



AGRIFOOD

4Future

Innovation & Entrepreneurship in the European Union: A Systems Perspective on Competitiveness, Sustainability, and Scale-Up

Innovation as a Structural Policy Lever

Innovation and entrepreneurship have become central pillars of the European Union's long-term strategy to strengthen competitiveness, accelerate the green and digital transitions and reinforce strategic autonomy. Recent policy developments from the European Commission emphasize a shift from fragmented innovation support to integrated innovation ecosystems capable of scaling deep-tech solutions, supporting SMEs and translating research into market-ready applications.

This evolution is particularly evident in frameworks such as [Horizon Europe](#) and the [European Innovation Council](#) (EIC), which together signal a transition from input-driven research funding to outcome-oriented innovation policy.

The New European Innovation Agenda: From Research to Market Impact

A major milestone in EU innovation policy is the [New European Innovation Agenda](#), which explicitly addresses Europe's historical "scale-up gap." While Europe remains strong in scientific output, the conversion rate into globally competitive companies has been comparatively weaker than in other major economies.

The Agenda focuses on five structural priorities:

- Improving access to finance for scale-ups and deep-tech start-ups
- Enabling experimentation through regulatory sandboxes
- Strengthening innovation ecosystems in regional and local contexts
- Attracting and retaining talent in strategic sectors
- Accelerating innovation in climate, energy, and digital domains

This reflects a systemic view of entrepreneurship, not as isolated firm creation, but as a networked process embedded in research infrastructures, industrial strategy, and public policy.

Entrepreneurship as an Ecosystem Function

Contemporary EU policy increasingly treats entrepreneurship as an ecosystem function rather than a purely individual or firm-level activity. This approach is reflected in the design of the European Innovation Council (EIC), which combines grants, equity instruments and acceleration services to support high-risk, high-impact innovations.

Key structural elements include:

- **Deep-tech orientation:** prioritising technologies rooted in scientific discovery (AI, biotechnology, advanced materials, clean energy systems)
- **Blended finance models:** combining grants with equity investments to reduce scale-up bottlenecks
- **Cross-border innovation networks:** linking universities, research centres, corporates, and start-ups
- **Mission-oriented funding:** aligning innovation with EU priorities such as climate neutrality and food system transformation

This ecosystem logic aligns with broader EU strategic frameworks such as the [Green Deal](#) and the [Digital Decade](#) targets.

Innovation in Agrifood Systems: Strategic Relevance

In agrifood systems, innovation and entrepreneurship are increasingly central to resilience, sustainability and productivity. EU policy highlights the importance of:

- Climate-smart agriculture
- Digitalisation of food systems (precision farming, AI-driven monitoring)
- Reduction of food loss and waste
- Circular bioeconomy solutions
- Sustainable protein transitions

These priorities are strongly embedded in Horizon Europe partnerships and EIC-supported initiatives, positioning agrifood as a strategic sector for both environmental transition and economic competitiveness.

From a systems perspective, agrifood innovation is no longer limited to production efficiency; it integrates environmental externalities, supply chain transparency and consumer behaviour transformation.

Structural Barriers: The European Scale-Up Challenge

Despite strong policy frameworks, the EU continues to face structural barriers in innovation performance:

- Fragmented capital markets limiting late-stage financing
- Regulatory heterogeneity across Member States
- Weak linkages between research institutions and industry in some regions
- Talent mobility constraints
- Underdeveloped risk capital culture compared to the US and parts of Asia

Recent Commission analyses highlight that addressing these bottlenecks requires not only funding instruments, but institutional reform and deeper integration of the Single Market for innovation.

Policy Direction: Towards Mission-Oriented and Systemic Innovation

The current direction of EU innovation policy is increasingly mission-oriented, focusing on systemic transformation rather than incremental improvement. This is visible in:

- Climate neutrality goals under the European Green Deal
- Digital transformation targets under the Digital Decade framework

- Food system transformation strategies linked to sustainability and resilience

The implication is a shift from “project-based innovation funding” to “portfolio-based system transformation,” where entrepreneurship is a mechanism for delivering public value alongside economic returns.

From Innovation Policy to Innovation Systems

The European Union is progressively redefining innovation and entrepreneurship as interconnected components of a broader socio-economic system. Through instruments such as European Innovation Council and strategic frameworks under European Commission, the policy emphasis is moving toward scalability, systemic impact, and cross-sector integration.

The key challenge ahead is not the absence of innovation capacity, but the ability to translate that capacity into globally competitive enterprises and transformative societal outcomes. In this context, entrepreneurship becomes less about firm creation alone and more about orchestrating ecosystems capable of delivering long-term structural change.

References (EU Policy and Framework Basis):

- [*European Commission – New European Innovation Agenda \(2022\)*](#)
- [*Horizon Europe Programme \(2021–2027\)*](#)
- [*European Innovation Council \(EIC\) Strategic Frameworks*](#)
- [*European Green Deal Policy Framework*](#)
- [*Digital Decade Policy Programme 2030*](#)

More information about AGRIFOOD4FUTURE Transnational Working Groups:

- [*AGRIFOOD4FUTURE - TWG*](#)