

The state of Circular Bioeconomy in the Danube macro-region: How do countries differ, what challenges are they facing, and what can be done to facilitate the transition to a more sustainable future?



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By the end of June 2021, the GoDanuBio project consortium concluded with activities on Work Package T1 entitled »Analysis of Circular Bioeconomy Framework Conditions«. The last activity was the preparation of the [“Macroregional framework conditions report”](#). The aim of the report was to analyze regional readiness in the field of circular bioeconomy and to identify active stakeholders and their position in the circular bioeconomy ecosystem.

This synthesis report comprises of seven main sections. In the first section, the EU Strategy for the Danube Region in the framework of the project's objectives was analyzed. Two objectives of the strategy were found to be relevant for the project's objective: “Counteracting climate change” and “Stimulating sustainable development”. In addition, five relevant priority areas were identified: “Sustainable Energy”, “Biodiversity and Landscape, Quality of Air and Soils”, “To develop the Knowledge Society”, “Competitiveness and enterprises” and “Institutional capacity and cooperation”.

In the second section, regional policies with regard to circular bioeconomy were analyzed. There are three types of regions in the project: regions with circular bioeconomy policy in place (e.g. Baden Württemberg), regions with circular bioeconomy policy in the planning stage (e.g. Bulgaria) and regions without circular bioeconomy but with topic-related policy (e.g. Slovakia). It was found that, out of ten regions, eight belong to the last group, which means that they do not have a circular bioeconomy policy framework, even none in the planning stage. In these regions, the topic is most likely addressed in Smart Specialisation Strategies (S3), in Environmental programmes or within the circular economy framework.

In the third section, the respective regional circular bioeconomy definitions were described. It was established that only one region (Baden-Württemberg) has its own definition¹, while most of the other regions use the definition provided by the European Commission's, with Serbia being the only country without a circular bioeconomy definition. Within the partner regions, circular bioeconomy is addressed in different policy documents: Strategies in the field of climate, energy and environment (e.g. Hungarian "National Energy Strategy 2030 – with outlook to 2040"), Development strategies (e.g. Serbian "Sustainable Urban Development Strategy of the Republic of Serbia until 2030"), Innovation strategies (e.g. Slovenian "Slovenia's Smart Specialization Strategy"), Strategies in the field of agriculture (e.g. Romanian: "National Strategic Plan on Common Agricultural Policy until 2027) and Strategies in the field of low-carbon economy (e.g. Serbian "Industrial Policy Strategy of the Republic of Serbia from 2021 to 2030").

The fourth section elaborated on the specific importance of the stakeholders, that were identified by the partners of the project, for the implementation of GoDanuBio.

The fifth section addressed the challenges that different regions are facing in terms of implementing circular bioeconomy. For example, the need for a clear common understanding of the circular bioeconomy concept, the importance of multi-stakeholder cooperation, the focus on the relationship between demographic change and bioeconomy, and strengthening the role of local education systems in keeping young professionals in rural areas were identified.

In the sixth section, the opportunities that regions have in circular bioeconomy were analyzed. to begin with, it was established that the knowledge gathered from previous projects and activities has not been sufficiently disseminated. Secondly, it was pointed out that Local Action Groups² have great potential for encouraging local innovation. Lastly, it was argued that capacity-building initiatives and implementation of multi-level participative governance are needed in order to bring actors together in a targeted way and enhance the socio-economic status of the regions.

The final section offers a presentation of four different best practice examples of participative governance in the sphere of circular bioeconomy: "Policy Learning Platform", Interreg Europe (Europe wide), "Participation portal", Baden-Württemberg (Germany), "Linz Innovation Main Square", Upper Austria (Austria) and "Participatory Budgeting", Maribor (Slovenia).

In conclusion, the report, provided by the partners from the GoDanuBio project managed to provide a comprehensive analysis of the macroregional framework conditions in the examined macro-region that would be a valuable tool for defining and improving the implementation of the concept of circular bioeconomy, as well as addressing the challenges faced by different regions.

¹ Upper Austria as a federal state of Austria is participating in the project. Austria also has a circular bioeconomy definition, which is why Upper Austria could also be counted here.

² https://enrd.ec.europa.eu/leader-clld/lag-database_en, last accessed 20/07/2021