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Building strong clusters in structurally weak regions

ECCP Discussion Paper

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ECCP Discussion Papers

The European Cluster Collaboration Platform (ECCP) is the main hub facilitating cluster cooperation within the EU and beyond. It is supported by the European Commission through the COSME programme.

This Discussion Paper was submitted to the European Expert Group on Clusters as an input for their discussions. The European Expert Group on Clusters provides the Commission, EU countries and regions with recommendations, advice, and expertise, specifically on how to better use clusters as a strategic tool of industrial policy, interregional collaboration and to integrate SMEs into EU and global value chains. The members of the group are the EU countries and individual experts appointed in a personal capacity (selected via a call for applications).

Introduction

The presence of strong industrial clusters has been demonstrated to positively impact on regional economic performance. Moreover, the cluster organisations that support these clusters are widely acknowledged as playing intermediary roles that support the implementation of smart specialisation strategies, the acceleration of processes of green and digital transition, and the construction of regional resilience. Yet there is a concern that strong clusters themselves tend to be more prevalent in regions that are already structurally stronger, while the challenges of resilience and industrial transition to sustainable, higher value-added activities are often more acute in regions that are structurally weaker.

This raises an important policy question in terms of how to go about strengthening clusters and cluster organisations in weaker regions so that the collaborative power of clusters can be harnessed also towards the goal of strengthening economic, social, and territorial cohesion in the European Union. The aim of this input paper is to provide the basis for discussion among the European Cluster Expert Group around what is needed to build strong clusters in regions that suffer certain structural weaknesses.

The paper is structured in three sections that respond to three key questions:
- Why are clusters important for structurally weak regions?
- What can ECCP data tell us about clusters in structurally weak regions?
- How can we build strong clusters in structurally weak regions?

The ideas developed around each of these questions are brought together at the end of the paper in a brief concluding section that identifies a series of questions to guide further policy discussion.

Why are clusters important for structurally weak regions?

Clusters and cohesion

EU cohesion policy in the period 2021-2027 aims to correct imbalances between countries and regions while delivering on the green and digital transitions around which the European Union's *European Green Deal* and *New Industrial Strategy* are built and ensuring an economy that works for people.[1] To support the targeting of funding to address imbalances, the European Regional Development Fund (ERDF) and other complementary mechanisms distinguishes three groups of regions (Figure 1):

- More developed regions (GDP *per capita* greater than 100% EU27 average)
- Transition regions (GDP *per capita* between 75% and 100% of EU27 average)
- Less developed regions (GDP *per capita* less than 75% of EU27 average)

In line with this approach, structurally weak regions can be equated with the less developed region category: the around one third of EU regions that have GDP *per capita* below 75% the EU27 average.

Figure 1: Three groups of regions for cohesion policy

Investment for jobs and growth goal (ERDF and ESF+) eligibility, 2021-2027
Categories of regions
Less developed regions (GDP/head (PPS) less than 75% of the EU-27 average)
Transition regions (GDP/head (PPS) between 75% and 100% of the EU-27 average)
More developed regions (GDP/head (PPS) above 100% of the EU-27 average)

GDP/head: average 2015-2016-2017

© EuroGeographics Association for the administrative boundaries

Source: https://ec.europa.eu/eurostat/web/cohesion-policy-indicators/context/cohesion-regions

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[1] See European Commission (2019, 2020, 2021) and https://ec.europa.eu/regional_policy/en/2021_2027/.

To tackle the question of why clusters are important for the catching-up process of this group of EU regions within the framework of EU cohesion policy, it is important to make a clear distinction between clusters themselves and the institutions that support them:

- **Clusters** are geographical concentrations of businesses and other organisations (research, education, government, civil society …) that operate in related sectors in a specific region. They can be measured statistically and there is a significant body of research that has analysed their effects on different dimensions of regional economic performance.

- When clusters are present in regions, they frequently give rise to **cluster *initiatives*,** which are proactive attempts to strengthen the collaborative dynamics between the clustered businesses and other organisations.

- Cluster initiatives are often operationalised by **cluster organisations**, specific legal entities dedicated to supporting collaboration within clusters. These organisations are mapped on the ECCP and provide the focus for cluster policy implementation at different levels (regional, Member State, EU).

Existing academic and policy studies highlight the relevance of both strong clusters and strong cluster organisations for the economic development prospects of structurally weak regions, and together imply that clusters should be an important focus for achieving the aims of cohesion policy.

Strong clusters: drivers of regional prosperity

Ever since Michael Porter packaged and popularised the concept of clusters during the 1990s, academic researchers have sought to explore the roles that clusters play in regional economic development. It is hypothesised that clustering helps firms to operate more productively and to innovate more effectively. This is because clustering both fosters localised competitive pressures and simultaneously enables better access to pools of skilled labour and specialised infrastructures and/or institutions. It also facilitates knowledge spill-overs and advanced coordination of supply chains. Many of these hypothesised benefits are supported by research suggesting that the location of firms in clusters contributes positively to firm-level performance in innovation[2] and productivity,[3] and to the generation of regional employment and economic growth.[4]

The most recent research by Ketels and Protsiv (2020), using comprehensive data from the European Cluster Observatory (now integrated into the ECCP), provides convincing evidence that the presence of strong clusters is a key driver of regional prosperity in Europe. They find that regional prosperity is positively and significantly associated with: (i) the presence of portfolios of strong clusters in a region; (ii) the positioning of the region's mix of clusters in more advanced industries; and (iii) the quality of the regional business environment. Moreover, the effect of strong cluster presence holds even when accounting for the powerful driver that is business environment quality, and the implication for structurally weak regions is clear:

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[2] See, for example, Delgado *et al.* (2014) or Uyarra and Ramlogan (2016).
[3] See, for example, Martin *et al.* (2011) or Cainelli *et al.* (2016).
[4] See, for example, Spencer *et al.* (2010), Delgado *et al.* (2014) or Ketels and Protsiv (2020).

> ***Clusters exist at all stages of economic development, and the specialization in strong clusters is helping locations at all levels of business environment quality to support higher levels of prosperity***[5]

Given that structurally weak regions are typically characterised by lower overall business environment quality, the presence of strong clusters that demand and create improvements in infrastructure, skills, etc. can provide a vital catalyst to the process of upgrading structural conditions that have impacts more widely in the economy. This in turn can facilitate the emergence of other strong clusters. However, putting this virtuous cycle in motion requires a proactive role from the institutions and policies that can support existing and emerging clusters.

Strong cluster organisations: Levers for transition and resilience

Evidence on the impact of cluster policies or cluster organisations on the economic development of regions is less clearcut than that on the role of clusters themselves, due in large part to the methodological challenges of isolating their impacts.[6] However there is a diverse and growing academic literature that points to impacts on performance in innovation, productivity, growth or entrepreneurship, and also to changes in behavioural outcomes related to knowledge transfer and network linkages.[7] Moreover, current policy experiences with the implementation of smart specialisation strategies (S3), with accelerating industrial transition to a greener, more digital economy, and with coordinating responses to shocks caused by the COVID-19 pandemic all highlight key roles that can be played by strong cluster organisations.

When it comes to **smart specialisation strategies (S3)**, cluster organisations provide a ready-made meeting point for the triple helix of business, research, and government. This leaves them ideally positioned to play central roles in the entrepreneurial discovery dynamics through which S3 are designed and implemented over time.[8] Indeed, a recent survey of regional policy makers conducted by the JRC identified intermediary institutions, including cluster organisations, as being among the regional actors that most participate in S3 strategy processes (Figure 2).

[5] Ketels and Protsiv (2020), pp. 217-218.
[6] See, for example, Rothgang *et al.* (2019) or Smith *et al.* (2020).
[7] See, for example, Aranguren *et al.* (2014), Audretsch *et al.* (2016), Graf and Broekel (2020), Lehmann and Menter (2017), Maffioli *et al.* (2016) or Uyarra and Ramlogan (2016).
[8] See, for example, European Commission (2003) or Wilson (2018).

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Figure 2: Level of stakeholder's participation in S3
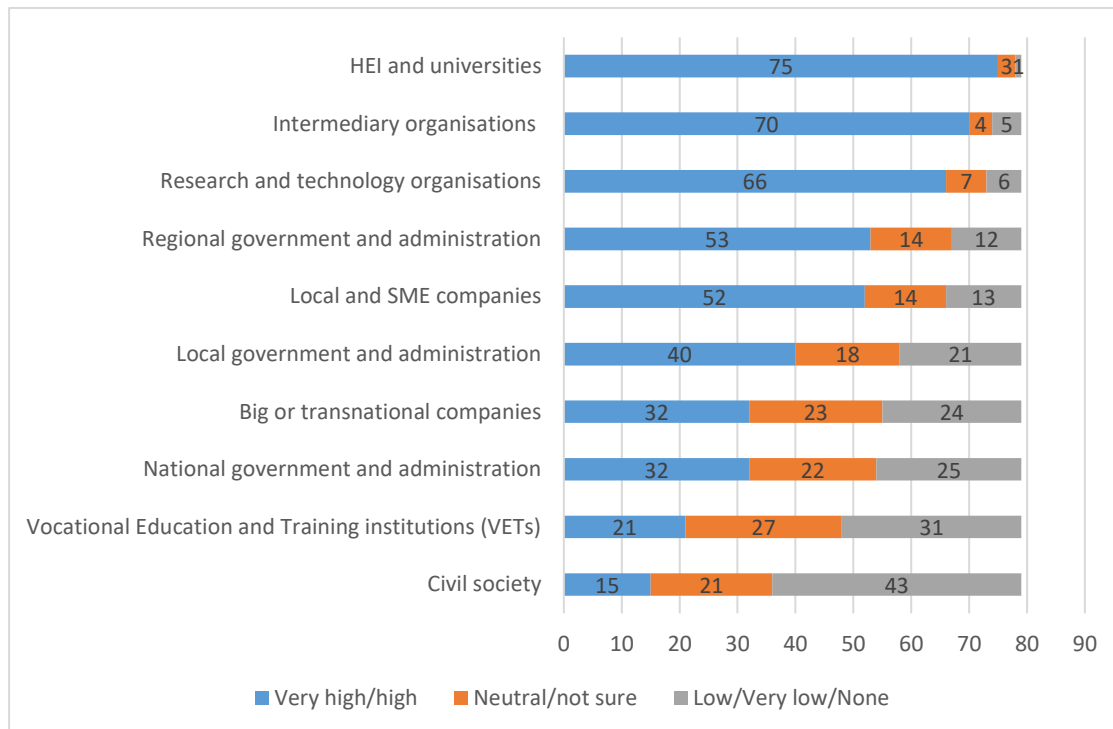
Source: Perianez-Forte and Wilson (2021)

This is supported up by in-depth evidence from 18 detailed case studies:

> *The high perceived involvement of intermediate organisations (such as clusters) is consistent with the cases and it reflects their efficiency as bridges between individual businesses and collective strategic processes*[9]

In the context of the evolution of S3 to S4 (sustainable smart specialisation strategies) in line with the need to **accelerate green and digital transitions**, the role of cluster organisations is becoming even more central because the challenges associated with these transitions require cooperation. As hubs of collaboration between large and small firms, research organisations and the public sector, cluster organisations can catalyse the transition towards new, more sustainable value chains, resource efficient production and circular economy.[10] Likewise, the deep and widespread digital transition of industry requires collaborative innovation, skills development and infrastructure investments that span business, research organisations, training organisations and government.

Finally, cluster organisations have long played a critical role in fostering **regional resilience**. Their core value propositions are based on boosting the competitiveness of firms through facilitating stronger and more effective cooperation around common challenges, related to innovation, skills, internationalisation, etc.. These challenges tend to be most acute in structurally weak regions, where more limited resources and capabilities place a premium on the synergies that can be derived from effective cooperation. Moreover, the COVID-19 pandemic has shone a spotlight on the role that cluster organisations are playing in

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[9] Perianez-Forte and Wilson (2021), p. 14.
[10] See, for example, Nielsen and Nielsen (2019) or Razminiene (2021).

sourcing and sharing strategic intelligence that help to anticipate supply chain shocks, monitor their evolving impacts, and develop effective responses.[11]

In the context of the evolution of smart specialisation strategies and the need to accelerate transitions and build resilience, **strong cluster organisations can be a key asset for structurally weak regions** whose needs for cooperation to meet these challenges are typically even larger than more developed regions.

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[11] See the ECCP discussion paper on the role of clusters in supply chain adjustments (ECCP, 2020a).

Strengthening the European economy through collaboration

What can ECCP data tell us about clusters in structurally weak regions?

Having established a series of arguments highlighting the importance of strong clusters and cluster organisations for accelerating the economic development of structurally weak regions, in this section we explore ECCP data to understand more about the current cluster panorama in these regions.

The first step is to adapt the classification of less developed regions set out in Figure 1 to the ECCP dataset, which mixes NUTS1 and NUTS2 regions according to the most appropriate administrative level for cluster policy. This results in 77 of the 201 regions mapped on the ECCP being categorised as 'structurally weak' and 124 classified as 'not structurally weak'.

Based on this dichotomy of 'weak' and 'non-weak' EU regions we can explore two types of data:

- Statistical data on employment that enables us to identify the presence of clusters
- ECCP profile data that enables us to identify the presence of cluster organisations

The presence of clusters and cluster organisations

Using data on employment disaggregated by 88 NACE 2-digit sectors, we calculate location quotients (LQs) to indicate which regions are specialised in specific sectors. We can look at specialisation from two points of view. The first is to identify which sectors the region has strengths in, because it is more specialised than other regions and because it generates a significant share of employment in the region. Alternatively, we can look at it from the point of view of the sectors, identifying which regions specialise in the sector and where that specialisation is also significant in terms of total sector employment in Europe. From this we can calculate two indicators that measure the presence of clusters:

- **Regional-relevant specialisation nodes:** When the region is specialised in the sector (LQ > 1.5) and the employment share of that sector is relevant for the region (regional employment share > 1%)

- **Industry-relevant specialisation nodes:** When the region is specialised in the sector (LQ > 1.5) and regional employment in the sector is relevant in the EU context (industry employment share > 1%)

We can then compare the average presence of regional-relevant specialisation nodes and industry-relevant specialisation nodes in weak and non-weak regions, combining that with data on the number of active cluster organisations (Table 1).[12]

In terms of the presence of clusters, the results indicate that clusters occur everywhere (an average of over 7 regional-relevant specialisation nodes in each EU region, and in fact slightly higher in weak regions than non-weak regions), because economic activity is not evenly spread and every region will have a larger share of employment in some sectors (as compared to the European average) and, conversely, a smaller share in other sectors. However, **clusters that are industry-relevant at the EU-27 level are significantly less prevalent in structurally weak regions** (4.8 on average, compared to 6.3 in non-weak regions). This means that, if we are searching for regions where a particular sector specialises, we are more likely to find that specialisation in a non-weak region.

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[12] 'Active cluster organisations' refers to cluster organisations registered on the ECCP who have updated their profile during the last 6 months (just over 300 in total).

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Moreover, **active cluster organisations are almost twice as likely to be found in non-weak regions than in weak regions**, and clusters (specialisation nodes) in non-weak regions are significantly more likely to have an active cluster organisation than those in weak regions. This is the case for both regional-relevant nodes and industry-relevant nodes, but more so for the latter.

Table 1: Presence of clusters in weak and non-weak EU regions

	Weak Regions	Non-weak Regions
Average Number of Regional-Relevant Specialisation Nodes	7.9	7.2
Average Number of Industry-Relevant Specialisation Nodes	4.8	6.3
Average Number of active Cluster Organisations	1.0	1.9
Average Number of active Cluster Organisations in Regional-Relevant Specialisation Nodes	0.4	0.5
Average Number of active Cluster Organisations in Industry-Relevant Specialisation Nodes	0.3	0.6

Source: Own elaboration based on ECCP data.

Presence of industrial ecosystems

It is also possible to conduct a parallel analysis of regional specialisation according to the industrial ecosystems identified by the European Commission. The number of nodes is likely to be much smaller than in the case of sectors because there are only 14 ecosystems, as opposed to 88 sectors.

For these ecosystems there are indeed few industry-relevant specialisation nodes, and these are quite evenly spread across weak and non-weak regions: there are, on average, 0.4 industry-relevant nodes in weak regions and 0.3 in non-weak regions.

Regional-relevant specialisation nodes are more prevalent, with twice as many in weak regions (2.0) than non-weak regions (1.0). However, **non-weak regions are twice as likely to have an active cluster organisation when they are specialised in an ecosystem**. More revealing than these overall figures is the breakdown by ecosystem (Tables 2 and 3).

The figures in tables 2 and 3 highlight, above all, the **significant differences in the types of industrial ecosystems in which weak and non-weak regions are specialised**. Looking at industry-relevant nodes, we can see that weak regions seem to be only relevant for the agri-food and textiles ecosystems, while non-weak regions relevance is more diversely spread across the 14 ecosystems (Table 3). Moreover, while weak regions are specialised and have a significant share of their regional employment in a more diverse range of ecosystems (Table 2), there is a large gap with non-weak regions in several ecosystems, including creative and cultural industries, digital and health. Alongside the clear specialisation of non-weak regions in agri-food and textiles, it is interesting to also note the relative importance of the renewable energy ecosystem as compared with non-weak regions.

Furthermore, Tables 2 and 3 also show that **the presence of cluster actors in nodes is more likely to occur in non-weak regions than in weak regions**. See, for instance, the textiles ecosystem in Table 3. We can observe that it is more likely to find weak regions that are relevant for this ecosystem: 14% of weak regions are both specialised and account for more than 1% of European employment in this ecosystem, as opposed to 6% of non-weak regions. However, cluster organisations are only present in 9% of weak regions with a textile-relevant

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node, as opposed to 29% of non-weak regions. Thus, there seems to be a stronger association between specialisation nodes and presence of cluster organisations in non-weak regions than in weak regions.

Table 2: Regional-relevant industrial ecosystem specialisation nodes

Ecosystems	Weak Regions		Non-weak Regions	
	% regions with ecosystem specialisation node	% nodes with presence of active cluster organisation	% regions with ecosystem specialisation node	% nodes with presence of active cluster organisation
E01. Tourism	14	0	9	9
E02. Aerospace & Defence	9	14	6	14
E03. Agri-food	61	9	2	0
E04. Construction	0	0	2	0
E05. Creative & Cultural Industries	0	0	10	8
E06. Digital	0	0	15	37
E07. Electronics	17	0	11	21
E08. Energy Intensive Industries	27	5	9	9
E09. Health	1	0	15	26
E10. Mobility-Transport-Automotive	13	0	5	17
E11. Proximity & Social Economy	4	0	2	0
E12. Renewable Energy	17	23	4	20
E13. Retail	1	0	0	0
E14. Textile	31	4	10	15

Source: Own elaboration based on ECCP data.

Table 3: Industry-relevant industrial ecosystem specialisation nodes

Industrial Ecosystems	Weak Regions		Non-weak Regions	
	% regions with ecosystem specialisation node	% nodes with presence of cluster organisation	% regions with ecosystem specialisation node	% nodes with presence of cluster organisation
E01. Tourism	0	0	2	0
E02. Aerospace & Defence	0	0	2	0
E03. Agri-food	16	17	1	0

E04. Construction	0	0	0	0
E05. Creative & Cultural Industries	0	0	5	0
E06. Digital	0	0	9	55
E07. Electronics	1	0	4	40
E08. Energy Intensive Industries	3	0	2	0
E09. Health	0	0	3	75
E10. Mobility-Transport-Automotive	1	0	0	0
E11. Proximity & Social Economy	0	0	0	0
E12. Renewable Energy	4	0	1	100
E13. Retail	0	0	0	0
E14. Textile	14	9	6	29

Source: Own elaboration based on ECCP data.

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How can we build stronger clusters structurally weak regions?

The analysis of the previous two sections has:

- Highlighted the importance of clusters and cluster organisations for the economic development of structurally weak regions, especially in the context of ongoing green and digital transitions.

- Provided evidence that strong clusters and active cluster organisations tend to be less prevalent in structurally weak regions, with specialised activity focused on a narrower set of industrial ecosystems.

This underscores an important policy agenda around building stronger clusters in structurally weak regions. Inspired by the concepts and data explored in the previous two sections, this section provides initial reflections to provoke discussion around how this policy agenda could move forwards. Specifically, it proposes **seven policy pathways for strengthening clusters in structurally weak regions**.

1. Target Investment

It is widely acknowledged that policy shouldn't seek to build new clusters from scratch but should rather seek to support clusters that are already emerging from existing business and/or scientific strengths in the region. Indeed, this is in line with the focus of smart specialisation strategies (S3) on developing a strategic approach to research and innovation investments that seeks smart diversification from existing regional strengths. In this regard, **the process of building strong clusters in structurally weak regions should be strongly linked to S3 entrepreneurial discovery dynamics** within these regions that seek an intelligent targeting of both public and private investments. Moreover, in the context of digital and green transitions and the rapid development of advanced manufacturing, automation and robotisation, new and stronger clusters in structurally weak regions are likely to emerge in the nexus between existing, more traditional activities and these evolving, cross-cutting technologies.

2. Engage Strong Players

A key barrier facing many structurally weak regions that has been identified in studies of S3 is a combination of relatively weak government capabilities and thin structure of intermediary organisations capable of fostering cooperative dynamics.[13] This makes the implementation of policies supporting cluster development significantly more challenging than in regions that already enjoy a 'thick' structure of intermediate institutions that are better placed to attract investment and policy funding. To achieve cohesion policy goals, it is important to break this cycle of funding being drawn to stronger regions with more capable organisational infrastructure. One possible route is to start from where strong capabilities do exist within structurally weak regions, often in their universities, RTOs and large firms. **Leveraging the capabilities and convening power of existing strong players in regional ecosystems** can overcome some of the initial capacity barriers and provide a step along the way to building strong cluster organisations that can support emerging clusters.

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[13] See, for example, Belussi & Trippl (2018) or Trippl *et al* (2019).

3. Boost Collaboration

Strong clusters require strong collaboration dynamics, and the demands on collaboration are becoming greater and more sophisticated in the context of the challenges associated with the green and digital transitions. **Establishing and strengthening cluster organisations in structurally weak regions provides a key pathway to boosting the collaborative capacity of the region and its clusters**. The time horizon to build the trust between cluster actors required for truly effective collaborative dynamics to flourish suggests that this needs long-term commitment from both policymakers and key cluster actors.[14] As suggested above, a first step in regions lacking certain capacities can be to encourage existing strong actors to play leading roles in collaborative dynamics that seek to reach progressively wider groups of SMEs. Moreover, following the recommendations of the European Expert Group on Clusters, cluster organisations can **facilitate a broader outreach to SMEs by cooperating with other business organisations**, such as employers' organisations, sectoral organisations, and trade organisations.[15] Indeed, one route to building strong cluster organisations in regions where they are not currently present is to leverage other types of organisations to build-in a more fundamental focus on cooperation among their members. Where cluster organisations do exist, they can become stronger and broaden their reach through partnering with other business organisations on issues of mutual interest. In this regard and following recent discussions at the European Expert Group on Clusters, there is significant scope to exploit the complementarity between clusters and the European Enterprise Network (EEN). Cooperation between cluster organisations and EEN consortia can be leveraged to strengthen long-term SME participation in cluster initiatives, especially when supported by a regional development agency with a holistic view on the complementarities between EEN initiatives and clusters.

4. Connect Clusters

The reach and impact of emerging collaborative dynamics in structurally weak regions can be enhanced by exploiting the connections between clusters, both within the same region and most especially across regions. Firstly, there is enormous **learning and capacity-building potential from twinning, study visits and peer exchanges** with cluster organisations working in similar sectors and at different stages of development in other regions. Secondly, and more specifically in the context of green and digital transitions that typically cross sectoral boundaries, **selective inter-cluster collaboration can support smart diversification and the upgrading and enhanced resilience of value chains**.

5. Bridge Skills Ecosystems

One of the key advantages that clustering brings to firm-level competitiveness is easier access so specialised local labour markets that are adapted to and evolve with the needs of the cluster. This advantage of clusters is particularly important in the present context of rapidly changing technologies and transitions to green and digital industry. It implies the need for fast and adaptive upgrading of skills ecosystems to maintain the competitiveness

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[14] See, for example, Smith *et al* (2020) or Wilson (2019).
[15] See:
https://clustercollaboration.eu/sites/default/files/news_attachment/European%20Expert%20Group%20on%20Clusters%20-%20Recommendation%20Report.pdf

of regional clusters and to build stronger, future-oriented clusters.[16] Where cluster organisations are present, they can play key roles in this process by **brokering links between the skills ecosystem and cluster actors**. Where cluster organisations are not yet present or only incipient, the activities of key actors within the existing skills ecosystem – most especially universities and VET centres – can provide a **focal point for initial collaborative activities oriented to solving the skills challenges of local cluster firms**. A key area of cooperation where results can be achieved quickly, this process of skills upgrading can lead to the identification of other areas for strategic cooperation, for example in innovation.

6. Enhance Cluster Management

Cluster management itself is an often-overlooked capacity, and especially important in structurally weak regions that are seeking to build strong clusters. It requires a unique skills-set that combines sector-specific knowledge with finely tuned human skills that support collaboration between diverse, and often competing, cluster actors. Indeed, **it is important not to under-estimate the human element involved in building strong clusters**, especially in adverse circumstances where business environment quality is poor and resources hard to come by. Responding to the training needs of cluster managers to enhance their potential for success in improving regional governance and business environment quality is therefore a key pathway to building strong clusters in structurally weak regions. Moreover, in the context of the ongoing green and digital transition, specific training related to key transversal areas such as new digital business models, servitisation, circular economy and resource efficiency are likely to boost the potential of clusters in these regions to take advantage of the opportunities of industrial transition.

7. Leverage EU Policies and Learning

In the European context, one of the key challenges of cluster managers, together with regional policymakers, is to **identify the most appropriate EU policies and funding mechanisms to support their endeavours and desired impacts at different moments in time**. There are clear direct opportunities from the European Commission's specific focus on clusters, including the new Euroclusters programme. However, in the context of the above arguments there are also key opportunities from targeting synergies with European cohesion policy linked to the development of S3, with initiatives developed in the context of the Pact for Skills, and more broadly within the challenge-oriented Horizon Europe programme. It is important to also consider the interactions between EU policy and other policy levels so that synergies can be optimised with national, regional, and even local policies. Finally, platforms such as the ECCP and the Interreg Europe platform and networks such as TCI Network offer enormous scope for international policy learning, becoming inspired by other experiences, and avoiding mistakes made elsewhere.[17] Specifically, the cluster policy mapping capabilities, country factsheets and cluster policy toolkit provided by the ECCP are set to boost policy learning capacity and should enhance the ability of structurally weak regions to learn from and with others.

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[16] See the ECCP discussion paper on clusters and skills (ECCP, 2020b).
[17] See: https://clustercollaboration.eu/, https://www.interregeurope.eu/policylearning/, and https://www.tci-network.org/.

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Conclusions and Discussion Questions

The arguments and evidence presented in this paper highlight that while strong clusters and active cluster organisations are currently less prevalent in structurally weak regions, they have the potential to boost the economic development of these regions, especially in the context of ongoing green and digital transitions. This suggests that **a cluster approach in structurally weak regions can be an important part of the path towards territorial cohesion**. To this end, seven policy pathways have been proposed for strengthening clusters in structurally weak regions:

1. Target investment
2. Engage strong players
3. Boost collaboration
4. Connect clusters
5. Bridge skills ecosystems
6. Enhance cluster management
7. Leverage EU policies and learning

The paper is designed to facilitate discussion around how to go about strengthening clusters and cluster organisations in weaker regions so that the collaborative power of clusters can be harnessed towards the goal of strengthening economic, social, and territorial cohesion. With that in mind, the following **questions for reflection and discussion** can help to frame ongoing discussion around this important policy agenda:

- Is the ECCP data on clusters and cluster organisations in structurally weak versus non-weak regions surprising? What are its key implications?
- Are the seven policy pathways for building strong clusters in structurally weak regions that are proposed coherent? Could the case for them be made clearer?
- How should each region go about prioritising the policy pathways that they take to strengthen their clusters?
- Which inspiring examples can be used to illustrate one or more of these pathways being taken by structurally weak regions?

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