

Climate adaptation policy lock-ins

Despite urgent need and available strategies to adapt to the impacts of climate change, limited action prevails. Aiming to understand systemic ‘lock-ins’ that hinder adaptation, this project takes an empirical and theoretically reflective approach, to analyze climate adaptation governance in the policy sectors water management, health care, and nature conservation – in Germany, the Netherlands, and the UK.

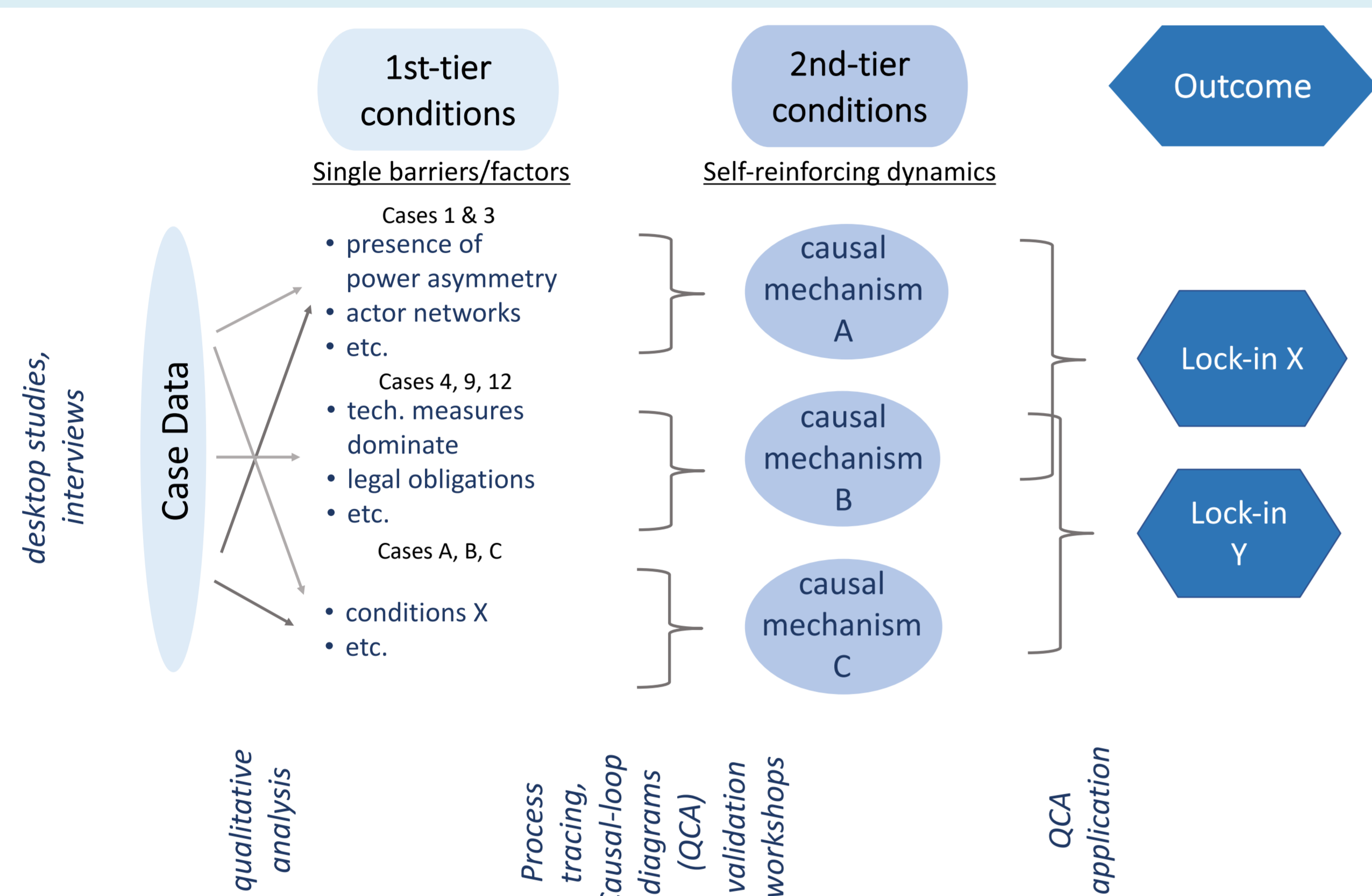


Figure: Design of the project with dependent variable – rigidity/inertia in policy systems (degree of lock-in) and independent variables – mutually reinforcing factors/feedbacks mechanisms.

Motivation

Parallel to mitigation efforts, there is an urgent need to adapt to the impacts of climate change. Adaptation strategies are available, yet **limited action** prevails. Institutions, infrastructures, and behaviors appear to be rigid and resistant to change. This project goes **beyond ‘barriers to adaptation’** focused on in previous literature and delve into systemic-level **mechanisms** and path dependencies that inhibit transformative change.

Research Questions

- Why haven’t pressures to adapt to impacts of climate change resulted in concrete adaptation policies or their implementation?
- In what ways do mechanisms of mutually reinforcing factors create and sustain lock-ins to the detriment of climate change adaptation?

Literature (selected)

- Biesbroek, G. Robbert, Catrien J.A.M. Termeer, Judith E.M. Klostermann, und Pavel Kabat. 2014. Rethinking barriers to adaptation: Mechanism-based explanation of impasses in the governance of an innovative adaptation measure. *Global Environmental Change* 26: 108–118.
- Klitkou, Antje, Simon Bolwig, Teis Hansen, und Nina Wessberg. 2015. The role of lock-in mechanisms in transition processes: The case of energy for road transport. *Environmental Innovation and Societal Transitions* 16: 22–37.
- Seto, Karen C. et al. 2016. Carbon Lock-In: Types, Causes, and Policy Implications. *Annual Review of Environment and Resources* 41: 425–452.

Methods

The project uses a comparative, mixed methods approach to understand why lock-ins arise and persist in each case. Cases are selected from **three sectors** (water, health, nature conservation) – 2 cases each – within **three countries** (Germany, the Netherlands, UK), leading to an overall sample of 18 more or less locked-in policy subsystems.

Data is gathered through documents, interviews, questionnaires, and focus group discussions. **In-depth analysis** relies on an innovative mix of process-tracing methods, combined with systems analysis techniques to identify case-specific lock-in situations. Finally, we employ **Qualitative Comparative Analysis (QCA)** to better understand the broader dynamics and patterns of lock-ins as they affect climate adaptation.

Project Partners

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Research Areas:

- Social Learning Processes
- International Environmental Policy
- Sustainable Development
- Collaborative and Network Governance

Regular Courses:

- International Sustainability Management
- Environmental and Sustainability Politics
- International Environmental Governance