

Knowledge Centre for Bioeconomy



Newsletter



Issue 28, March 2026

Bioeconomy knowledge highlights

Bio-based plastics in Europe: latest knowledge and trends

The EC's Knowledge Centre for Bioeconomy has carried out an assessment of the European bio-based plastics sector. The work illustrates characteristics and technical properties of bio-based plastics, classified by production step where biomass is introduced. Although it currently holds a minor share of the global plastic market, the bio-based plastic industry could potentially grow in the EU, relying on domestic feedstock. Such development is expected not only to bring socio-economic benefits, but also to help improve recyclability and end-of-life management.



[more](#)

Regionalising bioeconomy indicators through the integration of subnational and firm-level data

This JRC paper introduces a methodology to estimate employment and value added in bio-based activities at the EU NUTS-2 regional level, addressing long-standing data limitations in measuring the regional bioeconomy. By integrating official statistics with firm-level data, the study increases the granularity of regional economic information, enabling a more precise identification of bio-based activities within hybrid sectors. The methodology is illustrated through a case study for Italy, revealing significant territorial heterogeneity in the size and structure of bio-based activities.

[more](#)

Transforming Food Systems

This JRC report identifies barriers and enablers for food systems transformation, using a combination of methods, including scenario building with an adapted Futures Wheel. Two visions emerge: a protein shift driven by innovation and price signals, and local, nutrient-dense diets supported by education. Success needs policy, literacy, adaptive governance, data, finance and participation; cultural inertia, fragmented governance, skill gaps and misinformation impede progress.

[more](#)

Building climate-resilient agriculture in Europe: an economic perspective

The European Environment Agency has investigated the need for an economic shift towards climate-resilient agriculture (CRA) in Europe. This briefing links climate hazards to farm vulnerability and economic impacts and synthesises quantified findings from 51 European farm-level case studies to demonstrate that CRA can improve economic stability, reduce cost exposure and strengthen the long-term viability of agricultural systems under increasing climate stress.

[more](#)

Spatially explicit global assessment of cropland GHG emissions in 2020

This article presents new high-resolution maps of crop emissions, derived from a global collaboration between universities and international research institutions. It reveals that in 2020 alone, croplands emitted 2.5 GtCO₂e, representing 4.2% of global net anthropogenic emissions. Spatial correlations between emission intensity and production efficiency show geographic trade-offs between mitigation potential and food production.

[more](#)

2020 map of forest land use supporting the EU Deforestation Regulation

The JRC presents a harmonised and globally consistent map of forest presence or absence at 10 m spatial resolution for the year 2020. Combining multiple spatial datasets, primarily derived from Earth observation, it represents 4562 million hectares of forests globally, to inform the deforestation risk assessments under supply chain-oriented regulations such as the European Union's Deforestation Regulation.

[more](#)

CETO reports 2025 - Advanced Biofuels and Bioenergy

The European Clean Energy Technology Observatory has released reports on bioenergy and advanced biofuels. They highlight the EU's leading position in innovative bioenergy technologies, shift to sustainable feedstock, constant increase in biomethane and advanced biofuels production, and their key contribution to 2030 renewable energy targets.

[more](#)

Comparing innovation and regulatory environments for biotech and biosolutions across the EU and USA

This OECD Working Paper investigates the biotechnology development in the European Union and the United States by comparing innovation performance and regulatory environments. The findings support policymakers on both sides of the Atlantic in designing policies that foster innovation, unlock the economic potential of biotechnology, and facilitate market entry to strengthen competitiveness.

[more](#)

Read also...

Council Conclusions on the Bioeconomy Strategy

On 17th March, Ministers of Environment in the Council of the European Union approved Conclusions on the new EU's Bioeconomy Strategy. They welcomed the vision for a competitive and sustainable bioeconomy by 2040, and recommend the promotion of bio-based and circular solutions across all relevant sectors, also supporting innovation and investments.

[more](#)

Global Bioeconomy Summit - Call for workshops

The fifth Global Bioeconomy Summit will take place in Dublin, on 20-21 October 2026, bringing together global leaders to advance sustainable bio-based innovation and solutions. Interested organisations, individuals, and initiatives are invited to propose workshops on bioeconomy issues at the intersection of research, innovation, policy, industry, finance, and society. The Call for Workshop Proposals will close on 8th May.

[more](#)

Voluntary standard for permanent carbon removals

The European Commission adopted the first set of methodologies under the Carbon Removals and Carbon Farming Regulation to certify activities that permanently remove CO₂ from the atmosphere. The new rules cover three types of activities: direct air capture with carbon storage, biogenic emissions capture with carbon storage, and biochar carbon removal. The Commission is finalising two additional delegated regulations for certification methodologies, respectively addressing i) agriculture and agroforestry, peatland rewetting and afforestation and ii) bio-based construction products.

[more](#)

Industrial Accelerator Act

This legislative proposal by the European Commission aims to increase demand for low-carbon, European-made technologies and products. The Industrial Accelerator Act is designed to boost manufacturing, grow businesses, and create jobs in the EU, while supporting industry's adoption of cleaner, future-ready technologies. It aligns with the new EU Bioeconomy Strategy, in terms of boosting low-carbon and bio-based solutions.

[more](#)

Strengthened Framework for Safe and Sustainable by Design chemicals and materials

The European Commission has adopted a revised recommendation on the Safe and Sustainable by Design framework, reinforcing Europe's commitment to chemicals and materials innovation that aligns with the Clean Industrial Deal's ambition for a toxic-free, circular, and competitive economy. The design principles have been developed in different contexts, such as in green chemistry, green engineering, circular chemistry, sustainable chemistry, and safe by design as well as policy-related ambitions (e.g. circular economy, bioeconomy, or zero pollution).

[more](#)

Measures to reduce farmers' dependency on imported fertilisers

On 9th March, the European Commission formally adopted the Directive amending the Nitrates Directive as regards the use of fertilisers, derived from processed livestock manure, in which nutrients are recovered and transformed into forms that can substitute mineral fertilisers. The so-called RENURE (REcovered Nitrogen from manURE) will reduce costs for farmers, thereby increasing the strategic autonomy of the EU agricultural sector by lowering its dependence on imported fertilisers. The amendment will apply only to Member States choosing to authorise RENURE, transposing it into national law.

[more](#)

Our tools

[BIOECONOMY COUNTRY DASHBOARD](#)[BIOECONOMY MONITORING SYSTEM](#)[BIOECONOMY GLOSSARY](#)

Our Network



Forest

[Portal](#) | [Newsletter](#)

Soil

[Portal](#) | [Newsletter](#)

Agriculture

[Portal](#) | [Newsletter](#)

Drought

[Portal](#) | [Newsletter](#)

This is an edition of the enewsletter published by the [Knowledge Centre for Bioeconomy](#) via the [European Commission's Knowledge4Policy platform](#)

[Subscribe](#), if this email was forwarded to you | You can unsubscribe on [your profile page](#)

The contents of the newsletter do not reflect the position or opinion of the European Commission. The Commission accepts no responsibility or liability whatsoever with regard to the information on this newsletter.

© European Union, 2026.

Reuse is authorized provided the source is acknowledged. The reuse policy of European Commission documents is regulated by Decision 2011/833/EU (OJ L 330, 14.12.2011, p. 39). Reuse is not applicable to documents subject to intellectual property rights of third parties.

The European Commission is committed to personal data protection. Any personal data is processed in line with the Regulation (EU) 2018/1725. Please read the [privacy statement](#).