



Participatory modelling of pathways in the sustainable textile transition

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Promote the textiles transition by participatory modelling

This project in the domain ‘textiles’ is aimed at analyzing the material transition using system thinking and identifying leverage points for facilitating a transition by expert involvement in scenario modelling.

What will the textile transition look like?

- The textile industry depends on fossil carbon
- Producers of textiles will become responsible for the intake, recycling and reuse of their materials
- Recycled and biobased textiles may replace carbon-based textiles
- In 2025, 50% of the sold textiles should be reused or recycled
- Chain actors face uncertainty around legal and supply topics and how the transitional pathway may develop

The **aim of this project** is **to identify options for transitional pathways towards an economy based on renewable textiles**

Scenario exploration

- We aim to consider *four* potential (future) chains from producers to consumers:
 - 1) Traditional process involving synthetic materials;
 - 2) New textiles from biobased materials;
 - 3) Reselling existing clothing items brought back by consumers;
 - 4) Recycling of materials from existing clothing items

Involving experts and stakeholders

- The economy involves multiple (types of) stakeholders with different motivations and concerns
- We aim to involve them through a participatory modelling process
- Modelling of production and supply chain scenarios
- Involving experts and stakeholders in workshops for identifying important transition thresholds and triggers
- Model as virtual laboratory for exploring ramifications of scenarios and decision making by chain actors

What are key deliverables?

- A modelling framework around important transition thresholds and triggers for the textile transition
- Workshops involving domain expertise and stakeholder consultation
- Publication of the findings

