



EUROPEAN CLUSTER
COLLABORATION PLATFORM

Country factsheet

Poland

An initiative of the European Union





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Introduction

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

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 plans¹ have been drafted in each Member State to ensure a recovery that addresses the challenges identified in the European Semester. In Poland there is no evidence of clusters playing an active role in drafting the National Recovery and Resilience Plan. They are not explicitly mentioned in the text of the plan either.

01

Industrial ecosystems and cluster landscape



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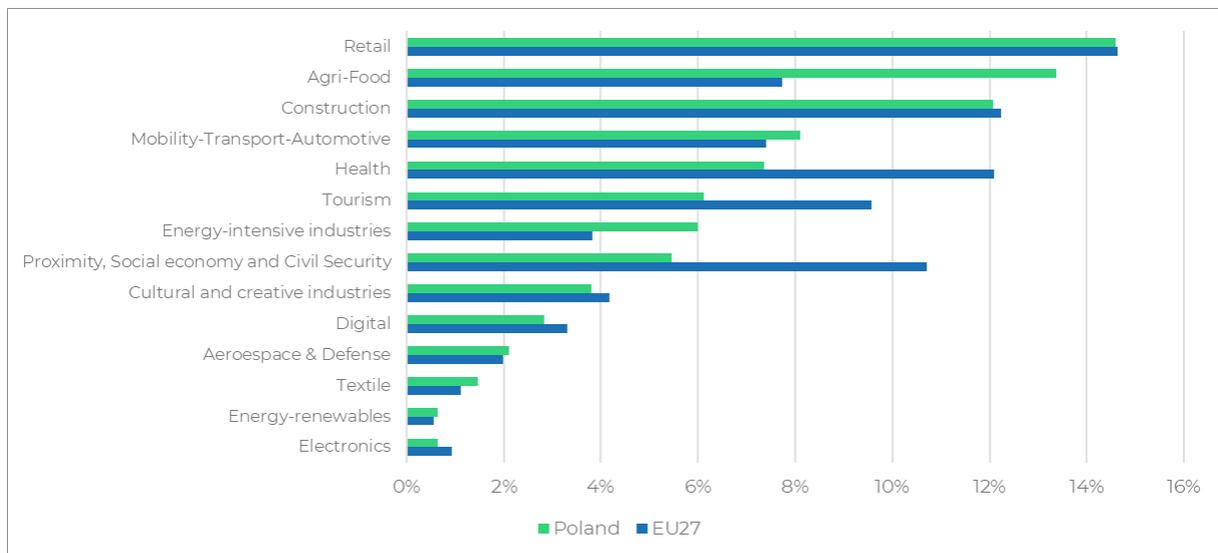


1. Industrial ecosystems and cluster landscape

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 shows the total number of regionally relevant specialisation nodes in each region in the country and identifies the top five most specialised of these nodes. The first table focuses on the 88 NACE 2-digit activities or sectors, totalling 142 in the country, while the second table is based on the 14 ecosystems, which total 32 in the country.

Table 1: Regionally relevant sectoral nodes

Region	Number of nodes	Node 1	Node 2	Node 3	Node 4	Node 5
PL21: Małopolskie	10	B05 - Mining of coal & lignite	C16 - Manuf. of wood products	C24 - Manuf. of basic metals	C31 - Manuf. of furniture	C33 - Repair, installation of machinery
PL22: Śląskie	8	B05 - Mining of coal & lignite	C24 - Manuf. of basic metals	C29 - Manuf. of motor vehicles & trailers	C33 - Repair, installation of machinery	C22 - Manuf. of rubber & plastic products
PL41: Wielkopolskie	8	C31 - Manuf. of furniture	C16 - Manuf. of wood products	A01 - Crop & animal production	C25 - Manuf. of fabricated metal products	C22 - Manuf. of rubber & plastic products
PL42: Zachodniopomorskie	9	C16 - Manuf. of wood products	C31 - Manuf. of furniture	C33 - Repair, installation of machinery	F41 - Construction of buildings	C20 - Manuf. of chemical products
PL43: Lubuskie	8	C31 - Manuf. of furniture	A02 - Forestry & logging	C16 - Manuf. of wood products	C29 - Manuf. of motor vehicles & trailers	C23 - Manuf. of other non-metal mineral products
PL51: Dolnośląskie	11	B07 - Mining of metal ores	C29 - Manuf. of motor vehicles & trailers	D35 - Electricity, gas & steam	C23 - Manuf. of other non-metal mineral products	C27 - Manuf. of electrical equipment
PL52: Opolskie	10	C31 - Manuf. of furniture	C22 - Manuf. of rubber & plastic products	C16 - Manuf. of wood products	C33 - Repair, installation of machinery	C23 - Manuf. of other non-metal mineral products
PL61: Kujawsko-pomorskie	8	C17 - Manuf. of paper products	C31 - Manuf. of furniture	C22 - Manuf. of rubber & plastic products	A01 - Crop & animal production	C33 - Repair, installation of machinery
PL62: Warmińsko-mazurskie	8	C31 - Manuf. of furniture	C16 - Manuf. of wood products	C22 - Manuf. of rubber & plastic products	A02 - Forestry & logging	F41 - Construction of buildings
PL63: Pomorskie	10	C30 - Manuf. of other transport equipment	C33 - Repair, installation of machinery	C31 - Manuf. of furniture	C16 - Manuf. of wood products	C26 - Manuf. of electronic & optical products
PL71: Łódzkie	10	C14 - Manuf. of wearing apparel	C13 - Manuf. of textiles	C22 - Manuf. of rubber & plastic products	C27 - Manuf. of electrical equipment	A01 - Crop & animal production
PL72: Świętokrzyskie	4	A01 - Crop & animal production	C23 - Manuf. of other non-metal mineral products	F42 - Civil engineering	C25 - Manuf. of fabricated metal products	
PL81: Lubelskie	4	A01 - Crop & animal production	C31 - Manuf. of furniture	C16 - Manuf. of wood products	F42 - Civil engineering	
PL82: Podkarpackie	10	C30 - Manuf. of other transport equipment	C22 - Manuf. of rubber & plastic products	C31 - Manuf. of furniture	C16 - Manuf. of wood products	C23 - Manuf. of other non-metal mineral products
PL84: Podlaskie	6	C16 - Manuf. of wood products	A01 - Crop & animal production	C31 - Manuf. of furniture	C22 - Manuf. of rubber & plastic products	C10 - Manuf. of food products



PL91: Warsaw-Capital	11	J61 - Telecommunications	M73 - Advertising & market research	K64 - Financial services	K65 - Insurance, pension funding	R90 - Arts & entertainment
PL92: Mazowieckie-Regional	7	A01 - Crop & animal production	C10 - Manuf. of food products	N80 - Security, investigation activities	F42 - Civil engineering	C25 - Manuf. of fabricated metal products

Source: Own elaboration from Eurostat and National Statistical Offices

Table 2: Regionally relevant ecosystem nodes

Region	Number of nodes	Node 1	Node 2	Node 3	Node 4
PL21: Małopolskie	2	Energy-intensive industries	Agri-Food	-	-
PL22: Śląskie	2	Energy-intensive industries	Mobility-Transport-Automotive	-	-
PL41: Wielkopolskie	2	Agri-Food	Energy-intensive industries	-	-
PL42: Zachodniopomorskie	1	Energy-intensive industries	-	-	-
PL43: Lubuskie	2	Energy-intensive industries	Textile	-	-
PL51: Dolnośląskie	1	Energy-renewables	-	-	-
PL52: Opolskie	3	Energy-intensive industries	Energy-renewables	Agri-Food	-
PL61: Kujawsko-pomorskie	2	Agri-Food	Energy-intensive industries	-	-
PL62: Warmińsko-mazurskie	2	Agri-Food	Energy-intensive industries	-	-
PL63: Pomorskie	2	Electronics	Aerospace & Defense	-	-
PL71: Łódzkie	4	Textile	Energy-renewables	Agri-Food	Energy-intensive industries
PL72: Świętokrzyskie	1	Agri-Food	-	-	-
PL81: Lubelskie	1	Agri-Food	-	-	-
PL82: Podkarpackie	2	Energy-intensive industries	Agri-Food	-	-
PL84: Podlaskie	2	Agri-Food	Energy-intensive industries	-	-
PL91: Warsaw-Capital	2	Digital	Cultural and creative industries	-	-
PL92: Mazowieckie-Regional	1	Agri-Food	-	-	-

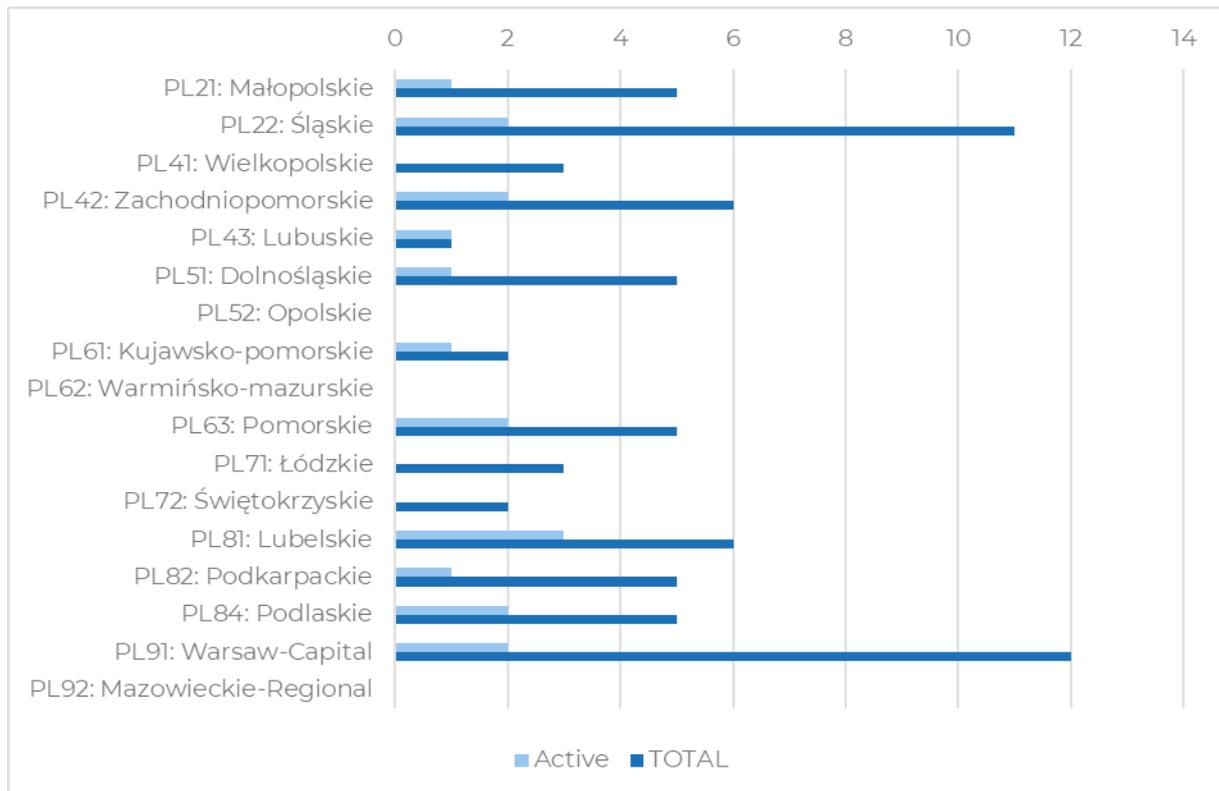
Source: Own elaboration from Eurostat and National Statistical Offices



Cluster organisations in the regions

There are 71 cluster organisations registered on the ECCP in the country, 18 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



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2. National cluster policy, programmes and initiatives

Policy type:	National cluster policy	National cluster policy	Regional cluster policy
Policy name:	Internationalization of the Key National Cluster Programme	Key National Clusters (KKK)	Intelligent Specialization of the Region (Mazowsze) Smart Specialization of the Region (Mazovia)
POLICY OBJECTIVES 	<p>Increasing competitiveness and boosting scale up of SMEs</p> <p>Supporting internationalisation activities</p> <p>Fostering R&D activities, technology development and implementation</p> <p>Promoting entrepreneurship, start-ups and spin-offs</p> <p>Strengthening the network of cluster organisations/cross-clustering</p>	<p>Strengthening cooperation between companies or industry and RTDI actors</p> <p>Increasing competitiveness and boosting scale up of SMEs</p> <p>Fostering R&D activities, technology development and implementation</p> <p>Fostering innovation and strengthening innovation ecosystems</p> <p>Promoting entrepreneurship, start-ups and spin-offs</p> <p>Strengthening the network of cluster organisations/cross-clustering</p>	<p>Increasing competitiveness and boosting scale up of SMEs</p> <p>Supporting internationalisation activities</p> <p>Fostering R&D activities, technology development and implementation</p> <p>Fostering innovation and strengthening innovation ecosystems</p> <p>Promoting entrepreneurship, start-ups and spin-offs</p> <p>Strengthening the network of cluster organisations/cross-clustering</p>



	<p>The aim of the Internationalisation of National Key Clusters competition is to finance comprehensive services supporting the adaptation and introduction or strengthening of the cluster's offer or products on foreign markets, with particular emphasis on technologically advanced products and support of SMEs.</p>	<p>The main purpose is to increase the competitiveness and innovation of SMEs and enhance their cooperation with the R&D sector across various industries. This will help with creating new technologies via establishing cooperation between enterprises, research institutions, business environment institutions, non-governmental organisations and local authorities.</p>	<p>The support for regional cluster policy is in line with the strategic and development goals of the Development Strategy for the Mazowieckie Voivodeship until 2030. The development of clusters is mainly focused on the development of enterprises within the cluster and enhancing innovation, including the creation of new companies and their internationalisation (e.g. in the form of foreign investments). The regional cluster strategy of Mazowsze is in line with goals of the national intelligent specialisation programme: research and development (R&D) activity, support for the international expansion of enterprises, improving the quality of human capital in enterprises, stimulating industry cooperation, creation of new enterprises. The support will cover key clusters/cluster initiatives that are in line with the selected smart specialisation areas of the region.</p>
<p>POLICY FOCUS</p> 	<p>No specific focus</p> <p>The policy does not focus on one specific sector but promotes internationalisation of various sectors.</p>	<p>Cross-sectoral</p> <p>The policy does not focus on one specific sector but rather focuses on the cross-sectoral cooperation between various actors of KKKs.</p>	<p>Cross-sectoral</p> <p>An important element of the regional cluster policy of Mazowsze is to increase competitiveness of the region through cooperation between clusters operating within the same industrial areas across various geographical locations. The result of such cooperation are often the so-called meta-clusters internationally across key industries, leading to increase the competitiveness of Central Europe. The</p>



			following clusters are key for the region: ICT, medical sector, construction sector, renewable energy and energy efficiency.
RESPONSIBLE AUTHORITIES 	Both drafting and implementation Provides funding Oversees the implementation	Both drafting and implementation Provides funding Oversees the implementation	Both drafting and implementation Provides funding Oversees the implementation
	<p>Ministry of Economic Development, Labour and Technology (previously Ministry of Entrepreneurship and Technology), through the Smart Growth Operational Programme is the main responsible authority and funding source.</p> <p>Polish Agency for Enterprise Development (PARP) is involved in the evaluation of proposals and selection of the candidates of the competitions.</p>	<p>Ministry of Economic Development, Labour and Technology (previously Ministry of Entrepreneurship and Technology) as the main responsible authority and funding source, as well as the selection of Key National Clusters.</p>	<p>Local authorities of the Mazowieckie Voivodeship, Mazovian Innovation Council</p>
BENEFICIARIES 	Cluster organisations (National Key Clusters and their members)	SMEs Cluster organisations Research organisations Start-ups Business associations Technology centres Policy makers	SMEs Cluster organisations Start-ups
	<p>The programme is dedicated to organisations that have the status of Key National Clusters. Organisations can participate through their cluster</p>	<p>The competition is dedicated to clusters that are applying for renewal of the KKK status and clusters applying for obtaining a status of the KKK. The cluster is a source of benefits and</p>	<p>Support for the cluster initiative takes place on two levels:</p> <p>Level 1: support aimed at cluster coordinators in order to increase the internationalization and innovation of</p>



		<p>coordinator or as an individual cluster member implementing a project.</p>	<p>creates a new value for all types of entities participating in the cluster, such as enterprises, universities and other scientific units, business environment institutions, public administration, and other supporting organizations.</p>	<p>clusters and to strengthen their competitiveness in the process of applying for international support instruments. At this level, the aid will focus on soft projects, with no possibility of co-financing the purchase of fixed assets (or only in the minimum amount).</p> <p>Level 2: support for entrepreneurs included in the cluster for the implementation of projects aimed at achieving a specific market effect; the support will not include activities in the field of strengthening the cluster organization, appropriate for Level 1.</p>
<p>INSTRUMENT</p>	<p>Financial</p>	<p>Subsidies to hire personnel</p> <p>Subsidies for cluster infrastructure (e.g. offices, equipment)</p> <p>Financing networking events</p> <p>Supporting market entry (e.g. testing, proof-of concept, prototyping, demonstration projects)</p>	<p>Funding collaboration initiatives</p> <p>Support to R&D projects, SMEs becoming cluster members, etc.</p> <p>Financing networking events</p> <p>Financing start-ups</p> <p>Innovation: voucher, support to hire PhDs, cooperation with R&I actors</p>	<p>Funding collaboration initiatives</p> <p>Support to R&D projects, SMEs becoming cluster members, etc.</p> <p>Subsidies for cluster infrastructure (e.g. offices, equipment)</p> <p>Financing networking events</p> <p>Innovation: voucher, support to hire PhDs, cooperation with R&I actors</p>
	<p>Technical assistance</p>	<p>Support for hard skill development: knowledge transfer, intellectual property, entrepreneurship, export advice, market intelligence</p> <p>Support for soft skills development: coaching, management training, upskilling/reskilling</p> <p>Support for networking and partnership building (at national and/or international level)</p>	<p>Support for hard skill development: knowledge transfer, intellectual property, entrepreneurship, export advice, market intelligence</p> <p>Support for soft skills development: coaching, management training, upskilling/reskilling</p> <p>Support for networking and partnership building (at national and/or international level)</p>	<p>Support for soft skills development: coaching, management training, upskilling/reskilling</p> <p>Support for networking and partnership building (at national and/or international level)</p> <p>Marketing activities: advertising, communication, events, fairs, and so on</p>



	Explanation	Marketing activities: advertising, communication, events, fairs, and so on	Marketing activities: advertising, communication, events, fairs, and so on.	
		<p>The purpose of financing is the development and introduction to foreign markets of products and services offered by National Key Clusters and their members. Clusters can receive co-financing for certain activities (see listed above) that enhance such international cooperation. The total project cost must amount to EUR 2,27 million (PLN 10 million). Participants can receive a maximum of EUR 1.8 million (PLN 8 million), which means that at least 20% of self-financing the total cost of the project is required. The type of financing that can be obtained differs depending if you apply as a cluster coordinator or cluster member.</p> <p>The cluster manager receive subsidies for: administrative costs and remuneration for the personnel participating in the project; expert services, including market research, audits, evaluation research; services for the design, creation, maintenance and development of ICT tools; marketing; management of the cluster facilities, organization of training programs, workshops and conferences for support, knowledge sharing, networking and international cooperation. Cluster members receive subsidies for: advisory services and training in the field of operations on foreign markets; participation in economic missions;</p>	<p>The coordinator of the National Key Cluster was entitled to apply for public support under the instruments of the Smart Growth Operational Programme 2014-2020. Applications of consortia consisting of a group of members of the KKK will benefit from preferences under the assessment system when applying to various programs and assistance activities. The instruments listed here have been deducted from more general programme description (e.g. the overall objectives of the policy).</p> <p>Obtaining the status of a Key National Cluster does not automatically grant access to financing. There were competitions in the framework of the Smart Growth Operational Programme that were available exclusively for KKK.</p> <p>In September 2020 a competition aimed specifically at the Key National Clusters coordinators was launched, to enable them their development (Development of the Potential of the Coordinators of Key National Clusters). The aim of the competition is to support actions aimed at extending the offer of coordinators of Key National Clusters by at least one new service in the strategic areas provided for in the framework of cluster development policy, in particular digitalization and transformation activities, transformation towards the industry of the future (Industry 4.0), the circular economy (GOZ), and the low-carbon economy.</p>	<p>The information about financial instruments and TA is limited. The instruments listed here have been deducted from more general programme description (e.g. the overall objectives of the policy). One of the evaluation criteria for project selection is representation of different levels of the common value chain (i.e. infrastructure provision, human resource management, technology, research and development, procurement, logistics, production and service provision, marketing and sales, service and utilization), created by cluster members to achieve the goals cluster.</p>



		participation in the fair as an exhibitor; access to foreign research and development infrastructure; promotion of brands and products.		
HISTORY 	Period	Limited period	Unlimited period	Limited period
	Ending year <i>(for policies with limited period)</i>	The programme is financed through the programme 2014-2020.	No ending date specified	The programme is financed through the programme 2014-2020.
	Starting year	2014	2015	2014
	Explanation	The archive of PARP provides results of the competition from 2015. In 2014 PARP organised public consultations.	The programme was created based on the recommendations of the Working Group on Cluster Policy in 2012 that established the basis of the cluster policy in Poland until 2020. The first round of competitions started in 2015 and was initially planned until 2018. After that, the programme was prolonged with no specific time limit.	The programme is financed through the programme 2014-2020 therefore it remains operational until the end of the year. Work on identifying smart specialization in the Mazowieckie Voivodeship was initiated in the second half of 2012 and was carried out in parallel with the work related to programming support under the EU 2014-2020 financial perspective.
BUDGET 	Overall	Around EUR 33.25 million	Information not available	Information not available
	Annual	Information not available	Information not available	Information not available
	Source of funding	National and EU funds within Smart Growth Operational Programme (measure 2.3 Pro-innovative services for enterprises / 2.3.3	National and EU funds within Smart Growth Operational Programme (measure 2.3 Pro-innovative services for enterprises)	National funds and funds of the local authorities of Mazowsze as well as EU funds (Regional Operational Program of the Mazowieckie Voivodeship for the years 2014-2020 (RPO WM 2014-2020),



		Internationalization of National Key Clusters)		Smart Growth Operational Programme 2014 - 2020 (OP IR), Operational Programme Digital Poland for 2014-2020 (PO PC), Operational Program Knowledge, Education and Development for 2014-2020 (PO KED), Rural Development Program 2014 - 2020 (RDP), Horizon 2020 Framework Program for research and innovation (Horizon 2020), Interreg Baltic Sea Region, Interreg Central Europe).
POLICY  EVALUATION	Availability	No policy evaluation	Ex-post	Ex-post
	Results	No publicly available evaluation has been identified for this policy. A mid-term evaluation of the Smart Growth Operational Programme covered measure 2.3. The report is available in Polish (www.poir.gov.pl) - <i>Ewaluacja mid-term postępu rzeczowego Programu Operacyjnego Inteligentny Rozwój 2014-2020</i>	Based on the 2018 evaluation of the three rounds of the competitions organised between 2015-2018, a new fourth competition was prepared for 2020 and a next one for 2021. The evaluation is not publicly available but based on the decision to prolong the programme one can assume that it was positive. Within the evaluation strategic development areas were designated within cluster policy in Poland. A new monitoring and evaluation tool is being implemented (October 2020)	Within the 2007-2013 programming period, regional clusters could obtain financial support under the Regional Operational Program of the Mazowieckie Voivodeship for 2007-2013 (RPO WM). All the operational programmes are subject of evaluation (ex-ante, mid-term and ex-post). It is obligatory for the Managing Authorities to carry out these evaluation (exception is the ex-ante evaluation in the forthcoming financial perspective).
POLICY ALIGNMENT WITH THE EU PRIORITIES 		-	-	Green economy Digitalisation Social inclusion

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 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)

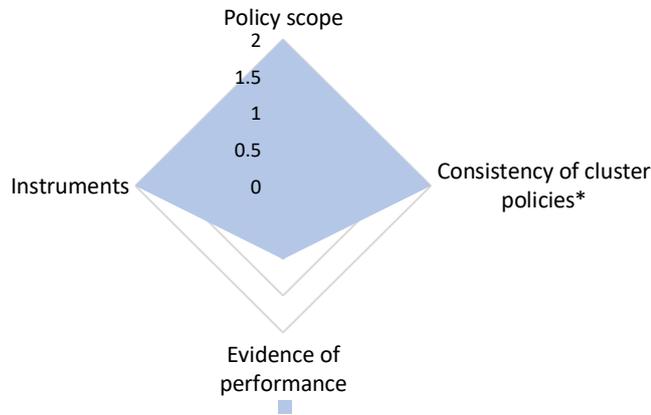
It is important to note that the maturity does not reflect the performance of a country, but only the degree of development of their cluster policy at the moment when the data was collected (2020 and 2021). The maturity index illustrates how the country scores for each of these four dimensions (policy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

	Poland	Maximum score
Policy scope	2	2
Consistency of cluster policies*	2	2
Evidence of performance	1	1
Instruments	2	2

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



Cluster policy maturity level



State of play of cluster policy in the country

<p>Policy evaluation (for terminated policies)</p>	<p>Availability of evaluations for terminated policies</p> <p>Based on a document from Ministry of Economic Development, Labour and Technology (previously Ministry of Entrepreneurship and Technology) from 2019, in 2018 there was evaluation of the system of National Key Clusters. As part of this evaluation strategic development areas of cluster policy in Poland were designed. However, the results of this evaluation are not publicly available.</p>
<p>Policy approach in the country</p>	<p>Policy support for the activities of cluster organisations</p>
<p>Continuity</p>	<p>The cluster policy in Poland at the national level was not defined as an independent policy initially and was rather an element of the long-term formulated innovation policy included within several national programmes starting in 2007. Within the previous financing period 2007-2013 cluster development was supported from public funding within the Operational Programme Innovative Economy. The support was then intended for the development of inter-regional cooperation, in particular joint investment and advisory services contributing to easier transfer and diffusion of knowledge and innovation between cooperating entities. In 2012 a working group for cluster policy developed a comprehensive strategy and recommendations for the dedicated cluster policy in Poland. This policy was supported within the financing period 2014-2020. The Working Group on Cluster Policy developed a new strategy "Directions and assumptions of cluster policy in Poland after 2020". A new measure "Development of the potential of the coordinators of the National Key Clusters" has been launched in September 2020. The cluster policy in Poland is currently focused on the development of clusters. The main support so far has been aimed at supporting coordinators and cluster actors (subjective approach). Given the level of development of the Key National Clusters, it is planned to simultaneously launch a policy in which clusters will be an instrument for the development of the region/country. The cluster will cease to be only an object of support but will become an instrument for the implementation of public policy (functional approach).</p>
<p>Consistency</p>	<p>> 10 years (but with clear continuity)</p>



There is continuity in the national cluster policy in Poland. The initial indirect support for cluster development within the financing period 2007-2013 was transformed into developing a dedicated national cluster policy, that was ongoing within the financing period 2014-2020. Therefore, there was no interruption in the cluster policy.

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