



EUROPEAN CLUSTER
COLLABORATION PLATFORM

Country factsheet

Romania





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01

Introduction and economic policy context



EUROPEAN CLUSTER
COLLABORATION PLATFORM

Strengthening the European economy through collaboration

1. Introduction and economic policy context



This document presents an overview of the cluster policy in Romania. 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 2023 [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. Chapter 4.2 provides an overview on how Romania’s cluster policy could help to tackle the economic policy challenges identified in the European Semester country recommendations.

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 with 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 that 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. In addition, in response to the COVID-19 pandemic, 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 measures of Romanian’s Recovery and Resilience Plan are built on six pillars: green transition; digital transformation; smart, sustainable and inclusive growth; social and territorial cohesion; health, and economic, social and institutional resilience; policies for the next generation. In addition to pandemics, the ongoing war in Ukraine has also taken its toll on EU companies and industrial ecosystems, highlighting the significance of policy efforts in supporting SMEs and clusters.

Romania’s [Operational Programme ERDF 2021-2027](#) refers to clusters – to boost digitalisation, support for the IT&C companies and clusters will be provided. Within Romania’s [Cohesion Policy 2021-2027](#) refers to the support for innovation clusters and business networks that primarily benefit SMEs. In addition, the new National Strategy for Research, Innovation and Smart Specialisation 2022-2027 of Romania was developed by the Ministry of Research, Innovation and Digitalisation and entered into force in July 2022. Also, Romania has updated and/or elaborated the eight Regional Smart Specialisation Strategies, which were the basis for the development of the National Research, Innovation and Smart Specialisation Strategy 2022-2027.

In what follows, a succinct overview of the cluster policy in Romania will be provided. The structure of this factsheet encompasses:

- 1) an overview of the industrial ecosystems and cluster landscape in Romania,

- 2) an overview of the broad policies which support the development of clusters and an insight into a regional policy example,
- 3) an assessment of the state of play of the Romanian cluster policy and its role in broader economic policy challenges mentioned in the European Semester Reports.

02

Industrial ecosystems and cluster landscape



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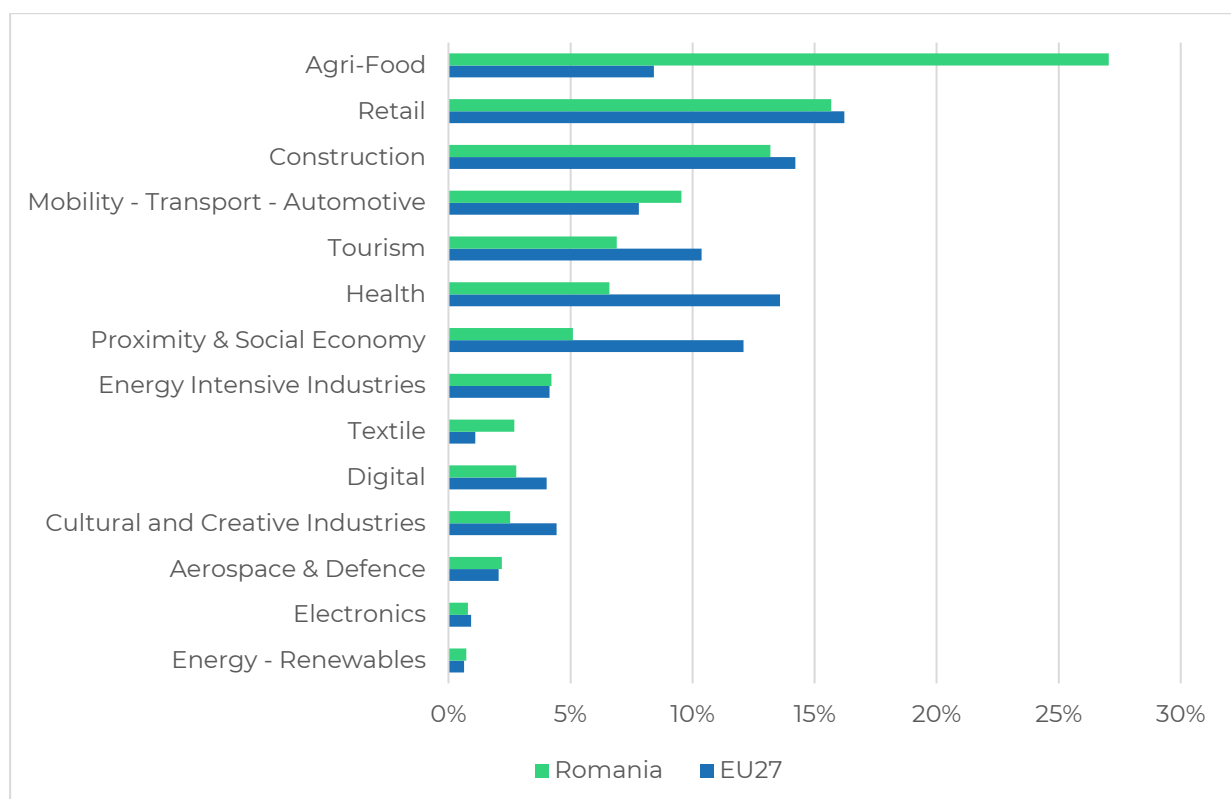
2. Industrial ecosystems and cluster landscape

2.1 Employment in the 14 industrial ecosystems

As part of its Industrial Strategy (March 2020), the European Commission has identified 14 industrial ecosystems that encompass all players operating in a value chain.¹ The classification of the 14 industrial ecosystems have been calculated by aggregating NACE 2-digit activities, following the methodology established in the European Commission. This means that the data provided below can differ from other publications by the European Commission that do not consider the industrial ecosystem classification.

Figure 1 shows the share (in %) of employed persons in each ecosystems in comparison to the EU27. 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. In Romania, the three main ecosystems by employment for are "Agri-food", "Retail" and "Construction". Moreover, employment shares higher than the EU27 average were reported in the industrial ecosystems "Agri-food", "Mobility" and "Textile", which indicates the relative strength of the country in those industrial ecosystems.

Figure 1: Employment across the ecosystems



Source: ECCP (2023), own elaboration based on data from Eurostat.

According to Figure 1, the most significant ecosystem in Romania is the "Agri-Food" sector, which accounts for 28% of employment across all ecosystems. This is followed by "Retail" at 15% and

¹ see here for more information <https://clustercollaboration.eu/in-focus/industrial-ecosystems> (last access 09.01.2024).



"Construction" at 13%. Romania's strength in the "Agri-Food" sector is also evident when compared to the EU27 average of only 9%. "Mobility - Transport - Automotive" is the fourth-largest ecosystem, with a share of 9% of employment across all ecosystems, while "Textile" accounts for 3%. These two industrial ecosystems in Romania have a higher share of employment than the EU27 level, indicating their comparative strength. The strength of ecosystems "Agri-Food", "Mobility - Transport - Automotive" and "Textile" is also shown in the sectoral and ecosystem agglomerations that are regionally relevant across the majority of the eight Romanian NUTS 2 regions, as detailed in the section below.

2.2 Regional agglomerations

Economic activity is not equally distributed across regions in the EU but tends to agglomerate in certain places. In this context, an Agglomeration is defined as the concentration of a certain industry, sector or ecosystem in a certain geographical area. The following section provides an analysis of, first, the sectoral agglomerations and, second, the ecosystem agglomerations in the regions. Agglomerations are operationalised through the employment-based Location Quotients (LQ), measuring the relative specialisation of one region compared to the EU level, as well as the employment size.

If the LQ for a given activity-region combination is above 1.5, it is considered an agglomeration, and if the activity accounts for at least 1 % of total employment in the region, it is considered a regionally relevant agglomeration. The following tables show the total number of regionally relevant agglomerations in each region in the country and identifies the top five most specialised of these agglomerations. The first table focuses on the 88 NACE 2-digit activities or sectors, while the second table is based on the 14 ecosystems.

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

Region	# of aggro.	Agglo. 1	Agglo. 2	Agglo. 3	Agglo. 4	Agglo. 5
RO11: North-West (Romania)	11	C31 - Manuf. of furniture	A01 - Crop & animal production	C15 - Manuf. of leather products	C14 - Manuf. of wearing apparel	F41 - Construction of buildings
RO12: Centre (Romania)	14	C15 - Manuf. of leather products	C29 - Manuf. of motor vehicles & trailers	C16 - Manuf. of wood products	C14 - Manuf. of wearing apparel	C31 - Manuf. of furniture
RO21: North-East (Romania)	6	A01 - Crop & animal production	A02 - Forestry & logging	C14 - Manuf. of wearing apparel	F41 - Construction of buildings	F42 - Civil engineering
RO22: South-East (Romania)	9	C30 - Manuf. of other transport equipment	C14 - Manuf. of wearing apparel	A01 - Crop & animal production	A02 - Forestry & logging	C24 - Manuf. of basic metals
RO31: South-Muntenia	9	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	10	N80 - Security, investigation activities	J61 - Telecommunications	J62 - Computer programming, consultancy & related activities	E38 - Waste activities	F41 - Construction of buildings
RO41: South-West Oltenia	10	B05 - Mining of coal & lignite	A01 - Crop & animal production	A02 - Forestry & logging	D35 - Electricity, gas & steam	C14 - Manuf. of wearing apparel
RO42: West (Romania)	12	C29 - Manuf. of motor	C26 - Manuf. of electronic	C27 - Manufacture of	C14 - Manuf. of wearing apparel	C22 - Manufacture of



		vehicles & trailers	& optical products	electrical equipment		rubber and plastic products
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Source: ECCP (2023), own elaboration based on data from Eurostat.

As mentioned at the beginning of this Chapter, the NACE 2-digit activities have been aggregated to the 14 EU industrial ecosystems following the methodology established by the European Commission. Table 2 provides an overview of the regional distribution of industrial ecosystem agglomerations. Overall, there are fewer ecosystem agglomerations than the regionally relevant sectoral agglomerations by NACE sectors. This more concentrated agglomeration can at least partially be linked to the methodology of measurement of the 14 industrial ecosystems.

Overall, the employment strength of Romania in the ecosystems “Agri-Food”, “Mobility-Transport-Automotive”, and “Textile” compared to the EU27 average is also reflected in the regionally relevant sectoral agglomerations (NACE) and the regionally relevant ecosystem agglomerations of the different regions. For instance, a number of regions (e.g., RO11: North-West and RO21: Centre) display regionally relevant agglomerations in the ecosystems “Textile” and “Agri-Food”. These regions also have regionally relevant sectoral agglomerations such as manufacturing of leather products (C15) and wearing apparel (C14) as well as crop and animal production (A01). Moreover, a number of regions has regionally relevant agglomerations in the ecosystem “Mobility-Transport-Automotive” (e.g., RO12: Centre and RO42: West). These regions and many others have related regionally relevant sectoral agglomerations, such as manufacturing of motor vehicles and trailers (C29) or manufacturing of other transport equipment (C30). Moreover, the agglomerations further underline the relative strength of Romania in the industrial ecosystems outlined before (see Figure 1): the agri-food and textile ecosystems, which are responsible for most employment in Romania, recur often as sectoral and ecosystem agglomerations in the two tables.

Table 2: Number of regionally relevant ecosystem agglomerations and Top 5 agglomerations by region

Region	# of ecosystem aggro.	Agglo. 1	Agglo. 2	Agglo. 3	Agglo. 4	Agglo. 5
RO11: North-West (Romania)	3	Textile	Agri-Food	Energy-renewables	-	-
RO12: Centre (Romania)	4	Textile	Agri-Food	Energy-renewables	Mobility-Transport-Automotive	-
RO21: North-East (Romania)	2	Agri-Food	Textile	-	-	-
RO22: South-East (Romania)	2	Agri-Food	Textile	Aerospace & Defense	-	-
RO31: South-Muntenia	2	Agri-Food	Textile			-
RO32: Bucharest-Ilfov	2	Digital	Aerospace & Defense	-	-	-
RO41: South-West Oltenia	3	Agri-Food	Textile	-	-	-
RO42: West (Romania)	5	Electronics	Textile	Mobility-Transport-Automotive	Energy-renewables	Aerospace & Defense

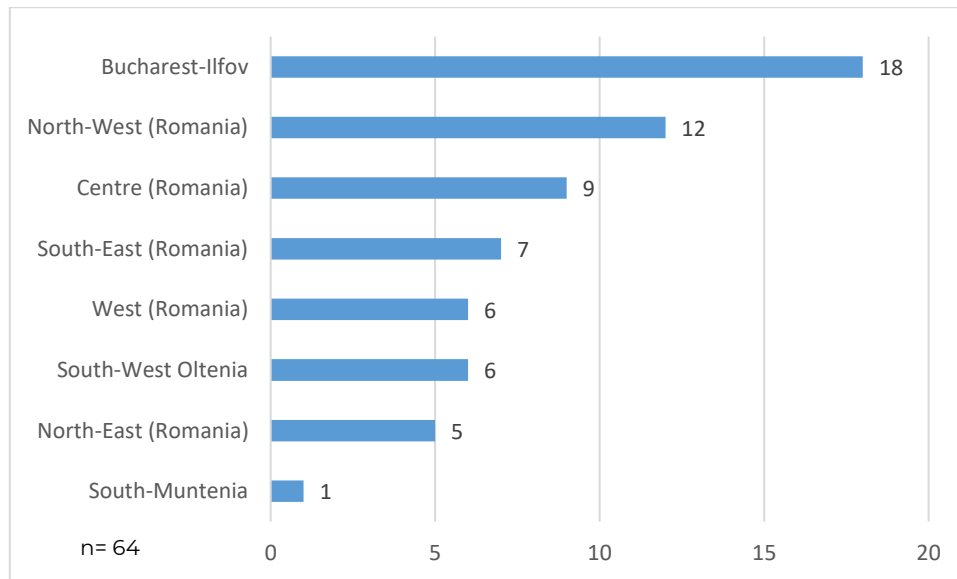
Source: ECCP (2023), own elaboration based on data from Eurostat.



2.3 Cluster organisations & international cooperation

There are 64 cluster organisations registered on the ECCP in the country. The majority of these cluster organisations are located in the capital region Bucharest-Ilfov (18 cluster organisations) followed by North-West (12 cluster organisations) and Centre with 9 cluster organisations. The following figure shows the presence of cluster organisations in the different regions.

Figure 2: Cluster organisations profiled on the ECCP



Source: ECCP (2023). Note: the data for the analysis was extracted on 21/12/2023.

The majority of member organizations of Romanian cluster organizations with profiles on the ECCP are composed of SMEs (78%, EU: 83%), followed by research organizations (14%, EU: 7%) and large enterprises (8%, EU: 9%). From a thematic perspective, these Romanian 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.

- Digital (11 cluster organisations)
- Renewable Energy (7 cluster organisations)
- Health (5 cluster organisations)
- Energy Intensive Industries (4 cluster organisations)
- Construction (3 cluster organisations)
- Creative & Cultural Industries (3 cluster organisations)
- Electronics (2 cluster organisations)
- Tourism (2 cluster organisations)
- Agri-food (2 cluster organisations)
- Mobility-Transport-Automotive (1 cluster organisation)
- Textile (1 cluster organisation)
- Proximity & Social Economy (1 cluster organisation)



Cross-regional / international cooperation

In the 2014-2020 funding period², the European Cluster Partnerships and the INNOSUP-1 initiative have been launched by the European Commission to encourage clusters from Europe to intensify collaboration across regions and sectors. Romanian cluster organizations have been involved in eighteen consortia of the European Strategic Cluster Partnerships out of which nine partnerships were focused on internationalisation (ESCP-4i), seven partnerships were on cluster management excellence (ESCP-4x) and two partnerships were focused on smart specialisation (ESCP-S3). Consortia partners came from 21 different states (PT, ES, AL, FR, RS, DE, PL, CZ, MK, IT, BG, DK, EL, BE, SE, HU, TR, LV, SI, AT, NL). Three Romanian cluster organizations participated in the INNOSUP-1 initiative with partner organizations coming from 14 countries (PL, ES, FR, DK, SE, DE, IT, IE, UK, BG, TR, FI, EL, GR).

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 Romania, seven cluster organisations are part of eight Euroclusters with partner from 12 countries (SK, AT, IT, ES, BG, FR, PL, BE, CZ, GR, DE, SE). These Euroclusters, namely AEC Eurocluster, DESIRE, DREAM, EU Rural Tourism, FRIEND CCI, RE-CENTRE, SILEO and SocialTech4EU, collectively cover seven industrial ecosystems. These ecosystems are "Construction" (AEC Eurocluster), "Cultural" (FRIEND CCI and RE-CENTRE), "Digital" (DREAM, RE-CENTRE), "Digital" (DREAM, RE-CENTRE), HEALTH (DESIRE), "Proximity" (Social Tech 4EU), "Tourism" (EU Rural Tourism) and "Retail" (SILEO).

² Many of the programmes of the 2014-2020 funding period have been terminated by December 2023. However, the collaborative projects that were funded may continue to operate.



03

National cluster policy, programmes and initiatives



3. National cluster policy, programmes and initiatives

In this section we provide an overview of the existing Romanian policies on national level as well as example of the regional level policy.


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 and third columns represent the case of Romanian broad policies supporting cluster development.

Within the table the text presented in bold (black) depicts standardised categories across country factsheets (56 in total for 2023), which are applied for comparative purposes. This is followed by a complementary descriptive text to provide more insights about the cluster policy in Romania.



Table 3: Overview of Romanian cluster policy

Policy type:	Broad policy	Sectoral policy
Policy name:	Strategia Nationala de Specializare Inteligenta (National Strategy for Smart Specialization)	Document de politică industrială a României (Romania's industrial 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 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	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 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



Policy type:	Broad policy	Sectoral policy
Policy name:	Strategia Nationala de Specializare Inteligenta (National Strategy for Smart Specialization)	Document de politică industrială a României (Romania's industrial policy)
	<p>Promoting entrepreneurship, start-ups and spin-offs</p> <p>Promoting resilience and sustainable economy and other solidarity-based initiatives</p> <p>Promoting employment and upgrading skills and competences</p> <p>Enhancing territorial cohesion (through RIS3)</p> <p>Strengthening the network of cluster organisations/cross-clustering</p> <p>Cluster analysis and support for policymaking</p> <p>Increase supply chain resilience</p>	<p>Promoting resilience and sustainable economy and other solidarity-based initiatives</p> <p>Promoting employment and upgrading skills and competences</p> <p>Strengthening the network of cluster organisations/cross-clustering</p>
	<p>The new National Strategy for Smart Specialisation 2022-2027 is currently in progress under Ministry of Research, Innovation and Digitalisation coordination. The strategy will identify new S3 priorities and will define new mechanisms for S3 governance through clusters at national and regional level in the following period. In April 2022, the proposal regarding the National Strategy for Research, Innovation and Intelligent Specialization 2022-2027 was published.</p>	<p>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.</p>
POLICY FOCUS 	Cross-sectoral	Sectoral
	<p>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.</p>	<p>Romania's industrial policy document presents the current situation of the Romanian industry and underlines the main directions of action for an industry of the future.</p>



Policy type:	Broad policy	Sectoral policy
Policy name:	Strategia Nationala de Specializare Inteligenta (National Strategy for Smart Specialization)	Document de politică industrială a României (Romania's industrial policy)
RESPONSIBLE AUTHORITIES 	Drafting as well as Implementation The provision of funding	Drafting as well as Implementation The provision of funding
	The Ministry of Research, Innovation and Digitalisation	The Ministry of Economy, Industrial Policy Directorate
BENEFICIARIES 	SMEs Cluster organisations Research organisations Academic institutions Start-ups Business associations Large firms Technology centres General population	SMEs Cluster organisations Research organisations Academic institutions Start-ups Business associations Large firms Technology centres
	<p>The new policy does not mention specifically which are the actors that will benefit from it. Nevertheless, the Ministry of Research, Innovation and Digitalisation deploys the 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.</p>	<p>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.</p>





Policy type:		Broad policy	Sectoral policy
Policy name:		Strategia Nationala de Specializare Inteligenta (National Strategy for Smart Specialization)	Document de politică industrială a României (Romania's industrial policy)
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
	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) Marketing activities: advertising, communication, events, fairs, and so on	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) 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.	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



Policy type:		Broad policy	Sectoral policy
Policy name:		Strategia Nationala de Specializare Inteligenta (National Strategy for Smart Specialization)	Document de politică industrială a României (Romania's industrial policy)
		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.	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.
HISTORY 	Period	Limited	Unlimited
	Ending year <i>(for policies with limited period)</i>	2027	
	Starting year	2022	2009
	Explanation	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.	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.
BUDGET 	Overall	EUR 16.6 billion	N/A
	Annual	N/A	N/A
	Source of funding	Funds came mainly from EU funds which were channeled through different national programmes, for the programming period 2021-2027: The Operational Program Smart Growth, Digitalisation and Financial Instruments	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).



Policy type:		Broad policy	Sectoral policy
Policy name:		Strategia Nationala de Specializare Inteligenta (National Strategy for Smart Specialization)	Document de politică industrială a României (Romania's industrial policy)
		2021-2027 (POCIDIF) and the National Recovery and Resilience Plan.	
POLICY EVALUATION 	Availability	In-itinere	Ex-post
	Results	The assessment of progress in national smart specialization priorities will be carried out in 2025 and 2027.	The Romanian Cluster Association (ClusteRo) published a report on the situation of Romanian clusters (2020).
POLICY ALIGNMENT WITH THE EU PRIORITIES 		Resilience	Resilience

Source: ECCP (2023).



04

State of cluster policy and its role in broader economic policy



4. State of cluster policy and its role in broader economic policy challenges

4.1 The state of cluster policy

This section presents an overview on the state of play of Romanian cluster policy in the form of a qualitative assessment across four categories of analysis – policy scope, continuity of cluster policies, evidence of performance, and the range of cluster support instruments. Please refer to the **Annex** for the detailed overview of the categories and the scoring system. The table below presents an overview of the **state of play of Romanian cluster policy** for 2023.

Table 4: State of play

Romania	State of play
POLICY SCOPE	Absence of cluster policy
	Broad policy
	Sectoral policy
	National and/or regional cluster policy
CONTINUITY	No cluster-specific policy available
	Cluster policy established recently
	Cluster policy established between over 2 and 10 years
	Cluster policy established over 10 years ago
EVIDENCE OF PERFORMANCE	No evaluation and / or monitoring available
	Existence of evaluations of past policies
	Existence of monitoring or an ongoing / interim evaluation
	Existence of monitoring and ex-ante or ongoing / interim evaluation
CLUSTER SUPPORT INSTRUMENTS	No instruments for cluster development
	Financial support for cluster development in the broader and / or sectoral policy
	Financial or technical support for cluster development in dedicated cluster policy
	Financial and technical support for cluster development in dedicated cluster policy

Source: ECCP (2023).

The text below provides a **qualitative description** of the state of play of the cluster policy in Romania.

Policy scope

Although there is no self-standing cluster policy in Romania and the concept is only developed through the broader industrial policy, such as Document de politică industrială a României (Romania's industrial policy), Strategia Națională de Specializare Inteligentă (National Strategy for Smart Specialization) or Regional Strategies for Smart Specialisation, the gap in the strategic approach to economic development is compensated by a series of measures, activities and financial



instruments dedicated to the development of clusters in Romania that are now included in the national/operational programs for the period 2021-2027, e.g. in the National Plan for Research, Development and Innovation 2022-2027, the National Resilience and Recovery Plan of Romania (Component 9 – Support for the private sector, research, development, innovation – value chains), Regional Operational Programs for each of the 8 Development Regions of Romania, and the Operational Program Smart Growth, Digitalization and Financial Instruments.

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 and 2020).

In Romania, there is no dedicated cluster policy. As mentioned previously, cluster as a concept is only an integral part of the wider national industrial policy. The current support targeted to cluster development under the industrial policy is rather unclear as it does not set any specific objectives or initiatives in this sense. Its main role is to disseminate the cluster concept at national and regional level and help clusters get involved in various European projects.

Evidence of performance

In 2020, the Romanian Cluster Association (ClusteRo) published a report on the situation of Romanian clusters, which showed that one of the main weaknesses of the cluster landscape and implicitly of the cluster policy has been the lack of coherent support. In the previous programming period, the structural funds have been made available only through ERDF interventions of the 'Operational Programme for Competitiveness 2014 - 2020'. The results of the report showed overall sub-optimal support which could pose a risk to the cluster landscape in the medium and long term. However, due to the combined efforts of ClusterRo and the Ministry of Economy (the main actor responsible for cluster policy as an integral part of the industrial policy), the support measures and financial instruments dedicated to clusters have been included in operational programs for 2021-2027.

Cluster support instruments

In Romania's cluster support policies, there is a broad range of instruments for the creation and further development of clusters, e.g. support for cooperation and collaboration activities, support for R&D projects, development of innovations, etc.





4.2 Cluster policy's potential impact on challenges identified in the European Semester Report

Cluster policy can provide important support to broader economic policy efforts. This section shows how Romanian clusters (can) play a role in addressing the challenges identified in the European Semester Report for the country. To this end, the European Semester 2023 country report for Romania³ has been analysed across policy areas relevant to cluster policy. The results point to a series of issues where cluster policy can play an important role in tackling the country's economic challenges.

The table below also outlines how Romanian cluster organisations are already contributing to the challenges outlined in the European Semester Reports in the absence of a dedicated cluster policy. Developing a dedicated cluster policy could further strengthen and focus the activities of Romanian cluster organisations towards broader economic policy challenges.

Table 5: Contribution of Romanian clusters to the challenges identified in the European Semester Report

Policy area	Challenges	Cluster activity
INNOVATION 	<ul style="list-style-type: none"> • Provide sustainable sources of public R&D funding. • Remedy the structural weakness of the innovation ecosystem. • Promote private R&D investments and improve R&D absorption within businesses 	<p>The programme for the European Union funds investment emphasises the importance of a strong innovation ecosystem. The programme also encourages cooperation between companies, research organisations and public authorities to strengthen the innovation ecosystem. To this end, the programme provides support to innovation clusters.</p> <p>Clusters can indeed play an important role in facilitating the transfer of technology.⁴ In that regard, the various Romanian cluster organisations are strongly focusing on facilitating R&D projects. This is showcased, for instance, by the project "<i>Innovative services for twin transition in SMEs and clusters</i>", whose strategic objective (SO) of the project is to increase the competitiveness of Romanian companies based on green industry (eco) innovation, digitalisation approaches and internationalisation, with a particular focus on strengthening the Romanian-Norwegian business & innovation relationships.⁵</p> <p>Moreover, the literature points out that the presence of clusters is positively linked to higher investments for research and development both in the public and especially the private sector.⁶</p>
SKILLS 	<ul style="list-style-type: none"> • Address the widespread lack of human capital for the green and digital 	<p>Regarding skill development, the programme for the European Union funds investment aims to improve skills and competences, in which clusters have the potential to offer a significant contribution. Research underlines the role of clusters in developing the skills of</p>

³ https://economy-finance.ec.europa.eu/system/files/2023-05/RO_SWD_2023_623_en.pdf (last access 10.05.2024)

⁴ Fioravanti, V.; Stocker, F.; Macau, F. (2023).

⁵ See <http://clustero.eu/innovative-services-for-twin-transition-in-smes-and-clusters/> for more details

⁶ ECCP (2022).



Policy area	Challenges	Cluster activity
	<p>transitions</p> <ul style="list-style-type: none"> • Address the skills mismatch that besets industry. • Improve national policies to attract and retain talent 	<p>the workforce and attracting skilled workers to a region.⁷ For instance, one can point out the activities of the ClusteRo association, which participated in the DanubePeerChains project, which aims to execute Integrated capacity building and training programme for Danube area labour and business support organisations, local industry and entrepreneurs.⁸</p> <p>More generally, as cluster organisations act as intermediaries between companies and research and educational institutions, they can also be seen as part of the training and educational infrastructure in the innovation ecosystem.⁹</p>
<p>GREEN TRANSITION</p> 	<ul style="list-style-type: none"> • Stronger protection for biodiversity • Making progress towards a circular economy, particularly in the industry. • Stepping up energy efficiency measures, particularly in the industrial sector 	<p>In order to support the green transition of the country, the programme for the European Union funds investment 2021-2027 aims to support the technology transfer between companies, research centres and universities with a focus on low-carbon resilience of the economy and climate change and adaptation. As facilitators of technology transfer, clusters are assigned an important role in supporting the green transition.</p> <p>As facilitators of technology transfer, clusters are assigned an important role in supporting the green transition. Clusters in Romania are addressing the recommendations mentioned by the European Semester Report. For instance, ClusteRo participated in the aforementioned “Innovative services for twin transition in SMEs and clusters project”.</p> <p>Studies also show that clusters can play a vital role in the green transition of the economy¹⁰ and it can be underlined that cluster organisations have a positive influence on the green transition, not least because they facilitate exchange between different actors, disseminate relevant knowledge and practices and deepen environmental awareness among stakeholders.¹¹</p>

Source: ECCP (2023).

⁷ Hsu, M.-S et al. (2014).

⁸ See <http://clustero.eu/danubepeerchains-integrated-capacity-building-and-training-programme-for-danube-area-labour-and-business-support-organisations-local-industry-and-entrepreneurs-to-enter-innovative-transnational-valu/> for more info.

⁹ European Expert Group on Clusters (2020).

¹⁰ Lis, A. & Mackiewicz, M. (2023); ECCP (2021).

¹¹ Hatch et al. (2017).

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Annex

Table 6: Analytical framework for the state of cluster policy

Criterion	Description	Categorical variables
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 existence of broader policies existence of specific sectoral policies existence of targeted cluster policies
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 cluster policy established recently (within the last 2 years) cluster policy established between over 2 and 10 years cluster policy established over 10 years ago
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 existence of evaluations of past policies, e.g. ex-ante existence of monitoring or an ongoing / interim evaluation existence of monitoring and ex-ante or ongoing / interim evaluation
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 financial support for cluster development in the broader and / or sectoral policy financial or technical support for cluster development in dedicated cluster policy financial and technical support for cluster development in dedicated cluster policy

Source: ECCP (2023).