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Experiments as a means towards sustainable societies – lessons learnt and future outlooks from a Finnish perspective

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#### **Abstract**

Experimentation has been introduced as a potential means to overcome gaps between top-down led climate change policies and challenges related to the upscaling of grassroots innovations. In Finland, the current government programme emphasises the role of experimentation in sustainability transition and as a source for new growth. We carried out an exploratory study into the conditions that support experimentation and analysed the role of experiments in creating change, and the critical factors that determine the success of the experiments and their possibilities for upscaling. We drew our analyses from a selection of ten experiments aimed at mitigating climate change and improving resource efficiency. Experimentation scholars have identified similar success factors and barriers across different types of experiments, including economic viability, public funding, technological development, impact assessments, public policies and regulation as well as social aspects. Our results are in line with these findings, especially highlighting the significance of the social aspects as a crucial enabling factor. The monitoring of the sustainability performance of both successful and ended or failed experiments and communication about the impact of such experiments are important from a learning point of view. We conclude that the development of governance structures for experimentation requires further attention.

#### Highlights:

- The role of experiments in sustainability transition is emphasised
- Ten deliberately chosen, different types of sustainability experiments were assessed
- Social aspects, such as trust and networking are critical success factors
- Monitoring sustainability performance helps to focus and redirect the experiments
- Governance structures for experimentation require further development

Keywords: Experiments, case studies, success factors, upscaling, Finland

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