Presentation of the Input Paper

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Economic profile of North Brabant

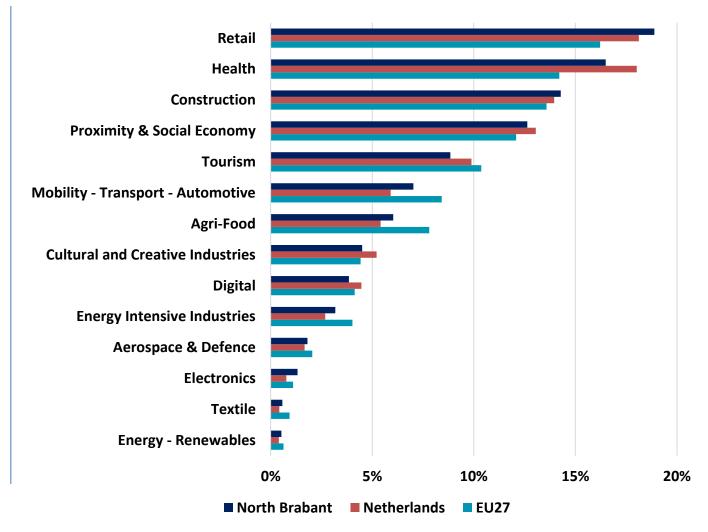
General trends in the regional economy:

- The region of North Brabant exhibited a GDP of €161.9 billion, and a **GDP** per capita (PPS) of €52,200 (EU avg. €38,100)
- North Brabant's exports totalled €166.4 billion in 2022, with "Machinery and transport equipment" being the most exported good
- region excels in advanced manufacturing, photonics. **semiconductors**, and **robotics**, supporting the development of key enabling technologies

Employment composition:

- **Retail**, **Health and Construction**, stand out as key industrial ecosystems
- The Mobility-Transport-Automotive, Agri-Food, Energy Intensive Industries, Electronics and Energy - Renewable ecosystems all have employment shares above the national average

Employment shares across the Industrial Ecosystems







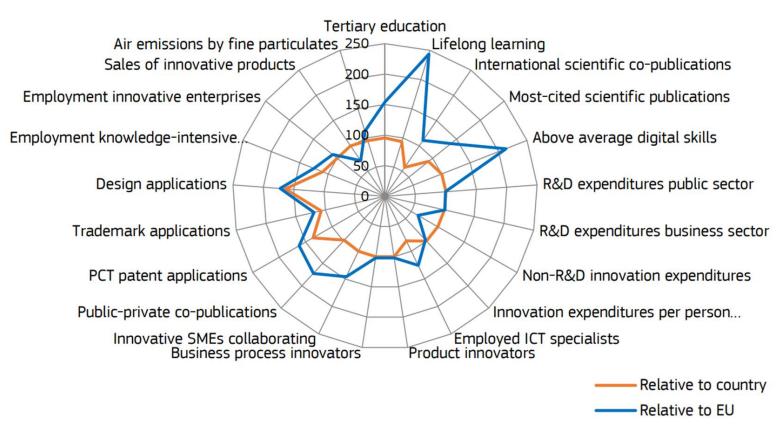






Regional innovation & competitiveness performance

RIS 2023: North Brabant (NL41) as an "Innovation Leader"



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

Relative Strengths according to the RIS 2023

- 1. PCT patent applications (relative to EU & NL)
- 2. Design applications (relative to EU & NL)
- 3. Trademark applications (relative to EU & NL)

Areas for improvement

- 1. International scientific co-publications (relative NL)
- 2. Non-R&D innovation expenditures (relative to EU)
- 3. Sales of innovative products (relative to EU)

Regional Competitiveness Performance (RCI 2022)

- North Brabant is ranked 4th across all 234 assessed regions in the RCI making it one of the most competitive regions in the EU
- The province excels in the Innovation Sub-Index, driven by strong performances in pillars for technological readiness and innovation





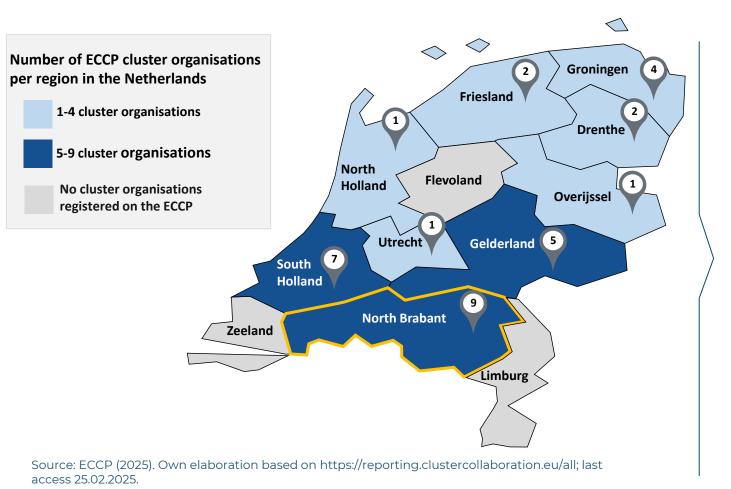






ECCP cluster ecosystem in North Brabant: Locations, industrial ecosystems and structures

Cluster organisations registered on the ECCP in North **Brabant and the Netherlands**



32 Dutch Cluster Organisations are registered on the ECCP

- North Brabant is the region with the most cluster organisations (9) with five of them located in **Eindhoven**
- COs spanning 7 out of EU industrial ecosystems,
- **Top ecosystem: Health** with 3 Cos two of them being active in the sports sector

Structure of clusters

- Many mid-sized and large COs in terms of member structure: 66% have 100 or more members (EU: 38%)
- **Collaborative Areas:** Partnering for projects, internationalisation, exchanging with peers as well as technology scouting and digitalisation











The policy framework to support cluster development

National level



The Netherlands

<u>Topsectorenbeleid (top sectors policy)</u>

- Since 2011
- Collaboration and funding platforms for leading sectors (Top Consortia)
- Horizontal elements: mission-driven approach; key enabling technologies
- Supported by leading "TO2" research institutions
- Tax instruments, funding streams, guarantees, consultancy services

Regional level



Province North Brabant

Smart Specialisation Strategy (S3)

- Focusing on sectoral transitions
- E.g., energy transition, health transition
- Linked to Vanguard Initiative to leverage S3 for interregional cooperation
- Implemented through Brabant Development Agency (BOM)

Subregional level









- Four subregional development agencies
- Managing strategic partnerships and innovation programmes
- Offering various business services











Clusters and regional economic competitiveness

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

Business environment



Birth of enterprises

Human resources in Science & Tech

Firm behaviour



Business R&D investment

++ Positive correlation ++ Weak positive correlation

Innovation potential



PCT patents per capita

Economic returns



GDP per capita

Apparent labour productivity

Employment rate

Employment in tech & knowledge sectors

Source: ECCP (2025). The symbols in the table indicate Pearson correlation coefficients that are significant at 95% level. Positive/negative Correlations include coefficients >=0.3, weak correlations include coefficients >=0.1.







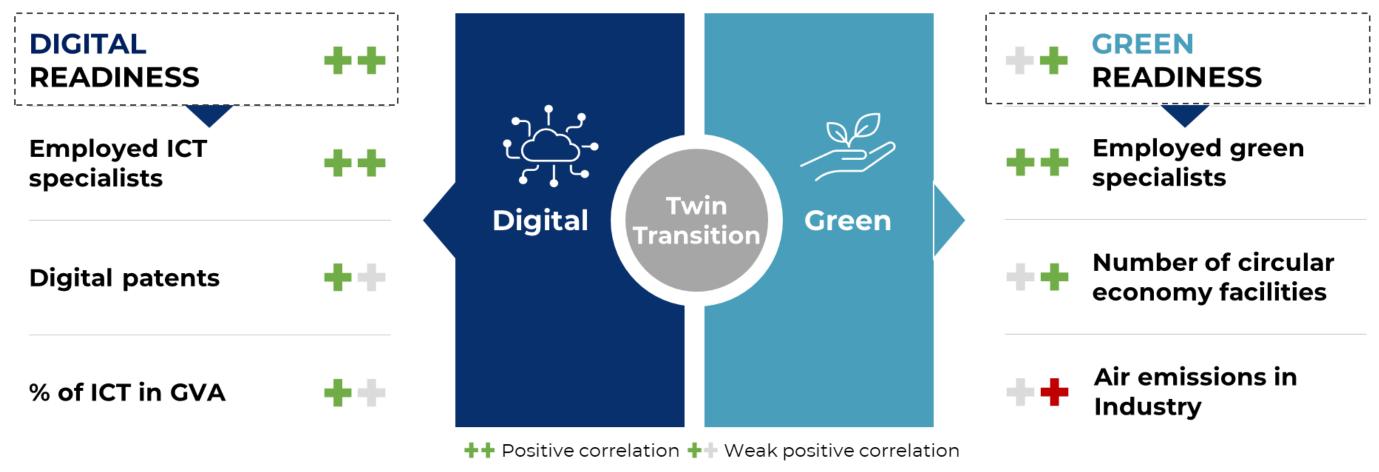






Clusters and the Twin Transition

Clusters are driving digital and green readiness:



Source: ECCP (2025). The symbols in the table indicate Pearson correlation coefficients >=0.1. AGreen fields indicate a positive relationship and red a negative relationship











EU offers important programmes for collaborative projects among clusters & their members





- **COSME** initiative
- Development and implementation of joint internationalisation strategies to support SME internationalisation
- **Three clusters from North Brabant involved in three 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 North Brabant are involved in two different ESCP-4x projects



Euroclusters

- Single Market Programme
- Support the implementation of the EC industrial strategy through cross-sectoral, interdisciplinary and trans-European cluster initiatives
- **Three clusters from North** Brabant are participating in three Euroclusters.



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- Funding instrument under the **European Regional Development** Fund (ERDF) 2021-2027 programming period that provides advisory and financial support
- 24 beneficiaries from North Brabant of which two are clusters, participate in 9 different 13 projects.

Source: ECCP (2025)









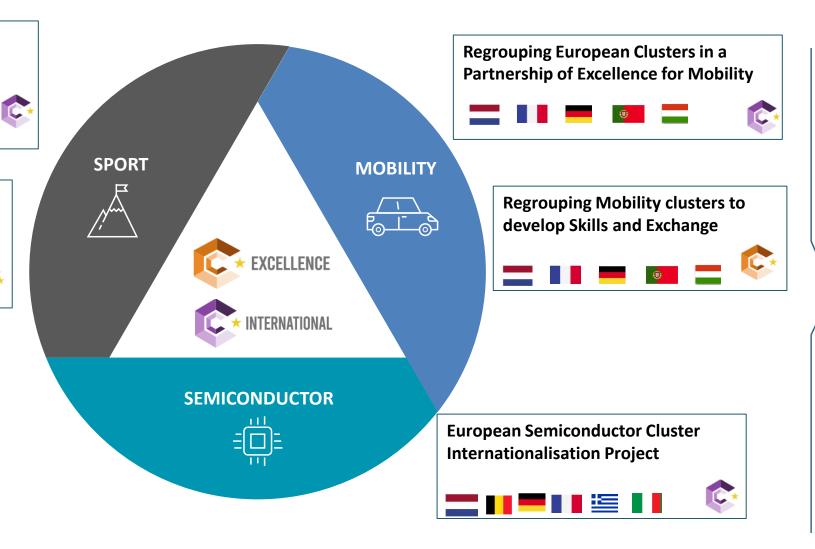


Cross-border cooperation and involvement of North Brabant in European partnerships

Implementation and test of a Joint Internationalization Strategy for the European Strategic Sports Clusters Partnership

Smart and sustainable Sports Products and Services for the promotion of Healthy Lifestyles





- Three cluster participate in ESCP International and two in the ESCP for Excellence
- ESCP-4i projects looked towards markets in Taiwan, Japan, China and the USA
- Projects involved cluster organisations from 7 different countries
- Strong specialisation in the sports, mobility and semiconductors sectors

Source: ECCP (2025).













Involvement in the Euroclusters

E-BOOST

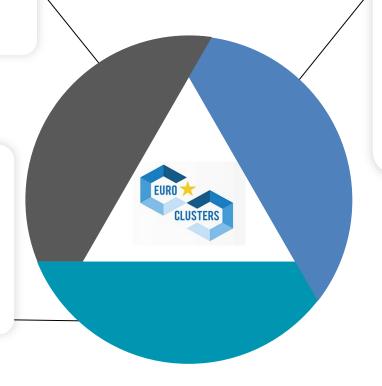


Aims to accelerate green and digital transition, setting focus on electricity and green hydrogen.

Silicon Eurocluster

High-tech NL

Achieve greater European selfsufficiency, competitiveness and resilience in electronics value chain.



BioMan4R2



- Lifeteczone
- Health focused aiming at scaling up innovation in the health sector, adapting the funding system and supporting collaboration of different EU-levels with SMEs, investors, etc.
- **3 participations** in Euroclusters by three North Brabant cluster orgnisations
- Projects involved EU cluster partners from 11 different countries
- Thematic focus areas:
 - Health
 - **Green transition**
 - **Digital transition**
 - **Technology**

Source: ECCP (2025).











Smart Specialisation Strategy of North Brabant and the role of clusters

Smart Specialisation Strategy of North Brabant

Priority areas of the S3 2021-2027 of North Brabant



- 1. Energy transition
- 2. Raw materials transition
- 3. Climate Transition
- 4. Agriculture and food transition
- 5. Health transition

- The North Brabant Smart Specialisation Strategy identifies 5
 priority areas
- North Brabant's cluster organisations are key both for the development and implementation of North Brabant's S3 2021-2027
- **Workforce upskilling** will come from the collaboration between universities, vocational institutions and businesses
- Crucial role of the dynamic cluster ecosystem in positioning North Brabant as one of Europe's most innovative regions supporting S3 implementation

Source: ECCP (2025)











Final Remarks



North Brabant is an **Innovation Leader**, which is reflected in the creation of intellectual, research collaboration and a high skilled work force



The **cluster landscape in North Brabant** is defined by nine cluster organisations, with particular strengths found in the industrial ecosystems Electronics and Health

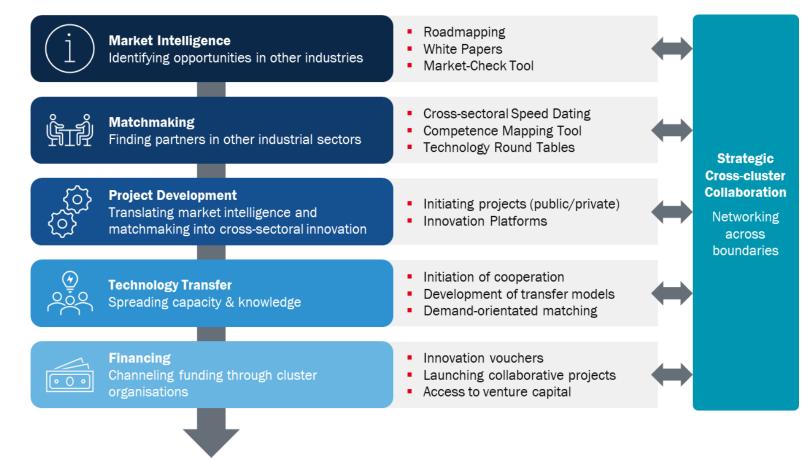


Several cluster organisations participate in various **inter-regional collaboration initiatives** to support entrepeneurship



The North Brabant S3 2021-2027 identifies **5 priority areas**. North Brabant clusters play a key role in the development & implementation of the strategy

Role of cluster organisations in the innovation ecosystem



Facilitation of value chain transformation (Twin Transition), innovation & greater resilience

Source: ECCP (2025), based on European Cluster Observatory (2014): Cluster Collaboration and Business Support Tools to Facilitate Entrepreneurship, Cross-sectoral Collaboration and Growth





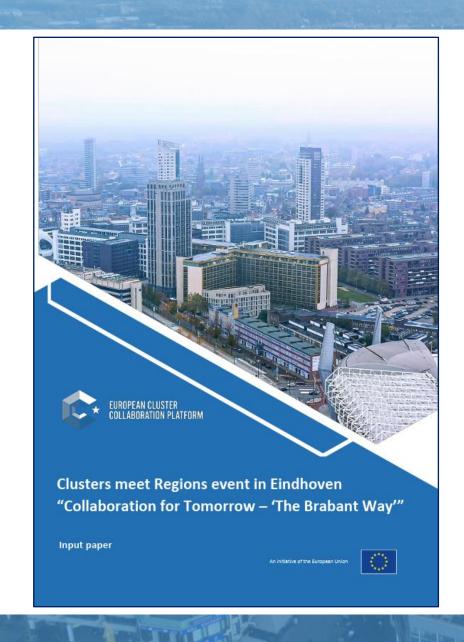








Make sure to check out the Input Paper!





Source: ECCP (2025).











