



Farming with Bio-Based Solutions

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Article information

Title	Farming with Bio-Based Solutions
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Brief summary	Humanity faces environmental challenges, driven by resource management, climate change, and fossil fuel use. The EU is advancing agro-food systems to minimise environmental impact, focusing on bioeconomy and circular economy principles. Successful transitions require technological, social, and regulatory changes, alongside Bio-Based Technologies, to ensure equity and sustainable development.
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Farming with Bio-Based Solutions

Humanity is facing significant environmental challenges. The management of natural resources, coupled with climate change, is at the heart of these challenges. Rapid population growth, the need for food security, concerns about the depletion of natural resources, and the impacts of fossil fuel use exacerbate the situation.

The European Union (EU) has mobilised at both the policy and the primary and secondary production levels to address these challenges, making notable progress. EU policies mandate a transition towards agro-food systems that minimise environmental impact. This transition is supported by the use of both digital technologies and eco-friendly practices. At the business level, these agro-food systems are grounded in the principles of bioeconomy and circular economy.

Within the framework of agro-food supply chains, various agricultural and livestock practices, such as integrating livestock into crop rotations, fully utilising plant and animal-based biomass, and more, are combined to increase resource efficiency, improve the quality of produced goods, and maintain biodiversity.

The success of these interventions, apart from the purely practical/technical aspect, requires social and regulatory changes to ensure that the transition is both sustainable and equitable.

Technocratic interventions involve the development and implementation of strategies for the bioeconomy at regional and national levels. These interventions must be integrated into corresponding research and development policies. Additionally, the development of quality standards for the standardisation of bio-based products and regulatory frameworks to govern the market and create clusters and innovation hubs are essential.

Equally important is the social dimension, which is often overlooked. Access to new technologies, ongoing training, the creation of new markets, and a suitable regulatory framework are critical factors for a successful business transition.

Bio-Based Technologies (BBTs) can serve as a powerful tool for economic development in terms of social and economic justice, provided they are accompanied by social sensitivity and solid institutional support. Building on this understanding, the BBioNets project promotes and further advances the work initiated by EIP-AGRI Operational Groups (OGs), fostering the application of BBTs in managing and processing agricultural and forest biomass.



Document information

Title	BBioNets – Creation and promotion of Forest and Agriculture Networks to boost Bio-Based Technologies adoption and Value Chain development (GA No 101133904)
Start – end date	1/11/2023 – 31/10/2026 (36 months)
Project type	Coordination and Support Action
Programme	Horizon Europe – Cluster 6
Funding	1,998,636.20 €
Coordinator	Munster Technological University Ms. Carmen Girón Domínguez (carmen.dominguez@mtu.ie)
Project overview	BBioNets constitutes a thematic network that relies on, promotes, and further advances the work carried out by EIP-AGRI Operational Groups (OGs) with respect to management and/or processing of agricultural and forest biomass with Bio-Based Technologies (BBTs) . The project has set up 6 regional Forest and Agriculture Networks – FANs (IE, ES, IT, EL, PL, CZ) that identify local needs, prioritise specific BBTs and share BBT knowledge ready for practice to farmers and foresters, boosting the (re)definition of value chains, stimulating cross-fertilisation beyond borders, and bringing Europe to the forefront of farming, forestry and bioeconomy with economically viable and sustainable practices.

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