

Presentation of the Input Paper for Lombardy

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Economic profile of Lombardy

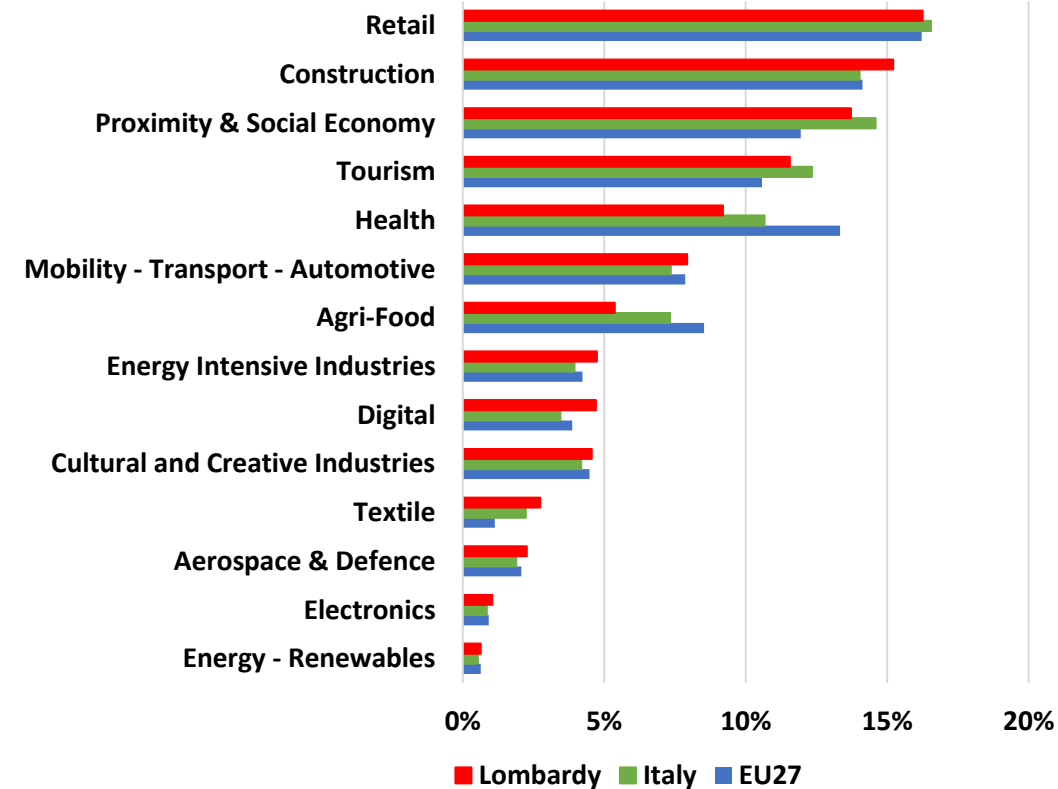
General trends in the regional economy:

- **Largest regional economy in Italy**, with a GDP of €439.9 billion, representing almost a quarter of Italy's total GDP in 2022
- **Important trade hub in Europe**, contributing 26% to Italy's total exports in 2022, with more than half directed to EU countries

Employment composition and agglomerations:

- Region is marked by a large **services sector**, reflected in the **Retail** (largest ecosystem by employment), Proximity & Social Economy, Tourism, Digital or CCI ecosystems
- Large **industrial presence** with high employment concentration relative to EU27 & IT in ecosystems **Mobility-Transport-Automotive**, **Energy Intensive Industries**, and **Aerospace & Defence**
- **Textile** ecosystem remains regionally relevant agglomeration

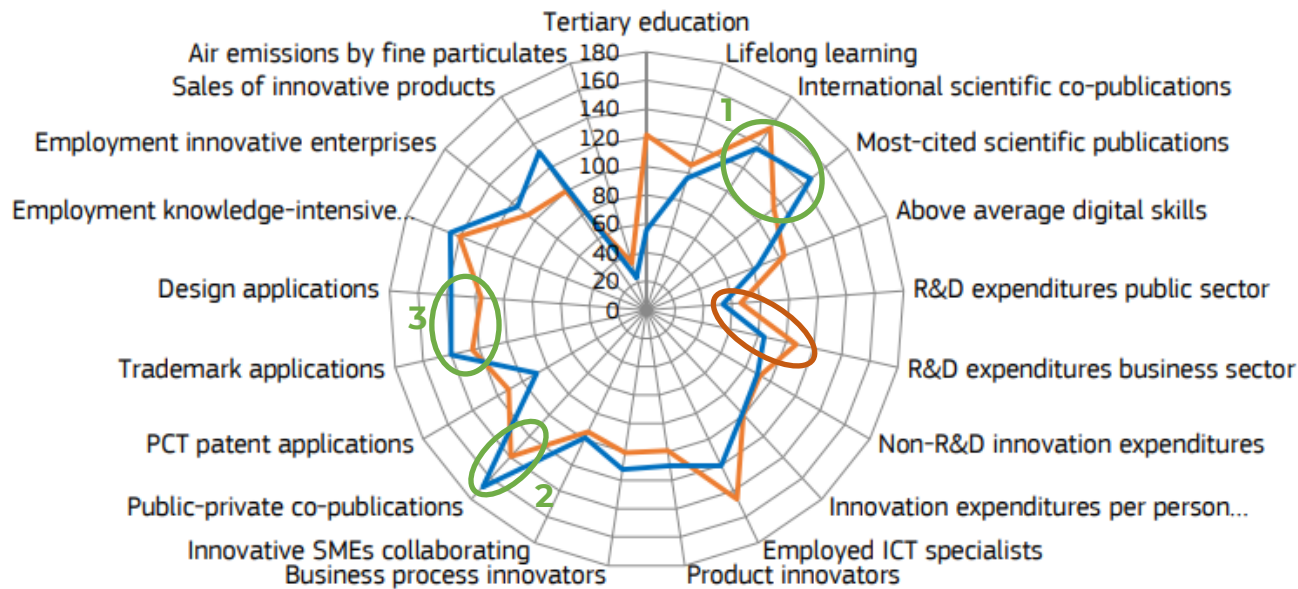
Employment shares across the Industrial Ecosystems



Source: ECCP (2024), own elaboration based on Eurostat.

Lombardy's regional innovation & competitiveness performance

RIS 2023: Lombardy as “Moderate Innovator +”



Relative Strengths according to the RIS 2023

1. International scientific co-publications & Most-cited scientific co-publications (relative to EU & IT)
2. Public-private co-publications (relative to EU & IT)
3. Design & Trademark applications (relative to EU & IT)

Areas for improvement

- Lombardy's R&D expenditure relative to GDP falls below Italian and EU averages
- Lombardy with 1.29 %, Italy (1.43 %), EU27 (2.27 %).

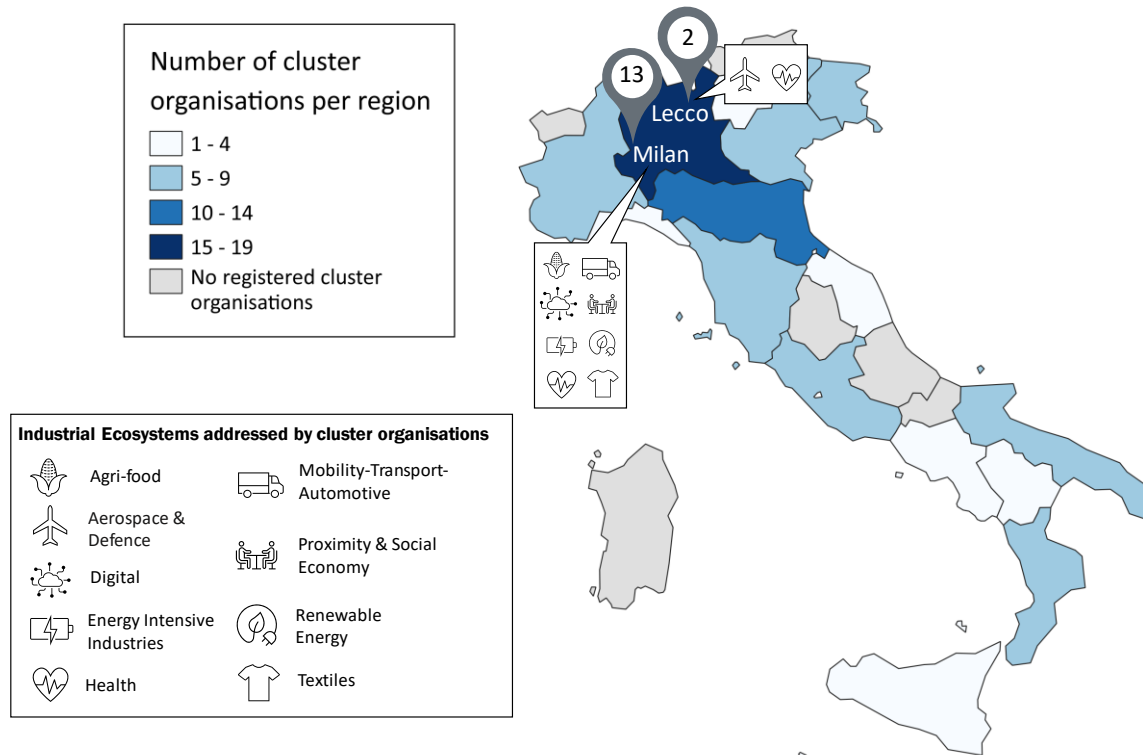
Regional Competitiveness Index 2022

- Lombardy classified as **more developed region (Rank 98)**, with market size, innovation & business sophistication standing out
- Region indicates **room for improvement** in **technological readiness** to competitiveness and growth

Source: European Commission (2023): Regional Innovation Scoreboard 2023 – Regional profiles Italy

ECCP cluster ecosystem in Lombardy: Locations, sectors and structures

Cluster organisations registered on the ECCP in Italy



Cluster Organisations from Lombardy on the ECCP

- **15 Cluster Organisations (CO) from Lombardy** on ECCP (96 from Italy overall)
- Including all **nine Lombardy Technology Clusters**, **two cluster organisations of national relevance** and **four others**
- Cover **9 out of 14** EU Industrial Ecosystems
- **Top 3 ecosystems:** Health (4 COs), Digital (3 COs), Energy – Renewables (3 COs)

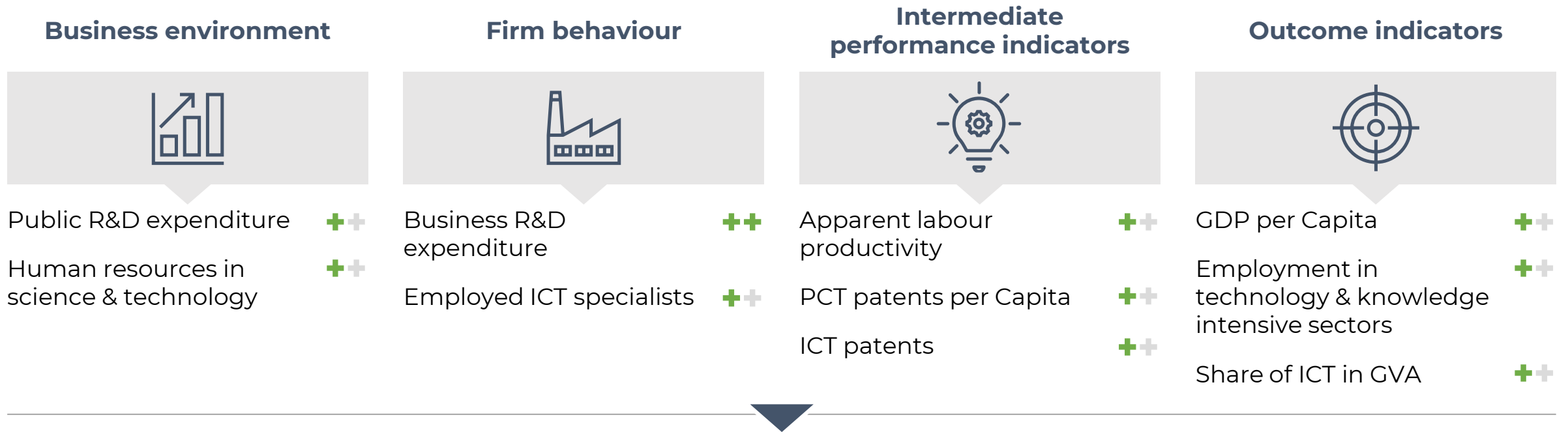
Structure of clusters

- **Many small & mid-sized COs:** 67% have 100 or less members (EU: 61%)
- Cluster organisations have comparatively **low numbers of staff:** 73% have up to 5 employees (EU: 67%)
- **Collaborative Areas:** Internationalisation; partnering for projects; digitalisation; resource efficiency and circular economy

Source: ECCP (2024). Own elaboration based on <https://reporting.clustercollaboration.eu/all>; last access 26.02.2024.

Clusters and regional economic competitiveness

Cluster organisations are **positively correlated** with a range of **economic competitiveness indicators**:



However: The presence of regional industrial agglomerations is also linked with **higher air pollution**.

Source: ECCP (2022). Summary Report on Cluster Policy in the EU.

++ Positive correlation **+** Weak positive correlation

European Commission offers important programmes for collaborative projects among clusters & their members



ESCP-4i

- COSME initiative
- Development and implementation of joint internationalisation strategies to support SME internationalisation
- **Seven clusters from Lombardy involved in 10 ESCP-4i projects**



ESCP-4x

- COSME initiative
- Boost the cross-cluster networking and learning within the EU and development of cluster management excellence
- **Two clusters from Lombardy involved in the HempCluB project**



Euroclusters

- Single Market Programme
- Support the implementation of the EC industrial strategy through cross-sectoral, interdisciplinary and trans-European cluster initiatives
- **One cluster from Lombardy involved in one Euroclusters (PIMAP4Sustainability project)**



I3

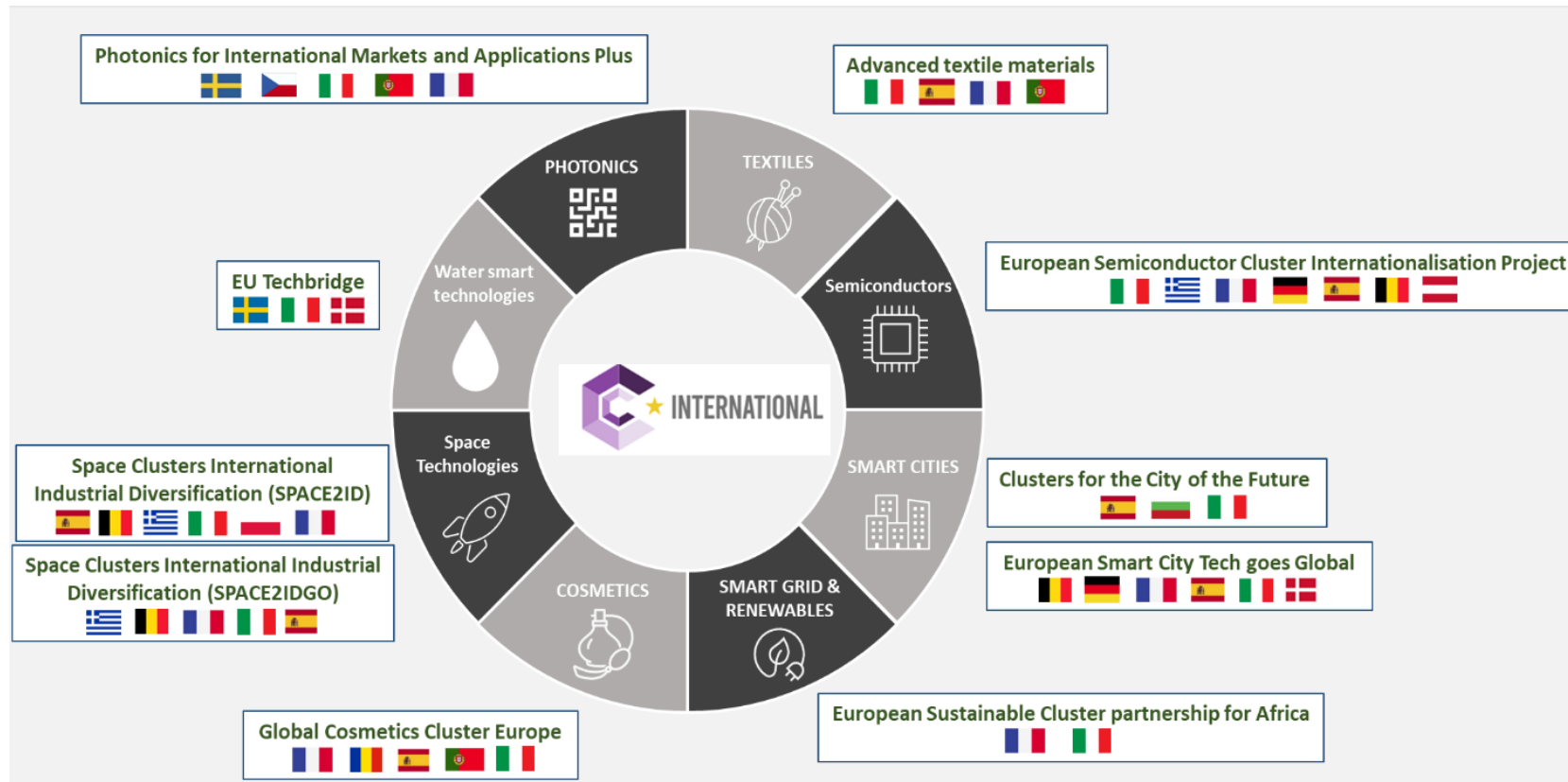
- Funding instrument under the European Regional Development Fund (ERDF) 2021-2027 programming period that provides advisory and financial support
- **27 beneficiaries from Lombardy, of which three clusters, participate in 10 different I3 projects**

Source: ECCP (2024).



Seven clusters from Lombardy involved in ten ESCP-4i projects with European partners

Overview of involvement in the ESCP-4i



- **10 project participations in the ESCP-4x** by seven cluster organisations.
- **Projects involved 45 EU cluster partners** from 14 different countries.
- **Thematic focus areas:**
 - Smart cities,
 - Space technologies,
 - Semiconductors,
 - Photonics
 - Renewable energy

Source: ECCP (2024) based on information from COSME data hub.

Involvement of Lombardy in Eurocluster & I3



Euroclusters

- One CO from Lombardy (AFIL) is part of the **PIMAP4Sustainability** Eurocluster
- **Focus:** Photonics for International Markets & Applications for Sustainability
- **Objectives:**
 1. Boosting resilience of SMEs through adoption of photonics tech
 2. Deepening cross-sectoral innovation in photonics value chain
 3. Maximising innovation potential of photonics by providing skilling & re-skilling services
 4. Accelerating SME internationalisation
- **Cluster partners** come from five other MS (CZ, FI, FR, PT, Se)




Interregional Innovation Investments Instrument (I3)

- **Three Lombardy Technology Clusters** participate in five I3 partnerships:
 - SMART-Growth (Zero-Defect Manufacturing via AI)
 - BATMASS (EU Circular Battery Valley)
 - DeremCo (End of Life composite materials)
 - AMBITIOUS (AI, IoT, 5G for sustainability)
 - RISE: Resilient Innovation Ecosystems for European Value Chains (innovation support for LDR)
- I3 partnerships involve **partners** from 13 different MS (AT, BE, BG, DE, EL, ES, FI, FR, NL, PT, RO SE, SI)



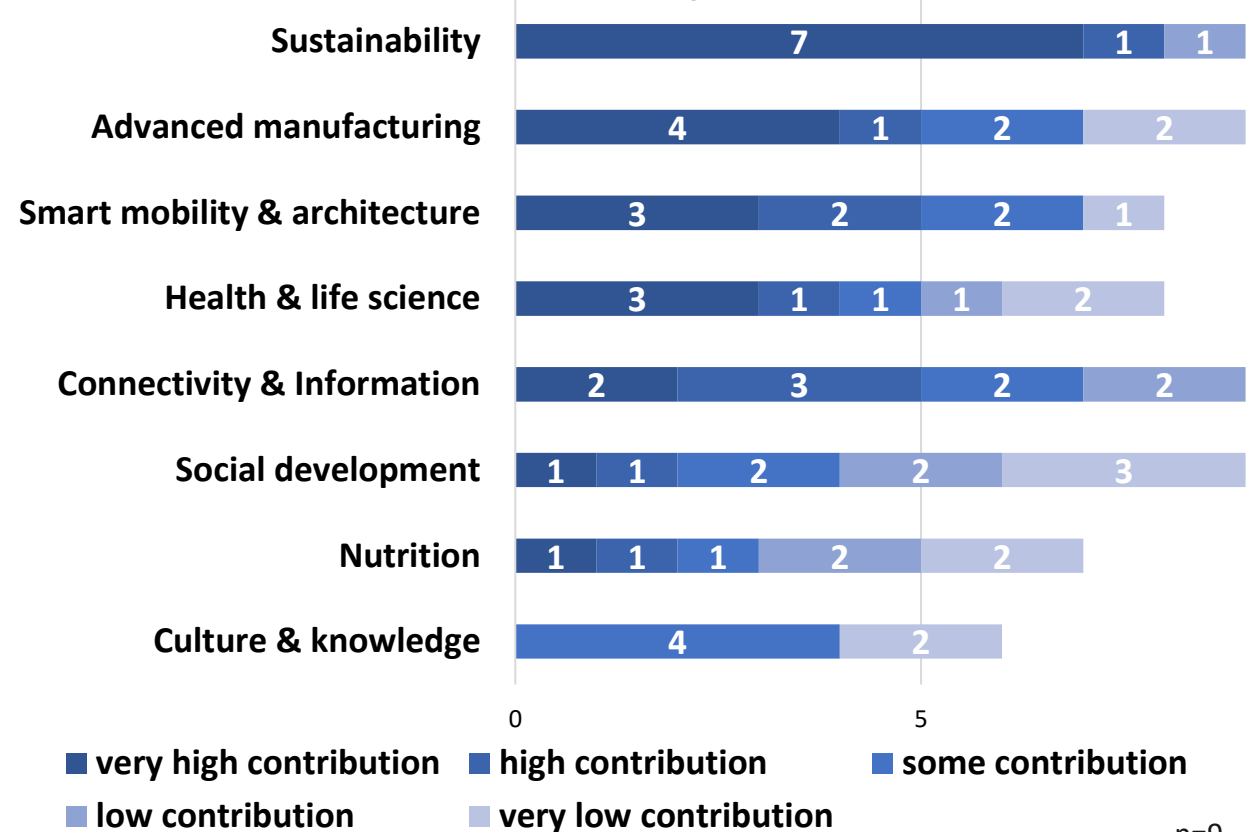
Smart Specialisation Strategy of Lombardy and the role of clusters

Innovation Ecosystems of the S3 2021-2027 of Lombardy



1. Nutrition
2. Health & life science
3. Culture & knowledge
4. Connectivity & Information
5. Smart mobility & architecture
6. Sustainability
7. Social development
8. Advanced manufacturing

Contribution of competencies of Lombardy Technology Clusters to the S3 Innovation Ecosystems



Source: ECCP (2024) own elaboration based on the Smart Specialisation Strategy for Research & Innovation 2021-2027 of Lombardy. Survey results are based on the self-assessment of Lombardy Technology Clusters. Survey conducted in February - March 2024. Note: participants could select multiple priority areas.

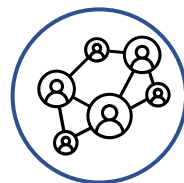
Final Remarks



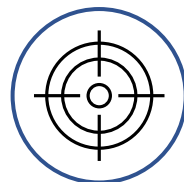
Lombardy's knowledge and research ecosystem is characterized by a robust collaborative research environment and strong research linkage



Lombardy's cluster landscape is defined by the Lombardy Technology Clusters. Particular strengths are found in the ecosystems Health, Digital & Energy/Renewables.

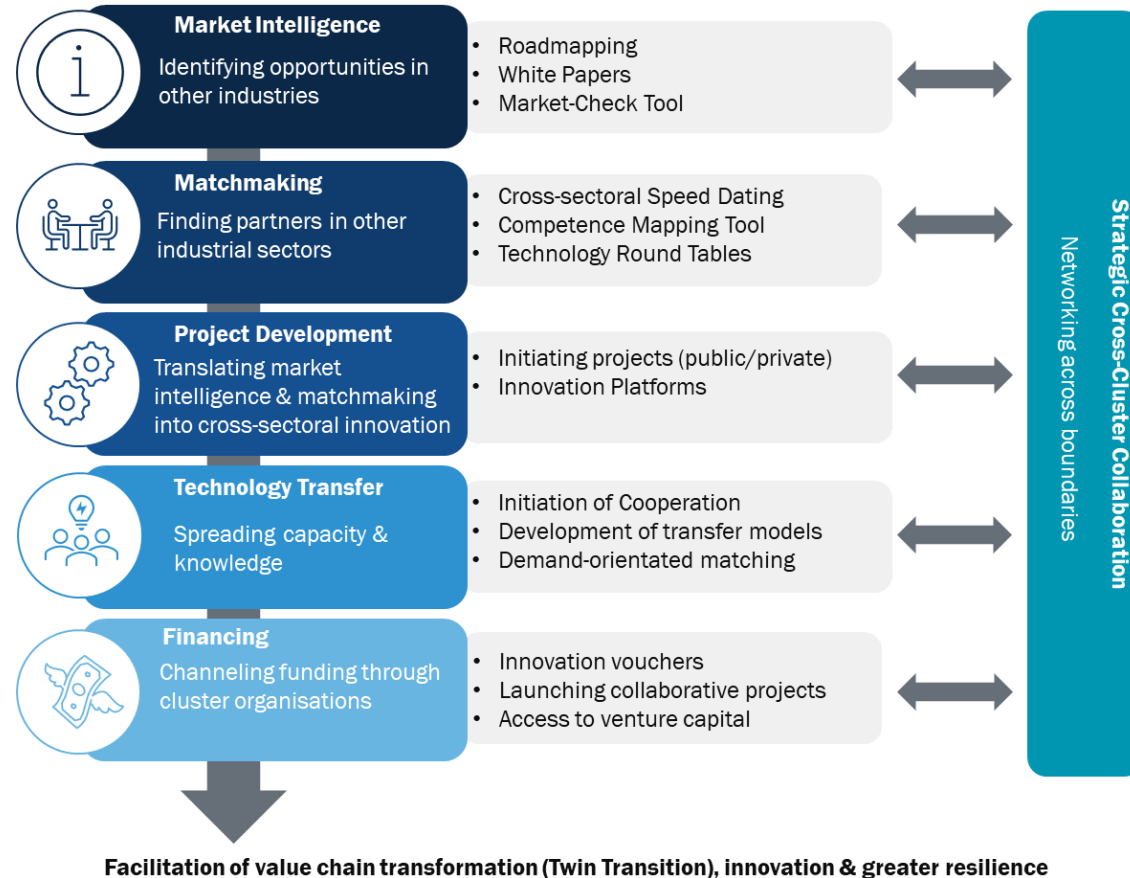


Several clusters participate in various **inter-regional collaborations initiatives** to facilitate innovation & value chain transformation



The S3 2021-2027 identifies **8 Innovation Ecosystems** out of which the relevance of Innovation Ecosystems related to the Twin Transition is highlighted.

Role of cluster organisations in the innovation ecosystem



Source: ECCP (2024), based on European Cluster Observatory (2014): Cluster Collaboration and Business Support Tools to Facilitate Entrepreneurship, Cross-sectoral Collaboration and Growth

Make sure to check out the Input Paper!

