

## Call for Papers

### **NESS Workshop: Transformative Change for a Green Industry: Nordic Experiences and Challenges**

#### **Workshop chairs:**

- Patrik Söderholm, Luleå University of Technology ([patrik.soderholm@ltu.se](mailto:patrik.soderholm@ltu.se))
- Hans Hellsmark, Chalmers University of Technology ([hans.hellsmark@chalmers.se](mailto:hans.hellsmark@chalmers.se))
- Johanna Mossberg, RISE, Research Institutes of Sweden ([johanna.mossberg@ri.se](mailto:johanna.mossberg@ri.se))

#### Other potential Chairs from other Nordic countries:

- Antje Klitkou, NIFU
- Paula Kivimaa, SYKE and SPRU
- Markus Steen, SINTEF

The literature has devoted increased attention to so-called sustainability transitions, which refer to the long-term transformation processes that shift established socio-technical systems (e.g., the energy system, industrial processes, etc.) into more sustainable modes of production and consumption. For instance, it is widely recognized that reducing greenhouse gas emissions in the industrial sectors, e.g., iron and steel production, can likely not be realized without the development of zero-carbon technologies.

Sustainability transitions are typically characterized by relatively long development periods during which technology-specific systemic structures, i.e., actor networks, institutions, value chains, etc., must be put in place and aligned with the emerging technologies. This suggests, it is often argued, that the development of sustainable technologies will be subject to multiple market, system and institutional failures. This, in turn, requires the use of mixes of policy instruments, e.g., technology push instruments, demand-pull instruments, and systemic instruments supporting various functions at the innovation system level.

This session invites research papers addressing how new, zero-carbon technologies can be developed and adopted in various industrial sectors, e.g., iron and steel, pulp and paper, mining, cement, etc. Both conceptual and empirical papers are welcome. These could address how various institutional, economic and political factors may support or hinder key technological development processes, including how various policy mixes can be designed and implemented to

facilitate such processes. Empirical research that investigates key experiences from historical sustainability transitions in industrial sectors, not least in the Nordic countries, are encouraged; what challenges characterized these transitions and how were these overcome? The role of the (green) state in governing the sustainable transformation of industry also represents topical issue.

The NESS workshops follow a standing session format (similar to ECPR), which allows for substantive discussions on research in progress. The conference invites scholars from multiple disciplinary backgrounds in environmental social science. The overall **objective** of the **workshop** is to facilitate and encourage participation, equality and collaboration between younger and more established scholars. Each paper is expected to relate to the theme of the workshop, and the participant submits and presents a paper (or work in progress) for the discussion. Workshop participants will be asked to comment on at least one other paper in the respective workshop and participate in the general discussion of the other papers presented. Participants should only choose and attend one workshop for the duration of the conference. The ambition with this format is that the workshops allow for in-depth and coherent discussions of the respective themes and provide opportunity for potential joint publications or other continuing collaborations between the participants.