



EUROPEAN CLUSTER
COLLABORATION PLATFORM

Country factsheet

Slovenia

An initiative of the European Union





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Introduction



This document presents an overview of the cluster policy in Slovenia. 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 Slovenia.

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 unprecedented economic shocks to the European and global economy. In response, policymakers at EU and national level have acted decisively and at short notice to make available significant financial resources, notably through the Recovery and Resilience Facility, to tackle the threat of a prolonged downturn. [National recovery and resilience plans](#)¹ have been drafted in each Member State to ensure a recovery that addresses the challenges identified in the European Semester. Clusters are not directly mentioned in the National recovery and resilience plan of Slovenia. 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 [ERDF Partnership Agreement 2021-2027](#) with Slovenia makes a clear reference to innovation clusters. In the priority areas of the Slovenian Sustainable Smart Specialisation Strategy (S5), innovation clusters (Strategic Research and Innovation Partnerships, SRIPs) will receive particular support in order to develop and improve research and innovation capacities and deploy advanced technologies.

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

- 1) an overview of the industrial ecosystems and cluster landscape in Slovenia
- 2) an overview of the national cluster policy,
- 3) an assessment of the state of play of the national cluster policy.

¹ National recovery and resilience plan of Slovenia, https://www.eu-skladi.si/sl/dokumenti/po-2020/dokumenti-po-2020/povzetek-noo_angl.pdf (last access 23.01.2023).

01

Industrial ecosystems and cluster landscape



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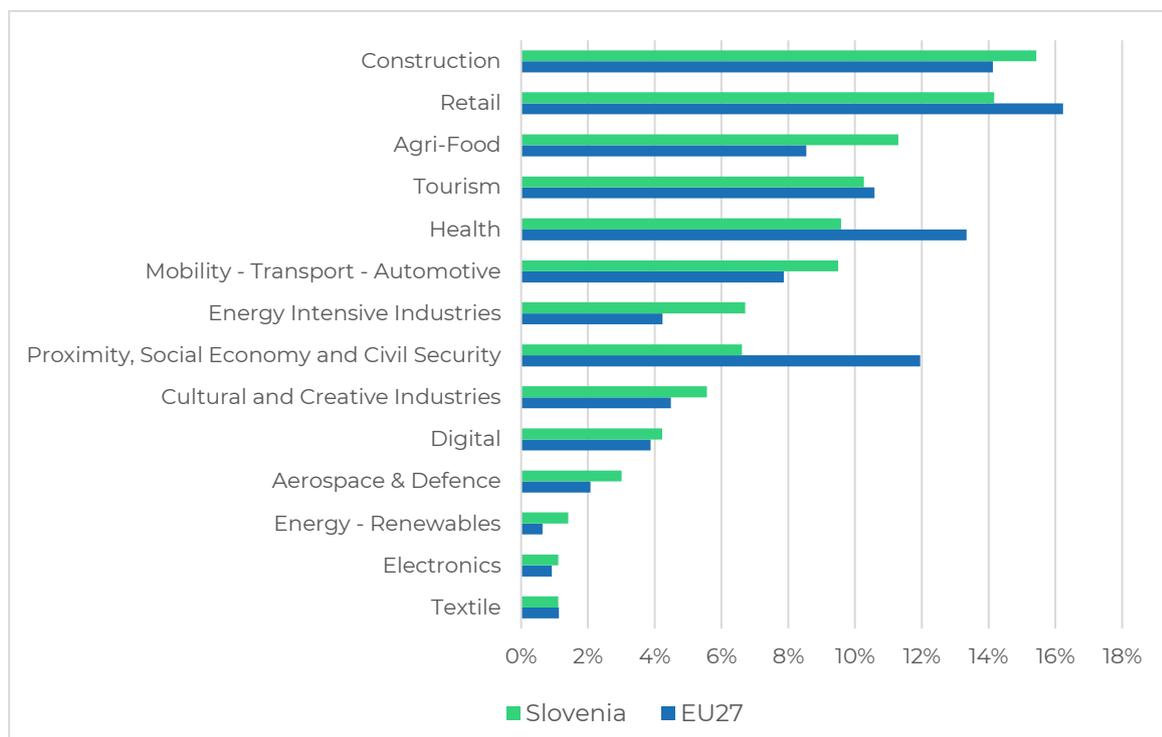
1. Industrial ecosystems and cluster landscape

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.² The classification of the 14 industrial ecosystems have been calculated by aggregating NACE 2 -digit activities, following the methodology established in the European Commission.³

In the following figure, the employment share of Slovenia 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 the EU27, it indicates that the country is more specialised in that ecosystem. Here, the three main ecosystems by employment for Slovenia are “Construction”, “Retail” and “Agri-Food”. In a number of industrial ecosystems (“Construction”, “Agri-Food”, “Mobility – Transport – Automotive”, “Energy Intensive Industries”, etc.) Slovenia has a higher employment share compared to the EU27 average. This indicates a relative strength of the country in those industrial ecosystems.

Figure 1: Employment in the ecosystems



Source: ECCP (2022), own elaboration based on data from Eurostat.

² see here for more information <https://clustercollaboration.eu/in-focus/industrial-ecosystems> (last access 09.01.2023).

³ see European Commission (2021): Annual Single Market Report, SWD(2021)351.



Regionally relevant nodes (agglomerations)

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.⁴ The following tables shows the total number of regionally relevant specialisation nodes (agglomerations) 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 17 in the country, while the second table is based on the 14 ecosystems, which total 5 in the country.

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

Region	# of nodes	Node 1	Node 2	Node 3	Node 4	Node 5
SI03: East Slovenia	10	C27 - Manuf. of electrical equipment	C25 - Manuf. of fabricated metal products	C16 - Manuf. of wood products	C24 - Manuf. of basic metals	A01 - Crop and animal production, hunting and related service activities
SI04: West Slovenia	7	K65 - Insurance, pension funding	C27 - Manuf. of electrical equipment	M70 - Head offices, management consult.	R90 - Arts & entertainment	M74 - Other professional, scientific & technical activities

Source: ECCP (2022), own elaboration based on data from Eurostat.

Overall, there are fewer numbers of ecosystem nodes compared to the regionally relevant sectoral nodes by NACE sectors. This more concentrated agglomeration can at least partially be linked to the methodology of measurement of the 14 industrial ecosystems. Slovenias employment strength in the industrial ecosystem “Agri-Food” is also mirrored in the Top 5 regionally relevant sectoral nodes (A01 - Crop and animal production, hunting and related service activities) as well as the ecosystem node (“Agri-Food”) of East-Slovenia (SI03). Likewise, a number of regionally relevant sectoral nodes (e.g., C25 – Manufacturing of fabricated metal products) are also reflected in the ecosystem node “Energy-intensive industries” of East-Slovenia (SI03).

Table 2: Regionally relevant ecosystem nodes by region

Region	# of ecosystem nodes	Node 1	Node 2	Node 3
SI03: East Slovenia	3	Energy-renewables	Energy-intensive industries	Agri-Food
SI04: West Slovenia	2	Energy-renewables	Digital	-

Source: ECCP (2022), own elaboration based on data from Eurostat.

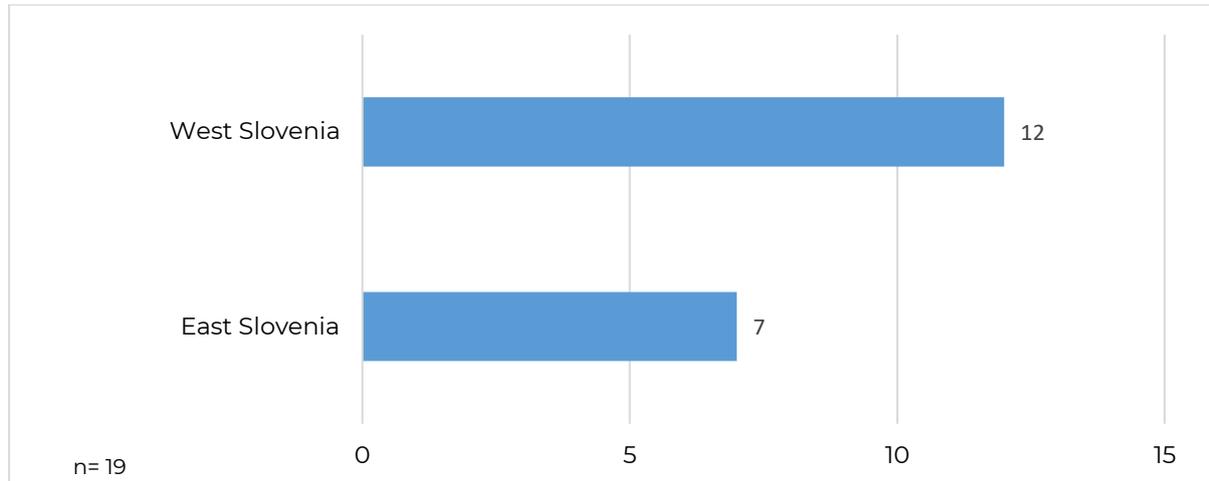
⁴ for more information on the methodology please see the methodology note: <https://clustercollaboration.eu/in-focus/policy-acceleration/country-factsheets-on-cluster-policies-and-programmes> (last access 09.01.2023).



Cluster organisations in the regions

There are 19 cluster organisations registered on the ECCP in the country. The majority of these cluster organisations are located in West Slovenia (12 cluster organisations). In East Slovenia 7 cluster organisations with profiles on the ECCP are located. The following figure shows the presence of cluster organisations in the different regions.

Figure 2: Cluster organisations profiled and active on the ECCP



Source: ECCP (2022). Note: the data for the analysis was extracted on 14/10/2022

SMEs (71%, EU: 84%) followed by research organisations (16%, EU:7%) and large enterprises (13%, EU: 9%) constitute the majority of member organisations of Slovenian cluster organisations with profiles on the ECCP. From a thematic perspective, these Slovenian 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.

- Construction (2 cluster organisations)
- Digital (1 cluster organisation)
- Renewable Energy (1 cluster organisation)
- Agri-food (1 cluster organisation)
- Health (1 cluster organisation)
- Electronics (1 cluster organisation)

02

National cluster policy, programmes and initiatives



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2. National cluster policy, programmes and initiatives

In this section we provide an overview of the existing Slovenian cluster policy on a national level.

The below table showcases information on related aspects which constitute the cluster policy (beginning with 'Policy Objectives', following with 'Policy Focus', etc.). The second column represents the case of the Slovenian broad policy supporting cluster development.

Within the table the text presented in bold (black) depicts standardised categories across country factsheets (56 in total for 2022), which are applied for comparative purposes. This is followed by a complementary descriptive text to provide more insights about the cluster policy in Slovenia.

Policy type:	Broad policy
Policy name:	Strategic Research and Innovation Partnerships (SRIPs)
POLICY OBJECTIVES 	<ul style="list-style-type: none"> Strengthening cooperation between companies or industry and RTDI actors. Increasing competitiveness and boosting scale up of SMEs Supporting internationalisation activities Fostering R&D activities, technology development and implementation Fostering innovation and strengthening innovation ecosystems Supporting cluster excellence and professionalisation of cluster management Supporting the consolidation of existing cluster organisations Promoting entrepreneurship, start-ups and spin-offs Promoting employment and upgrading skills and competences Enhancing territorial cohesion (through RIS3) Increase supply chain resilience Strengthening the network of cluster organisations/cross-clustering



Policy type:	Broad policy
Policy name:	Strategic Research and Innovation Partnerships (SRIPs)
	<p>Strategic Research and Innovation Partnerships (SRIPs) are elements of the Slovenian Smart Specialisation Strategy to foster innovation and economic development in the niche areas of the Slovenian economy. According to the Slovenian Smart Specialisation Strategy (previously S4, now S5), the cooperation between stakeholders in SRIPs is built on coordination of R&D activities, sharing of capacities, development of human resources, exchange of knowledge and experience, networking and collective representation of interest abroad. SRIPs are a type of clusters organisations, displaying similar features such as the creation of a space for innovation, consisting of companies, development teams and universities specializing in a specific industry or field. SRIPs can therefore be understood as cluster organisations, although they are not named as such. Compared to typical definition of cluster development, SRIPs in Slovenia are still 'broader' formation in terms of the covered field of industry. For example, SRIP in Health-medicine domain does not cover collaboration only in the medicine sector, but also includes (bio)pharmacy, cosmetics, etc. Similar holds for the SRIPs in other domains. SRIPs are thus very broad interest groupings and are also referred as such in national texts.</p>
<p>POLICY FOCUS</p> 	<p>Sectoral</p> <p>SRIPs are established across nine main areas identified in the Smart Specialisation Strategy. In all these nine areas, a SRIP (=cluster) has been established. The nine areas are: 1) Smart cities and communities, 2) Smart building and homes, including wood chain, 3) Networks for the transition into circular economy, 4) Sustainable food production, 5) Sustainable tourism, 6) Factories of the Future, 7) Health-medicine, 8) Mobility and 9) Development of materials as products.</p>
<p>RESPONSIBLE AUTHORITIES</p> 	<p>Both drafting and implementation</p> <p>Provides funding</p> <p>Oversees the implementation</p> <p>The coordination of Slovenian Smart Specialisation Strategy (S3) and of SRIPs are done by Government office for development and European Cohesion Policy.</p>



Policy type:		Broad policy
Policy name:		Strategic Research and Innovation Partnerships (SRIPs)
BENEFICIARIES 		<p>Research organisations</p> <p>Academic institutions</p> <p>Technology centres</p> <p>NGOs</p> <p>Cluster organisations</p> <p>SMEs</p> <p>Large firms</p> <p>Start-ups</p> <p>Business associations</p> <p>Policy makers</p> <p>SRIPs are long-term partnerships between (1) business community, (2) research organisations, (3) state and municipalities, and (4) facilitators, innovation users and NGOs – so-called quadruple helix - to pool investment and knowledge of Slovenian stakeholders, and help the stakeholders set up a comprehensive innovation ecosystem with the aim of entering global markets and improving the position in S4 priority areas. In the new S5 strategy it is expanded into a “quintuple helix” including (5) sustainability/the environment.</p>
INSTRUMENTS 	Financial	<p>Support to R&D projects, SMEs becoming cluster members, etc.</p> <p>Funding collaboration initiatives</p> <p>Financing networking events</p> <p>Supporting market entry (e.g. testing, proof-of concept, prototyping, demonstration projects)</p> <p>Financing start-ups</p>



Policy type:		Broad policy
Policy name:		Strategic Research and Innovation Partnerships (SRIPs)
	Technical assistance	<p>Infrastructure: coworking spaces, offices, incubation and accelerator spaces, research centres, technology parks etc.</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>Marketing activities: advertising, communication, events, fairs, and so on</p>
	Explanation	Financial sources for SRIPs are split by purpose for RTDI, human resources development, promotion of entrepreneurship and internationalisation.
HISTORY 	Period	Unlimited
	Ending year <i>(for policies with limited period)</i>	-
	Starting year	2016
	Explanation	The sources do not indicate any ending date. In view of the type of programme, it is more likely that it is unlimited/undetermined. Slovenia is in the process of updating its current S3/S4 strategy to an upgraded 'Slovenia's Sustainable Smart Specialisation Strategy' (S5). The process included a series of online workshops on priority domains as well as public consultation. The new version of S5 was submitted to the European Commission in March 2022 and will be published after comments from the European Commission have been incorporated.



Policy type:		Broad policy
Policy name:		Strategic Research and Innovation Partnerships (SRIPs)
BUDGET 	Overall	No definitive budget available yet.
	Annual	No definitive budget available yet.
	Source of funding	The funding is divided between EU funds and national funds that are distributed by various ministries depending on the domain Co-financing is in accordance with the state aid rules.
POLICY EVALUATION 	Availability	in-itinere
	Results	<p>Regular monitoring and evaluation reports of the operation of SRIPs have been published by an external contractor; most recently in October 2021. The evaluators conclude that increased integration and cooperation of SRIPs on common themes and topics was important for implementation of Slovenia's S4 strategy and in particular to increase the competitiveness of Slovenian companies through the creation of complex value chains. During their operation, the SRIPs have identified a set of cross-cutting themes where it is expected that pooling capacities would lead to faster and more successful solutions will be found more efficiently.</p> <p>In general besides regular, periodic monitoring carried out by the Office for Cohesion Policy, there are four-year reports on the evaluation of the implementation of S5 envisaged in the most recent draft version of Slovenia's new S5 strategy.</p>
POLICY ALIGNMENT WITH THE EU PRIORITIES 		Green Economy Digitalisation Resilience

03

State of play of cluster policy



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3. State of play of cluster policy

This section presents an overview on the state of play of Slovenian cluster policy in the form of a quantitative and qualitative assessment. The data below illustrates how the country ranks in terms of maturity of cluster policy at the national level. The maturity assessment is based on a combination of factors presented in Chapter 2, which receive a score based on the existence or absence of a given element in the cluster policy. The regional cluster policy example is not included in this assessment.

Note: the maturity assessment does not reflect the performance of a country, but only the degree of development of their national cluster policy at the moment of data collection (Q3 2022). The assessment illustrates how the country scores for each of the four criteria (policy scope, continuity of cluster policies, evidence of performance, cluster support instruments) compared to the maximum score that they can reach. Please refer to the Annex for the detailed overview of the categories and the scoring system.

The table below presents an overview of the **maturity assessment for Slovenia** for 2022. The total score of Slovenia is 3 points out of 8.

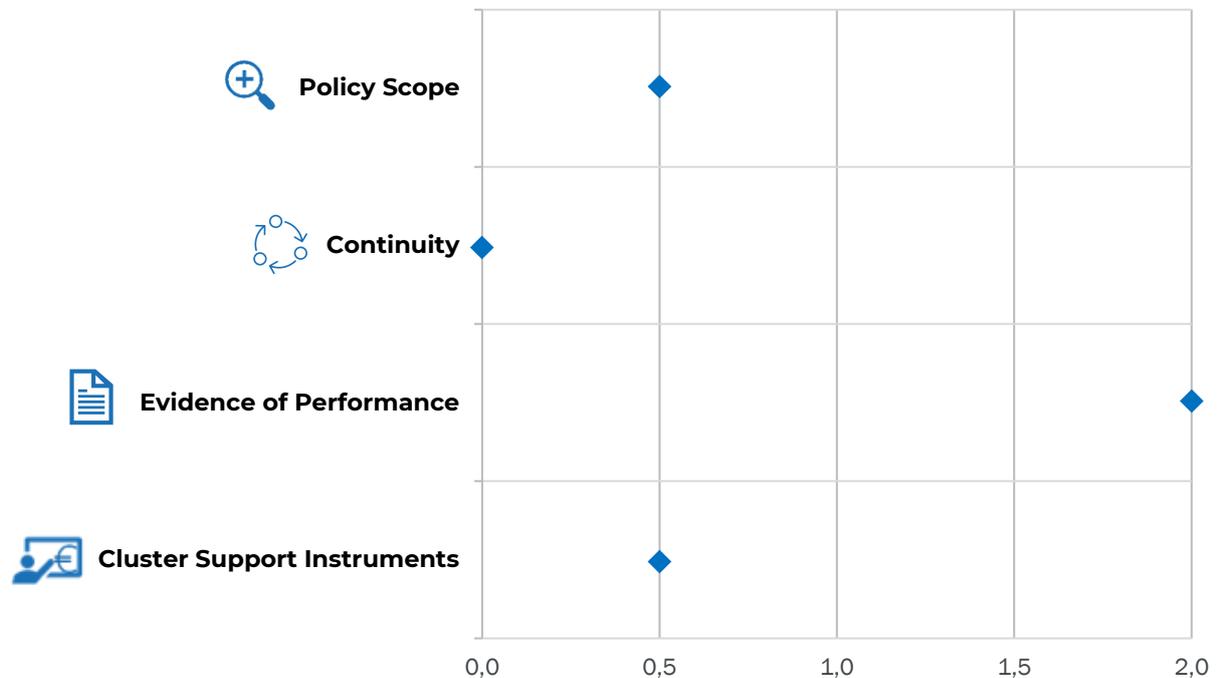
Slovenia	MATURITY ASSESSMENT	Max score	Actual score
POLICY SCOPE	Absence of cluster policy	0	
	Broad policy	0,5	0,5
	Sectoral policy	1	
	National and/or regional cluster policy	2	
CONTINUITY	No cluster-specific policy available	0	0
	Cluster policy established recently	0,5	
	Cluster policy established between over 2 and 10 years	1	
	Cluster policy established over 10 years ago	2	
EVIDENCE OF PERFORMANCE	No evaluation and / or monitoring available	0	
	Existence of evaluations of past policies	0,5	
	Existence of evaluations of past policies	1	
	Existence of monitoring and ex-ante or ongoing / interim evaluation	2	2
CLUSTER SUPPORT INSTRUMENTS	No instruments for cluster development	0	
	Financial support for cluster development in the broader and / or sectoral policy	0,5	0,5
	Financial or technical support for cluster development in dedicated cluster policy	1	
	Financial and technical support for cluster development in dedicated cluster policy	2	
TOTAL (8)			3

Source: ECCP (2022).



Drawing from the table above that showcases the scored points in Slovenia's cluster policy, the Figure below portrays the **degree of maturity** across four categories related to the national level cluster policy.

Figure 3: Maturity of cluster policy - Slovenia



Source: ECCP (2022).

The text below provides a **qualitative description** of the state of play of the cluster policy in Slovenia, which is complementary to the maturity assessment presented above.

Policy scope

Strategic Research and Innovation Partnerships (SRIPs) are elements of the Slovenian Smart Specialisation Strategy to foster innovation and economic development in the niche areas of the Slovenian economy. Compared to typical definitions of cluster development, SRIPs in Slovenia are still 'broader' formation in terms of the covered field of industry. For example, SRIP in Health-medicine domain does not cover collaboration only in the medicine sector, but also includes (bio)pharmacy, cosmetics, etc. Similar holds for the SRIPs in other domains. SRIPs are thus very broad interest groupings and are also referred as such in national texts.

In its essence, SRIPs are large interest groups targeting the collaboration between a wide range of stakeholders of broad industry spectrum. Nevertheless, the strategy for the development of SRIPs is politically broad and general and addresses the development of the country in broad economic and research terms. Slovenia thus does not have a specific strategy for the development of clusters, as it does not have any political strategy or document that would address exclusively the formation and development of clusters, and only addresses elements of clusters indirectly.



Continuity

Slovenia does not have a policy that directly targets cluster development. Cluster development is indirectly involved in the Strategic Research and Innovation Partnerships (SRIPs), which were formed in 2016 as part of the smart specialisation strategy. SRIPs are long-term partnerships between companies, the research sphere, the state, and municipalities, as well as facilitators, users and the non-governmental sphere, which were formed at the end of 2016 in each of the nine areas of application of S4. SRIPs contain elements of modern clustering, such as the creation of a space for innovation, consisting of companies, development teams and universities specializing in a specific industry or field, and can therefore be understood as a kind of clusters, although they are not named as such.

Slovenia is currently revising its S4 strategy and developing it into a S5 approach. In September 2022, the new EU Partnership Agreement 2021-2027 was published. Slovenia will receive a total of €3.26 billion from Cohesion Policy in 2021-2027 in the framework of its Partnership Agreement. The EU funds will address the regional disparities in the country by boosting innovation and competitiveness, enabling the economy's digital transformation, investing in social inclusion, skills training and employment, and helping reach the country's climate and biodiversity goals.

Evidence of performance

Reports on the implementation of the Smart Specialisation Strategy (S4) have been published, however the reports provide the statistical results of the programme and do not include the evaluation of the programme (e.g. SRIPs) as such. Regular Interim evaluation reports of the SRIPs, including a detailed description of each SRIP, were published by an external contractor. A full analysis of the implementation of the SRIPs is expected to be finalised by the end of 2022.

Cluster support instruments

Financial support and technical assistance for SRIPs are split by purpose for RTDI, human resources development, promotion of entrepreneurship and internationalisation and range from funding for networking events to technical support for skills development.

Cross-regional / international cooperation

Slovenian cluster organisations have been involved in six consortia of the European Strategic Cluster Partnerships, out of which four partnerships were focusing on internationalisation (ESCP-4i), one partnership was on cluster management excellence (ESCP-4x) and one partnership on a thematic area related to regional smart specialisation (ESCP-S3). Two Slovenian cluster organisations participated in the INNOSUP-1 initiative.

In the 2021-2027 funding period, the Single Market Programme supports clusters as part of the Joint Cluster Initiatives (Euroclusters) for Europe's recovery. From Slovenia, there are not yet any clusters registered that are taking part in a Eurocluster.

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Annex

Criterion of maturity assessment	Description	Scoring (points between 0 and 2)
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	<p>absence of cluster policy = 0</p> <p>existence of broader policies = 0,5</p> <p>existence of specific sectoral policies = 1</p> <p>existence of targeted cluster policies = 2</p>
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	<p>absence of policies supporting cluster development = 0</p> <p>cluster policy established recently (within the last 2 years) = 0,5</p> <p>cluster policy established between over 2 and 10 years = 1</p> <p>cluster policy established over 10 years ago = 2</p>
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	<p>no evaluation and / or monitoring available = 0</p> <p>existence of evaluations of past policies, e.g. ex-ante = 0,5</p> <p>existence of monitoring or an ongoing / interim evaluation =1</p> <p>existence of monitoring and ex-ante or ongoing / interim evaluation =2</p>
Cluster Support Instruments	assessment whether the policies provide any instruments to support the policy implementation, being these financial and/or technical support	<p>no instruments for cluster development =0</p> <p>financial support for cluster development in the broader and / or sectoral policy = 0,5</p> <p>financial or technical support for cluster development in dedicated cluster policy = 1</p> <p>financial and technical support for cluster development in dedicated cluster policy = 2</p>