

Country factsheet

Slovakia





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Introduction



This document presents an overview of the cluster policy in Slovakia. 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 Slovakia</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 State¹ to ensure a recovery that addresses the challenges identified in the European Semester. The Union of Clusters of Slovakia which is an active member of the European Cluster Collaboration Platform (ECCP) participated in the creation of the Covid-19 Industrial Clusters Response Portal² and clusters have been included in the National Recovery and Resilience Plan of Slovakia³.

³ ECCP, Open for business: European economy, the Recovery Plan and how clusters can help. Available at: https://clustercollaboration.eu/news/open-business-european-economy-recovery-plan-and-how-clusters-can-help.



¹ The National Recovery and Resilience Plan of Slovakia has been approved by the European Commission on 21 June 2021. The text of the Plan (in Slovak) can be found here: https://www.planobnovy.sk/files/dokumenty/kompletny-plan_obnovy.pdf.

² Únia klastrov Slovenska, ECCP vytvorila portál s cieľom pomôcť prekonať pandémiu koronavírusu COVID-19 aj v spolupráci s klastrami – Covid-19 Industrial Clusters Response Portal. Available at: http://uksk.sk/blog/2020/04/08/eccp-vytvorila-portal-s-cielom-pomoct-prekonat-pandemiu-koronavirusu-covid-19-aj-v-spolupraci-s-klastrami-covid-19-industrial-clusters-response-portal/.

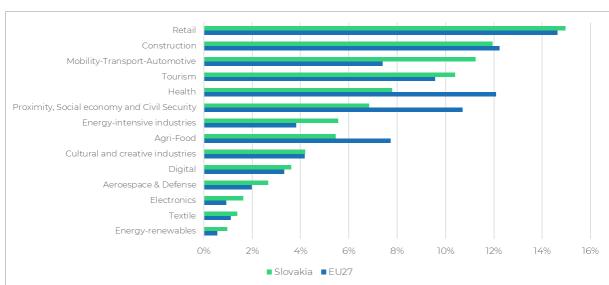
01 **Industrial ecosystems** and cluster landscape Strengthening the European economy through collaboration



1. Industrial ecosystems and cluster landscape

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 42 in the country, while the second table is based on the 14 ecosystems, which total 11 in the country.

Table 1: Regionally relevant sectoral nodes

Region	Numbe r of nodes	Node 1	Node 2	Node 3	Node 4	Node 5
SK01: Bratislava	13	M73 - Advertising & market research	N82 - Business support activities	C29 - Manuf. of motor vehicles & trailers	L68 - Real estate	M70 - Head offices, management consult.
SK02: West Slovakia	10	C29 - Manuf. of motor vehicles & trailers	C27 - Manuf. of electrical equipment	C22 - Manuf. of rubber & plastic products	C26 - Manuf. of electronic & optical products	D35 - Electricity, gas & steam
SK03: Central Slovakia	10	A02 - Forestry & logging	C16 - Manuf. of wood products	C29 - Manuf. of motor vehicles & trailers	C24 - Manuf. of basic metals	C26 - Manuf. of electronic & optical products
SK04: East Slovakia	9	C24 - Manuf. of basic metals	A02 - Forestry & logging	C29 - Manuf. of motor vehicles & trailers	C26 - Manuf. of electronic & optical products	C25 - Manuf. of fabricated metal products

Source: Own elaboration from Eurostat and National Statistical Offices

Table 2: Regionally relevant ecosystem nodes

Region	Number of nodes	Node 1	Node 2	Node 3	Node 4
SK01: Bratislava	2	Mobility-Transport- Automotive	Cultural and creative industries	-	-
SK02: West Slovakia	4	Energy-renewables	Electronics	Mobility-Transport- Automotive	Aeroespace & Defense
SK03: Central Slovakia	2	Electronics	Energy-intensive industries	-	-
SK04: East Slovakia	3	Energy-intensive industries	Textile	Electronics	-

Source: Own elaboration from Eurostat and National Statistical Offices



Cluster organisations in the regions

There are 17 cluster organisations registered on the ECCP in the country, 7 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.

0 1 2 3 4 5 6 7 8 9

SK01: Bratislava

SK02: West Slovakia

SK03: Central Slovakia

SK04: East Slovakia

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:	National cluster policy
Policy name:	Regional development policy and structural change
POLICY OBJECTIVES	Strengthening cooperation between companies or industry and RTDI actors Increasing competitiveness and boosting scale up of SMEs Supporting internationalisation activities Enhancing the visibility of clusters Fostering R&D activities, technology development and implementation Fostering innovation and strengthening innovation ecosystems Supporting cluster excellence and professionalisation of cluster management Supporting the consolidation of existing cluster organisations Supporting the creation of new cluster organisations Promoting entrepreneurship, start-ups and spin-offs Promoting social and sustainable economy and other solidarity-based initiatives Promoting employment and upgrading skills and competences Enhancing territorial cohesion (through RIS3) Strengthening the network of cluster organisations/cross-clustering
	The broad Regional development policy has several policy objectives: POLICY OBJECTIVE 1 - INNOVATIVE SLOVAKIA (MORE INTELLIGENT EUROPE) - Support for measures to expand research and innovation capacities and the use of advanced technologies - Support for human resources building in research and development

- Support for the construction and modernization of central research and development infrastructure
- Support for the participation of Slovak entities in the European Research Area
- Supporting the development of the digital and data economy and the digital transformation of the wider economy, research, development and application of modern technologies in order to increase the innovative performance of Slovakia and eliminating the negative impact of digitization on society
- Modernization of public service delivery
- Support for the construction of smart regions and cities
- Support for small and medium-sized enterprises
- Internationalization of small and medium-sized enterprises
- Support for networking of business entities
- Promoting the quality of labour market-oriented tertiary education
- Digital and business skills

POLICY OBJECTIVE 2 - ECOLOGICAL SLOVAKIA FOR FUTURE GENERATIONS (MORE ECOLOGICAL LOW CARBON EUROPE)

- Support measures to improve energy efficiency and reduce greenhouse gas emissions
- Promotion of energy from renewable sources
- Development of intelligent energy systems, networks and storage outside TEN
- Promoting adaptation to climate change, risk prevention and disaster resilience
- Improving water quality and water supply and wastewater treatment
- Transition to circular management with emphasis on waste management
- Improving nature, landscape, biodiversity and ecosystem services
- Ensuring the investigation, remediation and monitoring of environmental pressures
- Improving air quality
- Promoting sustainable multimodal urban mobility
- ENRAF

POLICY OBJECTIVE 3 - MOBILITY, TRANSPORT, CONNECTIVITY (A CONNECTED EUROPE)

- Traffic

- Rail transport
- Water transport
- Support for digital connectivity

POLICY OBJECTIVE 4 - SOCIAL, FAIR AND EDUCATED SLOVAKIA (SOCIAL EUROPE)

- Adaptable and accessible labour market
- Quality inclusive education
- Youth guarantee
- Active inclusion and available services
- Food and material deprivation
- Social innovations and experiments

POLICY OBJECTIVE 5 - QUALITY LIVING IN THE REGIONS (EUROPE CLOSER TO CITIZENS)

- Building administrative and analytical-strategic capacities of local and regional authorities
- Prevention of negative social phenomena and creation of a safe physical environment of municipalities, cities and regions
- Regional and local infrastructure for physical activities and leisure
- Improving management, services and infrastructure to support sustainable tourism

FAIR TRANSFORMATION FUND

- In Slovakia, there are four regions that will be supported under the fund, namely: the Bratislava region, the Banská Bystrica region, the Upper Nitra region and the Košice region

POLICY FOCUS



No specific focus

The aim of the measure to Support the networking of business entities is to strengthen the position of the cluster system in relation to the area of intelligent specialization to connect the business and research environment in the transfer of knowledge implemented in practice in the form of open innovations. The measure also supports cluster cooperation through an innovative European and international environment.

Expected results:

		 improving the cluster ecosystem in Slovakia and increasing the involvement of SMEs in cluster organizations and multisectoral platforms, networking of SMEs with large companies, increased participation in the initiative of the European Cluster Collaboration Platform. In addition, the measure to ensure the investigation, remediation and monitoring of environmental burdens focuses on the introduction of progressive methods of solving organic farming through the establishment of an innovation and technology cluster and a chemical technological centre.
RESPONSIBLE A	AUTHORITIES	Oversees the implementation Ministry of Investments, Regional Development and Informatization of the Slovak Republic
BENEFICIARIES		SMEs Cluster organisations Research organisations Academic institutions Start-ups Technology centres General population
INSTRUMENTS	Financial	Funding collaboration initiatives Support to R&D projects, SMEs becoming cluster members, etc.
	Technical assistance	Support for hard skill development: knowledge transfer, intellectual property, entrepreneurship, export advice, market intelligence Support for soft skills development: coaching, management training, upskilling/reskilling Support for networking and partnership building (at national and/or international level)
	Explanation	Assistance under this scheme includes the following initiatives:

		 Support for measures to expand research and innovation capacities and the use of advanced technologies (Policy Objective 1) - building partnerships, knowledge transfer; Support for the participation of Slovak entities in the European Research Area (Policy Objective 1) - building partnerships; Support for building human resources in research and development (Policy Objective 1) - upskilling; Support for small and medium-sized enterprises (Policy Objective 1) - upskilling; Promoting the quality of labour market-oriented tertiary education (Policy Objective 1) - upskilling; Digital and business skills (Policy Objective 1) - upskilling; Adaptable and accessible labour market (Policy Objective 4) - upskilling; Quality inclusive education (Policy Objective 4) - upskilling; Youth Guarantee (Policy Objective 4) - upskilling; Increasing skill levels and retraining employees (FAIR TRANSFORMATION FUND) - upskilling; Support for digital connectivity (Policy Objective 3) - building partnerships; Adaptable and accessible labour market (Policy Objective 4) - building partnerships; Building administrative and analytical-strategic capacities of local and regional authorities (Policy Objective 5) - building partnerships; Support for the construction and modernization of the central infrastructure for research and development (Policy Objective 1) - knowledge transfer;
		• Support for the construction and modernization of the central infrastructure for research and development (Policy Objective 1)
		Investment in research and innovation activities and support for the transfer of advanced technologies (FAIR TRANSFORMATION FUND) - knowledge transfer
HISTORY	Period	Limited period
5	Ending year (for policies	2027

	with limited	
	period)	
	Starting	2021
	year	
	Explanation	The Scheme of the European Commission to support Cohesion policy in the period 2021-2027.
BUDGET	Overall	EUR 11.77 billion at constant prices, resp. EUR 13.3 billion at current prices
	Annual	N/A
	Source of	European Commission
	funding	
POLICY	Availability	no policy evaluation
<u>X</u>	Results	
EVALUATION		
POLICY ALIGN	MENT WITH	
THE EU 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:

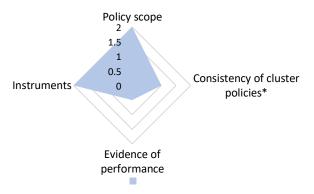
- **Policy scope:** whether the country has a dedicated cluster policy, or cluster creation and/or development is targeted through broader policies (existence of broader policies = 1 point; existence of targeted cluster policies = 2 points)
- Consistency of cluster policies: assessment of the duration 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.

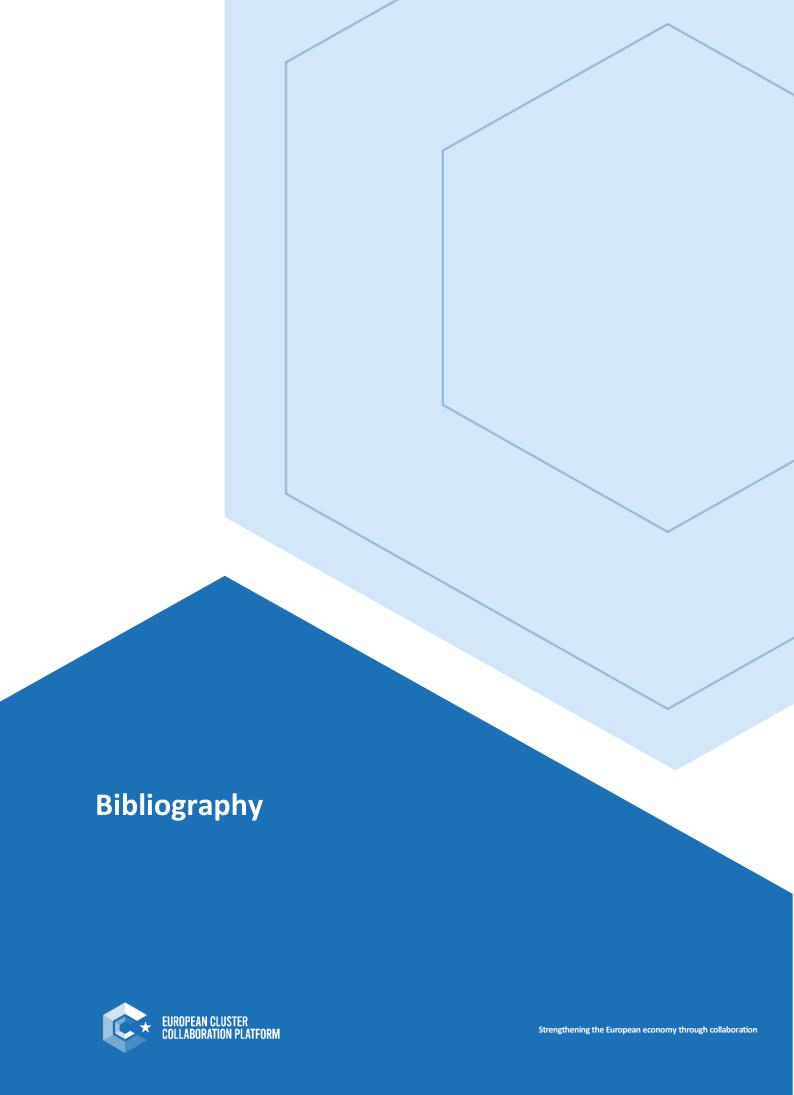
	Slovakia	Maximum
	Siovakia	score
Policy scope	2	2
Consistency of cluster policies*	1	2
Evidence of performance	0,5	1
Instruments	2	2

^{*} 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)	No policy evaluation	
	No policy evaluation for terminated policies has been identified.	
Policy approach in the country	Policy support for the activities of cluster organisations	
	Broad-based framework policies to support cooperation effectiveness	
Continuity	The main goal of the Innovation Policy of the Slovak Republic for the years 2008 to 2010 was the elaboration of individual measures of the Innovation Strategy of the Slovak Republic for the years 2007 to 2013 for specific measures and tasks. The fulfilment of the set tasks aimed at creating favourable conditions for the creation and implementation of support mechanisms for the establishment and development of regional innovation structures, innovative enterprises, partnerships and cooperation between enterprises and universities in the field of research, development and innovation as well as the gradual implementation of long-term conceptual plans of the Government of the Slovak Republic in the area of support for innovative activities. Part of this policy was improving the innovative environment and supporting the development of clusters through which the conditions for cooperation are to be created following the development potential in the regions. The Scheme to support industrial cluster organisations (de minimis scheme) within the competence of the Ministry of Economy was implemented in two parts: Scheme DM -	
	18/2014 and DM scheme - 13/2017 in the period between January 2015 and December 2020.	
	On the regional level, there is currently no cluster supporting programme in place, but policy interventions to support clusters existed in the past and are planned for the near future in the region of Western Slovakia (Západné Slovensko).	
Consistency	<10 years	
	Operational Program Research and Innovation (OP R&D), which was the most important program to support innovation and cooperation in Slovakia, states in the programming period 2014-2020 clusters (interest associations of legal entities) as eligible applicants. However, the calls announced so far within the OP R&D did not include clusters as eligible applicants. Currently, the only tool to support clusters is the Support Scheme industrial cluster organisations (de minimis scheme) within the competence of the Ministry of Economy.	



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