

Country factsheet

Belgium



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Introduction



This document presents an overview of the cluster policy in Belgium. Given its importance to contextualise the cluster policies (and related) analysed in the factsheets, a comprehensive outlook of the country in socioeconomic terms can be consulted in the <u>European Semester Country Report for Belgium</u>.

The European Semester was an instrument introduced to coordinate the EU Member States economic policies and

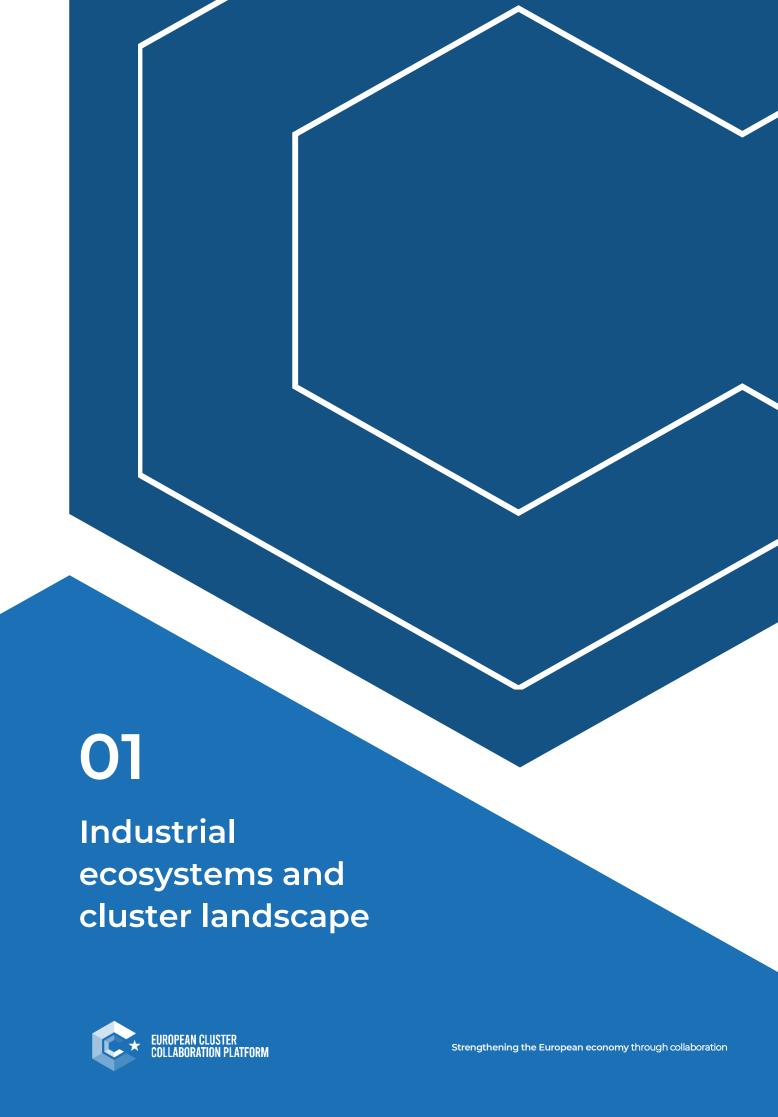
address the economic challenges faced by the EU. Its goals are "to ensure sound public finances, to prevent excessive macroeconomic imbalances in the EU, to support structural reforms to create more jobs and growth, and to boost investment". Thus, it focuses on the following areas: business environment; financial and fiscal stability; green economy; public administration; labour market and skills; and, social protection and cohesion.

The COVID-19 pandemic has caused an unprecedented economic shock to the European and global economy. In response, policymakers at EU and national level have acted decisively and at short notice to make available very significant financial resources, notably through the Recovery and Resilience Facility, to tackle the threat of a prolonged downturn. National recovery and resilience plans have been drafted in each Member State to ensure a recovery that addresses the challenges identified in the European Semester. The Belgium's recovery and resilience plan¹ are structured around six pillars: climate, sustainability, and innovation; digital transformation; mobility; social and inclusiveness; economy of the future and productivity; and public finances. Clusters are mentioned in the National recovery and resilience plan and will be an important stakeholder for the implementation of those pillars. In Belgium, industry, research, and innovation aspects as well as cluster support is handled by the regional authorities.

https://dermine.belgium.be/sites/default/files/articles/FR%20-%20Plan%20national%20pour%20la%20reprise%20et%20la%20re%CC%81silience.pdf



¹Belgium's recovery and resilience plan,

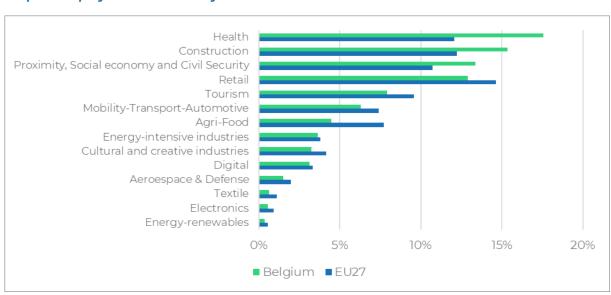


1. Industrial ecosystems and cluster landscape

This section will provide information on the national cluster organisations and statistical clusters in the country. The general cluster organisation landscape will show the geographical distribution of cluster organisations in the country registered under the ECCP, while the statistical clusters will display the top-performing clusters according to different measures of cluster strength (e.g. specialisation, size, productivity, dynamism. global frontier firms, high growth SMEs and gazelle firms).

Employment in the 14 ecosystems in the country

As part of its Industrial Strategy (March 2020), the European Commission has selected 14 industrial ecosystems that are particularly relevant in Europe and encompass all players operating in a value chain. The following graph shows the proportion of the country's employment accounted for by each ecosystem, as well as the equivalent figure for the EU27 on average. The ecosystems are ordered, from top to bottom, according to the amount of employment in the country. When the bar for the country is higher than that of the EU27, it indicates that the country is more specialised in that ecosystem.



Graph 1: Employment in the ecosystems

Source: Own elaboration from Eurostat and National Statistical Offices



Regionally relevant nodes

Economic activity, and therefore employment, is not equally distributed in all regions. Specialisation can be measured through Location Quotients (LQ) that reflect the relative specialisation of an activity in a region compared to the EU average. If the LQ for a given activity-region combination is above 1.5, it is considered a specialisation node, and if the activity accounts for at least 1 % of total employment in the region, it is considered regionally relevant. The following tables shows the total number of regionally relevant specialisation nodes in each region in the country and identifies the top five most specialised of these nodes. The first table focuses on the 88 NACE 2-digit activities or sectors, totalling 24 in the country, while the second table is based on the 14 ecosystems, which total 2 in the country.

Table 1: Regionally relevant sectoral nodes

Region	Number of nodes	Node 1	Node 2	Node 3	Node 4	Node 5
BE1: Brussels Region	11	J61 - Telecommunications	K64 - Financial services	N78 - Employment activities	P85 - Education	K65 - Insurance, pension funding
BE2: Flemish Region	6	N78 - Employment activities	N81-Buildings services and landscaping	Q87 - Residential care	Q88 - Social work without accommodation	C20 - Manuf. of chemical products
BE3: Walloon Region	7	C21 - Manuf. of pharmaceuticals	N81-Buildings services and landscaping	Q87 - Residential care	O84 - Public adm., defence, soc. security	N78 - Employment activities

Source: Own elaboration from Eurostat and National Statistical Offices

Table 2: Regionally relevant ecosystem nodes

Region	Number of nodes	Node 1
BEI: Brussels Region	0	-
BE2: Flemish Region	1	Health
BE3: Walloon Region	1	Health

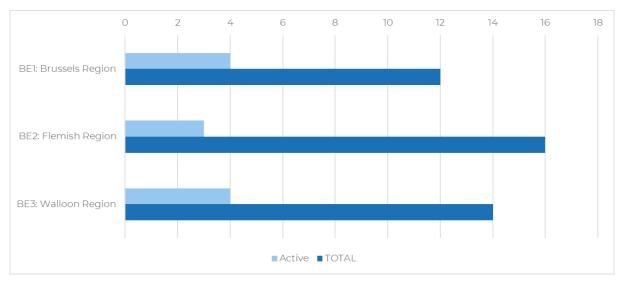
Source: Own elaboration from Eurostat and National Statistical Offices



Cluster organisations in the regions

There are 42 cluster organisations registered on the ECCP in the country, 11 of which can be considered active on the ECCP, having updated their profiles during the first half of 2021. The following graph shows the presence of cluster organisations in the different regions.

Graph 2: Cluster organisations profiled and active on the ECCP



Source: Own elaboration from Eurostat and National Statistical Offices



02

National cluster policy, programmes and initiatives





2. National cluster policy, programmes and initiatives

Policy type:	Regional cluster policy	Regional cluster policy
Policy name:	Flanders Innovation Clusters Policy	Walloon Region Competitive Clusters Policy
POLICY OBJECTIVES	Strengthening cooperation between companies or industry and RTDI actors Increasing competitiveness and boosting scale up of SMEs Supporting internationalisation activities Fostering R&D activities, technology development and implementation Promoting entrepreneurship, start-ups and spin-offs Promoting employment and upgrading skills and competences Strengthening the network of cluster organisations/cross-clustering Connect to global supply chains	Strengthening cooperation between companies or industry and RTDI actors Supporting internationalisation activities Enhancing the visibility of clusters Fostering R&D activities, technology development and implementation Fostering innovation and strengthening innovation ecosystems Promoting employment and upgrading skills and competences Cluster analysis and support for policymaking
	Policy objectives are to increase collaboration amongst researchers, industry, and businesses, as well as improve competitiveness of businesses.	Walloon region has two cluster policies, Business and Competitive Cluster policies. Business clusters are bottom-up development and sector initiated, public support being ensured by a regional decree. Competitive clusters are developed through a top-down approach, Walloon region having set 6 prior sectors. For this study, the focus is on Competitive Clusters because they were initiated by the government. Policy objectives of Competitive clusters are to encourage R&D cooperation projects between research institutions, academia and industry, encourage knowledge transfer between industry, training and skills

		upgrading of personnel involved in innovation, promote Walloon businesses locally and internationally, and cluster development.
POLICY FOCUS	Sectoral	Sectoral
+	The policies focuses on organizations operating in Flanders in 7 spearhead domains: agro-food, chemistry, logistics, new materials, energy and blue economy.	The policy does not have an industry focus. It however focuses on six competitive industries: life sciences, agro-industry, transport-logistics, mechanical engineering, aeronautics and environmental technologies.
RESPONSIBLE AUTHORITIES	Both drafting and implementation Provides funding Oversees the implementation	Both drafting and implementation Provides funding Oversees the implementation
	Flanders Innovation & Entrepreneurship (VLAIO) is responsible for drafting and implementing the cluster policy. This is based on the Decree of the Flemish Government March 4th, 2016. The agency is also responsible for funding the cluster organisations	The policy was designed by the Walloon Government through the Public Service for Economy, Employment and Research (SPW EER) which is also the managing authority. Each Competitiveness cluster is managed by a Board composed by academics and industrialists. The government oversees and aids the projects selected by the clusters int the framework of their own strategy. The government also provides funding to cover part of operational costs through the government agency Public Service of Wallonia.
BENEFICIARIES	SMEs	Cluster organisations
	Cluster organisations	Research organisations
	Research organisations	Academic institutions
	Academic institutions Large firms	Large firms SME's
	Technology centres	Technology centres

		Start-ups	
		The policy targets two types of clusters, spearhead clusters and Innovative Business Networks. Spearhead clusters are large scale, ambitious initiatives, while Innovative Business Networks are smaller scale initiatives that take a bottom-up approach to implement initiatives in upcoming domains. Both clusters target SMEs companies operating in Flanders, knowledge centres, and large firms.	Based on a governmental initiative, Competitive clusters are mainly an industry-driven approach to encourage collaboration between industry, academia, and research institutions, it mainly targets research larges firms, SME's, knowledge centres, , clusters organizations, and academia.
INSTRUMENTS	Financial	Funding collaboration initiatives	Funding collaboration initiatives
		Support to R&D projects, SMEs becoming cluster members, etc.	Support to R&D projects, SMEs becoming cluster members, etc.
		Financing start-ups	Subsidies to hire personnel
			Subsidies for cluster infrastructure (e.g. offices, equipment)
	Technical assistance	Infrastructure: incubation and accelerator spaces, research centres, technology parks etc.	Infrastructure: coworking spaces, offices, incubation and accelerator spaces, research centres, technology parks etc.
		Support for hard skill development: knowledge transfer, intellectual property, entrepreneurship, export advice,	Support for soft skills development: coaching, management training, upskilling/reskilling
		market intelligence	Support for networking and partnership building (at national
		Support for soft skills development: coaching, management training, upskilling/reskilling	and/or international level)
		Support for networking and partnership building (at national and/or international level)	
	Explanation	The policy offers support for R&D, business support, business creation, investments, starting incubators, entrepreneurship support and opportunities to network with knowledge sharers.	The Competitive Cluster policy offers support for R&D, attraction of foreign investment and exports, investment subsidies, infrastructure and equipment, and hard skill and soft skills training.



HISTORY	Period	Limited period	Unlimited period
	Ending year (for policies with limited period)	Spearhead Clusters = 2026 Business Innovative Networks = 3 years after start of each individual project	No indication that the policy is limited
	Starting year	2016	2005
	Explanation	The policy was put in place by the Flemish Government March 4th, 2016. Spearhead Clusters have a maximum financing of up to 10 years. Ending year= 2026. Business Innovative Networks have a maximum financing of 3 years. Ending year= 3 years after start of each individual projects.	The Competitive Clusters policy was launched in 2005 by Walloon Region to drive exports and attract foreign investment to Wallonia.
BUDGET	Overall	Total agency budget is EUR 510 million of which EUR 95 million earmarked for clusterprojects.	EUR 821 million as of 2019 (public funding)
	Annual	Data unavailable	As of 2019, EUR 46 million (public funding)
	Source of funding	50% of funding comes from Flemish Government subsidies and 50% from private investors	Part of the funding is provided by the Walloon government through the implementing Agency Public Service of Wallonia. Private Investors also contribute towards the programme.
POLICY	Availability	in-itinere	in-itinere
EVALUATION	Results	After three years, the number of companies involved in cluster organisations grew over 3.000; 62 cluster projects were initiated and raised EUR 79 million in support (yearly result in 2019). A recent evaluation of the first three years of the programme revealed that the cluster programme contributed to 1.1 billion euro additional turnover and an increase in workforce by 915 employees. Cluster members	Over 283 R&D projects have been completed, which have led to over 187 international collaborations, over 190 patent applications and 13 licenses sold. This has led to creation of over 4,205 jobs and 27 companies created. In terms of knowledge transfer and training, there have been difficulties reaching the main target

	also see the added value of participating in a cluster: 70% of the member companies sees or expects to see a contribution to their competitiveness in the short term due to their involvement in the cluster activities.	audience (employees of SMEs) because trainings did not always correspond with their needs and there was not an overall strategy.
POLICY ALIGNMENT WITH	Inclusive economy	Social inclusion
THE EU		Green economy
PRIORITIES		

03 State of play of cluster policy



3. State of play of cluster policy

The data below illustrates how the country ranks in terms of maturity of cluster policy. The maturity index is based on a combination of factors presented in Chapter 2 and which are scored based on their existence:

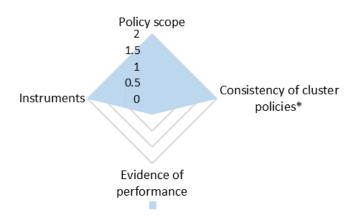
- **Policy scope:** whether the country has a dedicated cluster policy, or cluster creation and/or development is targeted through broader policies (existence of broader policies = 1 point; existence of targeted cluster policies = 2 points)
- Consistency of cluster policies: assessment of the duration and experience of the country in doing cluster policies. This dimension assesses only existing cluster policies and not broader policies (no cluster policies available = 0 points; < 10 years of experience or > 10 years (but interrupted) = 1 point; > 10 years (but with clear continuity = 2 points)
- **Evidence of performance**: the existence of monitoring and evaluation mechanisms determines the degree of policy development in the country (no evaluations = 0 points; existence of evaluations of past policies or in-itinere = 0.5 points; existence of ex-ante and/or ex-post evaluations = 0.5 points)
- **Instruments:** whether the policies provide any instruments to support the policy implementation, being these financial and/or technical assistance (1 point for each type of instrument available)

It is important to note that the maturity does not reflect the performance of a country, but only the degree of development of their cluster policy at the moment when the data was collected (2020 and 2021). The maturity index illustrates how the country scores for each of these four dimensions (policy scope, consistency of cluster policies, evidence of performance and instruments) compared to the maximum score that they can reach.

	Belgium	Maximum	
	beigium	score	
Policy scope	2	2	
Consistency of cluster policies*	2	2	
Evidence of performance	0,5	1	
Instruments	2	2	

^{*} This dimension is scored solely if the country has a dedicated cluster policy and it assesses only cluster policies

Cluster policy maturity level



State of play of cluster policy in the country

Policy evaluation (for terminated policies)

Availability of evaluations for terminated policies

2001-2005 Wallonia Clusters, Pilot Project: In the pilot project, the Government of Walloon supported 12 Business Clusters in three stages. Stage 1 (2001-2002) included the following clusters: aeronautics, automotive industry, wood and biotechnologies. Stage 2 (2003) added the following clusters: clinical research and ceramic products cluster. Stage 3 (2004) added the following clusters: solid wastes, transportation & logistics, nutrition, ICT and eco building clusters. Among the first four clusters analysed in Stage 1, two showed positive results (Aeronautics and Automotive), while the other two were unsuccessful. They had low impacts and no long-term prospects, as a result they were discontinued.

The pilot Project on clusters in general had positive results: growth in the number of businesses, job creation and innovation. Recommendations were made to improve the programme: 1) Legalising certain processes for the sustainability of program, 2) Upkeep of sliding-scaled public financing, 3) Open process based on objectives in the selection of initiatives or projects, and 4) Independent assessment of each cluster after 2 to 3 years of operation. Based on these results came the emergence of the Competitive Clusters initiative in 2005.

Policy approach in the country

Policy support for the activities of cluster organisations

Cluster approach used directly by national/regional development agencies

Broad-based framework policies to support cooperation effectiveness

Specific policies to support cooperation projects

Continuity

Belgium does not have any national cluster policies; it however has several regional cluster policies. Belgium is divided into three Regions: Flemish Region, Walloon Region and Brussels-Capital Region. Each of these regions have developed cluster policies based on industries in their regions. For the purpose of this study, the focus will be on the Flemish and Walloon Regions.

The Flemish government developed the earliest cluster policies in Belgium. In the late 1980s- 90s, the government developed a top-down cluster policy that designated six clusters to encourage the collaboration amongst the different sectors. In 1999, cluster initiatives were integrated into the "Innovation Decree," which gave the Flemish government authority to expand the R&D policy to include more organizations such as SMEs and research organizations. From this came demand-driven cluster networks or "Competence Poles" in 2005. In 2006, the government developed the "Flanders in Action" programme policy targeting smart specialisation. Building upon the "Flanders in Action" Programme, Flanders has the "Flanders Innovation Clusters" policy today.

As with the Flemish Region, Walloon Region also has a history of cluster policies dating back to the early 2000s, with the implementation of pilot projects clusters in 2001, the emergence of competitive clusters in 2005. From 2007 onwards, the Business and Competitive Cluster policies was initiated. Cluster policies in Belgium do not appear to have gap periods, with **each** terminated policy, a new policy has been implemented almost immediately.

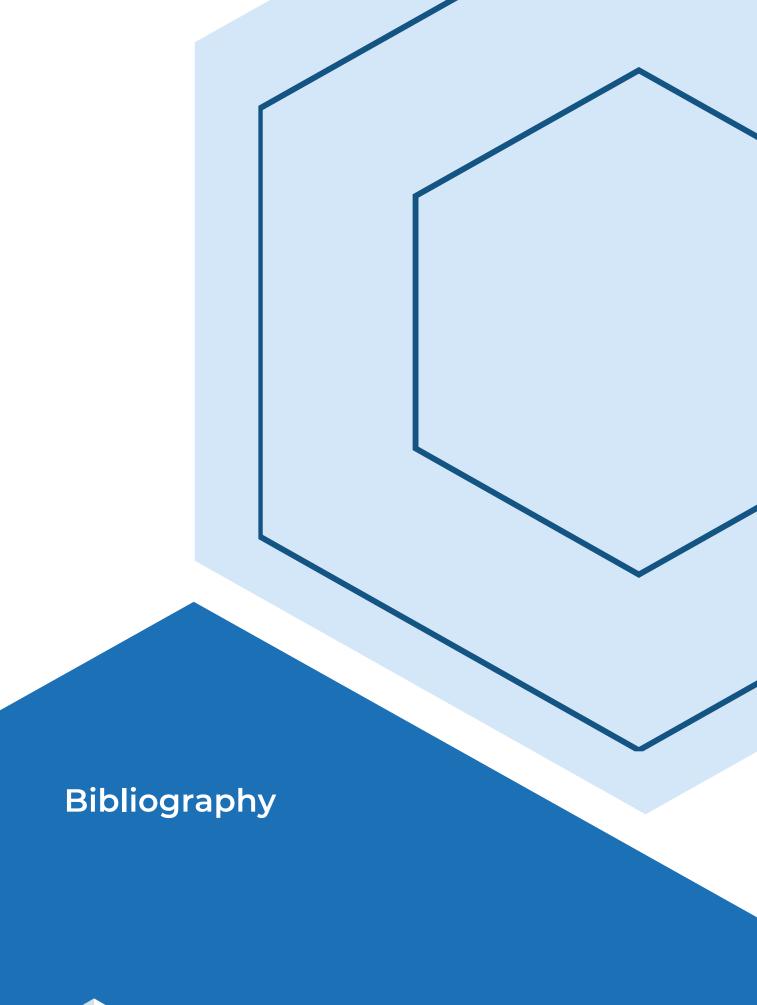
Consistency

> 10 years (but with clear continuity)

Belgium does not have any national cluster policies. However, it has several regional policies, for example, the Flemish Region has cluster policies dating back to the late 1980s/early 90s with clear continuity through the years and through several government changes. Walloon Region has the Competitive and Business Clusters Policies (both in



progress but pursuing different goals: networking and support of collaborative RDI projects), while Brussels-Capital Region Hub Brussel's Business Support Agency Policy.





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