
Session C5

Room: Brookfield, Thursday 2.30-5.15

Bioeconomy in the spotlight: TA-perspectives in a contested terrain of transformation

Chairs: Carmen Priefer, Stefan Böschen, Rolf Meyer, Sophie Kuppler

- Les Levidow, The Open University
 - European bioeconomy: rival trajectories and difficulties
- Lotte Asveld, Delft University of Technology & Dirk Stemerding, Rathenau Institute
 - Social learning in the bioeconomy: the case of Ecover
- Sina Leipold, University of Freiburg
 - The Circular Bioeconomy in Policy and Practice – An explorative analysis of Germany
- Christine Rösch, Karlsruhe Institute of Technology
 - Making the Bioeconomy work for Sustainable Development – the Requirements for a Sustainable Bioeconomy
- Thomas Arnold, European Commission
 - Sustainable Bioeconomy – Looking ahead
- Michael Carus, nova-Institute GmbH
 - Current markets for bio-based products and their perspectives
- Steffi Ober, Forschungswende / Nature And Biodiversity Conservation Union (NABU)
 - Sustainable bioeconomy: the need for alternative framings of economy

The concept of bioeconomy is one central promise for a sustainable economy. Core idea is the replacement of non-renewable fossil resources used in industrial production and for energy supply by renewable biogenic feedstock. This switch-over should pave the way for a more sustainable, eco-efficient economy and help tackle global challenges such as food security, climate change, resource scarcity, and environmental pressure. Leading to a rising biomass demand, various new interactions and fundamental changes in today's production patterns, the shaping of the concept in current political strategies is controversially discussed among scientists and societal stakeholders. The debate is fueled by quite different understandings of what bioeconomy should be and achieve, which innovations should be promoted as well as which development pathways should be supported. Moreover, the social and political framework conditions for the transition are more or less unclear. In many policy strategies new and emerging technologies like genetic engineering and synthetic biology are seen as key levers for enabling a so-called knowledge-based bioeconomy, while voices in science and society call for supporting smallholder agriculture, changes in consumer behaviour and an orientation of the economy towards the carrying capacities of ecological systems. In a nutshell: bioeconomy is a contested terrain and the societal pathways for establishing such an economy are under construction.

The session aims at reflecting transformative challenges from the perspective of different disciplines and stakeholders. Alternative conceptual ideas, narratives of innovation, chances and limits of the bioeconomy as well as its possible contribution to sustainable development are at the center of the discussion. In the first part of the session researchers give insights into their fields of work. This includes conceptual alternative drafts and rival trajectories in the European debate, social learning in the bioeconomy, the role of circular economy and requirements for a sustainable bioeconomy. Open research questions, conceptual and methodological challenges in analyzing and framing the transition process are identified. The second part includes statements of practitioners from politics, NGOs and industry on sustainable bioeconomy, bio-based products and their perspectives and alternative framings of economy. Points of consensus, but also controversial views on bioeconomy will be highlighted.