

How to gain public engagement for climate action? Challenges and opportunities for energy transitions in mountainous and rural areas

Felix Poelsma¹, Susanne Wymann¹, Stephanie Moser¹,

¹Centre for Development and Environment, University of Bern, Mittelstrasse 43, CH-3012 Bern (felix.poelsma@unibe.ch)

A shift towards more sustainable and cleaner energy systems is vital to limit adverse effects of climate change, but also to ensure economic development and reliable energy infrastructures throughout the world. Current energy systems are interwoven with other societal systems, such as transportation, housing and industries, but also with current values and lifestyles, which implies that to achieve these targets, radical systemic changes based on public engagement with climate change are necessary.

Policies supporting sustainable energy transitions are often contested and without support of local inhabitants, projects might not be implemented (Naumann & Rudolph, 2020). The recent rejection of the CO₂-Act by the Swiss population underlines that social acceptance is key for implementing policies in regard to transitions towards sustainability. But how can such broader social acceptance in regard with the radical systemic changes needed be achieved? An approach, which goes beyond previous education and communication strategies is 'transition management'. Over the last decade, research on sustainability transition management has grown rapidly (Köhler et al., 2019). This caused the development of various multi-actor initiatives which aim to support sustainability transitions (Hyysalo et al., 2019). Such initiatives typically involve societal as well as academic actors who jointly develop 'experiments' which contribute towards sustainability transitions (Luederitz et al. 2017). These initiatives allow actors from different sectors of society to participate in shaping/co-designing and jointly implementing policies. On the one hand, inclusion and providing opportunities for public participation can enhance societal acceptance and behaviour change and thus contribute to the shift to more sustainable and cleaner energy systems (Langer et al., 2017). However, it also provides several communication challenges, such as developing a joint understanding of the situation at hand, a shared vision and agenda to act. The research project, which will be presented in this contribution aims to gain insights into such participation processes in energy transitions in mountainous and rural areas. In the Global North, energy transitions have predominantly focused on urban energy transitions (Naumann & Rudolph, 2020). However, the boundaries of energy systems are usually not limited to urban or rural settings, since they are linked. Energy production sites are for instance often located in rural areas (Naumann & Rudolph, 2020). This is especially relevant for renewable energy production sites, as renewables often require a greater surface area compared to fossil fuel based energy production. We therefore focus on mountainous and rural areas, where the potential renewable energy production is high.

The presented research project is based on a case study in a Swiss Alpine Region, the administrative district Interlaken-Oberhasli, located in the Bernese Oberland. In this region a participative transition management process is

implemented between 2021 and 2023 under the project name: ‘**Local Energy Transition Experiments**’ (LETE) for a low-carbon society transformation – Piloting a transition management process in the Bernese Alps, under the lead of the authors of this contribution. A systematic overview of the research project is presented in Figure 1. This project will serve as a case study for public participation in energy transitions in rural and mountainous areas.

The LETE research project consist of several workshops with local actors. At the symposia on the SGM, experiences of the first workshop (joint problem framing) will be presented. This research contributes to finding inclusive ways to design more successful energy policies and support actors throughout society to engage in more sustainable projects and behaviours for fighting climate change. Furthermore, it expands the insight of transitions management to communities living in mountainous and rural areas.

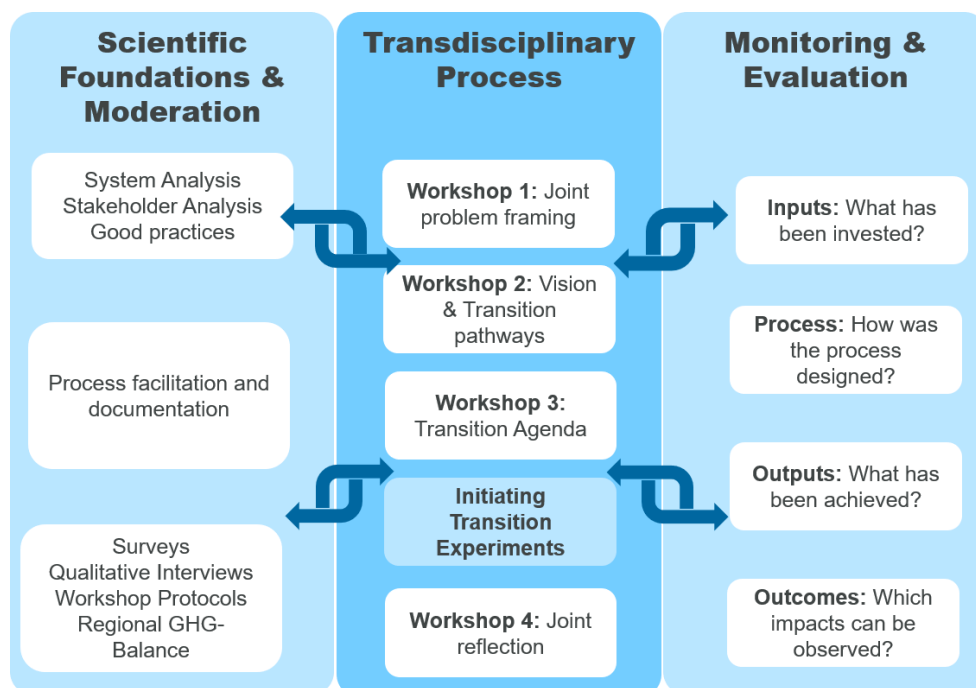


Figure 1. Overview of the LETE-research project.

REFERENCES

- Hyysalo, S., Lukkarinen, J., Kivimaa, P., Lovio, R., Temmes, A., Hildén, M., ... & Panssar, M. 2019: Developing policy pathways: redesigning transition arenas for mid-range planning, *Sustainability*, 11, 603.
- Köhler, J., Geels, F. W., Kern, F., Markard, J., Onsongo, E., Wieczorek, A., ... & Wells, P. 2019: An agenda for sustainability transitions research: State of the art and future directions, *Environmental innovation and societal transitions*, 31, 1-32.
- Langer, K., Decker, T., & Menrad, K. 2017: Public participation in wind energy projects located in Germany: Which form of participation is the key to acceptance?, *Renewable Energy*, 112, 63–73.
- Luederitz, C., Schöpke, N., Wiek, A., Lang, D. J., Bergmann, M., Bos, J. J., ... & Westley, F. R. 2017: Learning through evaluation—A tentative evaluative scheme for sustainability transition experiments, *Journal of Cleaner Production*, 169, 61-76.
- Naumann, M., & Rudolph, D. 2020: Conceptualizing rural energy transitions: Energizing rural studies, ruralizing energy research, *Journal of Rural Studies*, 73, 97-104.