



EUROPEAN CLUSTER  
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# Country factsheet

Slovenia

An initiative of the European Union



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# 01

## Introduction and economic policy context



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# 1. Introduction and economic policy context



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 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 Slovenia’s cluster policy can help to tackle the economic policy challenges identified in the European Semester country recommendations.**

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](#) 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. Slovenia’s [Operational Programme \(OP\) for the Cohesion policy funds 2021-2027](#) highlights support for innovation clusters to facilitate regional partnerships.

In what follows, 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 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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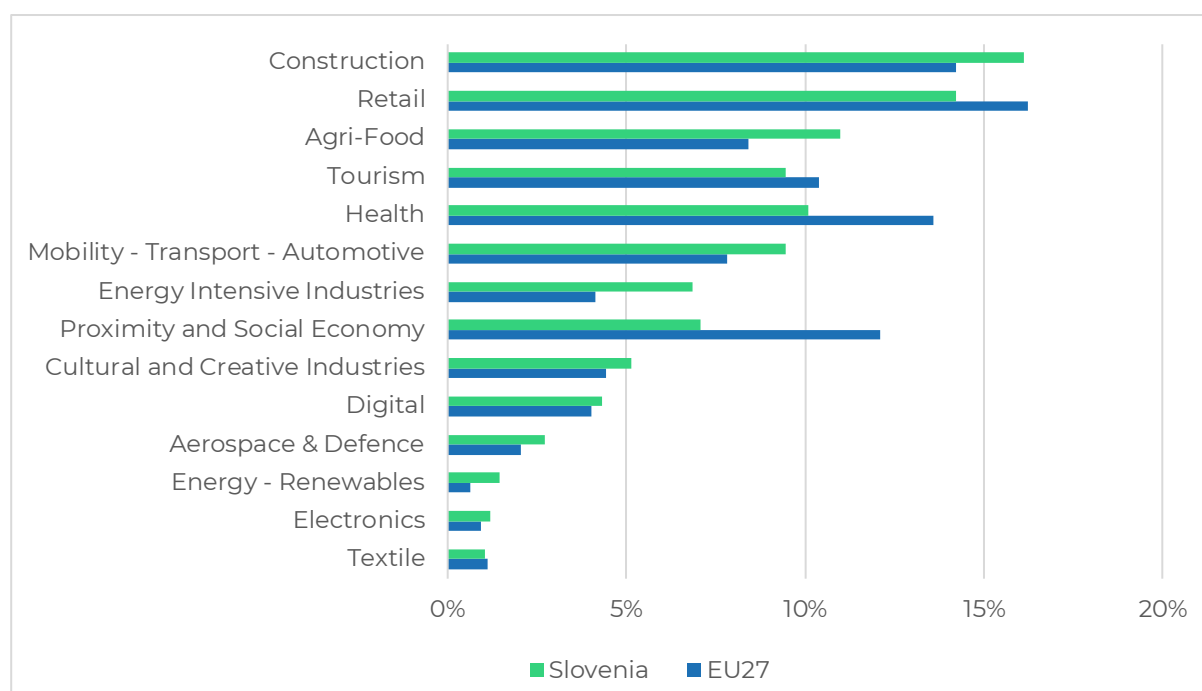
## 2. Industrial ecosystems and cluster landscape

### 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.<sup>1</sup> The classification of the 14 industrial ecosystems have been calculated by aggregating NACE 2-digit activities, following the methodology established in the European Commission.<sup>2</sup> 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 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. The three main ecosystems by employment for Slovenia are "Construction", "Retail" and "Agri-Food". In several industrial ecosystems ("Construction", "Agri-Food", "Mobility – Transport – Automotive", "Energy Intensive Industries", "Cultural and Creative Industries", "Digital", "Aerospace & Defence", "Energy - Renewables", and "Electronics") Slovenia has a higher employment share compared to the EU27 level. This indicates the relative strength of the country in those industrial ecosystems.

**Figure 1: Employment across the ecosystems**



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

<sup>1</sup> see here for more information <https://clustercollaboration.eu/in-focus/industrial-ecosystems> (last access 09.01.2023).

<sup>2</sup> see European Commission (2022): Annual Single Market Report, SWD(2022).



## 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.<sup>3</sup> 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. The first table focuses on the 88 NACE 2-digit activities or sectors, totalling 13 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 agglomerations and Top 5 agglomerations by region (NACE)**

Region	# of agglo.	Agglo. 1	Agglo. 2	Agglo. 3	Agglo. 4	Agglo. 5
<b>SI03: East Slovenia</b>	8	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
<b>SI04: West Slovenia</b>	5	C27 – Manuf. of electrical equipment	M70 – Head offices, management consult.	M74 – Other professional, scientific & technical activities	M71 – Architectural and engineering activities	C22 – Manufacture of rubber and plastic products

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 regions in Slovenia exhibit an agglomeration in the ecosystem “Energy-renewables”, showing a high concentration of employment relative to the EU27 level, which is reflected in Figure 1. Furthermore, Slovenia’s employment strength in the industrial ecosystem “Agri-Food” is also mirrored in the Top 5 regionally relevant sectoral agglomerations (A01 – Crop and animal production, hunting and related service activities) as well as the ecosystem agglomeration (“Agri-Food”) of East-Slovenia (SI03). Likewise, some regionally relevant sectoral agglomerations (e.g., C25 – Manufacturing of fabricated metal products) are also reflected in the ecosystem agglomeration “Energy-intensive industries” of East-Slovenia (SI03).

<sup>3</sup> 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).





**Table 2: Regionally relevant ecosystem agglomerations by region**

Region	# of ecosystem aggro.	Agglomeration 1	Agglomeration 2	Agglomeration 3
<b>SI03: East Slovenia</b>	3	Energy-renewables	Energy-intensive industries	Agri-Food
<b>SI04: West Slovenia</b>	2	Energy-renewables	Digital	-

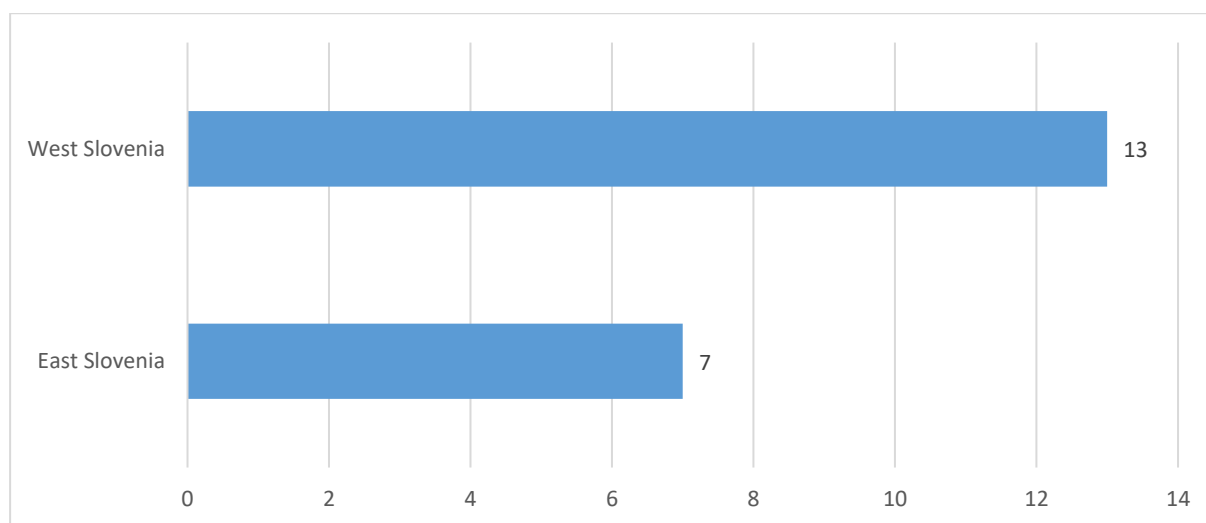
Source: ECCP (2023), own elaboration based on data from Eurostat.

## 2.3 Cluster organisations & interregional cooperation

### Cluster organisations in the regions

There are 20 cluster organisations registered on the ECCP in the country. The majority of these cluster organisations are located in West Slovenia (13 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 (2023). Note: the data for the analysis was extracted on 21/12/2023

SMEs (71%, EU: 83%) 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 industrial ecosystems as below. 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 list below shows that the cluster organisations profiled on the ECCP encompass six of the 14 industrial ecosystems. Yet, a clear connection between the employment size within each ecosystem and the presence of cluster organisations on the ECCP for those ecosystems cannot be established. Although the "Construction" ecosystem, which accounts for the majority of employment among all ecosystems in the country, has the highest number of cluster organisations profiled on the ECCP, alongside the "Health" ecosystem, other significant ecosystems with substantial employment figures, like "Mobility – Transport –



Automotive" and "Energy Intensive Industries," are not adequately represented by the cluster organisations on the ECCP.

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

### **Interregional cooperation**

In the 2014-2020 funding period<sup>4</sup>, 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. 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-S4). 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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<sup>4</sup> Many of the programmes of the 2014-2020 funding period have been terminated by December 2023. However, the collaborative projects that were funded may continue to operate.

# 03

## National cluster policy, programmes and initiatives



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### 3. 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 2023), which are applied for comparative purposes. This is followed by a complementary descriptive text to provide more insights about the cluster policy in Slovenia.



**Table 3: Overview of Slovenian cluster policy**

Policy type:	Broad policy
Policy name:	Strategic Research and Innovation Partnerships (SRIPs)
<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 cluster excellence and professionalisation of cluster management</b> <b>Supporting the consolidation of existing cluster organisations</b> <b>Promoting entrepreneurship, start-ups and spin-offs</b> <b>Promoting employment and upgrading skills and competences</b> <b>Enhancing territorial cohesion (through RIS3)</b> <b>Increase supply chain resilience</b> <b>Strengthening the network of cluster organisations/cross-clustering</b>




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&amp;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 refereed as such in national texts.</p>
<b>POLICY FOCUS</b> 	<p><b>Sectoral</b></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>
<b>RESPONSIBLE AUTHORITIES</b> 	<p><b>Both drafting and implementation</b></p> <p><b>Provides funding</b></p> <p><b>Oversees the implementation</b></p> <p>The coordination of Slovenian Smart Specialisation Strategy (S4) 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)
<b>BENEFICIARIES</b> 		<p><b>Research organisations</b></p> <p><b>Academic institutions</b></p> <p><b>Technology centres</b></p> <p><b>NGOs</b></p> <p><b>Cluster organisations</b></p> <p><b>SMEs</b></p> <p><b>Large firms</b></p> <p><b>Start-ups</b></p> <p><b>Business associations</b></p> <p><b>Policy makers</b></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>
<b>INSTRUMENTS</b> 	Financial	<p><b>Support to R&amp;D projects, SMEs becoming cluster members, etc.</b></p> <p><b>Funding collaboration initiatives</b></p> <p><b>Financing networking events</b></p> <p><b>Supporting market entry (e.g. testing, proof-of concept, prototyping, demonstration projects)</b></p> <p><b>Financing start-ups</b></p>





Policy type:		Broad policy
Policy name:		Strategic Research and Innovation Partnerships (SRIPs)
<b>HISTORY</b> 	<b>Technical assistance</b>	<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> <b>Marketing activities: advertising, communication, events, fairs, etc.</b>
	<b>Explanation</b>	Financial sources for SRIPs are split by purpose for RTDI, human resources development, promotion of entrepreneurship and internationalisation.
	<b>Period</b>	<b>Unlimited</b>
	<b>Ending year</b> ( <i>for policies with limited period</i> )	-
	<b>Starting year</b>	2016
	<b>Explanation</b>	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 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)
<b>BUDGET</b> 	<b>Overall</b>	No definitive budget available yet.
	<b>Annual</b>	No definitive budget available yet.
	<b>Source of funding</b>	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.
<b>POLICY EVALUATION</b> 	<b>Availability</b>	<b>in-itinere</b>
	<b>Results</b>	<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>
<b>POLICY ALIGNMENT WITH THE EU PRIORITIES</b> 		<b>Green Economy</b> <b>Digitalisation</b> <b>Resilience</b>

Source: ECCP (2023).

# 04

## State of cluster policy and its role in broader economic policy challenges



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

### 4.1 The state of cluster policy

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

**Table 4: State of play**

Slovenia	State of play
<b>POLICY SCOPE</b>	Absence of cluster policy
	Broad policy
	Sectoral policy
	National and/or regional cluster policy
<b>CONTINUITY</b>	No cluster-specific policy available
	Cluster policy established recently
	Cluster policy established between over 2 and 10 years
	Cluster policy established over 10 years ago
<b>EVIDENCE OF PERFORMANCE</b>	No evaluation and / or monitoring available
	Existence of evaluations of past policies
	Existence of evaluations of past policies
	Existence of monitoring and ex-ante or ongoing / interim evaluation
<b>CLUSTER SUPPORT INSTRUMENTS</b>	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 Slovenia.

#### **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 to as such in national texts. As such, the programme can be classified as a broad policy.

In essence, SRIPs are large interest groups targeting the collaboration between a wide range of stakeholders of a 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 dedicated 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 specialising 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 were 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.




## 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 Slovenian clusters (can) play a role in addressing the challenges identified in the European Semester Report for the country. To this end, the European Semester 2023 country report for Slovenia<sup>5</sup> has been analysed across policy areas relevant to cluster policy. The results point to a series of issues where cluster policy can play an important role in tackling the country's economic challenges.

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

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

Policy area	Challenges	Cluster activity
<b>INNOVATION</b> 	<ul style="list-style-type: none"> <li>Enhancing the low level of both public and private R&amp;D expenditure, as well as the low availability of adequate research infrastructure</li> <li>Improving the business environment to stimulate productivity growth</li> </ul>	<p>The programme for the European Union funds investment emphasises the importance of a strong <b>innovation ecosystem</b>. The programme also encourages cooperation between companies, research organisations and public authorities to strengthen the innovation ecosystem. To this end, the programme provides support to innovation clusters.</p> <p>Clusters can indeed play an important role in facilitating the transfer of technology.<sup>6</sup> In that regard, the various Slovenian cluster organisations are strongly focusing on facilitating R&amp;D projects. For instance, SRIP ACS+, Slovenia's strategic research and innovation partnership in field of mobility, promotes joint members' activities to improve products and operations in R&amp;D, production, quality assurance and to achieve and maintain business excellence.<sup>7</sup> Additionally, it monitors the business environment, suggesting the appropriate measures to the authorities enabling the members to respond to the constant challenges in the automotive industry.</p> <p>Moreover, the literature points out that the presence of clusters is positively linked to higher investments for research and development both in the public and especially the private sector.<sup>8</sup></p>

<sup>5</sup> [https://economy-finance.ec.europa.eu/document/download/630e1d06-6230-438a-b61f-529a361960ae\\_en?filename=SI\\_SWD\\_2023\\_624\\_en.pdf](https://economy-finance.ec.europa.eu/document/download/630e1d06-6230-438a-b61f-529a361960ae_en?filename=SI_SWD_2023_624_en.pdf) (last access 12.01.2024).


<sup>6</sup> Fioravanti, V.; Stocker, F.; Macau, F. (2023).

<sup>7</sup> see <https://www.acs-giz.si/en/about-acs> (last access 30.04.2024).

<sup>8</sup> ECCP (2022).





Policy area	Challenges	Cluster activity
<b>SKILLS</b> 	<ul style="list-style-type: none"> <li>Addressing the lack of skills necessary for the transition to a net-zero and digital economy</li> </ul>	<p>Regarding skill development, the programme for the European Union funds investment aims to improve <b>skills</b> and <b>competences</b>, in which clusters have the potential to offer a significant contribution. Research underlines the role of clusters in developing the skills of the workforce and attracting skilled workers to a region.<sup>9</sup> In addition, one can point out the activities of SRIP Circular Economy, Slovenia's strategic research and innovation partnership for the transition into circular economy, that plans to build a model of development of specific competencies. This platform should predict long-term competence needs as well as identify gaps in competences and fill them through education and training of staff in existing programmes.<sup>10</sup></p> <p>More generally, as cluster organisations act as intermediaries between companies and research and educational institutions, they can also be seen as part of the training and educational infrastructure in the innovation ecosystem.<sup>11</sup></p>

Source: ECCP (2023).

<sup>9</sup> Hsu, M.-S et al. (2014).

<sup>10</sup> see <https://srp-circular-economy.eu/project/career-platform-and-competence-development/> (last access 30.04.2024).

<sup>11</sup> European Expert Group on Clusters (2020).

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## Annex

**Table 6: Analytical framework for the state of cluster policy**

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

Source: ECCP (2023).