Ecological Economics



Research area:

Urban development in the context of climate change

Cities and urban areas are facing effects of climate change in various ways. Yet, at the same time these areas offer potentials to implement climate protection and adaptation measures. To ensure the legitimacy, acceptability and sustainability of such measures it it is essential to engage local stakeholders in the decision making process. The two research projects ENaQ and BREsilient focus on participation strategies suitable for this joint design of a sustainable urban development that implements climate protection and adaptation measures in Oldenburg and Bremen.



ENaQ

The aims of the Paris Agreement can only be achieved if the primary energy consumption and the $\rm CO_2$ -emissions are reduced drastically. To fully exhaust the existing potentials it is essential to connect the electricity, heat and e-mobility sector on a neighborhood level. The research project ENaQ contributes to this intention by conceptualizing and implementing a climate friendly neighborhood as a living lab in Oldenburg, where the energy needs are supposed to be locally fulfilled. This highly technical field must be combined with a human-centered approach to design technological innovations in ways that are socially acceptable. An active citizen and stakeholder engagement is therefore indispensable.

Research Focus

- Analyses of previous participation processes in Oldenburg
- Design and implementation of a stakeholder engagement process
- Design and implementation of a concept for process and outcome evaluation of several participatory formats in the living lab to identify success determinants

Selected Literature

Goldschmidt, R. (2014). Kriterien zur Evaluation von Dialog- und Beteiligungsverfahren. Konzeptuelle Ausarbeitung eines integrativen Systems aus sechs Metakriterien. Wiesbaden: Springer.
Siebenhüner, B. (2018). Conflicts in Transdisciplinary Research: Reviewing Literature and Analysing a Case of Climate Adaptation in Northwestern Germany. Ecological Economics, 154, 117-127.

BREsilient

The city of Bremen is particularly sensitive to climate change due to its coastal location and its densely populated urban areas. To meet adaptation challenges in the administration, economy and population of Bremen the research project BREsilient aims at gaining a deeper understanding of specific assessment and implementation requirements in order to deduce innovations for governance processes for regional and municipal politics. The project focuses on the enhancement of climate resilience by conducting several participatory processes with representatives from public administration, the maritime economy and people living or working in flood prone areas.

Research Focus

- Support of the prioritization of adaptation measurements particularly on the basis of a participatory-oriented costbenefit analysis and an inter-sectoral coordination within the political-administrative system
- Preparation of the implementation of specific adaptation measurements in pilot projects
- Realization of participation processes with decision makers, stakeholder and citizens
- Process and outcome evaluation of the participation processes



Prof. Dr. Bernd Siebenhüner

Project staff:

Dr. Torsten Grothmann, Alexandra Unger, Theresa Michel

Field of Activity

- Ecological Economics
- Social learning & collective learning processes
- International Environmental Policies
- Transdisciplinary and participative Methods
- Climate Change & Biodiversity
- Sustainable Land Use and City Development
- Sustainability Reporting

Regular Courses

- International Sustainability Management
- Environmental and Sustainability Policies
- Corporate Ecological Policies
- Ecological Economics
- International Environmental Governance
- Practical Projects in Sustainability Economics and Management
- Colloquium for Bachelor-, Master- and PhD-Students
- Cases in Coastal Zone Management

