Policy Helpdesk

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Helpdesk topic on clusters driving the green and digital twin transitions

Policy insights 1. Cluster organisations

We encourage you to read **our policy brief on Clusters** that highlights the role of clusters in **driving the green and digital transitions** and discussed the importance of cluster organisations in driving changes. In this policy brief, we investigate how **clusters can connect top-down directionality initiatives**—such as the European Green Deal and Digital Europe—**with bottom-up industrial ecosystems**. **Clusters can promote cross-cluster collaboration**, which can be conducted at the regional, national, or EU levels. Cross-cluster collaboration can serve for cluster management capacity-building and for strengthening clustered firms' innovation capacities. Indeed, cross-cluster collaboration can aim to promote sharing cross-sectoral and interdisciplinary knowledge to foster cross-fertilisation and the recombination of different knowledge bases and lead to radical innovations. Cross-cluster collaboration is at the core of European cluster initiatives such as **European strategic cluster partnerships (ESCPs)**.

Cluster organisations must have efficient governance mechanisms to address regional coordination challenges. An important element of successful cluster-based policy is **governance at operational and strategic levels** to develop a shared vision, goals, and strategy. **At the operational leve**l, a cluster is often piloted by an organisation (not-for-profit or public-private legal entity) that coordinates the implementation of the cluster activities to achieve strategic cluster objectives. The main stages of the cluster management cycle can be split into (1) Define, (2) Design, (3) Implement, (4) Monitor, (5) Evaluate, and (6) Revise (**PWC**). This cluster organisation must implement day-to-day cluster activities to respond to its stakeholders' needs and priorities coming from a more strategic governance level. The EC has supported the development of a cluster organisational labelling process which enables clusters management teams to both benchmark their performance with similar clusters and assess the quality of their management and ecosystem animation tools (see **European Secretariat for Cluster Analysis**).

Strategic governance refers to appointing cluster managers and evaluating their performance, setting the vision and strategy of the cluster and approving action plans. Cluster governance refers to the intended collective actions of cluster stakeholders to advance the cluster and develop a sustainable competitive advantage. Cluster governance thus represents the interests of cluster stakeholders (e.g. universities and research institutes, large companies and SMEs, government, supporting structures, etc.) (**PWC**).

We encourage you to read the PWC report on **uncovering excellence in cluster management**

Innovation vouchers could be of interest to you in your practice to promote cross-cluster collaboration. **Innovation vouchers** are small lines of credit (usually ranging from €2000 to €20,000) provided by regional or national governments to **Small- and Medium-sized Enterprises (SMEs) to purchase services from knowledge providers** such as universities, research centres, or consulting firms with a view to introducing new products, processes, or services in their business operations.

Innovation vouchers have three main objectives:

(1) **To stimulate the introduction product, process, organisational or service innovation in SMEs**, which tend to lack leading-edge knowledge compared to large companies or innovative start-ups.
(2) **To promote science-industry collaboration and stimulate knowledge transfer**. Indeed, SMEs tend to have limited exchanges with universities and research centres due to information asymmetries such as the cost linked to the identification of relevant information providers. Moreover, universities and research centres tend to have difficulties in finding users of their research.
(3) **To foster the formation of networks between SMEs and other academic, research and private partners**. Innovation vouchers can be the catalysts for longer-term relationships and collaboration.

For instance, innovation vouchers have been used in cluster policies.

Innovation vouchers can focus on moving up Technology Readiness Levels (TRLs). The Science and Technology Park, **Sunrise Valley**, introduced '**InoStartas LT**', an innovation voucher scheme to support commercialise R&D products and R&D investments to promote university-industry collaboration. The innovation voucher scheme was originally designed for **R&D technology feasibility studies for SMEs (up to TRL 3).** Sunrise Valley was inspired by the '**technological voucher**' scheme presented by the council of San Sebastian that focused on higher Technology Readiness Levels. **InoStartas LT offers differentiate innovation vouchers for startups and SMEs** at different Technology Readiness Levels (TRLS)—from TRL 1 to TRL 3, from TRL3 to TRL6, and from TRL7 to TRL9—**to bring new products and services to the region**.

Innovation voucher scheme can promote interregional collaboration. In **S34GROWTH**, the **Basque Country** introduced an **interregional innovation voucher scheme for SMEs**. The Basque Country is characterised by a dense regional innovation system that is inward-looking. From exchanges with **S34GROWTH** partners, Basque policymakers understood the importance of interregional cooperation and global value chains to overcome fragmentation and to boost regional firms' competitiveness. The Basque policymakers were inspired from the **multi-country voucher scheme** during the visit at the **Biobase Europe Pilot Plant** in Ghent, Flanders. The policy change is **a pilot voucher scheme programme to provide Basque firms with access and technical assistance for testing and experimentation infrastructure** in selected **Digital Innovation Hubs** (DIHs) in priority European regions and in regions involved in the **Vanguard initiative.**

Learn more about **Voucher schemes: implementing innovation vouchers**

We also recommend you to have a look at our recordings from our online workshop on **Clusters: Driving the Digital and Green Twin Transitions**.

Additionally, we wrote a short article on **Clusters: an established innovation policy for regional specialisation**. For additional information, you can have a look about the **European Commission's industrial cluster policy**.

Policy Insights 2. Clusters and Interreg Europe Good Practices

Cluster-policy is an important topic for European regions. We have collected several good practices that can inspire you when designing cluster policies, namely focusing on cross-cluster collaboration and cluster organisations.

Many Interreg Europe projects are aiming to design and deliver better cluster policies. For instance, **DEBUTING** aims to develop gender policies for new cluster competences. **CLUSTERFY** aims to foster clusters' **interregional collaboration and integration into global value chains (GVCs).** The project specifically focuses on policies to enable clustering of **SMEs in Key Enabling Technologies (KETs).** **CLUSTERIX2.0** looks at improving **regional innovation policies for clusters**, namely **by strengthening intra and interregional cooperation and university-industry linkages. CLUSTERS3** aims **to adopt cluster policies to improve S3 implementation**. The project focuses on the insertion of SMEs in the global value chains (GVCs). **STRING** aims to improve innovation policies for **food clusters while promoting stronger linkages with their regional innovation ecosystems.**

C3-Saxony—clusters and entrepreneurship in support of emerging industries—promotes cross-cluster collaboration in Saxony, Germany. **C3-Saxony** connects the cluster Silicon Saxony (microelectronics) with the cluster Biosaxony (Life Sciences) to spur cross-cluster collaboration with the aim to promote knowledge diffusion, cluster resilience, and technological recombination. The initiative uses three main policy instruments—networking events, matchmaking events, and innovation vouchers—to promote cross-cluster collaboration. As illustrated in the good practice, cross-cluster collaboration in cross-sectoral value chains can be implemented at the regional scale.

On engaging actors, the **Regional Cluster support strategy** in Piedmont, Italy, **established seven regional innovation clusters in each S3 thematic area**. Back in 2009, the region was supporting 12 regional innovation clusters in 12 different thematic areas. **In 2015, the region undertook a process of revision of the clusters through launching a public call** for the constitutions of the following clusters: Smart Products and Manufacturing, Green Chemistry and Advanced Materials, Energy and Clean Technologies, Information and Communication Technologies, Agri-food, Textile, Life Sciences **to align them with the S3 strategic priorities**. The good practice highlights the role of clusters **in engaging actors around regional S3 priorities to promote regional economic restructuring.**

The **innovation audits** is a programme to assess and review the innovation and internationalisation capabilities of private companies in Romanian clusters. The innovation audit consists of three phases: (1) a questionnaire with 45 questions on innovation culture, innovation strategy, innovation management, networking, development of new processes and products, research and development (R&D), access to new markets, and management technology is sent to private companies, (2) the questionnaire is analysed and recommendations are sent out, and (3) meetings are organised to discuss on the future uptakes of recommendations.

In **CLUSTERS3**, **the Basque Country** designed a programme to provide support to Cluster Management Organisations (CMO) to foster their roles in the S3 while increasing SMEs and territorial competitiveness. The programme requires CMOs to develop an action plan focused on delivering services and activities related to the S3 (identifying common challenges), competitive intelligence, launching working groups and projects (to solve those challenges) in the fields of technology R&D+i, internationalisation (trade missions, international trade fairs), talent development and sustainability. The peer review in Hungary and study tour in Piemonte, Italy, were essential to understand the importance of capacity-building for CMOs and introduce this policy change.

In **CLUSTERIX2.0**, **the cluster organisation, NOI AG**, is responsible for managing and developing the South Tyrol Science and Technology Park—which involves more than 70 companies and innovative start-ups, 4 research institutions and 3 faculties of the Free University of Bozen/Bolzano—in leading regional priority sectors. The cluster organisation, an in-house company of the Autonomous Province of Bolzano, introduced a policy change regarding the design of services for digital fabrication at Makerspace. Learning from the good practice **Strategic Use of Design** from Denmark, NOI AG was able to add concepts such as Danish design ladder, process mindset and iterative processes in its makerspace service for prototyping.

Also, we encourage you to stay updated of the latest **Interreg Europe Policy Learning Platform good practices** and latest **Interreg Europe Policy Learning Platform events**

Policy Insights 2. Other Interreg Europe Policy Learning Platform activities.

We offer two services that might be of interest to you for responding to your policy challenges related to **cluster policies**—matchmaking sessions and peer reviews. Matchmakings and peer reviews allow you to involve political actors during the meetings thus facilitating shared ownership of the strategy.

- **Matchmaking sessions** are **two-hour meetings**, online or face-to-face. They are designed to bring together a group of policymakers having the expertise and competence to discuss your specific policy questions. For two hours, they are at your disposal to discuss your challenge and offer solutions.
- **Peer-reviews** are **two-day meetings**, online or face-to-face, involving an international team of experts and peers. Based on your specific needs and challenges, peers selected carefully on the basis of targeted calls among the community members, share their expertise for your benefit. After a thorough analysis of your policy context, they provide targeted feedback and offer concrete solutions to you and your stakeholders.

For instance, the Policy Learning Platform organised an online **peer review on the topic of 'promoting economic diversification and attract manufacturing industries in the health sector' with the City of Szombathely**, Hungary, on 29-30 June 2021. The host region, the city of Szombathely with the support from Pannon Business Network (PBN), is currently designing its economic development strategy—Szombathely 2030. The host region aims to promote economic diversification in the health sector and wanted to explore with the peers the following policy challenges: (1) what are policies and initiatives to attract manufacturing industries in the health sector. (2) what are policies and initiatives for skills, research, university-industry collaboration to promote the health sector, and (3) what EU funding opportunities to promote the health sector are available.

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