Presentation of the Input Paper for Małopolska

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Economic profile of Małopolska

General trends in the regional economy:

- Fifth-largest regional economy in Poland, with a GDP of €47.2 billion (representing 8.2% of Poland’s total GDP) and a GDP per capita of €23,000 (PPS) (EU27 average of €32,400)

- Region grappling with significant challenges, i.e. after-effects of the COVID-19 pandemic, inflation as well as the economic and social repercussions of the war in Ukraine

Employment composition and specialisation:

- Relatively high shares in Agriculture & Mining, and Utilities & Construction are reflected in the composition of ecosystems

- Małopolska also exhibit specialisation nodes in industrial ecosystems like Agri-Food and Energy Intensive Industries.

- Also: High concentration relative to the EU27 in the ecosystems Retail, Construction, Mobility – Transport – Automotive, Digital, Textile and Energy – Renewables.

Source: ECCP (2023), own elaboration based on Eurostat.
Małopolska’s regional innovation & competitiveness performance

RIS 2023: PL21 – Małopolska as an “Moderate Innovator“

Relative strengths
1. Tertiary Education (relative to country and EU)
2. Employed ICT specialists (relative to country and EU)
3. Design applications (relative to country and EU)

Areas for improvement
1. Most-cited scientific publications (relative to EU)
2. Innovation expenditures per person employed (relative to EU)
3. Business Process and Product innovators as well as Innovative SMEs collaborating (relative to EU)

Regional Competitiveness Index 2022
- Małopolska’s overall score falls below the EU average, but above the national average score
- The region shows relative strengths in Higher education & LLL and Innovation, yet indicates room for improvement in Infrastructure, Technology readiness and Business sophistication

Source: European Commission (2023): Regional Innovation Scoreboard 2023 – Regional profiles Poland
Cluster ecosystem* in Małopolska: Locations, sectors and structures

Cluster Organisations
- 7 Cluster Organisations (CO) from Małopolska (Lesser Poland) on ECCP (81 from Poland overall)
- Cover 7 out of 14 EU Industrial Ecosystems
- Top ecosystems: Construction, Digital, Mobility-Transport-Automotive, Renewable Energy

Structure of clusters
- Many small and mid-sized COs: 72% have 100 or less members (EU: 61%)
- Cluster organisations have comparatively low numbers of staff: 86% have up to 5 employees (EU: 55%)
- High level of Cluster excellence: 3 Cluster Excellence Labels (2 Bronze, 1 Silver), 3 National Key Clusters
- Collaborative Areas: Internationalisation; partnering for projects; digitalisation

Clusters and regional economic competitiveness

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

- **Business environment**
  - Public R&D expenditure
  - Human resources in science & technology

- **Firm behaviour**
  - Business R&D expenditure
  - Employed ICT specialists

- **Intermediate performance indicators**
  - Apparent labour productivity
  - PCT patents per Capita
  - ICT patents

- **Outcome indicators**
  - GDP per Capita
  - Employment in technology & knowledge intensive sectors
  - Share of ICT in GVA

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

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

**2014-2020 funding period**

**INNOSUP-1**
- Horizon 2020 initiative
- Development of new-cross-sectoral industrial value chains across the EU
- One organisation from Małopolska (Mineral and Energy Economy Research Institute of the Polish Academy of Sciences) participated in INNOSUP-1 projects.

**ESCP-4i**
- COSME Initiative
- Development and implementation of joint internationalisation strategies to support SME internationalisation
- No cluster participation from the Małopolska region in ESCP-4i.

**ESCP-4x**
- COSME initiative
- Boost the cross-cluster networking and learning within the EU and development of cluster management excellence
- Two cluster organisations from Małopolska participated in three ESCP-4x projects.

**ESCP-S3**
- COSME initiative
- Boost cluster cooperation in specific thematic areas in the field of regional smart specialisation strategies
- No cluster participation from the Małopolska region in ESCP-S3.

**2021-2027 funding period**

**Euroclusters**
- Single Market Programme
- Support the implementation of the EC industrial strategy through cross-sectoral, interdisciplinary and trans-European cluster initiatives
- No cluster participation from the Małopolska region in the Euroclusters initiative.

Source: ECCP (2023).
Two clusters from Małopolska involved in three ESCP-4x projects with European partners

Overview of involvement in the ESCP-4x

**CE4BIG – Cluster Excellence for Business Innovation and Growth in the Health Sector:** Supporting the development of advanced therapies for personalised medicine by uniting four cluster organisations from European regions with similar S3 strategies. The project intends to promote business growth and raise the innovation capacity of SMEs.

**Excellence Cluster for Regional Improvement (ECRI) project:** the goal is to improve the performance of the four consortium clusters active in the life sciences domain, achieve and maintain cluster excellence in order to strengthen the competitiveness of their actors and foster trans-cluster cooperation.

**Eco-system Partnership for Interclusters and smart cities eXchanges (EPIX):** enable partners to exploit opportunities that will change the outlook of cities providing added-value services and new governance for the creation of data-sharing communities formed by cities and businesses.

- **3 project participations in the ESCP-4x** by two cluster organisations.
- **The projects involved 27 European cluster partners** from 18 different countries.
- **Thematic focus:** Health & Medicine; life sciences; smart cities, data sharing.

Source: ECCP (2023) based on information from COSME data hub.
Smart Specialisation in Małopolska

Priority areas of Małopolska
1. Life science
2. Sustainable energy
3. Information & communication technologies
4. Chemistry
5. Production of metals, metal products & non-metallic mineral products
6. Electrical engineering & machine industry
7. Creative & leisure industries

Source: ECCP (2023) own elaboration based on the Regional Innovation Strategy of the Małopolska Region 2030
Małopolska’s economy is marked by robust GDP growth and a rapid post-pandemic recovery, however facing major challenges, not least stemming from Russian Aggression in Ukraine.

Małopolska’s cluster organisations show a high participation in European and national cluster excellence initiatives and are present in key industrial ecosystems around the thematic areas of aerospace, smart cities, and life science.

3 Interregional cluster partnerships and cross-border collaborations facilitate innovation and value chain transformation within the Single Market.

The Regional Innovation Strategy of the Małopolska Region 2030 covers 7 priority areas; clusters highlight the relevance of the priority areas related to the Twin Transition.

Role of cluster organisations in the innovation ecosystem

- Market Intelligence
  - Identifying opportunities in other industries
  - Roadmapping
  - White Papers
  - Market-Check Tool

- Matchmaking
  - Finding partners in other industrial sectors
  - Cross-sectoral Speed Dating
  - Competence Mapping Tool
  - Technology Round Tables

- Project Development
  - Translating market intelligence and matchmaking into cross-sectoral innovation
  - Innovation Platforms
  - Change Management Moderation
  - Special Interest Groups

- Technology Transfer
  - Spreading capacity and knowledge
  - Transfer Concept

- Innovation Vouchers
  - Channeling funding through a cluster organisation
  - Meet & Greet Incentives
  - Insight Incentives
  - Collaboration Incentives

Facilitation of value chain transformation (twin transition), innovation and greater resilience