



EUROPEAN CLUSTER
COLLABORATION PLATFORM

Country factsheet

Spain

An initiative of the European Union





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01

Introduction and economic policy context



EUROPEAN CLUSTER
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Strengthening the European economy through collaboration



1. Introduction and economic policy context



This document presents an overview of the cluster policy in Spain. 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 Spain](#).

The European Semester is 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 Spain's cluster policy can help to tackle the economic policy challenges identified in the European Semester country recommendations.

The COVID-19 pandemic has caused an unprecedented economic shock to the European and global economy. In response, policymakers at the EU and national levels 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. In Spain, clusters are mentioned in the context of strengthening the public and private research and innovation ecosystem. 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.

The [Spanish Recovery Plan](#) includes investments and reforms to promote clusters in renewable energies and digitalisation. The creation of a green cluster for technological and industrial development of energetic storage and the creation of regional clusters and pilot projects to promote the value chain of hydrogen are particularly relevant. Financial grants will also be provided to clusters to support the digitalisation of the value chain of different industrial sectors¹. Furthermore, the Recovery Plan advances ambitious measures to promote the clusters of the Associations of Innovative Companies, the modernization of companies, the training of managers, and the promotion of entrepreneurship, through the Spain Entrepreneurial National agenda². Moreover, clusters are mentioned in the investments of component 13 of the plan focused on promoting SMEs: Digitization and innovation. Includes, among others, subsidy programs for SMEs for the costs of adopting digital solutions and digital transformation, to support value chain digitization projects.

[ERDF Partnership Agreement 2021-2027](#), along with the Partnership Agreement, Spain had its Cohesion Policy operational programme approved on January 2023 for the European Regional and Development Fund (ERDF), the Cohesion Fund, the Just Transition Fund (JTF) and the European Social Fund Plus (ESF+). In particular, the term cluster is mentioned in the regional plans of several Autonomous Communities such as Andalusia, the Basque Country, Aragón or Catalonia. In these documents, it is highlighted the role played by clusters in reinforcing the growth and competitiveness

¹ Gobierno de España. Plan de Recuperación, Transformación y Resiliencia. 27 April 2021. Available at: www.lamondcloa.gob.es/temas/fondos-recuperacion/Documents/30042021-Plan_Recuperacion_%20Transformacion_%20Resiliencia.pdf

² Gobierno de España. Spain Entrepreneurial Nation. June 2021. https://nacionemprendedora.gob.es/sites/default/files/Spain_Entrepreneurial_Nation.pdf



of small and medium-sized enterprises (SMEs). Due to the small size of these businesses, they often face challenges in terms of innovation and productivity. Clusters facilitate collaboration and idea exchange, fostering innovation and productivity improvement. They help SMEs establish networks with other businesses and institutions, opening new business opportunities. Clusters also facilitate the development of interregional innovative projects, including cross-border ones, allowing SMEs to access new markets and collaborate with partners in other regions or countries. In essence, clusters are vital in supporting the growth and competitiveness of SMEs, promoting a more innovative and productive economy.

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

- 1) an overview of the industrial ecosystems and cluster landscape in Spain
- 2) an overview of the national cluster policy and an insight into the regional cluster policy,
- 3) an assessment of the state of play of the national cluster policy and its capacity to tackle wider economic policy challenges mentioned in the European Semester Reports.

02

Industrial ecosystems and cluster landscape



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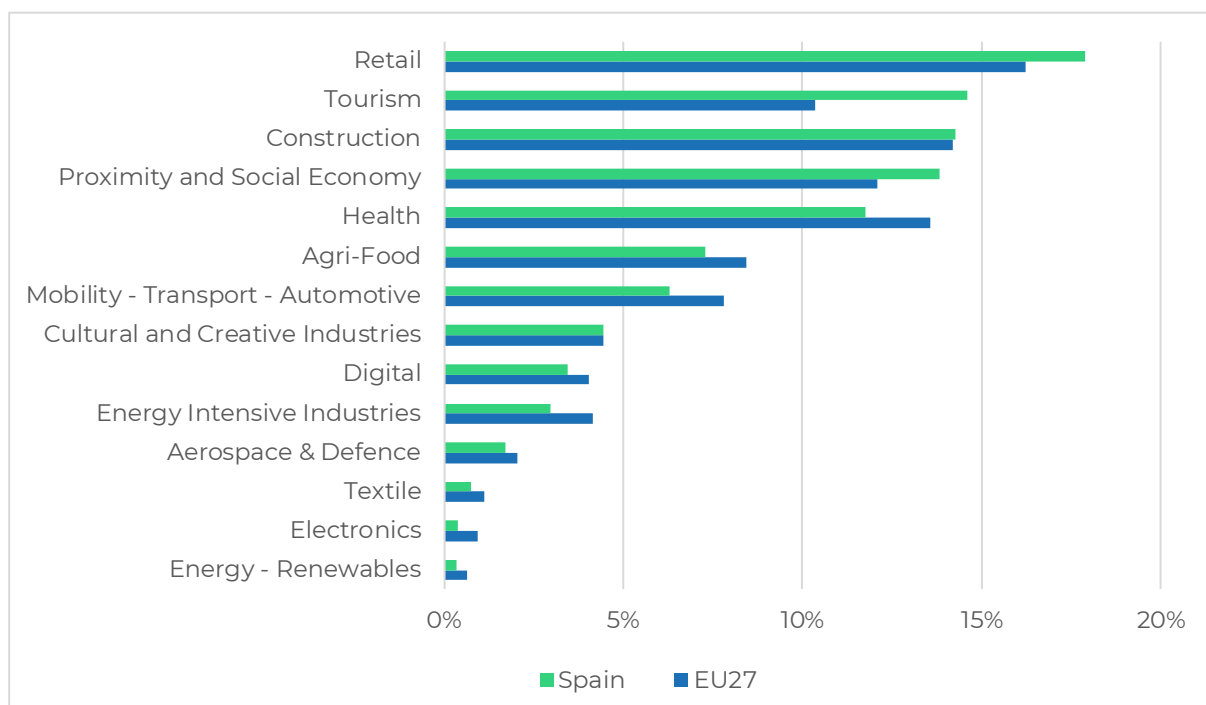
2. Industrial ecosystems and cluster landscape

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.³ The classification of the 14 industrial ecosystems have been calculated by aggregating NACE 2 -digit activities, following the methodology established in the European Commission.⁴ This means that the data provided below can differ from other publications by the European Commission that do not consider the industrial ecosystem classification.

In Figure 1, the employment share of Spain and the EU27 in each industrial ecosystem is shown relative to the number of all 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 all EU27 Member States, it indicates that the country is more specialised in that ecosystem. In Spain, the highest employment shares are found in the industrial ecosystems “Retail” (18%), “Tourism” (15%), in both of which the country exhibits a higher share than the EU27 Member States. This is followed by the ecosystem “Construction” with 14%, a similar share to that of the EU27 Member States. Furthermore, the ecosystem “Proximity and Social Economy” industrial ecosystem plays a rather important role, also accounting for 14% of employment across the ecosystems, thus exceeding the EU27 level.

Figure 1: Employment across the ecosystems



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

³ see here for more information <https://clustercollaboration.eu/in-focus/industrial-ecosystems> (last access 09.01.2023)

⁴ see European Commission (2021): Annual Single Market Report, SWD(2021)351.



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.⁵ The following tables show the total number of regionally relevant specialisation agglomerations in each region in the country and identifies the top five most specialised of these agglomerations. Table 1 focuses on the 88 NACE 2-digit activities or sectors, totalling 122 in the country across 32 sectors, while Table 2 is based on the 14 ecosystems, which total 14 in the country across seven ecosystems.

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

Region	# of agglo.	Agglomeration 1	Agglomeration 2	Agglomeration 3	Agglomeration 4	Agglomeration 5
ES11: Galicia	5	T97 – Households as employers act.	R93 – Sports, amusement, recreation	F41 – Construction of buildings	I56 – Food & beverage services	N82 – Office administrative, office support and other business support activities
ES12: Asturias	6	C24 – Manuf. of basic metals	T97 – Households as employers act.	I56 – Food & beverage services	N81 – Services to buildings and landscape activities	C33 – Repair, installation of machinery
ES13: Cantabria	7	T97 – Households as employers act.	C24 – Manuf. of basic metals	E38 – Waste collection, treatment & disposal	F41 – Construction of buildings	R93 – Sports, amusement, recreation
ES21: Basque Country	8	C24 – Manuf. of basic metals	T97 – Households as employers act.	C25 – Manuf. of fabricated metal products	C27 – Manuf. of electrical equipment	R93 – Sports, amusement, recreation
ES22: Navarra	7	C29 – Manuf. of motor vehicles & trailers	T97 – Households as employers act.	C10 – Manuf. of food products	C27 – Manuf. of electrical equipment	R93 – Sports, amusement, recreation
ES23: Rioja	8	C15 – Manuf. of leather products	C11 – Manuf. of beverages	T97 – Households as employers act.	F41 – Construction of buildings	C10 – Manuf. of food products
ES24: Aragon	4	T97 – Households as employers act.	C29 – Manuf. of motor vehicles & trailers	R93 – Sports, amusement, recreation	C27 – Manuf. of electrical equipment	-
ES30: Madrid	8	T97 – Households as employers act.	M73 – Advertising & market research	N82 – Business support activities	J62 – Computer programming, consultancy	R93 – Sports, amusement, recreation
ES41: Castile and Leon	5	T97 – Households as employers act.	F41 – Construction of buildings	C10 – Manuf. of food products	R93 – Sports, amusement, recreation	I56 – Food & beverage services
ES42: Castile-La Mancha	5	T97 – Households as employers act.	F41 – Construction of buildings	A01 – Crop & animal production	R93 – Sports, amusement, recreation	C10 – Manuf. of food products
ES43: Extremadura	5	T97 – Households as employers act.	A01 – Crop & animal production	F41 – Construction of buildings	N81 – Services to buildings and landscape activities	R93 – Sports, amusement, recreation

⁵ for more information on the methodology please see the methodology note: <https://clustercollaboration.eu/in-focus/policy-acceleration/country-factsheets-on-cluster-policies-and-programmes> (last access 09.01.2023)



ES51: Catalonia	7	T97 – Households as employers act.	N82 – Business support activities	C20 – Manuf. of chemical products	R93 – Sports, amusement, recreation	I56 – Food & beverage services
ES52: Valencia	6	T97 – Households as employers act.	C23 – Manuf. of other non-metallic mineral products.	I56 – Food & beverage services	F41 – Construction of buildings	G46 – Wholesale trade, except of motor vehicles and motorcycles
ES53: Balearic Islands	6	I55 – Accommodation	F41 – Construction of buildings	T97 – Households as employers act.	I56 – Food & beverage services	R93 – Sports, amusement, recreation
ES61: Andalusia	5	T97 – Households as employers act.	F41 – Construction of buildings	A01 – Crop & animal production	I56 – Food & beverage services	R93 – Sports, amusement, recreation
ES62: Murcia	7	T97 – Households as employers act.	G46 – Wholesale trade (not motor vehicles)	A01 – Crop & animal production	C10 – Manuf. of food products	N78 – Employment activities
ES63: Ceuta	9	E38 – Waste collection, treatment and disposal activities	N80 – Security and investigation activities	Q86 – Human health activities	P85 – Education	O84 – Public administration and defence
ES64: Melilla	8	N81 – Services to buildings and landscape activities	Q86 – Human health activities	P85 – Education	O84 – Public adm., defence, soc. security	T97 – Households as employers act.
ES70: Canary Islands	6	I55 – Accommodation	T97 – Households as employers act.	I56 – Food & beverage services	F41 – Construction of buildings	R93 – Sports, amusement, recreation

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 numbers of ecosystem agglomerations compared to 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. Both Table 1 and 2 reflect the relevance of employment related to Construction and Tourism, which is also pointed out in the previous Figure 1. For instance, for ten Spanish regions, the sector construction of buildings (F41) is among the top 5 regionally relevant sectoral agglomerations. Moreover, some regions (e.g., Balearic Islands and Canary Islands) display regionally relevant sectoral agglomerations that are relevant for tourism (e.g., I55 – Accommodation) which is also reflected in their relevant ecosystem agglomeration, namely “Tourism”. Similarly, for other regions (e.g., Castilla-La Mancha and Extremadura) several regionally relevant sectoral agglomerations related to agriculture (e.g., A01 - Crop & animal production) emerge, which are also found in the regionally relevant ecosystem agglomeration for the ecosystem “Agri-Food”. The capital region of Madrid (ES30) exhibits agglomerations in the “Digital” and “Cultural and creative industries” ecosystems. These are echoed in the NACE agglomerations, such as Computer programming, consultancy (J62) for the first, advertising and market research (M73) for the second.

Table 2: Regionally relevant ecosystem agglomerations by region

Region	Number of ecosystem agglomerations	Agglomeration 1	Agglomeration 2
ES11: Galicia	0	-	-
ES12: Asturias	0	-	-
ES13: Cantabria	0	-	-
ES21: Basque Country	0	-	-
ES22: Navarra	0	-	-
ES23: Rioja	2	Textile	Agri-Food
ES24: Aragon	0	-	-
ES30: Madrid	2	Digital	Cultural and creative industries



ES41: Castile and Leon	0	-	-
ES42: Castile-La Mancha	1	Agri-Food	-
ES43: Extremadura	1	Agri-Food	-
ES51: Catalonia	0	-	-
ES52: Valencia	1	Textile	-
ES53: Balearic Islands	1	Tourism	-
ES61: Andalusia	0	-	-
ES62: Murcia	1	Agri-Food	-
ES63: Ceuta	2	Health	Proximity and Social Economy
ES64: Melilla	2	Health	Proximity and Social Economy
ES70: Canary Islands	1	Tourism	-

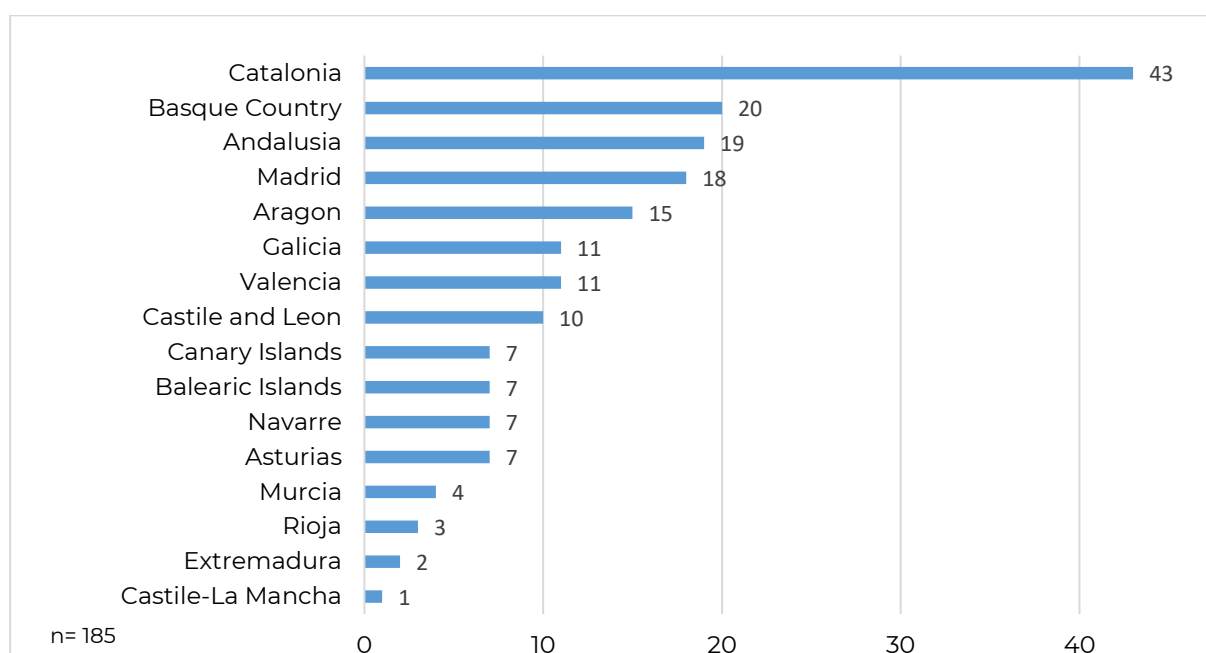
Source: ECCP (2023), own elaboration based on data from Eurostat.

2.3 Cluster organisations & interregional cooperation

Cluster organisations in the regions

There are 185 cluster organisations registered on the ECCP in 16 out of the 19 regions. The majority of these cluster organisations are located in Catalonia (43 cluster organisations) followed by Basque Country (20 cluster organisations) and Andalusia (19 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

SMEs (80%, EU: 83%) followed by large enterprises (13%, EU: 9%) and research organisations (7%, EU: 8%) constitute the majority of member organisations of Spanish cluster organisations with profiles on the ECCP. From a thematic perspective, these Spanish 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. The following list also underlines that the Spanish strengths in terms of employment (e.g., in “Digital”, “Agri-food”, “Tourism”) that was outlined before is also largely reflected in the Spanish ECCP registered cluster organisations.

- Digital (28 cluster organisations)
- Agri-food (19 cluster organisations)
- Mobility-Transport-Automotive (19 cluster organisations)
- Renewable Energy (16 cluster organisations)
- Creative & Cultural Industries (11 cluster organisations)
- Construction (11 cluster organisations)
- Health (11 cluster organisations)
- Tourism (10 cluster organisations)
- Energy Intensive Industries (6 cluster organisations)
- Aerospace & Defence (4 cluster organisations)
- Textile (4 cluster organisations)
- Electronics (3 cluster organisations)
- Proximity & Social Economy (3 cluster organisations)
- Retail (3 cluster organisations)

Interregional cooperation

In the 2014-2020 funding period⁶, 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. Spanish cluster organizations have been involved in 18 consortia of the European Strategic Cluster Partnerships out of which 13 partnerships were focusing on ESCP-4i (internationalisation), 4 partnerships in ESCP-4x (cluster excellence) and one partnership was focusing on ESCP-S3 (smart specialisation). Consortia partners came from 25 different EU member states (AT, BE, BG, CZ, DE, DK, EE, EL, FI, FR, HU, IE, IT, LT, LV, NL, PL, PT, RO, RS, SE, SI, SK, TR, UK). 46 Spanish cluster organizations participated in the INNOSUP-1 initiative with partner organisations coming from 25 countries (AT, BE, BG, CZ, DE, DK, EL, FI, FR, HU, IE, IL, IT, LT, LU, NL, NO, PL, PT, RO, RS, SE, SI, TR, UK).

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 Spain, 28 cluster organisations are part of 23 Euroclusters with partner from 21 countries (SK, AT, IT, ES, RO, BG, DE, FI, PL, EE, NL, FR, BE, CZ, DK, NO, LT, GR, PT, HU, LV). These Euroclusters are AEC Eurocluster, AIBC Eurocluster, B-Resilient, BioMan4R2, CircInWater, ELBE Eurocluster, EPICENTRE, EU Rural Tourism, EuroBoosTEX, FRIEND CCI, IKAT, INGENIOUS, MedBan, METASTARS, POLREC, RE-CENTRE, RESIST, SILEO, Silicon Eurocluster, SocialTech4EU, SUAVE, SUSTAIN and xBUILD-EU. Collectively, they cover all 14 industrial ecosystems.⁷

⁶ 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.

⁷ Assigned Euroclusters to each of the 14 industrial ecosystems is shown on: <https://clustercollaboration.eu/euroclusters> (last access 20.03.2023).

03

National cluster policy, programmes and initiatives



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3. National cluster policy, programmes and initiatives

In this section, we provide an overview of the existing Spanish cluster policies on a national as well as regional level (example of Catalonia).

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 Spanish national cluster policy, whilst the third represents an exemplary regional cluster policy in Spain, precisely the example of the regional cluster policy in Catalonia, Spain.

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

Table 3: Overview of Spanish cluster policy

Policy type:	National cluster policy	Regional cluster policy
Policy name:	Programme to support Innovative Business Associations	Catalonia Clusters Program
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 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





Policy type:	National cluster policy	Regional cluster policy
Policy name:	Programme to support Innovative Business Associations	Catalonia Clusters Program
	<p>Supporting the consolidation of existing cluster organisations</p> <p>Supporting the creation of new cluster organisations</p> <p>Promoting resilience and sustainable economy and other solidarity-based initiatives</p> <p>Strengthening the network of cluster organisations/cross-clustering</p> <p>Increase supply chain resilience</p> <p>The national cluster policy in Spain is mainly based on two closely linked elements: the Register of Innovative Business Associations and the Programme to Support Innovative Business Associations, both managed by the Ministry of Industry, Trade and Tourism (MINCOTUR).</p> <p>To be included in the Register, which is a necessary condition to participate in the Programme, the cluster organisations (known as AIEs) must submit a 4-year Strategic Plan. This is then evaluated by a specific Assessment Committee and needs to obtain an "Excellent" qualification. The Strategic Plans provide MINCOTUR with first-rate information about the activities of the AIEs and facilitates the monitoring of their evolution over time as</p>	<p>Supporting the consolidation of existing cluster organisations</p> <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 Regional Innovation Strategy (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>The program wants to implement a cluster policy that tends to excellence in line with the recommendations of the European Commission and the orientation of the main reference countries in this area (Scandinavian countries, Germany, etc.). This approach implies the need to concentrate efforts towards a limited number of initiatives seeking a consistent strategic focus, private leadership, too critical, efficient management of resources and ability to move on a global stage, among others.</p>



Policy type:	National cluster policy	Regional cluster policy
Policy name:	Programme to support Innovative Business Associations	Catalonia Clusters Program
	<p>they must be renewed every four years to maintain the validity of the records.</p> <p>As for the Programme, its main objective is to strengthen the role of clusters (or AEIs) as agents capable of promoting cooperation between universities, R&D&I centres and industry to boost competitiveness, innovation and internationalisation and, ultimately, to support SMEs.</p>	
POLICY FOCUS 	Sectoral	Cross-sectoral
	The clusters must be focused on a specific sector or area of activity. No cross-sectoral clusters are registered.	According to the Catalonia Clusters Program, “cross-sector” projects, in which companies are grouped by their strategic option or their final market, tend to assume a higher aggregate turnover and also a comparatively more significant employment than which corresponds to the initiatives carried out based on industrial microclusters.
RESPONSIBLE AUTHORITIES 	Both drafting and implementation Provides funding Oversees the implementation	Both drafting and implementation Provides funding Oversees the implementation
	<p>The Ministry of Industry, Commerce and Tourism (through the General Secretary of Industry and SMEs) is the responsible authority.</p> <p>aei@mincotur.es</p>	<p>Generalitat de Catalunya</p> <p>info@gencat.cat</p>
	SMEs Cluster organisations	SMEs Cluster organisation



Policy type:		National cluster policy	Regional cluster policy
Policy name:		Programme to support Innovative Business Associations	Catalonia Clusters Program
BENEFICIARIES 		Research organisations Academic institutions Large firms Technology centres	Start-ups Large firms Technology centres
		<p>The beneficiaries are cluster organisations (known as AIE) part of the AIE Register. Two types of AIEs are considered:</p> <p>Emerging: recently constituted AIEs, in the process of consolidation, with an antiquity of a maximum of 4 years from their date of constitution.</p> <p>Excellent: AIEs that demonstrate a high performance in the development of projects and services relevant to the improvement of the competitiveness of the associated companies, in the organisation of their own management structure and in the achievement of a sustainable financial structure. In the case of joint innovation activities, cluster's members can also be the beneficiaries, with some restrictions, e.g. large companies can only participate in cooperation with an SME.</p>	<p>The focus of the cluster policy of the Government of Catalonia is on stimulating excellence rather than incorporating all clusters of Catalonia. The program is divided into two calls IRC and NON. IRC is only for the clusters of the program whereas NON is open to all companies in Catalonia. Non is focused on new business opportunities and is divided into strategic change projects and structural change. IRC covers support for competitive reinforcement. It is formed by dynamic agents and competitive projects.</p>
INSTRUMENTS 	Financial	Funding collaboration initiatives Support to R&D projects, SMEs becoming cluster members, etc. Subsidies to hire personnel Subsidies for cluster infrastructure (e.g. offices, equipment)	Funding collaboration initiatives Support to R&D projects, SMEs becoming cluster members, etc. Subsidies to hire personnel Financing start-ups




Policy type:		National cluster policy	Regional cluster policy
Policy name:		Programme to support Innovative Business Associations	Catalonia Clusters Program
		Financing networking events Supporting market entry (e.g. testing, proof-of concept, prototyping, demonstration projects) Innovation: voucher, support to hire PhDs, cooperation with R&I actors	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 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)
	Explanation	<p>The Programme subsidises different types of actions directed to innovation:</p> <ol style="list-style-type: none"> 1. Set up and development of coordination and management structures of “emerging” AIEs; 2. Elaboration of technical viability studies: evaluation and analysis of a potential project; 3. Development of innovative activities (e.g. industrial and experimental research, innovation in organisation and processes). 	<p>Both financial instruments and technical assistance are provided through this program. The program finances innovation projects, competitiveness reinforcement projects, structural change projects and strategic change projects.</p>



Policy type:	National cluster policy	Regional cluster policy
Policy name:	Programme to support Innovative Business Associations	Catalonia Clusters Program
	<p>4. Innovation activities and projects in cooperation.</p> <p>The expenses covered by the grants of the Programme are: technical personnel directly involved in the execution of the actions; external collaborations; interurban travel and accommodation of the technical staff; and, in the actions towards the development of the management and coordination structures, the expenses related to administrative staff and necessary services for the operational management of the entity except financial and investment costs.</p> <p>Two funding lines (2023):</p> <p>Line 2 funds "Technical Feasibility Studies" focused on defining projects that wish to be submitted to future calls of the following programmes:</p> <ul style="list-style-type: none"> - The Support for Innovative Business Clusters programme through Line 3 for "Digital Technologies Projects". - The EU framework programme for research and innovation for the period 2021-2027, "Horizon Europe". <p>Line 3. It finances "Digital Technologies Projects" that must incorporate knowledge and/or technologies that promote the digital transformation of the companies that carry them out within the framework of the following categories:</p> <ul style="list-style-type: none"> - Industrial research activities. - Experimental development activities. - Organisational innovation. - Process innovation. 	



Policy type:		National cluster policy	Regional cluster policy
Policy name:		Programme to support Innovative Business Associations	Catalonia Clusters Program
HISTORY 		The aid limits may reach 3 million euros per action for collaborative projects in the "Digital Technologies" line if the circumstances of the participation of 2 or more AEIs or 3 or more SMEs in industrial research activities are met.	
	Period	Unlimited period	Limited period
	Ending year (<i>for policies with limited period</i>)	-	2023
	Starting year	2006	2021
	Explanation	<p>The Programme was launched between 2006-2007 and has been active since then. In a first stage, it focused on promoting the formation of an initial set of clusters from which to favour the expansion of the "cluster phenomenon" across Spain. Subsequently, it focused on the search for excellence and the promotion of collaborative actions. Currently, the Programme prioritises digitalisation and value chains, and it is expected that new steps will be taken to promote cluster collaboration with digital innovation hubs.</p> <p>The call for applications for the support programme for Innovative Business Associations (AEI) for 2023 has received 446 applications for more than worth more than 96 M€.</p> <p>No ending date is mentioned.</p>	<p>Catalonia was one of the pioneer territories at an international level in designing and implementing initiatives for improvement of competitiveness using clusters. Three decades of continuous experience have had since their beginnings, in 1992, the essential objective of improving the business competitiveness, understanding the cluster as a tool and not as an objective. Programs are for 3 years. The current program is from 2024 to 2026.</p>



Policy type:		National cluster policy	Regional cluster policy
Policy name:		Programme to support Innovative Business Associations	Catalonia Clusters Program
BUDGET 	Overall	EUR 103,600,000 (49,600,000 between 2006-2022 and 54,000,000 in 2023) ⁸	EUR 5,600,000
	Annual	EUR 7,700,000 (2022) and EUR 54,000,000 (2023) ⁹	n/a
	Source of funding	<p>A combination of Recovery and Resilience Facility funding and budget from the Ministry of Industry, Commerce and Tourism. The overall budget corresponds to the new funding period 2021-2027. The annual budget varies, and the number represents the annual average of the previous 2014-2022 funding period.</p> <p>The 2023 call for proposals had an extraordinary budget of 54 million euros of which 46.44 million euros are from the European Union's Resilience and Recovery Mechanism.</p>	The budget is divided into the two calls: the budget for IRC is for dynamic agents EUR 800,000 and for competitive projects EUR 1,8 M. In case of the budget of NON is EUR 3M.
POLICY EVALUATION 	Availability	in-itinere	in-itinere
	Results	<p>In 2020, the Ministry published the article "Cluster policy in the Ministry of Industry, Commerce and Tourism. Evolution, results and perspectives.". The document illustrates the results of the Programme since its start. The assessment of the 2007-2013 phase, focused on promoting the formation of clusters, showed very positive results with a total of 160 AIEs registered in 2013 and 515 projects carried out during this time. In the 2014-2020 phase, the priorities changed to focus on the consolidation of the existing clusters. The evaluation of the outcomes is highly positive.</p>	An annual evaluation process is carried out on the cluster managers, the Project manager team and the presidents of the clusters. The review focuses on the following points: the robustness of the governance, the soundness of the financial model, the management team and the qualitative critical mass.


⁸ See Ministerio de Industria, Comercio y Turismo (2023).

⁹ See Ministerio de Industria, Comercio y Turismo (2020b).



Policy type:	National cluster policy	Regional cluster policy
Policy name:	Programme to support Innovative Business Associations	Catalonia Clusters Program
	<p>The number of clusters registered decreased to 82, but these integrated more companies and research and technological centres. In particular, these accounted for about 7,500 associated companies providing more than 1.8 million jobs and collaborating with more than 340 technology centres and research organisations. Moreover, the clusters are more professionalised, better organised and especially, more interlinked and internationalised in the framework of EU initiatives such as the “Cluster Excellence” or the ECEI label. The evaluation of the Strategic Plans has also raised the requirements to ensure the impact of the RDI projects is optimal. The information provided by the Strategic Plans and the continuous dialogue with the clusters are of vital importance to plan the actions that make up the cluster policy. Such policy is being developed within the much broader framework of the MINCOTUR industrial policy and its policy to support SMEs, in line with the guidelines issued by the EU and with a clear desire to complement the policies and actions developed on the ground by the Autonomous Communities. The total amount of funds allocated by MINCOTUR to the Programme over its 14 years existence was about EUR 75 million, which in turn served to mobilise another EUR 73.5 million by other public and private sources to finance more than 1,800 projects.</p> <p>The primary objective of the 2023 support programme is to boost and accelerate innovative projects among SMEs that, without the collaboration formulas offered by clusters, would find it difficult to have sufficient scale or the necessary technology to compete in Industry 4.0 or Artificial Intelligence.</p>	



Policy type:	National cluster policy	Regional cluster policy
Policy name:	Programme to support Innovative Business Associations	Catalonia Clusters Program
POLICY ALIGNMENT WITH THE EU PRIORITIES 	Green Economy Digitalisation Resilience	Digitalisation Resilience

Source: ECCP (2023).

04

State of cluster policy and its role in broader economic policy



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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 of the state of play of Spain 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 for detailed overview of the categories. The table below presents an overview of the **state of play of Spanish cluster policy for 2023**.

Table 4: State of play

Spain	State of play
POLICY SCOPE	Absence of cluster policy
	Broad policy
	Sectoral policy
	National and/or regional cluster policy
CONTINUITY	No cluster 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 Spain.

Policy scope

In terms of policy scope and approach the cluster policy in Spain is characterised by a national coordination of clusters through the national cluster policy and independent regional policies in different regions. Thus, the development and facilitation of cluster initiatives are financed regionally



and based on regional strategies. The document explains the regional cluster policy of the Basque Country and Catalonia, two of the Spanish regions with the highest cluster activity.

The increase in funding to 54 million euros in 2023, mainly supported by the European Union's Resilience and Recovery Mechanism, is a good example of the Ministry of Industry's commitment to the development of clusters in Spain.

Continuity

As before mentioned, the national cluster programme (the Programme to Support Innovative Business Associations) and the Register of Innovative Business Associations have been successfully running since 2006-2007, which proves the continuity of the clusters policy at national level.

Although the objectives of the national cluster policy are shared at regional level, each of the Autonomous Communities have their own policy, mostly developed through regional development agencies. These are aligned with their industrial policies and largely influenced by their RIS3 in terms of specific objectives and instruments.

After the increase in 2023 and the high demand for initiatives worth 96 million euros, the question remains as to what weight these support programmes will have in 2024, whether they will return to the post-2022 levels or maintain a higher level of investment.

Evidence of performance

In 2020, the Ministry published the article [“Cluster policy in the Ministry of Industry, Commerce and Tourism. Evolution, results and perspectives.”](#). The document illustrates the results of the Programme since its start. The assessment of the 2007-2013 phase, focused on promoting the formation of clusters, showed very positive results, with a total of 160 AIEs registered in 2013 and 515 projects carried out during this time. In the 2014-2020 phase, the priorities changed to focus on the consolidation of the existing clusters. The evaluation of the outcomes is highly positive. The number of clusters registered decreased to 82, but these integrated more companies and research and technological centres. These accounted for about 7,500 associated companies providing more than 1.8 million jobs and collaborating with more than 340 technology centres and research organisations. Moreover, the clusters are more professionalised, better organised and especially, more interlinked and internationalised in the framework of EU initiatives such as the “Cluster Excellence” or the ECEI label. The evaluation of the Strategic Plans has also raised the requirements to ensure the impact of the RDI projects is optimal.

In a press release of May 2023, the Ministry of Industry, highlighted that the call would have received 446 applications worth more than EUR 96 million, which shows that cluster networks in Spain are an economic reality and demonstrates the active interest that clusters have in the development of innovation projects and in collaborating with the public administration.

Cluster support instruments




The Spanish clusters policy offers different financial and technical support instruments on a national level mentioned above in the document. Moreover, a national cluster award is organised to successful clusters.



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 Spanish cluster policy 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 Spain¹⁰ 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.

Table 5: Contribution of Spanish cluster policy to the challenges identified in the European Semester Reports

Policy area	Challenges	Cluster policy
INNOVATION 	<ul style="list-style-type: none"> Structural weaknesses in the innovation ecosystem Need to increase R&D investments and reinforce links with the scientific ecosystem 	Both the national cluster policy “Programme to support Innovative Business Associations” as well as the Catalan Clusters Program have the explicit goal to foster R&D activity and collaborations as well as to strengthen the innovation system. The national cluster policy follows the specific objective of strengthening and promoting cooperation between universities, R&D&I centres and industry.
SKILLS 	<ul style="list-style-type: none"> Lack of skills Need to promote skills for the green transition 	Especially the Catalan Clusters Program aims at promoting employment, upgrading skills and competences and provide technical support for the development of hard and soft skills. Research underlines the role of clusters in developing the skills of the workforce and attracting skilled workers to the region. ¹¹
GREEN TRANSITION 	<ul style="list-style-type: none"> Reducing the reliance on fossil fuels by further increasing the use of renewable energies 	<p>The ProACCIÓ Green programme, initiated by ACCIÓ, the Catalan Agency for Business and Competitiveness, includes various services, grants and activities that the agency puts at companies' disposal to make sustainability projects one of their strategic axes through responsible innovation and using technology as a lever for green transformation.</p> <p>Studies show that clusters can play a vital role in the green transition of the economy through a large set of activities ranging from integrative measures like standard-setting, local value-chain building or the cooperation with other clusters; to organising the access to resources, infrastructure, finance and information; to education and awareness building through workshops, knowledge sharing, campaigns and the promotion of green products and services.¹²</p>

Source: ECCP (2023).

¹⁰ European Commission (2023): Country report Spain. European Semester country reports 2023. Available at: https://economy-finance.ec.europa.eu/document/download/c2a417af-a656-4526-bec1-74977469dcad_en?filename=SWD_2023_609_1_EN_autre_document_travail_service_part1_v4.pdf

¹¹ Hsu et al. (2014).

¹² Lis and Mackiewicz (2023); ECCP (2021).

References



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References

- ACCIÓ. Acreditació de clústers 2021-2023. Available at <https://www.accio.gencat.cat/ca/serveis/processos-acreditacio/clusters/> (last access on 26.01.2024).
- ACCIÓ; Generalitat de Catalunya (2021). Política de Clústers de la Generalitat de Catalunya. Març 2021. Available at https://www.accio.gencat.cat/web/.content/01_Serveis/processos-acreditacio/Acreditacio-clusters/docs/2021/politica-de-clusters.pdf (last access on 26.01.2024).
- ECCP (2022): Summary report on cluster policies and programmes across Europe and priority third countries. Available online: https://clustercollaboration.eu/sites/default/files/sites/default/files/editor/ECCP_Summary%20Report%20cluster%20policies_2022_finalv2.pdf (last access 21.12.2023).
- European Expert Group on Clusters (2020): Recommendation Report. Available online https://clustercollaboration.eu/sites/default/files/news_attachment/European%20Expert%20Group%20on%20Clusters%20-%20Recommendation%20Report.pdf (last access 21.12.2023).
- Fioravanti, V.; Stocker, F.; Macau, F. (2023): Knowledge transfer in technological innovation clusters. Innovation & Management Review 20:1. Available online: <https://www.emerald.com/insight/content/doi/10.1108/INMR-12-2020-0176/full/html> (last access 10.01.2024).
- Gobierno de España. Ministerio de Hacienda y Función Pública (2022). Acuerdo de Asociación de España 2021-2027 – FEDER (EDRF). Available at https://www.fondoseuropeos.hacienda.gob.es/sitios/dgfc/es-ES/ipr/fcp2020/P2127/Documents/20221118_Acuerdo_Asociacion_aprobado.pdf (last access on 26.01.2024).
- Gobierno de España. Ministerio de Hacienda y Función Pública (2022). Acuerdo de Asociación de Andalucía 2021-2027 – FEDER (EDRF). Available at https://www.fondoseuropeos.hacienda.gob.es/sitios/dgfc/es-ES/ipr/fcp2020/P2127/PF/Documents/Programa_Andalucia.pdf (last access on 26.01.2024).
- Gobierno de España. Ministerio de Hacienda y Función Pública (2022). Acuerdo de Asociación del País Vasco 2021-2027 – FEDER (EDRF). Available at https://www.euskadi.eus/contenidos/informacion/feder_21_27/es_def/adjuntos/221129-Programa-FEDER-Pais-Vasco-2021-2027.pdf (last access on 26.01.2024).
- Gobierno de España. Ministerio de Hacienda y Función Pública (2022). Acuerdo de Asociación de Aragón 2021-2027 – FEDER (EDRF). Available at <https://www.aragon.es/documents/20127/90783167/Programa+AR+2021-2027.pdf/5fb27512-17f0-541b-bb9e-cf5d1ba448d6?t=1672302801477> (last access on 26.01.2024).
- Hatch et al. (2017): The Role of Social Actors in Advancing a Green Transition: The case of Québec's Cleantech Cluster. In Journal of Innovation Economics & Management. Available online: <https://www.cairn.info/revue-journal-of-innovation-economics-2017-3-page-63.htm> (last access 21.12.2023).
- Hsu, M.-S et al. (2014): The impact of industrial clusters on human resource and firms' performance. Journal of Modelling in Management 9:2. Available online:



<https://www.emerald.com/insight/content/doi/10.1108/JM2-11-2012-0038/full/html> (last access 21.12.2023).

Lis, A. & Mackiewicz, M. (2023): The implementation of green transformation through clusters. Ecological Economics 209. Available online:

<https://www.sciencedirect.com/science/article/abs/pii/S0921800923001052> (last access 18.01.2024).

Ministerio de Economía y Competitividad. Estrategia Española de Ciencia, Tecnología e Innovación 2013-2020. Available at https://www.ciencia.gob.es/dam/jcr:49a4ab93-ce39-4034-bdaf-e3bf999cb51f/Estrategia_espanola_ciencia_tecnologia_Innovacion.pdf (last access on 26.01.2024).

Ministerio de Industria, Energía y Turismo (2015). Industria Conectada 4.0. La Transformación Digital de la Industria Española. Informe preliminar. Available at <http://www6.mityc.es/IndustriaConectada40/informe-industria-conectada40.pdf> (last access on 26.01.2024).

Ministerio de Industria, Turismo y Comercio (2011). El programa AEIs 2007-2013. Balance actualizado de cinco años de aplicación de la política de clusters de MITYC. Secretaría General de Industria. Dirección General de Política de la Pequeña y Mediana Empresa. Available at www.ipyme.org/Publicaciones/ProgramaAEIs-2007_2013.pdf (last access on 26.01.2024).

Ministerio de Industria, Comercio y Turismo (2011). El Programa AEI en el marco de las políticas internacionales de apoyo a los clusters. Una valoración. Available at www.ipyme.org/Publicaciones/ProgramaAEIMarcoPoliticasyInternacionales.pdf (last access on 26.01.2024).

Ministerio de Industria, Comercio y Turismo (2019). Directrices Generales de la Nueva Política Industrial Española 2030. Available at www.mincotur.gob.es/es-es/gabineteprensa/notasprensa/2019/documents/docu%20directrices%20generales%20de%20la%20pol%C3%ADtica%20industrial%20espa%C3%B1ola.pdf (last access on 26.01.2024).

Ministerio de Industria, Comercio y Turismo (2020a). Extracto de la Orden de 22 de mayo de 2020, por la que se convocan subvenciones para el apoyo a Agrupaciones Empresariales Innovadoras, correspondientes al año 2020. BOE, n 152, 29 de mayo 2020. Available at www.boe.es/boe/dias/2020/05/29/pdfs/BOE-B-2020-14436.pdf (last access on 26.01.2024).

Ministerio de Industria, Comercio y Turismo (2020b). La Política de Clusters del Ministerio de Industria, Comercio y Turismo: Evolución, Resultados y Perspectivas. Available at www.mincotur.gob.es/Publicaciones/Publicacionesperiodicas/EconomiaIndustrial/RevistaEconomiaIndustrial/416/NOTAS.pdf (last access on 26.01.2024).

Ministerio de Industria, Comercio y Turismo (2021). Orden ICT/1117/2021, de 9 de octubre, por la que se establecen las bases reguladoras de las ayudas de apoyo a Agrupaciones Empresariales Innovadoras con objeto de mejorar la competitividad de las pequeñas y medianas empresas y se procede a la convocatoria correspondiente al año 2021, en el marco del Plan de Recuperación, Transformación y Resiliencia. Available at <https://www.boe.es/eli/es/o/2021/10/09/ict1117> (last access on 26.01.2024).

Ministerio de Industria, Comercio y Turismo (2022). Orden de 25 de junio por la que se efectúa la convocatoria correspondiente a 2022 de las ayudas establecidas para el apoyo a agrupaciones empresariales innovadoras con objeto de mejorar la competitividad de las pequeñas y medianas empresas en el marco del Plan de Recuperación, Transformación y Resiliencia. Available at <https://planderrecuperacion.gob.es/como-acceder-a-los-fondos/convocatorias/BDNS/635527/orden-de-25-de-junio-por-la-que-se-efectua-la->



[convocatoria-correspondiente-a-2022-de-las-ayudas-establecidas-para-el-apoyo-a-agrupaciones-empresariales-innovadoras-con-objeto-de-mejorar-la-competitividad-de-las-pequeñas-y-medianas-empresas-en-el-marco-del](#) (last access on 26.01.2024).

Ministerio de Industria, Turismo y Comercio. Agrupaciones Empresariales Innovadoras (AEI). Available at <https://clusters.ipyme.org/es-es/Paginas/PagInicio.aspx> (last access on 26.01.2024).

Ministerio de Industria, Comercio y Turismo (2023). Press release: “El Ministerio de Industria adjudica 54 M€ a 281 proyectos de clústers industriales. Available at <https://www.mintur.gob.es/es-es/GabinetePrensa/NotasPrensa/2023/Paginas/El-Ministerio-de-Industria-adjudica-54-millones-de-euros-a-281-proyectos-de-clusters-industriales.aspx> (last access on 26.01.2024).

Ministerio de Industria, Comercio y Turismo (2023). Press release: “La convocatoria de ayudas al programa de apoyo a las Agrupaciones Empresariales Innovadoras (AEI) ha recibido 446 solicitudes por valor de más de 96 M€”. Available at <https://www.mintur.gob.es/es-es/gabineteprensa/notasprensa/2023/documents/20230518%20np%20solicitudes%20ayudas%20cl%c3%basters.pdf> (last access on 26.01.2024).



Annex

Figure 3: 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).