

#bioeconomystrategies

CIRCULAR REGIONS

**6 Regions, 1 Goal:
Advancing Europe's Bioeconomy Together**



**BIOMODEL
4REGIONS**



SPRING

Italian Circular Bioeconomy Cluster

Tuscany region

Leonardo Gaiani - Technical and Scientific Coordinator SPRING

leonardo@clusterspring.it

Cluster SPRING

SPRING is the Italian Cluster of the Circular Bioeconomy

→ Brings together research centres, small, medium and large enterprises, trade associations, regional clusters and specialised service companies

168 members



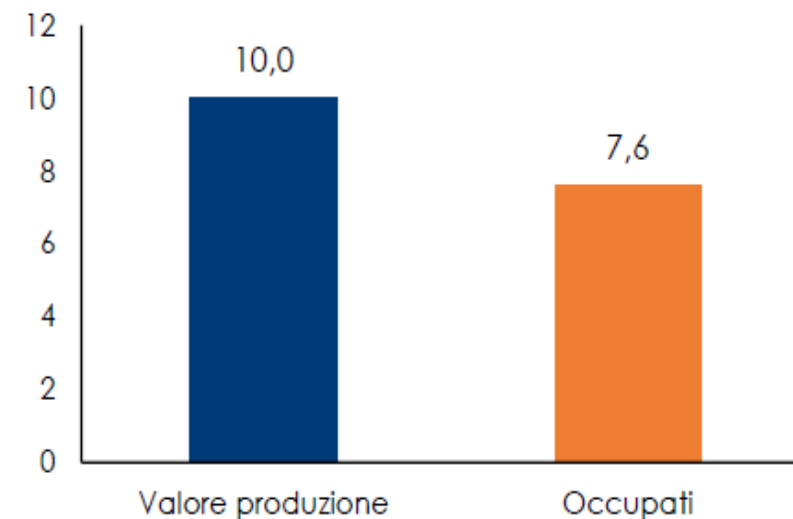
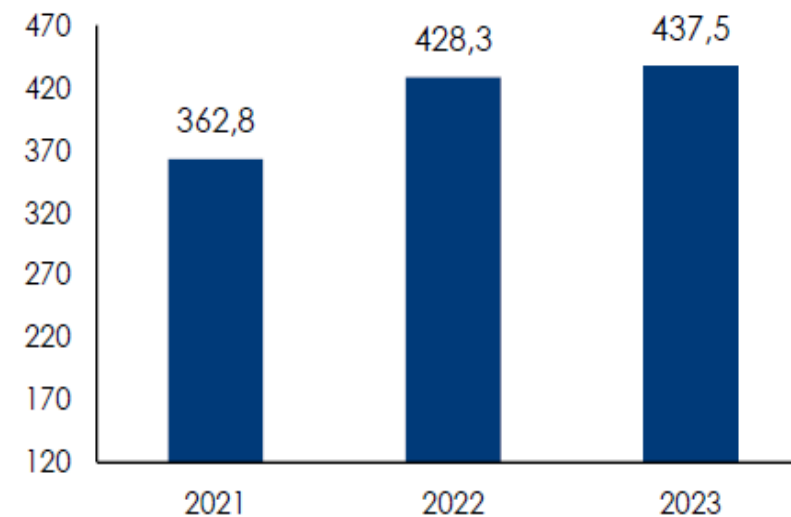
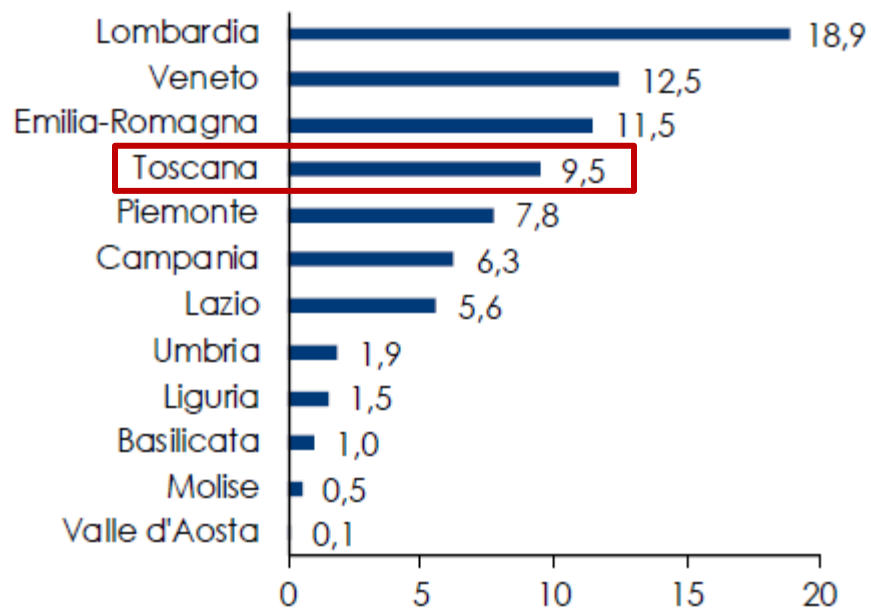
Mission

To **build interconnections between the different sectors of the bioeconomy**, helping to address environmental, social and economic challenges with a systemic and multidisciplinary approach.

The Cluster works to **build a strong and representative community**, protecting the sector's interests at institutions and promoting innovation projects that enhance territories.

Bioeconomy in Italy

- Total production: EUR 437.5 billion (+9.3 billion vs 2022)
- Employment: ~2 million people
- Economic impact: 10% of total production
- Total employment: 7.6% of the labour market
- Position in Europe: 3rd largest bioeconomy



On top, the evolution of the Bioeconomy in Italy (billion euro); On the bottom, the weight of the Bioeconomy in Italy on the total economy, in terms of production value and employment (%). Source: La Bioeconomia in Europa, 10° Rapporto, Intesa Sanpaolo. On the right, added value of the Bioeconomy by region (eur billion, 2019). Source: La Bioeconomia in Europa, 8° Rapporto, Intesa Sanpaolo.

Tuscany blueprint strategy

The strategic plan of the Biomodel4regions project provides an **operational framework** to advance the bioeconomy in Tuscany, aligning with national and European objectives. The bioeconomy can be used as a catalyst for regional transformation by supporting the development of sectors such as biobased materials, sustainable agriculture and renewable resources.

Benefits

- Strengthening of economic resilience
- Alignment with national and European targets
- Inter-regional collaboration

Key factors

- Education and skills development
- Participatory and inclusive governance
- Financing and investment for sustainable growth



Strategic actions

The strategic actions are the result of work carried out together with Tuscan stakeholders through co-creation methods and therefore fully reflect the territorial needs of the actors involved in the bioeconomy.

For each strategic action, the following have been identified:

- Barriers
- Facilitators
- Operative actions

Strategic actions	Objective
1. Creation of a technopole for the bioeconomy and integrated support network	Create a technopole that fosters collaboration between companies, universities and stakeholders, overcoming the fragmentation of the sector. The Technopole will promote knowledge sharing, adoption of innovative technologies and support for bio-based start-ups, strengthening the role of incubators and accelerators.
2. Governance and regulatory simplification	Improve governance of the sector with a dedicated regional agency, simplifying regulations and aligning them with the needs of the bioeconomy. The action will facilitate access to finance, promote dialogue between institutions and businesses and ensure greater consistency in development policies.
3. Development of a targeted funding programme and specific incentives	Facilitate access to funds for bio-based projects through targeted calls, co-financing and Proof of Concept (PoC) investments. The action will aim to involve private capital, simplify procedures for accessing regional funds and develop support tools for the bio-based market and logistics.
4. Training and communication to support the bioeconomy ecosystem	Strengthen skills and awareness in the bioeconomy sector with targeted training and communication initiatives. The action will reduce the gap between academia and industry, promoting the dissemination of key knowledge and stimulating stakeholder participation in bioeconomy opportunities.
5. Creation of an integrated support system for innovation and new supply chains	Facilitate the emergence of new sustainable supply chains by improving access to private finance, venture capital and digital platforms. The action will enhance academic research, promote incubators and accelerators and support the redevelopment of brownfield sites for the transition to a circular economy.

Challenges faced

Institutional and governance

- Fragmented governance
- Complex cross-sectoral integration

Stakeholder engagement

- Involvement of the quadruple helix
- Limited participation of civil society
- Complexity in building shared visions

Analytical and methodological

- Collection and synthesis of heterogeneous sectoral data
- Mapping governance with complex indicators

Skills and training

- Lack of specific expertise
- Training offer not yet aligned with new needs



Recommendations for policy makers

1. Creation of a technopole for the bioeconomy and integrated support network

- Locating the Technopole near clusters and academic poles, with dedicated funds for infrastructure and shared spaces.
- Make start-ups central to the bioeconomy strategy, supporting them with tax incentives.
- Develop digital tools for networking and knowledge sharing.

3. Development of a targeted funding programme and specific incentives

- Introduce a two-stage funding system for Proof of Concept and commercialization.
- Simplify portals for managing calls for tenders and reduce bureaucracy with digital tools.
- Promote private sector involvement with venture capital, incentives for logistics and co-financing for bio-based innovation.

2. Governance and regulatory simplification

- Establish a regional agency to coordinate projects, simplify procedures and provide regulatory support.
- Create a permanent dialogue between institutions and businesses for regulations that are more in line with the needs of the sector.

4. Training and communication to support the bioeconomy ecosystem

- Develop a regional training plan for operators, young professionals and civil servants.
- Promote training credits and incentives, such as free access to master courses and discounts on advanced courses.
- Launch a communication campaign and collaborate with associations to disseminate skills in the bioeconomy.

Recommendations for policy makers

5. **Creation of an integrated support system for innovation and new supply chains**
 - Organise networking events between universities and companies for knowledge transfer and collaboration.
 - Map business academies and local expertise to promote joint projects between research and industry.
 - Support regional consortia, integrate regional clusters into a national network and valorise brownfield sites.
-



Thanks for the attention!

