

**Regional Governance Challenges for the Transition towards Circular Economy**

**Session organisers:**

Dr Marcin Dąbrowski (Delft University of Technology, H2020 REPAiR)

Dr Erwin Heurkens (Delft University of Technology, H2020 REPAiR)

Circular economy is an approach to management of resources that shifts away from a linear process - where materials are used to make products that are later then distributed, used, and discarded - towards one that emphasises the need to maintain the value of products, materials and resources for as long as possible, through recycling, reusing, refurbishing. That way, production of waste is minimised, materials circulate in 'closed loops' and waste is not considered a burden but rather a resource that brings new economic opportunities, while generating positive externalities for the environment, spatial development or the quality of life.

Circular economy has recently become a new 'buzzword' and has been picked up by governments across the world as a solution to reduce carbon emissions and promote the shift towards a more sustainable development. Transition towards circular economy concerns a range of policy areas, from waste management, mobility, land use, to agriculture and waste management, thus calling for cross-sectoral cooperation; and requires working across geographical scales and levels of government, as the flows of materials are seldom contained within the borders of a municipality and strategies, policies and platforms are needed to explore and connect them in new ways. In other words, making circular economy requires working across sectoral, scalar, and administrative boundaries.

These complex interdependencies make integrating circular economy principles into regional spatial development challenging. The exact nature of that challenge depends on the regional geographic, environmental, technological, economic and institutional characteristics. Particularly, the transition towards circular economy raises questions about the suitable spatial scale of implementation, the ways to deal with limited awareness of this concept and the uncertainty about how it could be promoted through successful business cases, the possible governance models to facilitate the interactions needed, the integration of various circular flows, and numerous legal, regulatory, institutional and behavioural challenges.

This session draws on the empirical findings from the REPAiR research project (funded by Horizon 2020 research and innovation programme under grant agreement No 688920), focusing on regional strategies and solutions for using waste as a resource, while opening up the debate on this issue and inviting papers that explore the governance aspects of transition to circular economy across different regional contexts.

The objectives of this special session are to:

- Identify, understand and compare territorial governance challenges that using waste as a resource brings;
- Discuss potential strategies and examples of solutions for effectively coping with such challenges at a regional scale;
- Debate the theoretical underpinnings of the governance aspect of the transition towards circular economy.

We encourage and welcome insights from a variety of related academic fields and studies such as (territorial) governance, spatial planning, transition management, public policy, industrial ecology, sustainability studies, regional studies, and real estate management, amongst others.