



EUROPEAN CLUSTER  
COLLABORATION PLATFORM

# Country factsheet

Spain

An initiative of the European Union





## Contents

Contents .....	2
Introduction.....	3
1. Industrial ecosystems and cluster landscape .....	5
Employment in the 14 ecosystems in the country .....	5
Regionally relevant nodes.....	5
Cluster organisations in the regions.....	8
2. National cluster policy, programmes and initiatives.....	10
3. State of play of cluster policy .....	16
Bibliography.....	19



## Introduction



This document presents an overview of the cluster policy in Spain. Given its importance to contextualise the cluster policies (and related) analysed in the factsheets, a comprehensive outlook of the country in socioeconomic terms can be consulted in the [European Semester Country Report for Spain](#).

The European Semester was an instrument introduced to coordinate the EU Member States economic policies and address the economic challenges faced by the EU. Its goals are “to ensure sound public finances, to prevent excessive macroeconomic imbalances in the EU, to support structural reforms to create more jobs and growth, and to boost investment”. Thus, it focuses on the following areas: business environment; financial and fiscal stability; green economy; public administration; labour market and skills; and, social protection and cohesion.

The COVID-19 pandemic has caused an unprecedented economic shock to the European and global economy. In response, policymakers at EU and national level have acted decisively and at short notice to make available very significant financial resources, notably through the Recovery and Resilience Facility, to tackle the threat of a prolonged downturn. [National recovery and resilience plans](#) have been drafted in each Member State to ensure a recovery that addresses the challenges identified in the European Semester. In Spain, clusters are mentioned in the context of strengthening the public and private research and innovation ecosystem. The 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 sectors<sup>1</sup>.

---

<sup>1</sup> 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](http://www.lamondcloa.gob.es/temas/fondos-recuperacion/Documents/30042021-Plan_Recuperacion_%20Transformacion_%20Resiliencia.pdf)

# 01

## Industrial ecosystems and cluster landscape



EUROPEAN CLUSTER  
COLLABORATION PLATFORM

Strengthening the European economy through collaboration

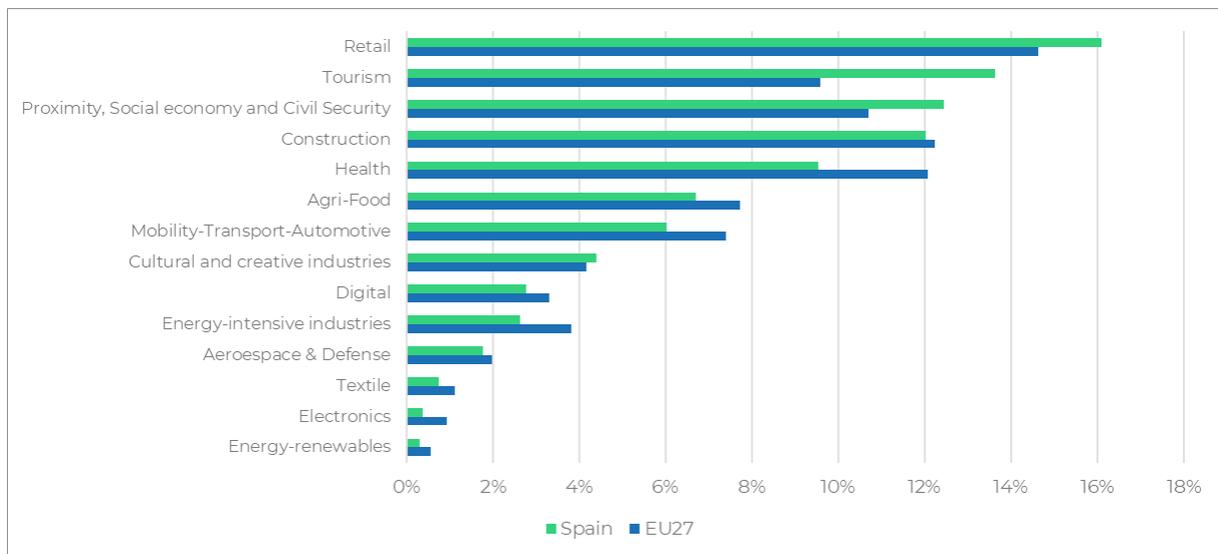


## 1. Industrial ecosystems and cluster landscape

### Employment in the 14 ecosystems in the country

As part of its Industrial Strategy (March 2020), the European Commission has selected 14 industrial ecosystems that are particularly relevant in Europe and encompass all players operating in a value chain. The following graph shows the proportion of the country's employment accounted for by each ecosystem, as well as the equivalent figure for the EU27 on average. The ecosystems are ordered, from top to bottom, according to the amount of employment in the country. When the bar for the country is higher than that of the EU27, it indicates that the country is more specialised in that ecosystem.

*Graph 1: Employment in the ecosystems*



Source: Own elaboration from Eurostat and National Statistical Offices

### Regionally relevant nodes

Economic activity, and therefore employment, is not equally distributed in all regions. Specialisation can be measured through Location Quotients (LQ) that reflect the relative specialisation of an activity in a region compared to the EU average. If the LQ for a given activity-region combination is above 1.5, it is considered a specialisation node, and if the activity accounts for at least 1 % of total employment in the region, it is considered regionally relevant. The following tables show the total number of regionally relevant specialisation nodes in each region in the country and identifies the top five most specialised of these nodes. The first table focuses on the 88 NACE 2-digit activities or sectors, totalling 114 in the country, while the second table is based on the 14 ecosystems, which total 11 in the country.



Table 1: Regionally relevant sectoral nodes

Region	Number of nodes	Node 1	Node 2	Node 3	Node 4	Node 5
ES11: Galicia	6	A03 - Fishing & aquaculture	T97 - Households as employers act.	I56 - Food & beverage services	R93 - Sports, amusement, recreation	F41 - Construction of buildings
ES12: Asturias	5	C24 - Manuf. of basic metals	T97 - Households as employers act.	C33 - Repair, installation of machinery	I56 - Food & beverage services	R93 - Sports, amusement, recreation
ES13: Cantabria	7	C24 - Manuf. of basic metals	T97 - Households as employers act.	R93 - Sports, amusement, recreation	I56 - Food & beverage services	F42 - Civil engineering
ES21: Basque Country	7	T97 - Households as employers act.	C24 - Manuf. of basic metals	C25 - Manuf. of fabricated metal products	C22 - Manuf. of rubber & plastic products	C27 - Manuf. of electrical equipment
ES22: Navarre	6	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	7	C15 - Manuf. of leather products	C11 - Manuf. of beverages	T97 - Households as employers act.	C10 - Manuf. of food products	I56 - Food & beverage services
ES24: Aragon	2	T97 - Households as employers act.	C29 - Manuf. of motor vehicles & trailers			
ES30: Madrid	9	T97 - Households as employers act.	J61 - Telecommunications	M73 - Advertising & market research	N80 - Security, investigation activities	J62 - Computer programming, consultancy
ES41: Castile and Leon	5	T97 - Households as employers act.	C10 - Manuf. of food products	N82 - Business support activities	I56 - Food & beverage services	F41 - Construction of buildings
ES42: Castile-La Mancha	6	T97 - Households as employers act.	A01 - Crop & animal production	H52-Warehousing & support for transportation	F41 - Construction of buildings	C10 - Manuf. of food products
ES43: Extremadura	5	A01 - Crop & animal production	T97 - Households as employers act.	F41 - Construction of buildings	O84 - Public adm., defence, soc. security	I56 - Food & beverage services
ES51: Catalonia	6	T97 - Households as employers act.	R93 - Sports, amusement, recreation	C20 - Manuf. of chemical products	N81-Buildings services and landscaping	I56 - Food & beverage services
ES52: Valencia	5	C15 - Manuf. of leather products	T97 - Households as employers act.	I56 - Food & beverage services	R93 - Sports, amusement, recreation	G46-Wholesale trade (not motor vehicles)
ES53: Balearic Islands	7	I55 - Accommodation	N79 - Travel agency, tour operators	F41 - Construction of buildings	T97 - Households as employers act.	I56 - Food & beverage services
ES61: Andalusia	6	T97 - Households as employers act.	I56 - Food & beverage services	A01 - Crop & animal production	I55 - Accommodation	F41 - Construction of buildings
ES62: Murcia	6	T97 - Households as employers act.	A01 - Crop & animal production	G46-Wholesale trade (not motor vehicles)	C10 - Manuf. of food products	N78 - Employment activities
ES63: Ceuta	6	O84 - Public adm., defence, soc. security	T97 - Households as employers act.	P85 - Education	Q87 - Residential care	H52-Warehousing & support for transportation
ES64: Melilla	6	O84 - Public adm., defence, soc. security	N81-Buildings services and landscaping	T97 - Households as employers act.	P85 - Education	Q87 - Residential care
ES70: Canary Islands	7	I55 - Accommodation	I56 - Food & beverage services	R93 - Sports, amusement, recreation	T97 - Households as employers act.	S96 - Other personal services

Source: Own elaboration from Eurostat and National Statistical Offices



*Table 2: Regionally relevant ecosystem nodes*

Region	Number of nodes	Node 1	Node 2	Node 3
ES11: Galicia	0	-	-	-
ES12: Asturias	0	-	-	-
ES13: Cantabria	0	-	-	-
ES21: Basque Country	0	-	-	-
ES22: Navarre	0	-	-	-
ES23: Rioja	2	Textile	Agri-Food	-
ES24: Aragon	0	-	-	-
ES30: Madrid	3	Digital	Cultural and creative industries	Aerospace & Defense
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	0	-	-	-
ES64: Melilla	0	-	-	-
ES70: Canary Islands	1	Tourism	-	-

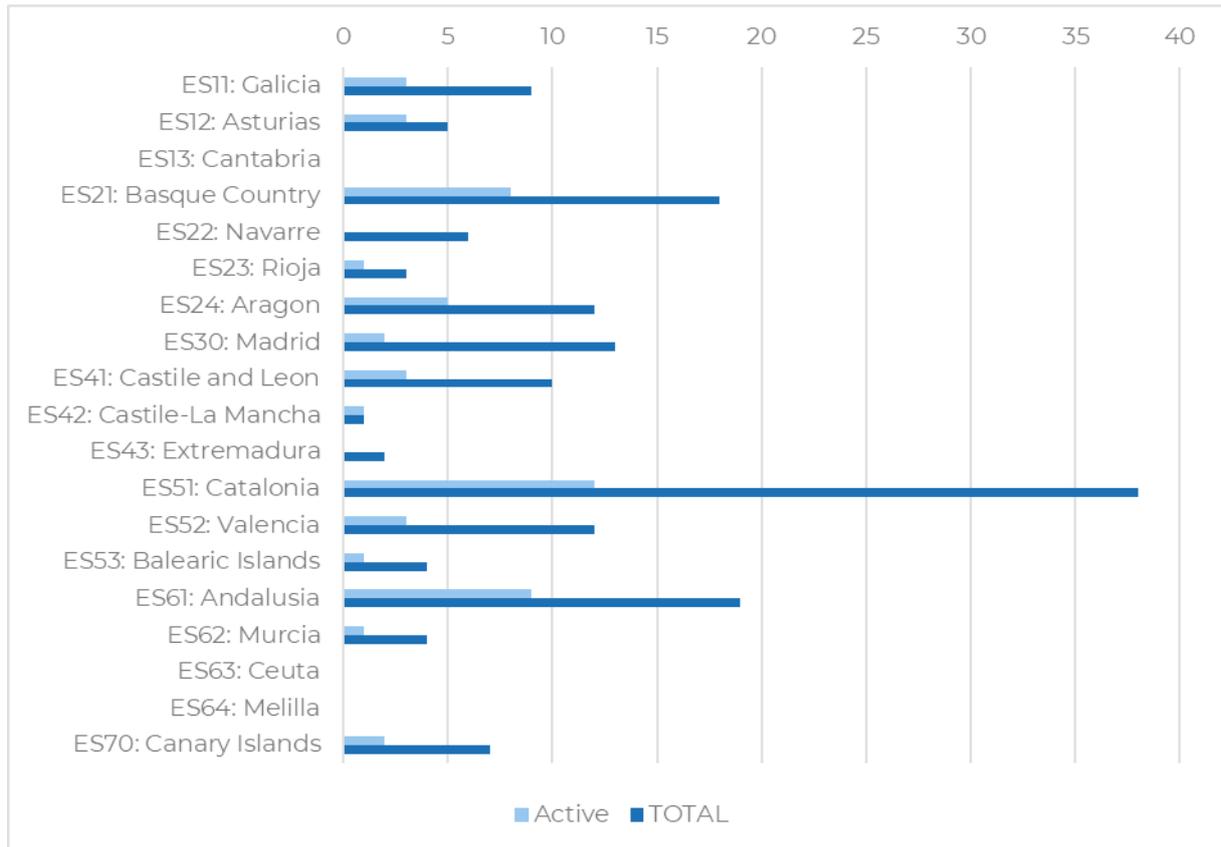
Source: Own elaboration from Eurostat and National Statistical Offices



## Cluster organisations in the regions

There are 163 cluster organisations registered on the ECCP in the country, 54 of which can be considered active on the ECCP, having updated their profiles during the first half of 2021. The following graph shows the presence of cluster organisations in the different regions.

Graph 2: Cluster organisations profiled and active on the ECCP



Source: Own elaboration from Eurostat and National Statistical Offices

# 02

## National cluster policy, programmes and initiatives



EUROPEAN CLUSTER  
COLLABORATION PLATFORM

Strengthening the European economy through collaboration



## 2. National cluster policy, programmes and initiatives

Policy type:	National cluster policy	Regional cluster policy (example of the Basque Country)
Policy name:	Programa de apoyo a Agrupaciones Empresariales Innovadoras (Programme to support Innovative Business Associations)	Plan Estratégico del Clúster y las Áreas de Actuación Estratégica (Strategic Plan of Cluster and Strategic Action Areas)
<b>POLICY OBJECTIVES</b> 	<b>Strengthening cooperation between companies or industry and RTDI actors</b> <b>Increasing competitiveness and boosting scale up of SMEs</b> <b>Supporting internationalisation activities</b> <b>Fostering R&amp;D activities, technology development and implementation</b> <b>Fostering innovation and strengthening innovation ecosystems</b> <b>Supporting the consolidation of existing cluster organisations</b> <b>Connect to global supply chains</b>	<b>Strengthening cooperation between companies or industry and RTDI actors</b> <b>Increasing competitiveness and boosting scale up of SMEs</b> <b>Supporting internationalisation activities</b> <b>Fostering R&amp;D activities, technology development and implementation</b> <b>Fostering innovation and strengthening innovation ecosystems</b> <b>Supporting cluster excellence and professionalisation of cluster management</b> <b>Supporting the consolidation of existing cluster organisations</b> <b>Supporting the creation of new cluster organisations</b> <b>Enhancing territorial cohesion (through RIS3)</b> <b>Strengthening the network of cluster organisations/cross-clustering</b> <b>Connect to global supply chains</b>
	<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</p>	<p>The Basque cluster policy is structured in three axes, corresponding to its main objectives: business innovation, technological innovation and internationalisation. Among others, the cluster policy aims to support the creation of complete activity chains; the access to new global markets and niches, as well as the integration into global value chains; to stimulate intra-enterprise initiatives within clusters; to promote sizing and convergence of companies; to develop new business models and financial tools; to integrate advanced manufacturing processes in the productive transformation links; to boost the</p>



	<p>with first-rate information about the activities of the AEIs and facilitates the monitoring of their evolution over time as 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&amp;D&amp;I centres and industry to boost competitiveness, innovation and internationalisation and, ultimately, to support SMEs.</p>	<p>technological and innovative content of the products of the companies in the cluster; to facilitate joint projects of technology transfer; to enhance environmental and energy sustainability by increasing efficiency and saving resources in the cluster's value chain; to incorporate new KET into the production process and final products; and, to support the attraction of activities and companies from abroad, as well as strategic industrial projects that contribute to complete the value chains of each cluster.</p> <p>The ultimate objective of the Basque cluster policy is to boost its economic competitiveness. The policy is closely linked with the Basque STI Plan 2020, which is also aligned with the RIS3 initiative</p>
<p><b>POLICY FOCUS</b></p> 	<p><b>No specific focus</b></p> <p>No specific sector is mentioned.</p>	<p><b>Sectoral</b></p> <p>The policy targets the priority sectors of the Basque Country as defined in the RIS3, namely: advanced manufacturing, energy and health/biosciences.</p>
<p><b>RESPONSIBLE AUTHORITIES</b></p> 	<p><b>Both drafting and implementation</b></p> <p><b>Provides funding</b></p> <p><b>Oversees the implementation</b></p> <p>The Ministry of Industry, Commerce and Tourism (through the General Secretary of Industry and SMEs) is the responsible authority.</p>	<p><b>Both drafting and implementation</b></p> <p><b>Provides funding</b></p> <p><b>Oversees the implementation</b></p> <p>The Basque Country Government - Department of Economic Development and Infrastructures is responsible for drafting, overseeing the implementation and providing funding, while the Basque Business Development Agency (SPRI), is responsible for the implementation.</p>
<p><b>BENEFICIARIES</b></p> 	<p><b>Cluster organisations</b></p> <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 AEIs, in the process of consolidation, with an antiquity of a maximum of 4 years from their date of constitution.</p> <p>Excellent: AEIs 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</p>	<p><b>Cluster organisation</b></p> <p>The beneficiaries are cluster organisations and 'pre-cluster organisations' (those that have not yet been awarded the status of priority cluster by the Basque Government).</p> <p>The cluster organisation needs to have a Strategic Cluster Plan and a Cluster Action Plan, as well as a sufficient critical mass. This is understood as at least 30 companies affiliated (of which 60% should be SMEs), with profits that account for over 1% of the Basque Country's GDP.</p>



		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 a SME.	
<b>INSTRUMENTS</b> 	Financial	<b>Funding collaboration initiatives</b> <b>Support to R&amp;D projects, SMEs becoming cluster members, etc.</b> <b>Subsidies to hire personnel</b> <b>Supporting market entry (e.g. testing, proof-of concept, prototyping, demonstration projects)</b> <b>Innovation: voucher, support to hire PhDs, cooperation with R&amp;I actors</b>	<b>Funding collaboration initiatives</b> <b>Support to R&amp;D projects, SMEs becoming cluster members, etc.</b> <b>Subsidies for cluster infrastructure (e.g. offices, equipment)</b> <b>Supporting market entry (e.g. testing, proof-of concept, prototyping, demonstration projects)</b> <b>Innovation: voucher, support to hire PhDs, cooperation with R&amp;I actors</b>
	Technical assistance	-	<b>Infrastructure: coworking spaces, offices, incubation and accelerator spaces, research centres, technology parks etc.</b> <b>Support for hard skill development: knowledge transfer, intellectual property, entrepreneurship, export advice, market intelligence</b> <b>Support for soft skills development: coaching, management training, upskilling/reskilling</b> <b>Support for networking and partnership building (at national and/or international level)</b>
	Explanation	<p>The Programme subsidises different types of actions directed to innovation: 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). 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>Both financial instruments and technical assistance are provided through this policy. Examples of economic advantages are facilitating the access to credits, favourable prices in industrial parks, etc.</p> <p>Technical support is also provided, for instance, by assigning an expert to accompany the cluster organisation during the first year.</p> <p>The cluster policy encompasses three types of instruments:</p> <p>Support to specific cooperation projects (innovation, quality, competences, infrastructure, etc.) participated by the cluster members and other agents</p> <p>Facilitation by a central agency of the networking activities within the clusters</p> <p>Support to clusters to promote collaboration among members.</p>



<b>HISTORY</b> 	<b>Period</b>	<b>Unlimited period</b>	<b>Unlimited period</b>
	<b>Ending year (for policies with limited period)</b>	-	-
	<b>Starting year</b>	2006	1990
	<b>Explanation</b>	<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>No ending date is mentioned.</p>	The policy dates to the 1990s and has continued uninterrupted since then. No ending date is mentioned.
<b>BUDGET</b> 	<b>Overall</b>	-	-
	<b>Annual</b>	EUR 8,000,000	EUR 2,968,000
	<b>Source of funding</b>	The Ministry of Industry, Commerce and Tourism. The budget is allocated on a yearly basis through competitive calls, which fund between 25% and 80% of the eligible budget up to EUR 400,000 (for SMES) depending on the type of action. The funds available are approximate EUR 8,000,000, depending on the year.	The Basque Country Government - Economic Development and Infrastructures The budget is allocated on a yearly basis through competitive calls.
<b>POLICY</b> <b>EVALUATION</b> 	<b>Availability</b>	<b>in-itinere</b>	<b>in-itinere</b>
	<b>Results</b>	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	<p>There are several evaluations of the Basque cluster policy over the years, which help to understand the results of the support measures and modify the approach according to the evolving needs of the region.</p> <p>Some of the main results show that clusters have an essential role in the dialogue and cooperation among public and private agents in strategic areas. Cluster policy has facilitated a better adjustment of the public policies to the businesses’ needs to promote competitiveness, although the different characteristics of the</p>



		<p>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>thematic priorities require different approaches for different clusters. A greater diversification and balance of the sectoral structure of the Basque economy has been also related to the cluster policy actions.</p> <p>Members of clusters obtain better results in the areas of innovation, quality, environment and international presence than those that do not belong to a cluster. However, the global export quota of clusters has been decreasing and there is a need to improve collaboration between clusters.</p>
<p><b>POLICY ALIGNMENT</b></p> <p><b>WITH THE EU</b></p> <p><b>PRIORITIES</b></p>		<p>-</p>	<p>-</p>

# 03

## State of play of cluster policy





### 3. State of play of cluster policy

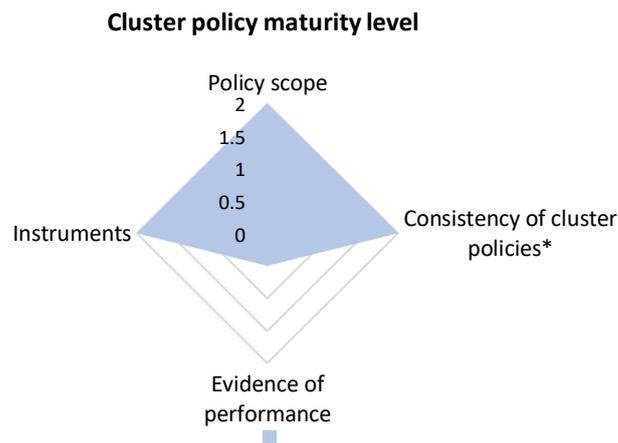
The data below illustrates how the country ranks in terms of maturity of cluster policy. The maturity index is based on a combination of factors presented in Chapter 2 and which are scored based on their existence:

- **Policy scope:** whether the country has a dedicated cluster policy, or cluster creation and/or development is targeted through broader policies (existence of broader policies = 1 point; existence of targeted cluster policies = 2 points)
- **Consistency of cluster policies:** assessment of the duration and experience of the country in doing cluster policies. This dimension assesses only existing cluster policies and not broader policies (no cluster policies available = 0 points; < 10 years of experience or > 10 years (but interrupted) = 1 point; > 10 years (but with clear continuity = 2 points)
- **Evidence of performance:** the existence of monitoring and evaluation mechanisms determines the degree of policy development in the country (no evaluations = 0 points; existence of evaluations of past policies or in-itinere = 0.5 points; existence of ex-ante and/or ex-post evaluations = 0.5 points)
- **Instruments:** whether the policies provide any instruments to support the policy implementation, being these financial and/or technical assistance (1 point for each type of instrument available)

It is important to note that the maturity does not reflect the performance of a country, but only the degree of development of their cluster policy at the moment when the data was collected (2020 and 2021). The maturity index illustrates how the country scores for each of these four dimensions (policy scope, consistency of cluster policies, evidence of performance and instruments) compared to the maximum score that they can reach.

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

*\* This dimension is scored solely if the country has a dedicated cluster policy and it assesses only cluster policies*



#### State of play of cluster policy in the country

<b>Policy evaluation (for terminated policies)</b>	<b>No policy evaluation</b>
	There are no previous cluster policies at national level.



<b>Policy approach in the country</b>	<p><b>Policy support for the activities of cluster organisations</b></p> <p><b>Broad-based framework policies to support cooperation effectiveness</b></p>
<b>Continuity</b>	<p>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.</p> <p>Although the objectives of the national cluster policy are shared at regional level, each of the Autonomous Communities have their own policy. These are aligned with their industrial policies and largely influenced by their RIS3 in terms of specific objectives and instruments.</p>
<b>Consistency</b>	<p><b>&gt; 10 years (but with clear continuity)</b></p> <p>The consolidation of the national cluster programme and the register have helped clusters to become an important instrument for the implementation of the national industrial policy at SME level.</p> <p>Currently, in the “General Guidelines of the new Spanish Industrial Policy 2030” (Directrices Generales de la Nueva Política Industrial Española 2030) published in 2019, the role of clusters is acknowledged for its capacity to promote digitalisation in the national industrial ecosystem, in particular in the case of SMEs, as well as to help them overcome the factors limiting their growth by improving their innovation potential through cooperation.</p> <p>All 17 Autonomous Communities in Spain have their own cluster policies, with different degrees of development and continuity. These are very connected to their industrial policies and their RIS3. The Basque Country has been chosen for having one of the longest and most successful clusters policies. Mentioned by Michael Porter as an example, in 2019, it was recognised with three out of the five awards by the National Cluster Association, namely: best management, best cluster project, and best cooperation project between clusters.</p>

# Bibliography



EUROPEAN CLUSTER  
COLLABORATION PLATFORM

Strengthening the European economy through collaboration



## Bibliography

- Boletín Oficial del Estado. Ministerio De Industria, Comercio y Turismo. 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. [www.boe.es/boe/dias/2020/05/29/pdfs/BOE-B-2020-14436.pdf](http://www.boe.es/boe/dias/2020/05/29/pdfs/BOE-B-2020-14436.pdf)
- Ministerio de Industria, Comercio y Turismo (2020). 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](http://www.mincotur.gob.es/Publicaciones/Publicacionesperiodicas/EconomiaIndustrial/RevistaEconomiaIndustrial/416/NOTAS.pdf)
- Ministerio De Industria, Comercio y Turismo (2019). Directrices Generales de la Nueva Política Industrial Española 2030. [www.mincotur.gob.es/es-es/gabineteprensa/notasprensa/2019/documents/docu%20directrices%20generales%20de%20la%20pol%C3%ADtica%20industrial%20espa%C3%B1ola.pdf](http://www.mincotur.gob.es/es-es/gabineteprensa/notasprensa/2019/documents/docu%20directrices%20generales%20de%20la%20pol%C3%ADtica%20industrial%20espa%C3%B1ola.pdf)
- Ministerio de Industria, Turismo y Comercio. Agrupaciones Empresariales Innovadoras (AEI). <https://clusters.ipyme.org/es-es/Paginas/PagInicio.aspx>
- Ministerio de Industria, Turismo y Comercio. 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. [www.ipyme.org/Publicaciones/ProgramaAEIs-2007\\_2013.pdf](http://www.ipyme.org/Publicaciones/ProgramaAEIs-2007_2013.pdf)
- Ministerio de Economía y Competitividad. Estrategia Española de Ciencia, Tecnología e Innovación 2013-2020. [www.ciencia.gob.es/stfls/MICINN/Investigacion/FICHEROS/Estrategia\\_espanola\\_ciencia\\_tecnologia\\_Innovacion.pdf](http://www.ciencia.gob.es/stfls/MICINN/Investigacion/FICHEROS/Estrategia_espanola_ciencia_tecnologia_Innovacion.pdf)
- Ministerio de Industria, Energía y Turismo (2015). Industria Conectada 4.0. La Transformación Digital de la Industria Española. Informe preliminar. [www6.mityc.es/IndustriaConectada40/informe-industria-conectada40.pdf](http://www6.mityc.es/IndustriaConectada40/informe-industria-conectada40.pdf)
- Gobierno Vasco (2014). PCTI EUSKADI 2020. Una estrategia de especialización inteligente (Research & Innovation Smart Specialisation Strategy RIS3). [www.euskadi.eus/contenidos/informacion/publicacion/es\\_departamento/es\\_def/adjuntos/investigacion/PCTI\\_Euskadi\\_2020.pdf](http://www.euskadi.eus/contenidos/informacion/publicacion/es_departamento/es_def/adjuntos/investigacion/PCTI_Euskadi_2020.pdf)
- Monge, R., Salazar, J.M. (2016). Políticas de clústeres y de desarrollo productivo en la Comunidad Autónoma del País Vasco. Organización Internacional del Trabajo (OIT). [https://aboutbasquecountry.eus/wp-content/uploads/2016/09/wcms\\_522350.pdf](https://aboutbasquecountry.eus/wp-content/uploads/2016/09/wcms_522350.pdf)
- Gobierno Vasco (2019). Premio al Gobierno Vasco por la eficiencia en política de clusters. [www.euskadi.eus/gobierno-vasco/-/noticia/2019/premio-al-gobierno-vasco-por-la-eficiencia-en-politica-de-clusters/](http://www.euskadi.eus/gobierno-vasco/-/noticia/2019/premio-al-gobierno-vasco-por-la-eficiencia-en-politica-de-clusters/)
- Boletín Oficial del País Vasco. Departamento de Desarrollo Económico e Infraestructuras (2019). ORDEN de 27 de junio de 2019, de la Consejera de Desarrollo Económico e Infraestructuras, por la que se regulan y se convocan, para el ejercicio 2019, las ayudas de apoyo a las organizaciones dinamizadoras de clústeres de la Comunidad Autónoma del País Vasco. [www.legegunea.euskadi.eus/x59\\_preview/es/contenidos/orden/bopv201903318/es\\_def/index.shtml](http://www.legegunea.euskadi.eus/x59_preview/es/contenidos/orden/bopv201903318/es_def/index.shtml)
- Ministerio de Industria, Comercio y Turismo (2011). El Programa AEI en el marco de las políticas internacionales de apoyo a los clúster. Una valoración. Available at: [www.ipyme.org/Publicaciones/ProgramaAEIMarcoPoliticInternacionales.pdf](http://www.ipyme.org/Publicaciones/ProgramaAEIMarcoPoliticInternacionales.pdf)