



## **ACHIEVING CARBON NEUTRALITY THROUGH CIRCULAR BIOECONOMY in the Central and Eastern Europe Countries: a special focus to the Danube Region**

Policy memo addressed to the European Commission, EUSDR and national/regional Ministries  
February 2023

The European Green Deal (EGD) launched in Autumn 2019 set a landmark in the green and just transition of Europe in the decades to come. The resulting ambitious package of cross-sectoral policies aims at a systemic approach to tackle one of the main challenges facing mankind: the climate change caused by the rise of the greenhouse gas emissions.

The bioeconomy, a key contributor to climate mitigation, is presented in a cross-cutting manner in the EGD<sup>1</sup>. The development of a sustainable and circular bioeconomy in each Member State (MS) will be essential to deliver on the EGD objectives<sup>2</sup>. This term appeared first in the European Union Research and Innovation programme in 2007. Since then, the bioeconomy has moved up the ranks in the policy agendas across Europe. Currently, 194 regions in EU-27 have a strategic framework for bioeconomy in place or are in the process of doing so<sup>3</sup>. However, most of the countries located in Eastern Europe are still lagging behind, mainly lacking on a systemic approach to bioeconomy-related policy- and decision-making. Accordingly, we strongly recommend the European Commission to streamline the implementation of the EGD to steer the transition of the Central and Eastern Europe (CEE) countries to climate neutral territories by 2050.

### **Background and evidence**

An urgent action toward the EU climate goals by 2030 (“Fit for 55” package) and 2050 (Climate neutrality) is inalienable. Projects such as GoDanuBio, DanuBioValNet, BIOEASTsUP, BE-Rural, and POWER4BIO are good examples of promoting cross-national and regional cooperation, as well as pathways toward the decarbonisation of the European economy. Some of them supported bottom-up approaches, e.g. in Stara Zagora (Bulgaria), South Bohemia (Czech Republic), Nitra (Slovakia), Covasna and Sud-Muntenia (Romania) and Lviv (Ukraine), as well as top-down approaches toward systemic policy-making for the deployment of the bioeconomy. However, it is obvious that the continuation of those initiatives usually requires follow-up projects, as well as the decisive support by the regional and national governments.

GoDanuBio focused on the countries located in the geographical catchment area of the Danube: Austria, Bulgaria, Croatia, Czech Republic, Germany, Hungary, Romania, Serbia, Slovakia and Slovenia. Within the framework of the project, which ended in December 2022, some conclusions were drawn regarding their potential. Except Austria and Germany (southern regions), the rest of the MS of the Danube Region should: i) take the resources triggered by the EGD and the EU Recovery instrument (*NextGenerationEU*)<sup>4</sup> as an opportunity to catch up with the bioeconomic trend in the Western Europe countries and regions; ii) anchor the bioeconomy in their governance models considering its inter-ministerial nature, or embed the bioeconomy in ongoing circular economy roadmaps.

The turnover in the EU bioeconomy (EU-27) in 2019 was of €2.4 trillion, from which 19% was generated from the agriculture and forestry sectors, and 34% from bio-based industries. The total number of employees in the EU bioeconomy amounted to 17.6 million<sup>5</sup>.

<sup>1</sup> COM/2019/640 final. The European Green Deal

<sup>2</sup> European Commission, Directorate-General for Research and Innovation, Dupont-Inglis, J., et al. Deploying the bioeconomy in the EU. A framework approach for bioeconomy strategy development: 10 policy recommendations for building national bioeconomies toward a fair and just climate neutral Europe, Dupont-Inglis, J. (editor), Maes, D. (editor), Barrett, P. (editor), Kulišić, B. (editor), Vehviläinen, A. (editor), Publications Office, 2021, <https://data.europa.eu/doi/10.2777/443131>

<sup>3</sup> European Union, 2022. Bioeconomy strategy development in EU regions

<sup>4</sup> [https://commission.europa.eu/strategy-and-policy/eu-budget/long-term-eu-budget/2021-2027/whats-new\\_en](https://commission.europa.eu/strategy-and-policy/eu-budget/long-term-eu-budget/2021-2027/whats-new_en); last accessed 22/02/2023

<sup>5</sup> Porc, O., Hark, N., Carus, M., Carrez, D., 2022. European Bioeconomy in Figures 2008–2019

As of September 2021, the term bioeconomy was included in several regional Smart Specialisation strategies (Croatia, Czech Republic, Hungary and Romania), considering countries that did not have a specific bioeconomy strategy<sup>6</sup>. However, it was only specifically defined in the case of Bulgaria. Since then, current developments in Bulgaria, Hungary and Serbia show promising possibilities for embedding the bioeconomy into circular economy policies in preparation.

Valuable experiences such as the Policy Support Facility / Mutual Learning Exercise (MLE) driven by DG RTD, or the BIOEAST Initiative<sup>7</sup> (covering seven out of ten countries of the Danube Region) were deployed since the last decade. However, political recognition of the bioeconomy as key contributor to the climate neutrality is still wary in some of the CEE countries.

On the other hand, the EU Strategy for the Danube Region (EUSDR) -a strategic integrated framework led by DG REGIO and endorsed by related MS- has supported the promotion and deployment of the bioeconomy through its Priority Area 8 (PA8 - Competitiveness of SMEs). Since 2017 working groups of PA8 fostered bioeconomy-centred projects such as DanuBioValNet and GoDanuBio, and recently a dedicated flagship project<sup>8</sup>.

## Recommendations

Recognising the importance of the circular bioeconomy in the EGD policies and the key role of the national and regional governments of the Danube Region in a successful transition to the carbon neutrality, we recommend the following:

- The entire value chain approach should be prioritised for the full deployment of the bioeconomy at the territorial level. Cross-cutting policy programming through several General Directorates (DG RTD, DG REGIO, DG CLIMA, DG AGRI, DG ENV, DG GROW and JRC) should be further pursued.
- A closer link between research and regional policies is strongly recommended to make the most of this transition and its stakeholders. Outcomes of the cohesion policy (e.g. Interreg projects, macro-regional strategies) should be aligned with programming in Horizon Europe, while at the same time striving for a broader deployment of the circular bioeconomy.
- The European Commission is encouraged to strengthen the cooperation with national policy- and decision-makers in terms of creating common conditions for more systemic governance of the bioeconomy. Since a top-down approach to the bioeconomy is lacking in most of the countries of the Danube Region, it would be optimal to request that the Member States officially incorporate the bioeconomy into their government structure<sup>9</sup>.
- A dedicated Policy Support Facility for the bioeconomy in the CEE countries, along with awareness-raising activities, should be promoted.
- The EUSDR should keep its ambition in terms of circular (bio)economy and sustainable development, while aiming to deal with the (existing) gap between what is planned on the macro-regional level and what is finally implemented in the regions.
- The Member States (MS) should use the economic incentives of the Multiannual Financial Framework and *NextGenerationEU* to accelerate the transition from linear to circular thinking while designing national and regional funding programmes.
- The MS and regions should adapt or improve their governance models to handle such large resources and projects, while making stakeholders active through participatory approaches.

Copyright © GoDanuBio

The opinions expressed in this policy memo are those of the authors and do not necessarily reflect the views of the Danube Transnational Programme. For re-use or distribution, please include this copyright notice.

Project co-funded by the European Union Funds (ERDF and IPA)

<sup>6</sup> Bulgaria, Croatia, Czech Republic, Hungary, Romania, Serbia, Slovakia and Slovenia

<sup>7</sup> <https://bioeast.eu/>; last accessed 22/02/2023

<sup>8</sup> <https://danube-region.eu/danube-alliance-for-sme-competitiveness/>; last accessed 22/02/2023

<sup>9</sup> [https://www.era-comm.eu/Introduction\\_EU\\_Environmental\\_Law/EN/module\\_2/module\\_2\\_6.html](https://www.era-comm.eu/Introduction_EU_Environmental_Law/EN/module_2/module_2_6.html); last accessed 22/02/2023