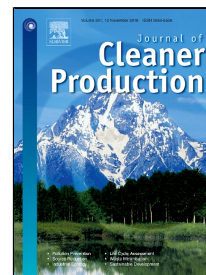


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# The theoretical foundations of sociotechnical systems change for sustainability: a systematic literature review

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## Highlights

- Systematic literature review on sociotechnical systems change for sustainability
- Categorization of literature and summary of key contributions
- Identification of 14 dominant foundations grounding theoretical development
- Discussion on future research paths building upon this research

## Abstract

This paper provides a critical literature overview of the foundations of the concepts of sustainability and sociotechnical systems change. This review covers the analysis of 182 scientific articles through a combination of bibliometric analysis, snowballing, content analysis and problematization. Our results identify and discuss 14 unique ontological and normative foundations shaping how we understand sociotechnical system change for sustainability. These influence both what system change is perceived as desirable and as attainable; as well as how to navigate between all the coexisting pathways, trade-offs, and complexities of the three dimensions of sustainability. By identifying the theoretical foundations, we illustrate the most up-to-date theoretical developments and concomitantly pinpoint a few opportunities for future contributions that improve, refute or complement them, hence shedding light on various research questions to develop the literature further.

**Keywords:** Sociotechnical Systems; Sustainability; Innovation; System Change; Systematic Literature Review

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