European Cluster Collaboration Platform

Country factsheet

Romania

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Introduction

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

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 European Green Deal and one of its core elements the European Industrial Strategy combined with the emerging concepts of experimental governance, mission-oriented innovation policies, responsible research and innovation (RRI) in a post-COVID-19 European Union will impact policymaking in many ways that are difficult to foresee. However, one thing is certain, regional policymakers will continue to experiment in designing and implementing policy solutions to respond to their unique regional policy challenges.

The European Commission updated its industrial strategy in May 2021 to ensure our industrial ambition takes account of the new circumstances following the COVID-19 crisis, while ensuring European industry can lead the way in transitioning to a green, digital and resilient economy.

Romania is developing a national smart specialisation strategy and a national competitiveness strategy to be published in 2021. The new National Strategy for Smart Specialisation 2021-2027 is currently in progress under Ministry of Research, Innovation and Digitalisation coordination, and the new National Strategy for Competitiveness 2021-2027 is under Ministry of Economy, Entrepreneurship and Trade coordination. Also, Romania updated and/or elaborated the 8 Regional Smart Specialisation Strategies as part of the regional policy.

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Industrial ecosystems and cluster landscape

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1. Industrial ecosystems and cluster landscape

At the end of July 2021, **76** cluster initatives were recorded by the Directorate for Industrial Policy of the Ministry of Economy, body which is responsible for the cluster development as part of the industrial policy. Out of them, **46 clusters** are members of the Romanian Cluster Association – CLUSTERO**,** best practice community and representative body at national, European and international level (www.clustero.eu**).**
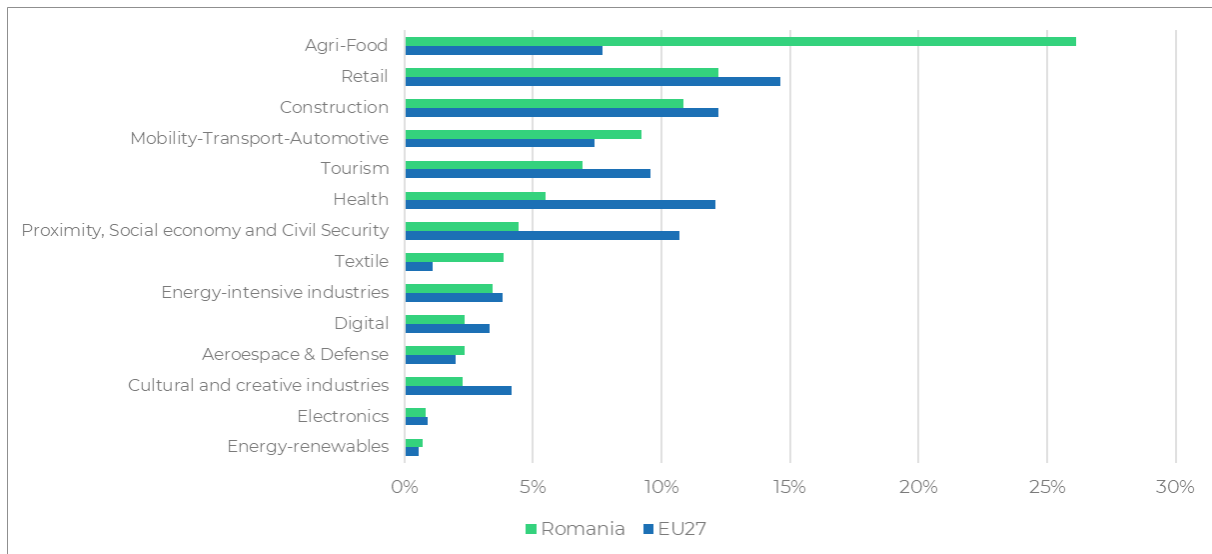
A part of the cluster support organisations ensuring cluster management services have been benchmarked by the European Secretariate for Cluster Analysis (www.esca.eu) on an international scale. As a result, their level of excellence in cluster management has been ranked as follows:

- **5 clusters** have been awarded *Gold Label* (best ranking in the Eastern Europe);
- **18 clusters** have been awarded *Silver Label*;
- **58 clusters** have been awarded *Bronze Label*.

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 71 in the country, while the second table is based on the 14 ecosystems, which total 24 in the country.

Table 1: Regionally relevant sectoral nodes

Region	Number of nodes	Node 1	Node 2	Node 3	Node 4	Node 5
RO11: North-West (Romania)	10	C15 - Manuf. of leather products	C31 - Manuf. of furniture	C14 - Manuf. of wearing apparel	A02 - Forestry & logging	A01 - Crop & animal production
RO12: Centre (Romania)	12	C15 - Manuf. of leather products	C16 - Manuf. of wood products	C14 - Manuf. of wearing apparel	F41 - Construction of buildings	C31 - Manuf. of furniture
RO21: North-East (Romania)	4	A01 - Crop & animal production	C14 - Manuf. of wearing apparel	F41 - Construction of buildings	A02 - Forestry & logging	
RO22: South-East (Romania)	8	H50 - Water transport	C14 - Manuf. of wearing apparel	C30 - Manuf. of other transport equipment	C33 - Repair, installation of machinery	A01 - Crop & animal production
RO31: South-Muntenia	10	A01 - Crop & animal production	C14 - Manuf. of wearing apparel	A02 - Forestry & logging	C29 - Manuf. of motor vehicles & trailers	F41 - Construction of buildings
RO32: Bucharest-Ilfov	7	J63 - Information services	J61 - Telecommunications	N80 - Security, investigation activities	F41 - Construction of buildings	E38 - Waste activities
RO41: South-West Oltenia	9	B05 - Mining of coal & lignite	A01 - Crop & animal production	C14 - Manuf. of wearing apparel	A02 - Forestry & logging	D35 - Electricity, gas & steam
RO42: West (Romania)	11	B05 - Mining of coal & lignite	C15 - Manuf. of leather products	C26 - Manuf. of electronic & optical products	C29 - Manuf. of motor vehicles & trailers	C27 - Manuf. of electrical equipment

Source: Own elaboration from Eurostat and National Statistical Offices

Table 2: Regionally relevant ecosystem nodes

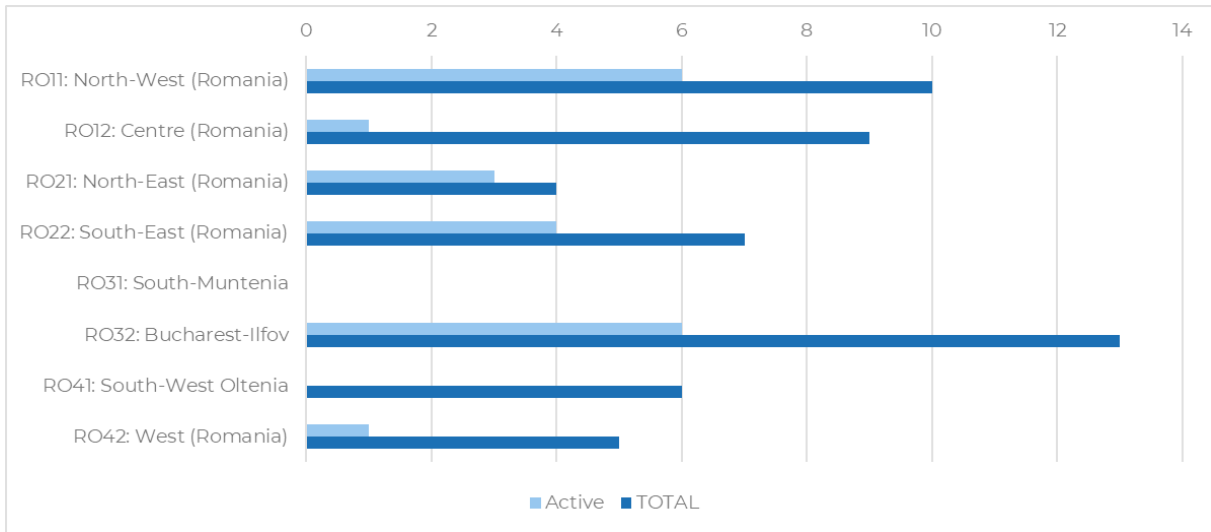| Region	Number of nodes	Node 1	Node 2	Node 3	Node 4	Node 5
RO11: North-West (Romania)	2	Textile	Agri-Food	-	-	-
RO12: Centre (Romania)	4	Textile	Energy-intensive industries	Agri-Food	Mobility-Transport-Automotive	-
RO21: North-East (Romania)	2	Agri-Food	Textile	-	-	-
RO22: South-East (Romania)	3	Textile	Agri-Food	Aeroespace & Defense	-	-
RO31: South-Muntenia	4	Agri-Food	Textile	Aeroespace & Defense	Mobility-Transport-Automotive	-
RO32: Bucharest-Ilfov	2	Digital	Aeroespace & Defense	-	-	-
RO41: South-West Oltenia	2	Agri-Food	Textile	-	-	-
RO42: West (Romania)	5	Electronics	Textile	Energy-renewables	Mobility-Transport-Automotive	Aeroespace & Defense

Source: Own elaboration from Eurostat and National Statistical Offices

Cluster organisations in the regions

There are 54 cluster organisations registered on the ECCP in the country, 21 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.

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Graph 2: Cluster organisations profiled and active on the ECCP

Source: Own elaboration from Eurostat and National Statistical Offices

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National cluster policy, programmes and initiatives

2. National cluster policy, programmes and initiatives

Policy type:	National cluster policy	Broad policy	Regional Cluster Policy
Policy name:	Strategia Nationala de Specializare Inteligenta (National Strategy for Smart Specialization) & Strategia Nationala de Competitivitate (National Strategy for Competitiveness)	Document de politică industrială a României (Romania's industrial policy)	Strategia Regionala de Specializare Inteligenta (Regional Strategy for Smart Specialisation) Bucharest-Ilfov
POLICY OBJECTIVES 	**Strengthening cooperation between companies or industry and RTDI actors** **Increasing competitiveness and boosting scale up of SMEs** **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 employment and upgrading skills and competences** **Enhancing territorial cohesion (through RIS3)** **Cluster analysis and support for policymaking**	**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**	**Strengthening cooperation between companies or industry and RTDI actors** **Increasing competitiveness and boosting scale up of SMEs** **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 employment and upgrading skills and competences**

	Romania is developing a national smart specialisation strategy and a national competitiveness strategy to be published in 2021. The new National Strategy for Smart Specialisation 2021-2027 is currently in progress under Ministry of Research, Innovation and Digitalisation coordination, and the new National Strategy for Competitiveness is under Ministry of Economy, Entrepreneurship and Trade coordination. These strategies will identify new S3 priorities for clusters and will define new mechanisms for S3 governance through clusters at national and regional level in the period 2021-2027.	Cluster policy in Romania has been, since 2009, an integral part of the overall national industrial policy. The policy was initiated by the Ministry of Economy and does not include non-industrial clusters. The main role of this policy is to disseminate the 'cluster' concept at national and regional level, to develop new and existing clusters, to help clusters get involved in European projects as well as having them involved in drafting smart specialisation strategies and exchange best practices with other relevant actors within the European network.	Romania includes 8 Development Regions that have developed their own smart specialization strategies. For the future programming period 2021-2017, the Regional Operational Program was distributed in the administration of RDAs. Naturally, elements of cluster policy have thus been included in regional smart specialization strategies.
POLICY FOCUS	**Cross-sectoral**	**No specific focus**	**Cross-sectoral**
	In addition to update the RIS3 and to respond to the 'seven enabling conditions' for the next programming period of EU Cohesion Policy 2021–27, the new Romanian strategies will have to experiment with new policy approaches to respond to the unique policy challenges resulting from COVID-19 and its consequences.	There is no mention on whether the policy focuses on specific sectors or it taps across several sectors. It is mentioned that it focuses only on industrial clusters.	In general, smart specialization strategies target potential sectors in the respective regions. But, given the rather cross-sectoral nature of clusters, the new approach will have to take this into account.
RESPONSIBLE AUTHORITIES	**Both drafting and implementation**	**Both drafting and implementation**	**Provides funding**
	The Ministry of Research, Innovation and Digitalisation & The Ministry of Economy, Entrepreneurship and Trade	The Ministry of Economy, Industrial Policy Directorate	RDA Bucharest Ilfov
BENEFICIARIES	**Academic institutions** **Start-ups** **Business associations** **Large firms** **Technology centres**	**Academic institutions** **Start-ups** **Business associations** **Large firms** **Technology centres**	**Academic institutions** **Start-ups** **Business associations** **Large firms** **Technology centres**

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		The new policies does not mention specifically which are the actors that will benefit from them. Nevertheless, both the Ministry of Research, Innovation and Digitalisation and the Ministry of Economy, Entrepreneurship and Trade through its Industrial Policy Directorate, deploys these policies in collaboration with several organisations representing different value chain actors: The Romanian Cluster Organisation (ClusteRo), Regional Development Agencies, The Romanian Academy, The National Institute of Research – Development for Machines and Installations Designed to Agriculture and Food Industry.	The policy does not mention specifically which are the actors that will benefit from the policy. Nevertheless, the Ministry of Economy, through its Industrial Policy Directorate, deploys this policy in collaboration with several organisations representing different value chain actors: The Romanian Cluster Organisation (ClusteRo), Regional Development Agencies, The Romanian Academy, The National Institute of Research – Development for Machines and Installations Designed to Agriculture and Food Industry.	RDAs are valuable policy instruments taking into account their capacities to mobilise stakeholders in the regions. As a result, the regional smart specialisation strategies should put into practice the cathalytic role of RDAs, addressing all the actors involved in th economic landscape of the region.
INSTRUMENTS	Financial	**Support to R&D projects, SMEs becoming cluster members, etc.** **Subsidies for cluster infrastructure (e.g. offices, equipment)** **Financing start-ups** **Innovation: voucher, support to hire PhDs, cooperation with R&I actors**	**Support to R&D projects, SMEs becoming cluster members, etc.** **Subsidies for cluster infrastructure (e.g. offices, equipment)** **Innovation: voucher, support to hire PhDs, cooperation with R&I actors**	**Support to R&D projects, SMEs becoming cluster members, etc.** **Subsidies for cluster infrastructure (e.g. offices, equipment)** **Financing networking events** **Financing start-ups** **Innovation: voucher, support to hire PhDs, cooperation with R&I actors**
	Technical assistance	**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, market intelligence** **Support for soft skills development: coaching, management training, upskilling/reskilling** **Support for networking and partnership building (at national and/or international level)**	**Infrastructure: coworking spaces, offices, incubation and accelerator spaces, research centres, technology parks etc.** **Marketing activities: advertising, communication, events, fairs, and so on**	**Infrastructure: coworking spaces, offices, incubation and accelerator spaces, research centres, technology parks etc.** **Support for networking and partnership building (at national and/or international level)** **Marketing activities: advertising, communication, events, fairs, and so on**

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		Marketing activities: advertising, communication, events, fairs, and so on		
	Explanation	A 2020 report from ClusterRo highlights the status-quo of the cluster organisations in Romania as well as the type support provide to cluster organisations since 2012. Most of the financial support provided to cluster organisations consisted of EU funds which were channeled through different national programmes. According to the report, the most efficient scheme was the Sectoral Operational Programme "Competitiveness" (POS CCE 1.3.3) which combined minimis aid schemes with R&D&I projects. Another source of financing was through the Competitiveness Operational Programme (POC). In terms of technical assistance, the Romanian government facilitates cluster development by giving access to industrial and technological parks or business incubators.		The Regional Operational Programme 2021-2027 is a strategic programming document covering the areas: smart and innovative specialization, SMEs, digitalisation, energy efficiency, urban development, mobility and connectivity, nature and biodiversity protection, educational infrastructure, tourism and culture/cultural heritage. The development of the Regional Operational Programme 2021-2027, need correlation both with existing planning documents at regional level and with existing regulations at national and European level.
HISTORY	Period	**2021-2027**	**2009**	**2021-2027**
	Ending year *(for policies with limited period)*	2027		2027
	Starting year	2021		2021
	Explanation	The policies are planned for the programming period 2021-2027 and, for the moment, there is no evidence on whether a revision of the current policy is envisaged.	The Romanian cluster policy has been an integral part of the national industrial policy since 2009. Although the policy per se has never been interrupted on paper, evidence seems to suggest that the support provided has not been consistent over the years which is highlighted also as one of the main weaknesses of the Romanian cluster landscape. Furthermore, a suitable funding framework is needed in order to ensure functioning of cluster organisations.	

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BUDGET	Overall	-		
	Annual	-		
	Source of funding	Funds came mainly from EU funds which were channeled through different national programmes (e.g. Sectoral Operational Programme "Strengthening the competitiveness of the economy" (POS CCE 1.3.3), Competitiveness Operational Programme - POC). For the next programming period 2021-2027: The Operational Program Smart Growth, Digitalisation and Financial Instruments 2021-2027 (POCIDIF) and the National Recovery and Resilience Plan.	Funds came mainly from EU funds which were channeled through different national programmes (e.g. Sectoral Operational Programme "Strengthening the competitiveness of the economy" (POS CCE 1.3.3), Competitiveness Operational Programme - POC).	Regional Operational Program 2021-2027
POLICY EVALUATION	Availability	ex-post		
	Results	We should notice the fact that existent and future cluster policies as part of the national strategies, have not instruments to monitor and evaluate their implementation. However, the Romanian Cluster Association (ClusteRo) published a report on the situation of Romanian clusters (2020). One of the main weaknesses of the cluster landscape and implictly of the cluster policy has been the lack of coherent support. Even though the Ministry of Economy is the main actor responsible for cluster policy as an integral part of the industrial policy, structural funds have been made available only through ERDF interventions of the 'Operational Programme for Competitiveness 2014 - 2020'. The results of the report show overall a sub-optimal support which can pose a risk to the cluster landscape in the medium and long term. Also, all the calls dedicated to clusters did not meet their actual needs. Despite the lack of support, cluster organisations have had very good results. throughout the years (ClusteRo had in 2020, 47 organisations). The data basis of the Ministry of Economy, Entrepreneurship and Trade records 76 clusters, out of	The Romanian Cluster Association (ClusteRo) published a report on the situation of Romanian clusters (2020). One of the main weaknesses of the cluster landscape and implictly of the cluster policy has been the lack of coherent support. Even though the Ministry of Economy is the main actor responsible for cluster policy as an integral part of the industrial policy, structural funds have been made available only through ERDF interventions of the 'Operational Programme for Competitiveness 2014 - 2020'. The results of the report show overall a sub-optimal support which can pose a risk to the cluster landscape in the medium and long term. Also, all the calls dedicated to clusters did not meet their actual needs. Despite the lack of support, cluster organisations have had very good results. throughout the years (ClusteRo had in 2020, 47 organisations).	We should notice the fact that existent and future cluster policies as part of the national strategies, have not instruments to monitor and evaluate their implementation. However, the Romanian Cluster Association (ClusteRo) published a report on the situation of Romanian clusters (2020). One of the main weaknesses of the cluster landscape and implictly of the cluster policy has been the lack of coherent support. Even though the Ministry of Economy is the main actor responsible for cluster policy as an integral part of the industrial policy, structural funds have been made available only through ERDF interventions of the 'Operational Programme for Competitiveness 2014 - 2020'. The Regional Operational Program 2021-2027 includes specific calls for clusters in all the eight Regional Development Agencies.

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		which 5 received the gold label from ESCA, 17-silver label and 58-bronze label.		
POLICY ALIGNMENT WITH THE EU PRIORITIES	**Developing a strong and vibrant economic base** **Building a climate-neutral, green, fair and social Europe**		**Developing a strong and vibrant economic base** **Building a climate-neutral, green, fair and social Europe**

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03

State of play of cluster policy

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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)
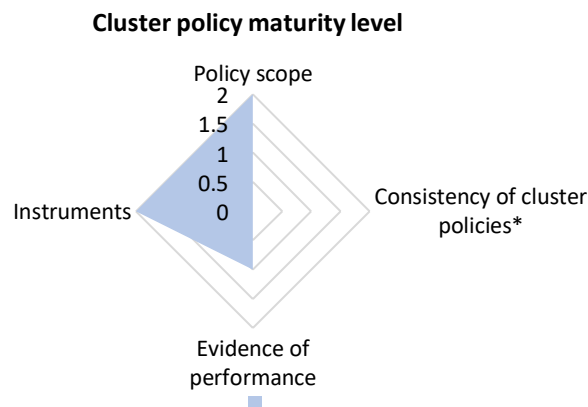
Evidence of performance: the existence of monitoring and evaluation mechanisms determines the degree of policy development in the country (no evaluations = 0 points; existence of evaluations of past policies or in-itinere = 0.5 points; existence of ex-ante and/or ex-post evaluations = 0.5 points)

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). 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.

	Romania	Maximum score
Policy scope	2	2
Consistency of cluster policies*	0	2
Evidence of performance	1	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** There is no self-standing cluster policy in Romania and the concept is only developed through the national and regional smart specialization and competitiveness strategies.
Policy approach in the country	**Policy support for the activities of cluster organisations** **Broad-based framework policies to support cooperation effectiveness**
Continuity	The Romanian cluster policy was created in 2009 as part of the national industrial policy. Although the policy has never been formally interrupted or terminated, the actual support (either financial or through technical assistance) has been inconsistent over the years. Where financial support was provided, this was done through EU funds channelled through various national programmes and only in some years (2012, 2013, 2015, 2018, 2020 and 2021).
Consistency	**No cluster policy available** In Romania, there is no dedicated cluster policy. As mentioned previously, cluster as a concept is only an integral part of the wider the national and regional smart specialization and competitiveness strategies.. It's main role is to disseminate the cluster concept at national and regional level and help clusters get involved in various European projects.

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