

## **Country factsheet**

Czechia







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## Introduction



This document presents an overview of the cluster policy in Czechia. Given the 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 European Semester Country Report for Czechia.

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. Clusters are not directly mentioned in the Czech National Resilience and Recovery Plan, but the plan, among other things, addresses identified bottlenecks in the field of cooperation between research institutions and companies. In particular, the plan focuses on creating better cooperation in the innovative ecosystem of the Czechia and increasing the innovative performance of enterprises. In addition to the COVID-19 pandemic, the ongoing Russian military aggression against Ukraine has also taken its toll on EU companies and industrial ecosystems, highlighting the significance of policy efforts in supporting SMEs and clusters.

<u>ERDF Partnership Agreement 2021-2027 with Czechia</u> refers to clusters as part of the goal to stimulate interregional collaboration and partnerships to strengthen innovation ecosystems.

In the following, a succinct overview of the cluster policy in Czechia will be provided. The structure of this factsheet generally encompasses:

- 1) an overview of the industrial ecosystems and cluster landscape in Czechia
- 2) an overview of the national cluster policy and an insight into the new broad policy addressing cluster development,
- 3) an assessment of the state of play of the national cluster policy.







## 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.<sup>1</sup> The classification of the 14 industrial ecosystems have been calculated by aggregating NACE 2 -digit activities, following the methodology established in the European Commission.<sup>2</sup> In Figure 1, the employment share of Czechia and the EU27 in each industrial ecosystem is shown relative to the number of employed persons in the 14 industrial ecosystems. 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.

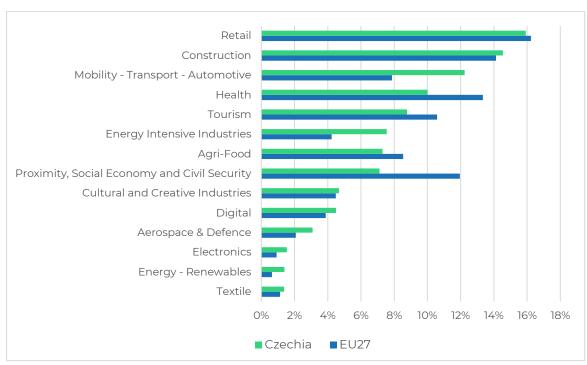


Figure 1: Employment in the ecosystems

Source: ECCP (2022), own elaboration based on data from Eurostat.

According to the figure, the most significant ecosystem in Czechia is "Retail," representing approximately 16% of employment across all ecosystems, followed by "Construction" at 14%. The ecosystem "Mobility – Transport – Automotive" is the third-largest by employment, accounting for about 12% of employment, which exceeds the EU27 level of just under 8%. This highlights the strength of this ecosystem in Czechia. Similarly, "Energy Intensive Industries," "Electronics," and "Textile" have a higher share of employment than the EU27 level, indicating the importance of the manufacturing sector in the Czech economy. Furthermore, the ecosystem "Energy – Renewables" is relatively prominent, with a 1.4% share of total employment across all ecosystems, compared to 0.6% in the EU27. The strength of these industrial ecosystems is also reflected in the sectoral and ecosystem

<sup>&</sup>lt;sup>2</sup> see European Commission (2021): Annual Single Market Report, SWD(2021)351.



<sup>&</sup>lt;sup>1</sup> see here for more information <a href="https://clustercollaboration.eu/in-focus/industrial-ecosystems">https://clustercollaboration.eu/in-focus/industrial-ecosystems</a> (last access 09.01.2023).

nodes that are regionally relevant across the majority of the eight Czech NUTS 2 regions, as detailed in the section below.

## Regionally relevant nodes (agglomerations)

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.<sup>3</sup> The following tables shows the total number of regionally relevant specialisation nodes (agglomerations) 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 95 in the country, while the second table is based on the 14 ecosystems, which total 32 in the country.

Table 1: Number of regionally relevant sectoral nodes and Top 5 nodes by region (NACE)

Region	# of nodes	Node 1	Node 2	Node 3	Node 4	Node 5
CZ01: Prague	13	L68 - Real estate activities	J58 – Publishing activities	M74 – Other professional, scientific and technical activities	M73 - Advertising and market research	J62 - Computer programming, consultancy and related activities
CZ02: Central Bohemia	9	C29 - Manuf. of motor vehicles & trailers	C32 - Other manufacturing	C26 - Manuf. of computer, electronic and optical products	C23 - Manuf. of other non-metallic mineral products	C16 - Manuf. of wood and of products of wood and cork, except furniture
CZ03: South-West (Czechia)	11	C27 - Manuf. of electrical equipment	A02 – Forestry & logging	C29 - Manuf. of motor vehicles & trailers	C32 - Other manufacturing	C16 – Manuf. of wood and of products of wood and cork, except furniture
CZ04: North-West (Czechia)	12	B05 - Mining of coal & lignite	C23 - Manuf. of other non-metal mineral products	C27 - Manuf. of electrical equipment	C33 - Repair, installation of machinery	C20 - Manuf. of chemicals and chemical products
CZ05: North-East (Czechia)	10	C13 - Manuf. of textiles	C29 - Manuf. of motor vehicles & trailers	C27 - Manuf. of electrical equipment	C26 - Manuf. of computer, electronic and optical products	C32 - Other manufacturing
CZ06: South-East (Czechia)	10	C27 - Manuf. of electrical equipment	C16 - Manuf. of wood and of products of wood and cork, except furniture	C32 - Other manufacturing	C25 - Manuf. of fabricated metal products	C28 - Manuf. of machinery and equipment
CZ07: Central Moravia	9	C22 - Manuf. of rubber & plastic products	C27 - Manuf. of electrical equipment	C25 - Manuf. of fabricated metal products	C16 - Manuf. of wood and of products of wood and cork, except furniture	C26 - Manuf. of electronic & optical products
CZ08: Moravian Silesia	10	B05 - Mining of coal & lignite	C24 - Manuf. of basic metals	C27 - Manuf. of electrical equipment	C29 - Manuf. of motor vehicles & trailers	C25 - Manuf. of fabricated metal products

Source: ECCP (2022), own elaboration based on data from Eurostat.

Overall, there are fewer numbers of ecosystem nodes compared to the regionally relevant sectoral nodes by NACE sectors. This more concentrated agglomeration can at least partially be linked to the methodology of measurement of the 14 industrial ecosystems. The capital region of Prague (CZO1) focuses on the specialization of service-related services, with real estate activities (L68), publishing

<sup>&</sup>lt;sup>3</sup> for more information on the methodology please see the methodology note: <a href="https://clustercollaboration.eu/infocus/policy-acceleration/country-factsheets-on-cluster-policies-and-programmes">https://clustercollaboration.eu/infocus/policy-acceleration/country-factsheets-on-cluster-policies-and-programmes</a> (last access 09.01.2023).



activities (J58) and advertising and market research being part of the most relevant sectoral nodes (NACE). These sectoral nodes are also reflected in the region's regionally relevant ecosystem nodes "Digital" as well as "Cultural and Creative Industries".

The other, less urban, regions of Czechia specialize mostly in the manufacturing sector, as shown by the most relevant sectoral nodes for these regions. In regions as Central Bohemia (CZ02), South-West (CZ03) or North-East (CZ05), the manufacture of motor vehicles & trailers (C29) and the manufacture of computer, electronic and optical products (C26) or the manufacture of electrical equipment (C27) are among the most relevant sectoral nodes, which is reflected in each of the regions' regionally relevant ecosystem nodes "Mobility Transport – Automotive", "Electronics" and "Energy-intensive industries".

Aside from that, most regions in Czechia, with the exception of Prague (CZ01) and Central Bohemia (CZ02) have a regionally relevant node in the ecosystem "Energy-renewables", which can be traced back to their specialization nodes in sectors, such as the manufacture of electrical equipment (C27) and electricity, gas, steam and air conditioning supply (E36).

Table 2: Regionally relevant ecosystem nodes

Region	# of ecosystem nodes	Node 1	Node 2	Node 3	Node 4	Node 5
CZ01: Prague	2	Digital	Cultural and creative industries	-	-	-
CZ02: Central Bohemia	3	Mobility- Transport- Automotive	Electronics	Energy- intensive industries	-	-
CZ03: South- West (Czechia)	5	Energy- renewables	Mobility- Transport- Automotive	Energy- intensive industries	Electronics	-
CZ04: North- West (Czechia)	3	Energy- renewables	Energy- intensive industries	Mobility- Transport- Automotive	-	-
CZ05: North- East (Czechia)	6	Electronics	Energy- renewables	Energy- intensive industries	Textile	Mobility- Transport- Automotive
CZ06: South- East (Czechia)	5	Energy- renewables	Electronics	Energy- intensive industries	Textile	Digital
CZ07: Central Moravia	4	Energy- renewables	Energy- intensive industries	Electronics	Aeroespace & Defense	-
CZ08: Moravian Silesia	4	Energy- renewables	Energy- intensive industries	Mobility- Transport- Automotive	Aeroespace & Defense	-

Source: ECCP (2022), own elaboration based on data from Eurostat.



## Cluster organisations in the regions

There are 22 cluster organisations registered on the ECCP in the country. The majority of these cluster organisations with profiles on the ECCP are located in Central Moravia (5 cluster organizations) and Moravian Silesia (5 cluster organisations). The following figure shows the presence of cluster organisations in the different regions.

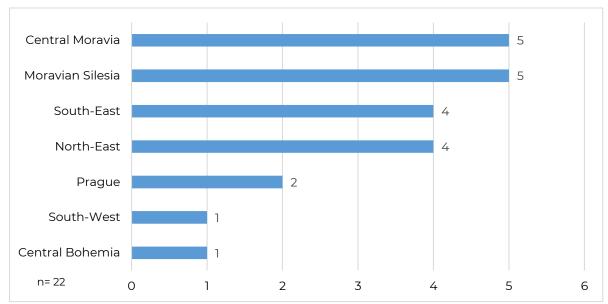


Figure 2: Cluster organisations profiled and active on the ECCP

Source: ECCP (2022). Note: the data for the analysis was extracted on 14/10/2022.

The majority of member organizations of Czech cluster organizations with profiles on the ECCP are composed of SMEs (72%, EU: 84%), followed by large enterprises (18%, EU: 9%) and research organizations (11%, EU: 7%). From a thematic perspective, these Czech cluster organisations are operating in the following industrial ecosystems. Since not all cluster organisations on the ECCP provided this information, the number of cluster organisations with an allocated industrial ecosystem is lower than the overall number of cluster organisations in the country.

- Aerospace & Defence (2 cluster organisation)
- Creative & Cultural Industries (2 cluster organisations)
- Electronics (2 cluster organisations)
- Agri-food (1 cluster organisation)
- Renewable Energy (1 cluster organisation)
- Mobility-Transport-Automotive (1 cluster organisation)
- Energy Intensive Industries (1 cluster organisation)



02

National cluster policy, programmes and initiatives



## 2. National cluster policy, programmes and initiatives

In this section we provide an overview of the existing cluster policies In Czechia at national level.

The breakdown is presented in the form of a table, with the first column showcasing information on the aspects which constitute the policy (beginning with 'Policy Objectives', following with 'Policy Focus', etc.). The second column represents the case of a Czech national cluster policy, while the third one showcases a new national broad policy in Czechia that includes cluster support elements.

Within the table the text presented in bold (black) depicts standardised categories across country factsheets (56 in total for 2022), which are applied for comparative purposes. This is followed by a complementary descriptive text to provide more insights about the cluster policy in Czechia.

Policy type:	National cluster policy	Broad policy
Policy name:	Operational Programme Enterprise and Innovation for Competitiveness – Support Programme Cooperation Clusters	Operational Programme Technologies and Applications for Competitiveness 2021 – 2027
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	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 Fostering innovation and strengthening innovation ecosystems Promoting entrepreneurship, start-ups and spin-offs Promoting employment and upgrading skills and competences



Policy type:	National cluster policy	Broad policy
Policy name:	Operational Programme Enterprise and Innovation for Competitiveness – Support Programme Cooperation Clusters	Operational Programme Technologies and Applications for Competitiveness 2021 – 2027
	Supporting the consolidation of existing cluster organisations  Promoting employment and upgrading skills and competences  Strengthening the network of cluster organisations/cross-clustering  Increase supply chain resilience	
	A support programme focused specifically on clusters under the Operational Programme Enterprise and Innovation for Competitiveness (OPPIK) has been running between 2014-2020. In total, there have been 7 calls for proposal under this support programme. The aim of the support programme is to support the development of innovation networks - clusters as a tool to increasing intensity of joint research, development and innovation activities between business entities and the research sphere. Furthermore, it aims to strengthen ties at the regional, supra-regional and international levels leading to the development of economy based on knowledge and innovation and fulfilment of the concept of smart specialisation. The activities of the programme are directly related to the strategic goal of the National Research and Innovation Strategy for Smart Specialisation of Czechia.	OP TAC focuses on: increasing the added value and productivity of Czech companies (mainly SMEs), strengthening their position in global value chains and searching for new opportunities, which is related to intensive stimulation of the creation and development of new innovative companies and start-ups. The program also focuses on the development of employees' skills. The specific objectives of the operational program are the development and support of research and innovation capacities and the implementation of advanced technologies, which will enable citizens, companies, research organizations and public bodies to enjoy the benefits of digitization. OP TAC will support the sustainable growth and competitiveness of SMEs and the creation of jobs. Other goals include supporting digital networks, increasing energy efficiency (by reducing emissions and greenhouse gases), supporting the use of energy from renewable sources (in accordance with EU Directive 2018/2001, including the sustainability criteria set out in the directive), developing smart energy systems and supporting sustainable multimodal urban mobility in the transition period to a carbon-neutral economy, supporting adaptation to climate change, prevention and

Policy type:	National cluster policy	Broad policy
Policy name:	Operational Programme Enterprise and Innovation for Competitiveness – Support Programme Cooperation Clusters	Operational Programme Technologies and Applications for Competitiveness 2021 – 2027
		resistance to the risks of catastrophic events with regard to ecosystem policies, supporting the transition to a cyclical economy with active use of resources. <sup>4</sup>
POLICY FOCUS	No specific focus	No specific focus
( <del>+)</del>	The call is open to all sectors and focuses particularly on SMEs and research institutions.	The program is intended for all sectors and focuses especially on small and medium-sized enterprises.
RESPONSIBLE AUTHORITIES	Both drafting and implementation	Both drafting and implementation
<u> </u>	Provides funding	Provides funding
T T	Oversees the implementation	Oversees the implementation
	The Ministry of Industry and Trade is the public authority responsible for the Operational Programme. It is also the authority that awards the funding under the calls for proposals. The projects are co-funded under the ERDF.	The governing body of the Operational Program Technology and Applications for Competitiveness is the Ministry of Industry and Trade (MPO). In 2019, the MPO established a Platform for the preparation of OP TAC. Individual participants (institutions and organizations) of the platform are selected according to the relevance of their activities, while the governing body tries to involve the widest possible spectrum of partners representing different focus groups or expert opinions with relevant experience and knowledge of good practice from previous program periods. Members of the platform prepare the program, are in charge of the preparation of the program

<sup>&</sup>lt;sup>4</sup> Ministerstvo Prumyslu a Obchodu. 2022. Evropská komise schválila OP TAK, na podporu podnikatelů je připraveno téměř 82 miliard korun z fondů EU. Available at: <a href="https://www.mpo.cz/cz/podnikani/dotace-a-podpora-podnikani/optak-2021-2027/aktualni-informace/evropska-komise-schvalila-op-tak--na-podporu-podnikatelu-je-pripraveno-temer-82-miliard-korun-z-fondu-eu--268464/">https://www.mpo.cz/cz/podnikani/dotace-a-podpora-podnikani/optak-2021-2027/aktualni-informace/evropska-komise-schvalila-op-tak--na-podporu-podnikatelu-je-pripraveno-temer-82-miliard-korun-z-fondu-eu--268464/">https://www.mpo.cz/cz/podnikani/dotace-a-podpora-podnikani/optak-2021-2027/aktualni-informace/evropska-komise-schvalila-op-tak--na-podporu-podnikatelu-je-pripraveno-temer-82-miliard-korun-z-fondu-eu--268464/</a> (last access 30.01.2023).

Policy type:	National cluster policy	Broad policy
Policy name:	Operational Programme Enterprise and Innovation for Competitiveness – Support Programme Cooperation Clusters	Operational Programme Technologies and Applications for Competitiveness 2021 – 2027
		document and are responsible for the successful implementation of the program. The program is co-financed within the EFRD.
BENEFICIARIES	SMEs	SMEs
<b>%</b> -8	Cluster organisations	Cluster organisations
	Research organisations	Research organisations
•	Academic institutions	Academic institutions
	Large firms	Start-ups
	Others - Chamber of Commerce	Business associations
		Large firms
		General population
		Others: Non-profit organizations, Territorial self-governing units, Infrastructure providers of innovations
	The beneficiary has to be an SME. If the beneficiary is a cluster, it needs to be composed of 15 separate members and at least 10 of them have to be SMEs (15 for developed clusters and 20 for clusters of excellence). At least one of the cluster members needs to be an organisation for research and knowledge sharing.	OP Technology and applications for competitiveness focuses primarily on supporting companies (mainly SMEs and partly also large companies <sup>5</sup> ), business associations, territorial self-governing units, non-profit organizations, research organizations, infrastructure providers for innovation and others.

 $<sup>^{5} \</sup> https://www.mpo.cz/cz/podnikani/dotace-a-podpora-podnikani/optak-2021-2027/aktualni-informace/evropska-komise-schvalila-op-tak--na-podporu-podnikatelu-je-pripraveno-temer-82-miliard-korun-z-fondu-eu--268464/ (last access 30.01.2023).$ 



Policy type:		National cluster policy	Broad policy
Policy name:		Operational Programme Enterprise and Innovation for Competitiveness – Support Programme Cooperation Clusters	Operational Programme Technologies and Applications for Competitiveness 2021 – 2027
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.
		Subsidies for cluster infrastructure (e.g. offices, equipment)	Subsidies for cluster infrastructure (e.g. offices, equipment)
		Others - internationalisation of clusters, development of	Supporting market entry (e.g. testing, proof-of concept, prototyping, demonstration projects)
		the cluster organisation (increase of quality, better cooperation, knowledge sharing, marketing, networking etc.)	Financing start-ups
	Technical assistance	No non-financial instruments	Support for hard skill development: knowledge transfer, intellectual property, entrepreneurship, export advice, market intelligence
			Support for soft skills development: coaching, management training, upskilling/reskilling
	Explanation		Support for networking and partnership building (at national and/or international level)
		The support programme's latest call for proposals provides funding under 4 activities - collective research, shared infrastructure, internationalisation of clusters, development of cluster organisation. The call does not provide any technical assistance.	<ul> <li>The Programme will provide:</li> <li>support for cooperation and exchange of knowledge between research organizations/academic institutions and companies,</li> <li>support for establishment of innovative firms and new companies in the area of smart specialisation,</li> <li>tools for businesses and research institutions to adapt and develop skills for smart specialization, industrial transformation and entrepreneurship,</li> </ul>



Policy type:		National cluster policy	Broad policy
Policy name:		Operational Programme Enterprise and Innovation for Competitiveness – Support Programme Cooperation Clusters	Operational Programme Technologies and Applications for Competitiveness 2021 – 2027
			<ul> <li>support for integration and implementation of digital technologies in SMEs operations, support for SMEs growth through specific vocational trainings and requalifications,</li> <li>support for businesses to gain a better position in value chains, increase productivity and facilitate participation in industry- and research-led clusters, support for strengthening the R&amp;I capacity of SMEs,</li> <li>support for SMEs internationalization, support for higher energetic efficiency and utilization of renewable energy sources in SMEs,</li> <li>support for reduction of GHG emissions,</li> <li>support for capacity building at the regional and local level to manage the transition to clean energy and the transition to a resource-efficient economy,</li> <li>investment in water retention/capture measures, measures to address contamination, water runoff and water quality</li> <li>and support for measures leading to the transition to a circular economy and the transition to a greater degree of waste prevention, reuse and recycling.</li> </ul>
HISTORY	Period	Limited period	Limited period
	Ending year (for policies with limited period)	2020	2027
	Starting year	2014	2021

Policy type:		National cluster policy	Broad policy
Policy name:		Operational Programme Enterprise and Innovation for Competitiveness – Support Programme Cooperation Clusters	Operational Programme Technologies and Applications for Competitiveness 2021 – 2027
	Explanation	Part of the 2014-2020 ERDF funding under operational programmes.	Operational program for the period 2021-2027
BUDGET	Overall	EUR 75.87 million <sup>6</sup> (CZK 1.98 billion) for 2015-2020	EUR 3,24 billion (CZK 80 billion) for 2021-2027
	Annual	N/A	N/A
	Source of funding	The calls for proposal under the support programme "Cooperation - Clusters" are financed through the EFRD. Each call is published for a varying period of time. There is no annual budget, each call has a specific allocated budget which ranged between EUR 1.5 to 19.1 million.	The Operational Programme Technologies and Applications for Competitiveness will be financed through EFRD.
POLICY	Availability	in-itinere	No policy evaluation
EVALUATION	Results	There is an evaluation of OP EIC Specific Objective 1.2. <sup>7</sup>	The Ministry of Industry and Trade, as the governing body of OP TAC, established a monitoring committee to evaluate the implementation of the operational program. This committee will meet at least once a year during the implementation of the program to assess the implementation of the OP TAC against its goals. There are no evaluations available yet (March 2023).

<sup>&</sup>lt;sup>6</sup> Converted from CZK according to ECB exchange rate from 08.08.2022. <a href="https://sdw.ecb.europa.eu/curConverter.do">https://sdw.ecb.europa.eu/curConverter.do</a> (last access 30.01.2023).

<sup>7</sup> <a href="https://www.mpo.cz/cz/podnikani/dotace-a-podpora-podnikani/oppik-2014-2020/evaluace-a-analyzy/evaluace-a-jine-analyzy--157435/">https://www.mpo.cz/cz/podnikani/dotace-a-podpora-podnikani/oppik-2014-2020/evaluace-a-analyzy/evaluace-a-jine-analyzy--157435/</a> (last access 30.01.2023).

<sup>&</sup>lt;sup>8</sup> https://www.mpo.cz/cz/podnikani/dotace-a-podpora-podnikani/optak-2021-2027/evaluace-a-analyzy/ (last access 28.03.2023).

Policy type:	National cluster policy	Broad policy
Policy name:	Operational Programme Enterprise and Innovation for Competitiveness – Support Programme Cooperation Clusters	Operational Programme Technologies and Applications for Competitiveness 2021 - 2027
POLICY ALIGNMENT WITH THE	-	Green Economy
EU PRIORITIES		Digitalisation
		Resilience

03 State of play of cluster policy



## 3. State of play of cluster policy

This section presents an overview on the state of play of cluster policy in Czechia in the form of a quantitative and qualitative assessment. The data below illustrates how the country ranks in terms of **maturity of cluster policy at the national level.** The maturity assessment is based on a combination of factors presented in Chapter 2, which receive a score based on the existence or absence of a given element in the cluster policy.

Note: the maturity assessment does not reflect the performance of a country, but only the degree of development of their national cluster policy at the moment of data collection (Q3 2022). The assessment illustrates how the country scores for each of the six criteria (policy scope, continuity of cluster policies, evidence of performance, cluster support instruments, cluster excellence management and cross-regional / international cooperation) compared to the maximum score that they can reach. Please refer to the **Annex** for the detailed overview of the categories and the scoring system.

The table below presents an overview of the **maturity assessment for Czechia** for 2022. The total score of Czechia is 6 points out of 8.

Czechia	MATURITY ASSESSMENT	Max score	Actual score
	Absence of cluster policy	0	
POLICY SCOPE	Broad policy	0,5	
POLICY SCOPE	Sectoral policy	1	
	National and/or regional cluster policy	2	2
	No cluster policy available	0	
	Cluster policy established recently	0,5	
CONTINUITY	Cluster policy established between over 2 and 10 years	1	1
	Cluster policy established over 10 years ago	2	
	No evaluation and / or monitoring available	0	
EVIDENCE OF	Existence of evaluations of past policies	0,5	
PERFORMANCE	Existence of monitoring or an ongoing / interim evaluation	1	1
	Existence of monitoring and ex-ante or ongoing / interim evaluation	2	
	No instruments for cluster development	0	
CLUSTER SUPPORT	Financial support for cluster development in the broader and / or sectoral policy	0,5	
INSTRUMENTS	Financial or technical support for cluster development in dedicated cluster policy	1	
	Financial and technical support for cluster development in dedicated cluster policy	2	2
	TOTAL (8)		6

Source: ECCP (2022)

Drawing from the table above that showcases the scored points in Czechia's cluster policy, the Figure below portrays the **degree of maturity** across four categories related to the national level cluster policy.

Policy Scope

Continuity

Evidence of Performance

Cluster Support Instruments

0,0 0,5 1,0 1,5 2,0

Figure 3: Maturity of cluster policy - Czechia

Source: ECCP (2022)

The text below provides a **qualitative description** of the state of play of the cluster policy in Czechia, which is complementary to the maturity assessment presented above.

#### **Policy scope**

The development and facilitation of cluster initiatives is financed through the Support programme Cooperation – Clusters. The programme aims to support the development of innovation networks and clusters as a tool increasing intensity of joint research, development and innovation activities between business entities and the research sphere. Furthermore, it aims to strengthen ties at the regional, supraregional and international levels leading to the development of economy based on knowledge, innovation and fulfilment of the concept of smart specialisation.

#### **Continuity**

Support for clusters has been provided over the years through several policies and funding lines. In 2005, a National Cluster Strategy for 2005 to 2008 was adopted by the Czech Government, however, this strategy as such was never completely implemented. According to the Ministry of Industry and Trade, the strategy and cluster support was mainly implemented through operational programmes first under OP Industry and Entrepreneurship (during the period 2007-2013). There were specific calls published under the operational programme which focused on fostering collaboration between clusters in the Czechia and their further development in terms of research, development and innovation. The objectives of this specific strand of financing are aligned with the Smart Specialisation Strategy's objective to increase innovation demand in companies and the public sector.



In 2019, the Government introduced Czechia's Innovation Strategy 2019-2030 where while clusters are specifically singled out, they are included within the focus point "The Country for Excellence" that aims to support innovation and research centres to reach their potential. One of the further goals is to achieve the integration of Czech companies into sectorial clusters with the participation of research institutions.

Czechia's industry is well developed, and the main focus has always been to support further research, development and innovation. While there is no specific cluster strategy in place, clusters and their development have always been supported either through specific budget lines in operational programmes or by including them in the country's smart specialisation strategy, Industry 4.0 strategy or various digitalisation strategies. At the moment, clusters are supported under a specific support programme Cooperation Clusters under the Operational Programme Enterprise and Innovation for Competitiveness for the 2014-2020 period and through broad policy named Operational Programme Technologies and Applications for Competitiveness 2021 – 2027.

#### **Evidence of performance**

An evaluation of the Operational Programme Enterprise and Innovation for Competitiveness was completed in June 2020 through which the Support Programme Cooperation Clusters was evaluated as well. The results of the evaluation are not publicly available.

There is an interium evaluation of the Support programme Cooperation – Clusters under OP EIC Specific Objective 1.2.9

The Ministry of Industry and Trade, as the governing body of OP TAC, established a monitoring committee to evaluate the implementation of the operational program. This committee will meet at least once a year during the implementation of the program to assess the implementation of the OP TAC against its goals.

#### **Cluster support instruments**

The Operational Programme Enterprise and Innovation for Competitiveness - Support Programme Cooperation Clusters offers different financial and technical support instruments on a national level. The Support Programme supports collective research (research and development activities within the cluster and implementation of cross-border R&D projects), shared infrastructure (establishment/ development and equipment of the cluster's centre with open access for the purposes of industrial research, development and innovation), cluster internationalisation (establishment of cooperation in the European research area, participation in cross-border networks of excellent clusters, etc.) and development of cluster organisations (activities leading to expansion of the cluster and improved quality of its management, improvement of cooperation, knowledge sharing, marketing, networking, etc.). Besides that, the programme offers technological platforms which serve as aid for coordination activities of the platform, technological foresight, establishing a deeper cooperation between TP and European technological platforms and participation of Czech research organisations as regards access to Horizon 2020 and other European programmes.<sup>70</sup>

#### <u>Cross-regional / international cooperation</u>

The European Cluster Partnership have been launched by the European Commission to encourage clusters from Europe to intensify collaboration across regions and sectors.

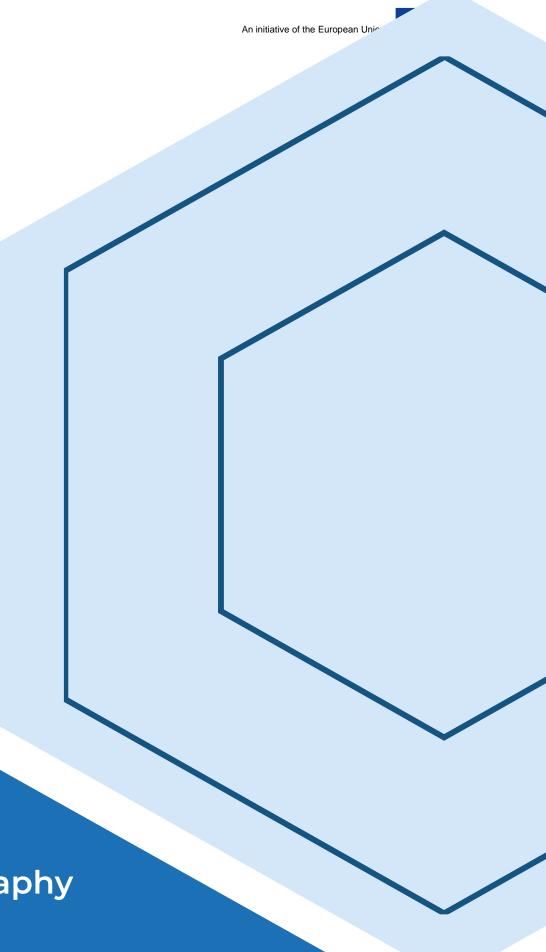
Cluster organizations from Czechia have been involved in eighteen consortia of the European Strategic Cluster Partnerships out of which nine partnerships were focusing on internationalization

<sup>&</sup>lt;sup>9</sup> https://www.mpo.cz/cz/podnikani/dotace-a-podpora-podnikani/oppik-2014-2020/evaluace-a-analyzy/evaluace-a-jine-analyzy--157435/ (last access 30.01.2023).

<sup>&</sup>lt;sup>10</sup> Ministry of Trade and Industry of the Czech Republic. <a href="https://www.agentura-api.org/wp-content/uploads/2019/06/obecne-op-pik-operational-programme-enterprise-and-innovation-for-competitiveness.pdf">https://www.agentura-api.org/wp-content/uploads/2019/06/obecne-op-pik-operational-programme-enterprise-and-innovation-for-competitiveness.pdf</a> (last access 30.01.2023).

(ESCP-4i), seven partnerships were on cluster managemenet excellence (ESCP-4x) and two partnerships were on smart specialization (ESCP-S3). Consortia partners came from 19 different states (ES, FR, IT, DE, BG, DK, HU, PL, PT, RO, SE, SI, FI, BE, AT, SK, TR, RS, UK). Two cluster organizations from Czechia participated in the INNOSUP-1 initiative with partner organizations coming from 12 countries (ES, FR, DE, DK, NL, PL, BE, HU, IT, NO, SI, PT).

In the 2021-2027 funding period, the Single Market Programme supports clusters as part of the Joint Clusters Initiatives (Euroclusters) for Europe's recovery. From Czechia, five cluster organisations are part of five Euroclusters with partners from 12 countries (IT, FR, ES, NL, FI, RO, GR, PL DE, SE, PT, AT). These Euroclusters, namely CIRCINWATER, EU Rural Tourism, INGENIOUS, PIMAP4SUSTAINABILITY, and RESIST, collectively cover seven industrial ecosystems. CIRCINWATER and PIMAP4SUSTAINABILITY each span two ecosystems, with CIRCINWATER covering "Energy – Renewables" and "AGRI-FOOD", and PIMAP4SUSTAINABILITY covering "Energy-Intensive Industries" and "Aerospace & Defence". The other Euroclusters are focused on the ecosystems "Tourism" (EU Rural Tourism), "Energy-Intensive Industries" (INGENIOUS), and "Mobility – Transport – Automotive" (RESIST).



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## Annex

Criterion of maturity assessment	Description	Scoring (points between 0 and 2)
Policy scope	assessment whether the country has a dedicated cluster policy, or cluster creation and/or development is targeted through broader policies, e.g. foreign trade policies, labour and social policies or specific sectoral policies, e.g. industrial policy tourism policies, agriculture policies	absence of cluster policy = 0 existence of broader policies = 0,5 existence of specific sectoral policies = 1 existence of targeted cluster policies = 2
Continuity of cluster policies	assessment of the duration and experience of the country in carrying out cluster policies. This criterion assesses only existence of targeted cluster policies and not broader policies or sectoral policies	absence of policies supporting cluster development = 0 cluster policy established recently (within the last 2 years) = 0,5 cluster policy established between over 2 and 10 years = 1 cluster policy established over 10 years ago = 2
Evidence of performance	assessment whether there are evaluations of past and ongoing policies and a monitoring system in place. The existence of monitoring and evaluation mechanisms determines the degree of policy development in the country	no evaluation and / or monitoring available = 0 existence of evaluations of past policies, e.g. ex-ante = 0,5 existence of monitoring or an ongoing / interim evaluation =1 existence of monitoring and ex- ante or ongoing / interim evaluation =2
Cluster Support Instruments	assessment whether the policies provide any instruments to support the policy implementation, being these financial and/or technical support	no instruments for cluster development =0  financial support for cluster development in the broader and / or sectoral policy = 0,5  financial or technical support for cluster development in dedicated cluster policy = 1  financial and technical support for cluster development in dedicated cluster policy = 2

Source: ECCP (2022)