



Promoting Circular Bioeconomy at the regional level. Potentials and challenges

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The transition to a sustainable and circular bioeconomy is widely recognized as a key pathway to achieving the ambitious goals of the European Green Deal. This shift promotes sustainable development, reduces dependence on fossil resources, and creates economic opportunities in investment, employment, and value generation across multiple sectors. A regionalized approach to the circular bioeconomy is seen as a promising bottom-up strategy, with several European regions already implementing relevant strategies.

The special session, “Promoting Circular Bioeconomy at the Regional Level: Potentials and Challenges”, highlights the outcomes of the Horizon BIO2REG project: “Enabling Regions to Transition Towards Bioeconomy” (<https://bio2reg.eu/>). BIO2REG aims to facilitate the systemic transition of greenhouse gas-intensive regions into bioeconomy model regions through concrete and actionable measures.

Aligned with the objectives of BIO2REG and the 64th ERSA Congress, this session aspires to provide a networking platform for experts and regional stakeholders. It invites contributions addressing the theoretical frameworks of bioeconomy, empirical models, online tools, and indicator systems for assessing bioeconomy potential at sectoral and regional levels. Submissions focusing on regional bioeconomy strategies, best practices, policy instruments, guidelines for stakeholders, and findings from related projects are especially welcome.



Special Session Proposal

Special Session Title: Promoting Circular Bioeconomy at the regional level. Potentials and challenges

(Please list here the special session organizer(s) of this proposal including first name, last name, email and affiliation - and specify who is the corresponding convener for ERSA Congress Secretariat)

- Prof. Dr. Antonios Rovolis, Panteion University, rovolis@panteion.gr , corresponding convener for the ERSA Congress Secretariat
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Abstract

The special session *“Promoting Circular Bioeconomy at the regional level. Potentials and challenges”* will explore challenges and pathways for transitioning carbon-intensive regions into bioeconomy model regions. It will also discuss:

- Current bioeconomy performance in EU Member States,
- Regional barriers and drivers of bioeconomy,
- Sectoral best practices, and
- Bioeconomy outlooks from a regional perspective.

Bioeconomy, which utilizes renewable biological resources and innovative technologies to produce food, materials, and energy, has the potential to drive transformative structural change. By fostering new value networks, it can support knowledge-based growth, enhance ecosystem resilience, improve resource efficiency and circularity, and stimulate innovation.

However, these benefits must be tailored to each region's unique economic, social, and environmental context.

Despite its potential, regional stakeholders face challenges such as limited expertise, insufficient frameworks, and inadequate financial resources to fully leverage the bioeconomy's transformative capacity. Regions with carbon-intensive industries -including coal mining, intensive agriculture, forestry, fisheries, and peat production- are undergoing profound structural changes, often accompanied by economic disruptions, unemployment, social tensions, and regional disparities.

The session will also introduce the "bioeconomy model region" concept and the European interregional network launched through BIO2REG. This network will connect experienced model regions with learner regions, enabling the adaptation and dissemination of best practices to meet diverse regional needs.

By addressing these themes, the session aims to support regions in navigating their transition toward a sustainable and circular bioeconomy, fostering resilience and innovation in the face of global challenges.