

TRACK 37. SYSTEMS INNOVATION AND TRANSITIONS TO SUSTAINABILITY

Persistent sustainability problems in e.g. energy, transport, water and food production have attracted the attention of science, technology and innovation (STI) scholars. A shared idea among these scholars is that due to scale and scope of sustainability problems, incremental change in prevailing systems will not suffice. Instead, there is a need for transformative change at a system level, including major changes in production and consumption ('sustainability transitions'). Our knowledge has advanced on these subjects in recent years. However, also new questions have emerged and there is still much to be learned if we want to unravel the complexity of transitions.

Goal of the thematic track

This thematic track aims at advancing the knowledge on system innovations and transitions to sustainability by

- critical reflections on existing conceptual frameworks and tools in the field of sustainability transitions;
- attention to yet under-explored areas and aspects of transitions; and
- proposing new insights from disciplines or practices that have not yet engaged with sustainability transition debates.

We welcome – both theoretical and empirical – abstracts/papers for subjects elaborated below. This list, however, is not exhaustive and other subjects that fall under the general heading of this track are also welcomed.

Potential subjects for abstract submission

General advancement of conceptual frameworks

Innovation and transition processes have been studied with e.g. the multi-level perspective, innovation systems, evolutionary concepts etc. We are looking for papers that critically reflect on the strengths and weaknesses of existing theoretical frameworks, point out potential linkages and propose conceptual improvements.

Micro-level foundations

The explanatory power of macro-/meso-level frameworks, like the multi-level perspective and technological innovation systems, may be increased by the inclusion of micro-level dynamics. Concepts in the fields of organizational sociology, management or business studies may provide fruitful inroads to include (e.g.) strategies and agency of organizational actors.

Governance, power and politics

Transitions inevitably evoke questions of governance, power and politics. Some agents and institutions in place will 'lose' while others 'win'. What

conditions are needed for the introduction of new forms of political practice necessary for socio-technical transitions to unfold?

Understanding the management of transitions, niches and experiments

A number of perspectives and practices is available for managing sustainability transitions. These include Transition Management, Strategic Niche Management, Socrobust, PROTEE, envisioning and backcasting methods, etc. How do these approaches relate? What can we learn from actual practices?

Geography of transitions

Transitions depend on place-specific interactions and learning from localised practices. However, transition theory and practice has paid little attention to spatial specificities of transitions (like culture, resources, etc.). How to deal with geographical differences when transferring the knowledge from experiments? How do developments in (for instance) Asia differ from Europe and North-America?

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