



EUROPEAN CLUSTER
COLLABORATION PLATFORM

Guide on Capacity Building for Clusters

Actions for green, digital, and resilient ecosystems

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An initiative of the European Union





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Introduction

Clusters are unique! Clusters are specialists in innovation, collaboration and networking. Clusters are ready to help overcome crises like the COVID-19 pandemic, supporting their regional ecosystems and their members.

I would like to encourage you to focus on supporting your ecosystems and your members in building innovation projects. This is the main pillar of each cluster. With new green and digital technologies, your members can grow and be resilient in the face of crisis. Ask your members: What is your competence in technology? What is your technology landscape for the next 10 years? How can the cluster help you?

This is the way we act in my cluster, [Mobility & Logistics](#). It is vital to bring together actors along the whole value chain - cross-sectoral, cross-industry users, and developers - strongly aligned with the regional smart specialisation strategy.

In this guide, you will find useful ideas to help your cluster build capacity in the key areas of green and digital transition, as well as resilience. I hope these practical recommendations will inspire you to take action to effectively support your members in these challenging times, and be a leader in innovation!



Uwe Pfeil, Cluster Manager of the Year 2020



Summary

This Guide on Capacity Building for Clusters aims to provide cluster organisations with ideas and suggestions for how to lead on the green transition, accelerate digital uptake, and build resilience within their ecosystems. In this respect, **this guide is a hands-on tool that focuses on the essentials**, and is intended to provide insight in an easily accessible and understandable manner, adding value for cluster organisations.

Clusters are key stakeholders across Europe, which help to boost our economies. They connect businesses with other ecosystem actors and support collaboration across ecosystems, engaging a wide array of actors who benefit from the mutual exchange fostered by clusters. During the global COVID-19 pandemic in 2020 and 2021, cluster organisations were essential reference points which their members turned to for advice, guidance, and help. Consequently, clusters and other intermediaries (such as development agencies and chambers of commerce) also played a vital role in the recovery process and "connecting the dots".

The multiannual financial framework 2021-27, with the NextGenerationEU recovery instrument and the updated EU Industrial Strategy, give impetus to the green and digital transitions (the twin transition) and help to shape a more resilient European economy. The European Commission recognises the role clusters can play in this transition. In its [report](#), published in December 2020, the European Expert Group on Clusters (hereafter Expert Group) developed recommendations on the role clusters can play to make our economies more sustainable, digital, and resilient.

But what exactly can clusters do? This guide operationalises some of the recommendations of the Expert Group. Focusing especially on collaboration, upskilling, and internationalisation, this guide sets out practical actions that clusters can take to support the twin transition and to enhance resilience.

This guide complements and expands on the series of eight [capacity building webinars](#) the European Cluster Collaboration Platform (ECCP) offered in 2020 and 2021. Tailored to the needs of cluster managers, the webinars touch on many aspects discussed in this guide and showcase additional good practice examples and tools clusters can use.

Clusters can act as leaders of a green transition

Sustainability is an essential element in recovery strategies, and is vital to achieving the goals set by the [European Green Deal](#). In this context, clusters have the opportunity to join green public and private initiatives for the benefit of their staff and their members. They can serve as platforms to raise awareness of the green



transition's importance for the environment and business prosperity. Thanks to their connecting role, clusters are uniquely well positioned to **facilitate collaboration**, such as exchanging knowledge and good practices among their members and external sources. It is essential that cluster managers are fully aware of the concerns and challenges that companies – especially SMEs – face as they advance towards the greening of their activities, and do their best to support them.

Clusters are digital skills accelerators

Businesses are increasingly incentivised to reskill and upskill their workforce, to keep pace with and drive digitalisation forward. This is part of a broader digital trend across society and the economy. The European Commission's [Digital Compass](#) defines targets to make the 'EU fit for the digital age' and sets ambitious objectives to upskill the labour force across the Union. As focal points in their industrial ecosystems, clusters can play an important role in promoting digitalisation and **supporting the re- and upskilling** of the labour force. They can also help their members attract the right sets of skills, and new talent, as the [Pact for Skills](#) acknowledges. During the COVID-19 crisis, clusters and businesses have been driven to develop their digital skills further. Clusters can help their members to understand potential skill gaps and take action to identify collaboration partners – including the clusters themselves, but also, for example, [Digital Innovation Hubs](#) – to train employees and expand their digital skills.

Clusters can build resilience through internationalisation

Internationalisation might not be seen as the most intuitive strategy to build economic resilience. Indeed there are other ways of building resilience, such as gathering intelligence from cluster members to design policy, engaging in re- and upskilling, and providing specialised services to cluster members. However, **internationalisation through clusters** has proven to be a key instrument for SMEs to grow and increase their competitiveness. It enables supply chains to become more robust, reducing the negative effects of supply chain disruptions. An increasing number of cluster organisations are becoming more actively engaged in internationalisation, and supporting their members in this journey. Now is the time to redefine strategies for internationalisation, and to rethink the services clusters can offer to their members to best address new needs, as companies are adapting to new global opportunities.





01

COVID-19 and its impacts on clusters

Taking stock and looking ahead



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Strengthening the European economy through collaboration



COVID-19 and its impacts on clusters

The pandemic took clusters by surprise. They needed to react and adapt quickly to a changing situation. **Clusters faced a twofold challenge:** reorganising their work internally, and rethinking service offers to their member organisations. As focal points within their networks, cluster organisations were particularly affected by the restrictions introduced by governments across the continent. The challenge was further aggravated by the fact that many member organisations reached out to cluster organisations for support. Facing great uncertainty, members asked for help and support from their cluster organisations, putting additional pressure to adjust quickly to pandemic norms.

Clusters lived up to these challenges. The entrepreneurial spirit of many cluster managers helped them see new opportunities, such as how digital tools could support and simplify their work. Rapid adaptation facilitated the role which clusters played - and continue to play - in supporting their ecosystems. In late 2020, the ECCP published a [discussion paper](#) identifying three distinct roles clusters can play to support their ecosystems and members in the short-term during the pandemic:

- Intelligence function.
- Connecting function.
- Support function.

Intelligence function. Clusters became a go-to spot for many businesses and actors to find relevant information in many regions. Clusters stepped up their efforts to collect intelligence on various topics, ranging from regulatory aspects to practical questions related to digitalising day-to-day business activities. For example, the [Icelandic Tourism Cluster](#) immediately organised online discussions with key players in their sector, drawing inspiration from other global tourism stakeholders to start rethinking tourism. Clusters are ideally placed to collect and filter incoming information and channel it to other actors who can benefit from the insights.

Connecting function. Clusters, which know their ecosystems inside-out, connected actors in and beyond their regions during the pandemic. Where businesses experienced difficulties because of supply chain disruptions, clusters were able to provide alternatives. They connected companies and brought various actors to the (virtual) table, to develop strategies and agree on actions to overcome disruptions. Clusters also strengthened connections between each other, exchanging intelligence and best practices. For example, the [European Clusters Alliance](#) (ECA) connected with other stakeholders, including the European Commission and academia, to form the [European Alliance Against Coronavirus](#). ECA ran a series of daily webinars supporting clusters on topics related to COVID-19, how to react to

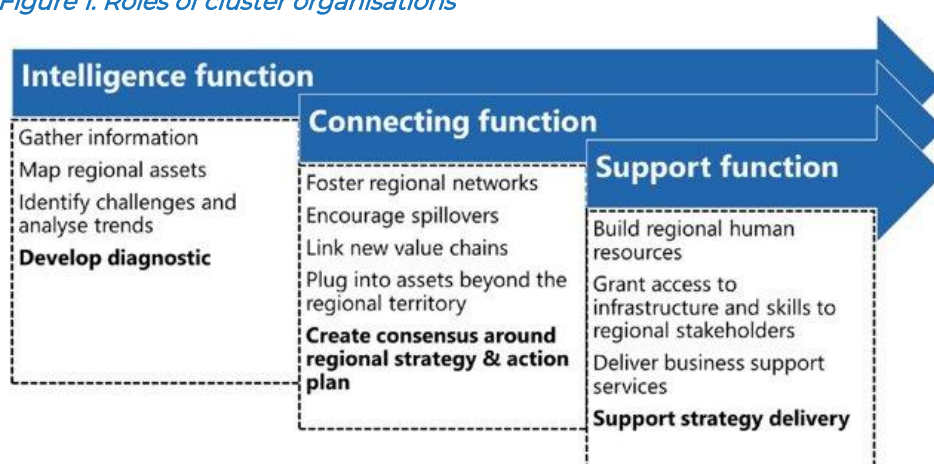




the pandemic, and the role of clusters in the economic and social recovery. Furthermore, ECA and the [ECCP](#) worked hand in hand to create the [ECCP COVID-19 Response Forum](#), compiling and integrating information and support from across the cluster community.

Support function. Clusters stepped in to combat the pandemic and play a key role in the recovery. During the crisis, clusters took actions in local ecosystems to help the health sector, using their connections with stakeholders to organise support and increase the production of vital equipment in short supply, such as protective gear and ventilation systems. For example, [clusters in Finland](#) took action to support local companies to shift production from alcohol to hand sanitisers.

Figure 1: Roles of cluster organisations



Source: European Observatory for Clusters and Industrial Change (2019)

By now, European economies are on their path to recovery from the effects of the pandemic, partly thanks to the swift actions taken by the European Union and Member States. Yet there are lessons that can be drawn from the pandemic that are likely to determine the nature of this recovery:

- Across the EU, the crisis highlighted a need to **further prioritise digitalisation**. Considered one of the defining transformations of our time, the crisis laid open weaknesses and shortcomings in the current uptake of digital solutions in many aspects of society, while simultaneously showcasing their advantages. At the same time, the pandemic acted to accelerate digitalisation by incentivising familiarisation with digital tools and services. To name just a few examples, e-commerce flourished during lockdowns, and tracing apps gained momentum to curb new outbreaks of the virus. The pandemic forced business process digitalisation in many sectors, and the adoption of new routes to market to stay in business. This trend is here to stay, and it is likely that the digital transition will further accelerate in the years to come.



- The measures used by countries to stop the spread of COVID-19 disrupted many supply chains, slowing production and transport, or bringing it to a halt. The disruption of supply chains also highlighted the EU's dependence on global supply chains; particularly for certain specialised products such as microchips. While it is likely that international trade routes will recover, European institutions realised that it needs to understand dependencies, prepare mitigation measures, and have options at hand to compensate for the disruption of (global) value chains in critical sectors and technologies. **Building up resilience** and securing strong and robust international trade routes is therefore another long-term implication of the crisis.
- The pandemic temporary shifted collective attention from one of the most important challenge of our times: climate change and the threat to the biodiversity and the environment we live in. [Research](#) suggests that pandemics are intrinsically linked to environmental pollution, as a loss in biodiversity and global warming increase the chances of viruses spreading from animals to humans. As the European Commission and Member States have committed to [climate neutrality by 2050](#), and to reducing the devastating effects of environmental destruction and climate change on our societies, the recovery from the crisis needs to be green. Therefore, the **green transition** will be the defining transformation for the decades to come.

Clusters can and will play a role in the twin transition, which DG GROW has set out in its [update of the EU Industrial Strategy](#). As key actors in their ecosystems, clusters are ideally placed to function as a link and transmit information among actors, but also between policy and implementation. By building up their own capacities, clusters can provide their members with the relevant information and encourage companies to rethink their business models to become greener, more digital, and more resilient.

Clusters will have to reconsider their own cluster business models as well. In times where more meetings and activities will be organised virtually, clusters have to rethink their value proposition to remain relevant for their regions. They will need to update their services and can offer training, advice, and support to actors in their ecosystems to develop the skills they need to become more sustainable and digital.

The path clusters can take to accompany and shape these processes has been developed by the European Expert Group on Clusters in late 2020. In their [policy document](#), the Expert Group produced a set of recommendations for clusters. The following sections attempt to translate these recommendations into practical actions to bring them to life.



Interview with Antonio Novo

Antonio Novo is the Managing Director of the Spanish Cluster IDiA, which brings together 81 Aragonese companies and institutions which collaborate in the development of ICT-related projects. He held the presidency of the European Clusters Alliance, encompassing 18 national cluster networks and more than 800 clusters. Antonio is president of the Spanish Federation of Clusters and a member of the Expert Group on Clusters of the European Commission, the EU Industrial Forum, and the expert group on Interregional Investment Initiatives.



ANTONIO, WHAT IMPACT HAS THE GLOBAL PANDEMIC HAD ON CLUSTERS?

The priorities of cluster members changed dramatically at the beginning of the COVID-19 crisis, and they have been evolving ever since. First, the most urgent need was to address logistical problems. Supply difficulties followed and have even worsened in certain cases. Cluster members also needed to define and implement new procedures for teleworking or safe work on-site. Many clusters supported their members, especially SMEs, with such adaptations. Cluster organisations also had to adapt their operations and have significantly upgraded their digital and communication tools. Overall, the demand for cluster services has notably grown with the pandemic, because SMEs benefit from the opportunities of collaborative networks in clusters.

DO YOU THINK CLUSTERS COME OUT OF THE CRISIS STRONGER THAN BEFORE?

Definitely. The crisis is testing the adaptation skills and resilience of all organisations. Clusters are key agents in resilience. We are identifying disruptions at European level, proposing solutions and coordinating responses. This led to the increase of our presence and recognition at EU level. In the last year, clusters have earned representation at the European Social and Economic Committee, at the Expert Group for Interregional Innovation Investments, and at the EU Industrial Forum. They evidence the growing awareness and prestige of the work of clusters.

WHAT DO YOU THINK CAN CLUSTERS DO TO SUPPORT THE ONGOING RECOVERY PROCESS?

A key task for clusters is to align the priorities of policymakers with the needs and capacities of industry. In turn, clusters create the optimal conditions for critical mass and access to knowledge that SMEs need to engage in innovation processes. These actions are key to national, regional and European recovery plans. We can apply our knowledge and capacity to enable strategies to become economic realities. A risk in recovery and resilience plans is that they only link up with large companies because rapid action is required, and SMEs struggle to make major strategic investments at high speed in unfamiliar areas. Clusters can be facilitators in this process.

LOOKING FURTHER AHEAD, WHAT ROLE DO YOU SEE FOR CLUSTERS IN THE TWIN TRANSITION?

The main challenge for the twin transition is the generation of successful business models combining the green and digital dimensions. This is particularly difficult for SMEs because their resources are more limited than those of large companies. Clusters must guide and support the creation of successful business models by providing expert knowledge and strategic vision for the operational plans of their members. This is a challenging task because clusters need to work with concepts that SMEs are not familiar with, or which are not easy to adopt. To assist members with the twin transition, cluster staff must build capacity internally and train themselves first.



02

Segments of action

For green, digital and resilient ecosystems



EUROPEAN CLUSTER
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Strengthening the European economy through collaboration



The previous sections have highlighted that the twin transition towards a greener and more digital economy, and increasing resilience, will be the three defining trends over the coming years. Acknowledging these trends, the European Expert Group on Clusters developed a set of [recommendations](#) to strengthen the role clusters can play to drive the transition forward. **How can these recommendations translate into actions? What should clusters and cluster managers do?**

The following action segments aim to provide answers to these questions. For each trend, a dedicated segment provides a brief analysis of the role clusters can play. Each of the following segments operationalises some of the Expert Group's recommendations, translating them into tangible actions. The segments highlight strategies, approaches, and tools which clusters can utilise to stay 'ahead of the curve'. Where possible, references to examples and resources are made, inviting cluster managers to read further and dig deeper. **Six success stories complement the segments**, providing real life examples and ideas from clusters across Europe.

The roles which clusters can play, and the actions they can take to drive the three trends forward, are diverse. Thus, the actions suggested in the following segments are not exhaustive; they should provide cluster managers with ideas and invite them to think of strategies to tackle challenges ahead. Acknowledging the diversity of the recommendations and actions, each section accentuates different aspects:

- The segment on **clusters as leaders of the green transition through collaboration** emphasises the importance of joining forces with different stakeholders to develop strategic actions to increase the sustainability of business activities and services.
- The segment on **clusters as accelerators of the digital transition through skills** focuses on the role clusters can play in the digital re-or upskilling of local labour forces.
- The segment on **clusters as builders of resilience through internationalisation** showcases that internationalisation and efforts to strengthen value chains can lead to more resilient ecosystems.



1. Clusters as leaders of the green transition through collaboration

Introduction

Green transition has become a key priority for many cluster organisations, thanks to a combination of their own foresight and awareness of the climate change challenge, driven by companies eager to shift towards green business models, and by policymakers at the local, national, European or global level.

The European cluster community has repeatedly acknowledged its ambition to grow in the field of sustainability. In 2020, participants of the [EU Cluster Conference](#) voted the green transition as one of their main priorities. Several surveys conducted recently at the ECCP¹ similarly show that cluster managers are aware of the importance of improving the sustainability of their cluster operations and services. Thus, as many companies need support to advance towards the green transition, clusters can play a fundamental role.

Advancing the green transition is a top priority for the von der Leyen Commission, as expressed in the [European Green Deal](#). In line with this, the Expert Group highlighted in their [Recommendation Report](#) that clusters 'have the potential to accelerate the twin green and digital 'transition''. Specifically, following the recommendations in this report;

clusters should facilitate stakeholder cooperation, identify opportunities and bring circularity into business processes, contribute to relevant alliances, build capacity through sustainable advisory services, and act as intermediaries to help SMEs gain access to expertise and financing for their greening efforts

During post-pandemic recovery, public and private investment is now kick-starting the economy, generating growth and fostering innovation to reach the ambitious sustainability goals foreseen in the European Green Deal. Over 50% of EU Member States already adopted or are preparing to implement Circular Economy Strategies². As a 2020 [study](#) by TCI Network, Enterprise Europe Network and Cluster Excellence Denmark showed, the "circular transition of SMEs can help reignite the economy" in post-COVID-19 times. Thus, clusters are presented with valuable opportunities to boost their positioning as leaders of the green transition for their organisation and their members.

¹ ECCP Needs Survey (November-December 2020) and Scoping Survey for 3.2 (January 2021)

² <https://circulareconomy.europa.eu/platform/>



The proposed actions in this segment link with the provisions of the [Policy Toolkit](#) published by the ECCP, "Leveraging clusters for a green, digital and resilient EU economy," designed to advise policymakers in this area.

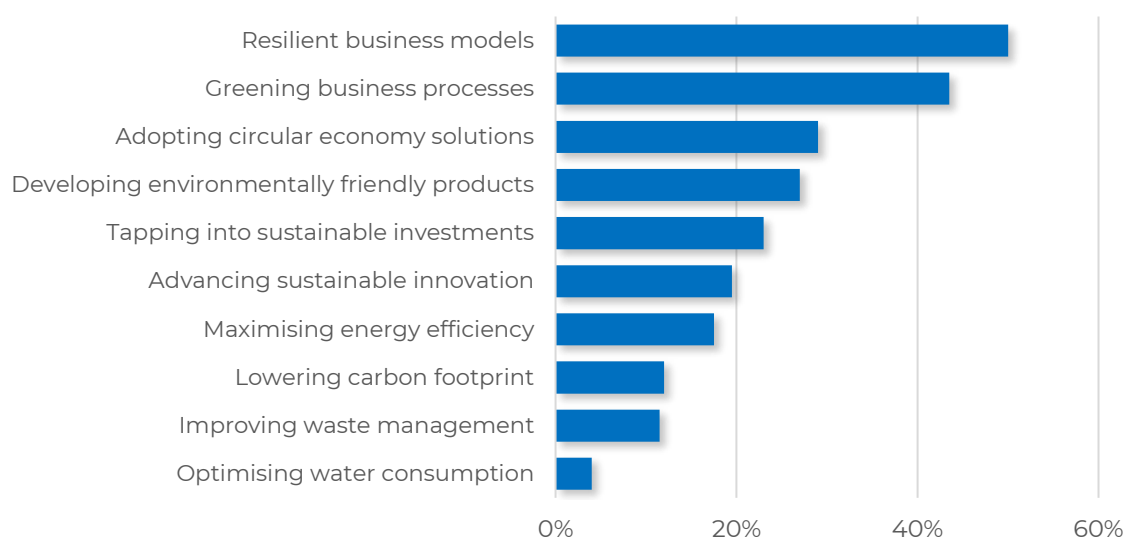
Actions for clusters

Action 1: Identify the sustainability needs in your cluster

Reach out to your cluster members - especially SMEs - and listen to their concerns and challenges for improving the sustainability of their business models, activities and products. In some sectors, the green transition is self evident, while in others companies will need analytical insight to better understand the challenges and possibilities.

This can be achieved through needs **assessment surveys and/or interviews** to identify the most pressing issues. For example, through the [Towards Green Transition Facility](#) of the ECCP, a needs assessment survey was conducted in January 2021 to identify the most relevant areas and types of services to help clusters address the sustainability challenges of their members. A total of 200 responses were received, of which 147 respondents represented a cluster organisation registered at the ECCP. In this way, the Facility was designed considering direct input from its target audience.

Figure 2: Views of clusters on the relevance of advisory or consulting services to support greening efforts of cluster members



Source: [ECCP \(2020\)](#)



Action 2: Play an active intermediary role

Once the key needs/topics are identified, emphasise the intermediary role of the cluster organisation through **connecting** SMEs and large companies, companies and research organisations, and research organisations from different disciplines in your cluster to strengthen mutual learning and collaboration in green transition areas of common interest. Moving forward, keep your members informed on related policy/funding developments and upcoming opportunities at local, national and EU level (e.g. related to the EU Recovery Funds).

Similarly, try to **facilitate SME access to green investment opportunities** from public and private investors, and find ways to help them access the significant amount of new funding opportunities that will let them advance towards sustainability.

Action 3: Integrate sustainability as part of the cluster strategy

Redefining the cluster strategy may be necessary to make the shift towards supporting your cluster members on the path to a new, more sustainable economy.

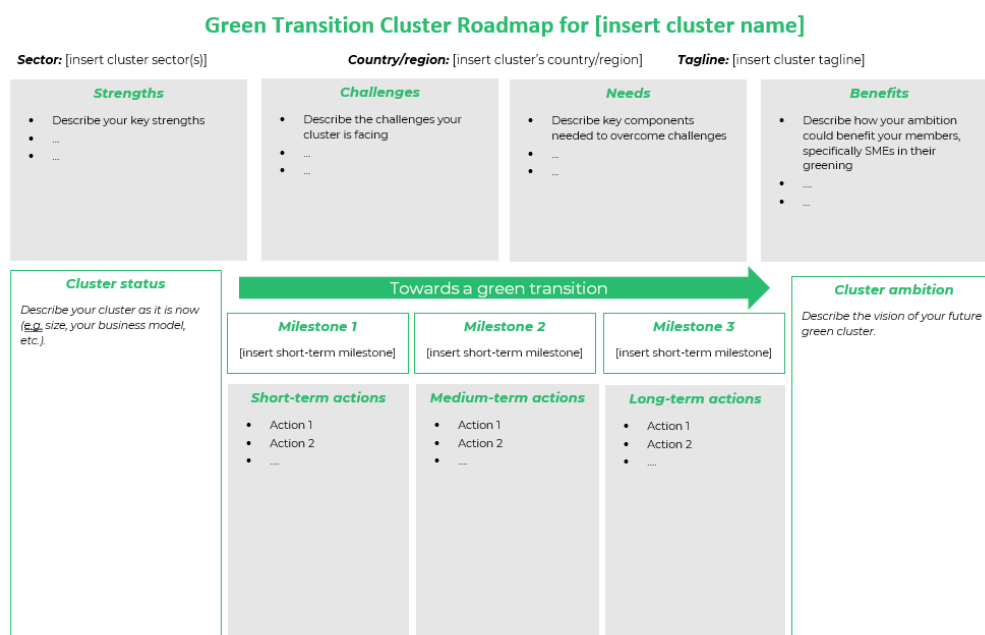
Many clusters are now working hard to make this strategic shift, for instance by developing **green action plans** or integrating **sustainability principles** as part of their overall objectives. Some cluster organisations have established sustainability KPIs to keep track of their progress with their green action plans. For instance, some cluster organisations have started measuring the extent to which their activities are reducing their CO₂ emissions.

Remember to communicate your cluster's strategic shift via a range of communication channels (social media, website, events, publications) to ensure that new potential members see and recognise this additional green value. Effective promotion of the sustainability practices of your cluster can also help society and policymakers notice your work in this area and realise that clusters play an active role in the green transition.

It is also critical to **establish an open, continued dialogue with your cluster members** about your green strategies, with regular feedback loops. This will help you engage them in the process and ensure that you are permanently updated about and responding to the evolving needs of your companies. It will also encourage their buy-in and ongoing support. Do not hesitate to update your strategy as frequently as needed.



Figure 3: Example of a roadmap to help a cluster with the green transition



Source: [ECCP \(2020\)](#)

Action 4: Establish green transition projects in your sector

Moving ahead in the green transition journey requires specific actions. For a start, it is advisable to **identify and collaborate with other clusters in agreeing** on activities and services. For example, strong collaboration between ICT and green tech clusters will accelerate investment in the development and deployment of green digital solutions based on energy efficiency and circular systems.

Subsequently, clusters are encouraged to **develop strategic partnerships to support each other** and jointly participate in future initiatives, such as applications to EU open calls and programmes, joint activities to build partnership with large enterprises, combining forces to access non-EU markets, and learning from each other on mutually reinforcing technologies for green and digital transition.

Similarly, **collaboration with technology solution providers** is a must. The path towards green transition is often based on identifying, accessing and developing technological solutions to facilitate business model transformation in the most efficient way.

Finally, as a cluster organisation you may participate in European green initiatives and green innovation alliances. In this regard, there are useful resources at your disposal such as the [European Circular Economy Stakeholder Platform](#), which enable connection with stakeholders active in this field.



Towards Green Transition Facility: Interview with Ana Felgueiras



The **Towards Green Transition Facility** (TGTF) is a unique ECCP initiative to enable clusters to promote green transition skills amongst their members, through technical advisory support.

25 European clusters were trained and advised on green transition topics to support their cluster members (especially SMEs). Services were tailor-made, focusing on the specific needs of each cluster. This support included one-on-one teaching, guidance documents, direct consultancy, workshops and webinars. Resilient business models, sustainable investment, the circular economy and sustainable innovation were fields in which beneficiaries were advised.

Clusaga, the Galician Food Cluster, is one of the selected clusters. Their director for European projects, Ana Felgueiras, hereby shares their experience with the TGTF.

WHAT IS THE MAIN CHALLENGE THAT CLUSAGA IDENTIFIED REGARDING GREEN TRANSITION FOR ITS MEMBERS?

Our members had challenges related to organisational culture, funding, technological solutions, skills, knowledge and policy framework. For the food sector, a key concern is the reduction and management of food waste. Improving the circularity of their business models and production processes is thus critical.



WHAT ARE THE MOST PRESSING CAPACITY-BUILDING NEEDS OF YOUR CLUSTER ON SUSTAINABILITY?

We recently hired a circularity expert and established cooperation with a local consultancy firm to address the lack of in-house expert knowledge. With them we will add the sustainability and circularity components to the support we provide our members with tailored services on innovation, internationalisation and technological development.

WHAT IS THE MOST INTERESTING THING YOU LEARNT FROM PARTICIPATING IN THE TGTF?

With the TGTF we gained hands-on knowledge on how to systematise the identification, assessment and prioritisation of our companies' needs, the analysis of business processes, and the identification of greening opportunities, which are very important for us.

WHICH GOOD PRACTICES WOULD YOU RECOMMEND TO OTHER CLUSTERS WORKING ON IMPROVING THE SUSTAINABILITY OF THEIR ACTIVITIES AND SERVICES?

Be prepared for a long process. It is important that sustainability is integrated into the cluster's mission and vision, and into the strategies and action plans to achieve them. Involve your members and ensure that the cluster's actions respond to your companies' needs and expectations. Seek expert advice, like the one we got from our TGTF advisor or from external consultancy firms, to systematise dispersed knowledge, and guide you. Finally, give visibility to your and your companies' achievements.

HOW DO YOU THINK THE EU SYSTEM COULD FURTHER SUPPORT EUROPEAN CLUSTERS WITH THE GREEN TRANSITION?

European policies, strategies and programmes must align with clusters' needs, resources and ways of working. European institutions should facilitate fora for knowledge sharing among clusters as well as hands-on training for us, such as that provided at the TGTF. Last but not least, appropriate financial support is indispensable



Action 5: Upskill your members – and cluster staff

A traditional activity in many cluster organisations is re- and upskilling. When it comes to the green transition, this activity is very relevant. Here are some suggestions for specific actions.

First, you may **contact the knowledge institutions** in your cluster for advice on green transition and showcasing its benefits. Discuss with them how new training programmes could be developed, and how they could best match the needs of your companies. In parallel, it may also be useful to liaise with green tech firms or consultants to **organise on-the-job training, the temporary exchange of workers, coaching, mentoring, and job shadowing**. These methods can yield new insights into technology solutions and business models, and help shift mindsets among companies more hesitant to make the green transition.

Additionally, the cluster may engage in public initiatives that bridge the gap between knowledge and companies, for the upskilling of your cluster members, especially SMEs. For instance, the [European Resource Efficiency Knowledge \(EREK\) Centre](#) provides services for both businesses and business support organisations. Among others, they offer a [self-assessment tool on sustainability](#) to allow SMEs assess their resource efficiency and receive suggestions to improve. Another example is the advisory service offered by [Enterprise Europe Network](#), through which SMEs receive support to develop a 'sustainability checklist' and improve business plans.

Re- and upskilling cluster members is a very important outcome. However, to make the most efficient shift, **the cluster secretariat needs to be equipped with the right competences**. In this sense, the ECCP offers free-of-charge access to [technical assistance services, discussion forums](#) for interacting with the cluster community, a mapping tool to find [green clusters](#) and [green partnerships, green news](#), and information on new [calls and funding opportunities](#).

Action 6: Be part of relevant green conferences and events

No single cluster organisation has all the answers regarding the green transition. Nevertheless, as an interconnected community, clusters can easily transfer their lessons learned and share experience with other clusters. This kind of knowledge sharing can help clusters to understand why sustainability is so important and how it impacts the business world. Furthermore, active involvement in green conferences and events is one dimension of a sustainable stance. Examples of **green policy events** for clusters are regularly advertised on the ECCP website. Take these opportunities to participate actively and expand your network.



Supporting the 'greening' of your members' business models: Interview with Kim Hjerrild

Kim Hjerrild is the Head of Circular Economy at the [Lifestyle & Design cluster](#) (Denmark). He leads a team dedicated to the implementation of circular and sustainable business models for SMEs in the Danish fashion, furniture and design industries. The cluster runs the national programme 'Grøn Cirkulær Omstilling' (Green Circular Transition).



WHY DID YOUR CLUSTER DECIDE TO ESTABLISH A CIRCULAR ECONOMY PROGRAMME?

Because it is vital for the fashion and furniture industries to recognise that the present linear model of production and consumption is not sustainable. Changing companies' business models takes time and some companies are large corporations with internationalised value chains. We want to engage a larger part of the Danish fashion industry in this programme, because soon companies will be required to have circular economy strategies to operate. The earlier they start the journey, the better to maintain their competitiveness.

HOW DOES THE CIRCULAR ECONOMY PROGRAMME SUPPORT CLUSTER MEMBERS?

We organise exhibitions to showcase good practices, we run educational programmes and we offer development projects where we match companies with expert advisors on the circular economy. We help them communicate, reach international markets, and become regenerative, thus strengthening their value position. In 2012 we started [ReThink Business](#) programmes with start-ups, which succeeded because they demonstrated that you can be more sustainable and circular as a fashion brand using alternative fibres. For example, [Copenhagen Cartel](#) is making lingerie out of plastics from the ocean.

WHAT CAN CLUSTERS DO TO SUPPORT SMEs TO 'GREEN' THEIR BUSINESS MODEL?

We should focus on competence and procurement policies. Start by sharing knowledge about the circular economy and different models of transition. Then, help SMEs in concrete ways such as financial aid and expert advisory support so they do not lose customers nor stretch their organisation. The public sector should ensure that tenders have clear criteria for circularity and are accessible for SMEs, reducing administrative burden, e.g. documentation requirements.

COULD YOU SHARE A SUCCESSFUL EXAMPLE OF A CLUSTER MEMBER THAT TRANSFORMED ITS BUSINESS MODEL INTO A GREENER ONE OVER THE LAST YEAR?

After joining the Circular Economy programme, the footwear company [Sika](#) developed a plan with green objectives for the coming years. This is a notable transformation for a company spanning four generations of the same family. Another success story is [Kentaur](#), a company that produces clothing and bed linen for hospitals, which recently established a strategic partnership with their customers to renew their used textiles. More success stories [here](#).

WHICH GOOD PRACTICES WOULD YOU RECOMMEND TO OTHER CLUSTERS WORKING ON IMPROVING THE SUSTAINABILITY OF THEIR ACTIVITIES AND SERVICES?

- 1. Stay close to the industries you collaborate with. Set up a model for informal consultation so you always know how the business situation is.*
- 2. Build up strong relationships with advisors in the field. Make consulting firms your allies because they can have valuable information to help you.*
- 3. Maintain your own network that supplies you with knowledge and inspiration, at national and international level*



Additional sources

- EREK report (2019) "The implementation of the circular economy in Europe: Perspectives of EU industry cluster managers and regional policymakers". Available at: clustercollaboration.eu/news/erek-report-implementation-circular-economy-europe-perspectives-eu-industry
- European Cluster Collaboration Platform (2021) "Towards Green Transition Facility". Available at: <https://clustercollaboration.eu/in-focus/green/towards-green-transition-facility>
- European Cluster Collaboration Platform (2021) "Document library". Available at: <https://clustercollaboration.eu/knowledge-sharing/publications/document-library>
- European Commission (2021) "Delivering the European Green Deal". Available at: ec.europa.eu/info/publications/delivering-european-green-deal_en



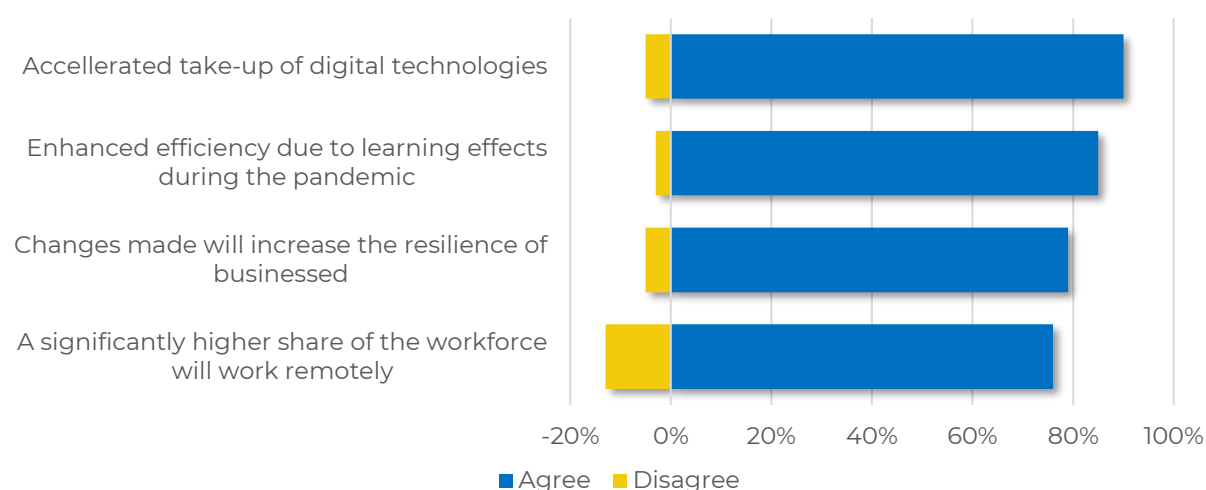


2. Clusters as accelerators of the digital transition through skills

Introduction

Digitalisation is here to stay. The global pandemic has increased the speed and scope of the digital transition. The European Central Bank performed an [ad hoc survey with companies](#) in the Euro Area in 2020, exploring their expectations with regard to the long-term effects of the pandemic. There was strong agreement that the pandemic resulted in accelerated company digitalisation (see figure below).

Figure 4: Level of agreement with long-term impacts of the pandemic on companies in Euro Area



Source: ECB (2020)

The digital transition affects all dimensions of our lives. Therefore, it is important to leave no one behind. For one, this means that businesses should understand the benefits and feel the need to digitise. However, it also means that people need to have the right skills and knowledge to push the digital transition forward.

Digital skills are a key enabler, and skills gaps remain a barrier to further digitalisation across the EU. While “digital natives”, particularly young people, have already – and are increasingly – joining the labour force, they do not always possess sector-specific digital skills and the contextual knowledge needed to effectively leverage their advantage. More experienced employees often find it more challenging to adjust and learn how to develop and use digital skills. While larger firms in urban areas find it easier to attract highly skilled workers, SMEs and companies in rural areas struggle to attract the workforce they need to pursue their digital transition.



Under the [Digital Decade](#), the European Commission prioritises actions and measures to enhance the digitalisation of economies and societies within the next ten years. As part of this programme, the European Commission actively delivers policies to support the upskilling and reskilling of the European labour force. For example, the Digital Compass specifies that within the next 10 years, at least 80% of population should have basic digital skills that a minimum of 20 million ICT specialists should work in the EU.³ The comprehensive [European Skills Agenda](#) defines actions to promote lifelong learning and developing the right skills for jobs. The promotion and development of digital skills is as a horizontal priority, across all sectors and all demographics.

For example, a [recent survey](#) by the public development banks of the respective countries across SMEs from France, Germany, Poland, Spain and the United Kingdom found that even though three out of four SMEs consider digitalisation to be a priority, the skills of their employees are an obstacle. After security concerns, insufficient employee digital skills are cited as second biggest obstacle, with 27% of the companies surveyed indicating that this is a very severe or major obstacle. Almost half (46%) of the SMEs taking part in the survey indicated that a lack of suitable applicants makes it difficult to hire employees with advanced IT skills.

Clusters can contribute to the digital transformation, by providing information, advice, and support to their local ecosystems. The European Expert Group on Clusters developed a number of [recommendations](#) on how clusters can help to digitalise the economy, and stress the role that clusters can play in re- and upskilling the local labour force. The experts recommend, “mobilis[ing] clusters to participate in digital and green skills initiatives.”

Given their role as focal point in their ecosystems, clusters are ideally placed to identify skill needs of businesses horizontally, and identify actors within or outside the ecosystem that either bring these skills or who are able to develop these skills.

Clusters have the potential to connect these actors with each other, and to support business in their strategies to attract and retain skilled workers.

³ https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/europes-digital-decade-digital-targets-2030_en.





Actions for clusters

Clusters can take action to support their members in improving their digital skills. Yet, before jumping to action, clusters should reflect on what their role and contribution can be. As several speakers at the [ECCP capacity building webinar on skills](#) mentioned, clusters need to think strategically when tackling upskilling – whether internally or externally. The following actions can be a starting point for clusters to reflect on the potential and their role in support for upskilling the labour forces of their member organisations.

Action 1: Map demand for and the supply of digital skills in your ecosystem

To provide adequate support, you should aim to fully understand the situation in their ecosystems first. There are two dimensions to map. The first dimension entails the **demand for digital skills among companies**, and the second dimension entails the **supply of skills**.

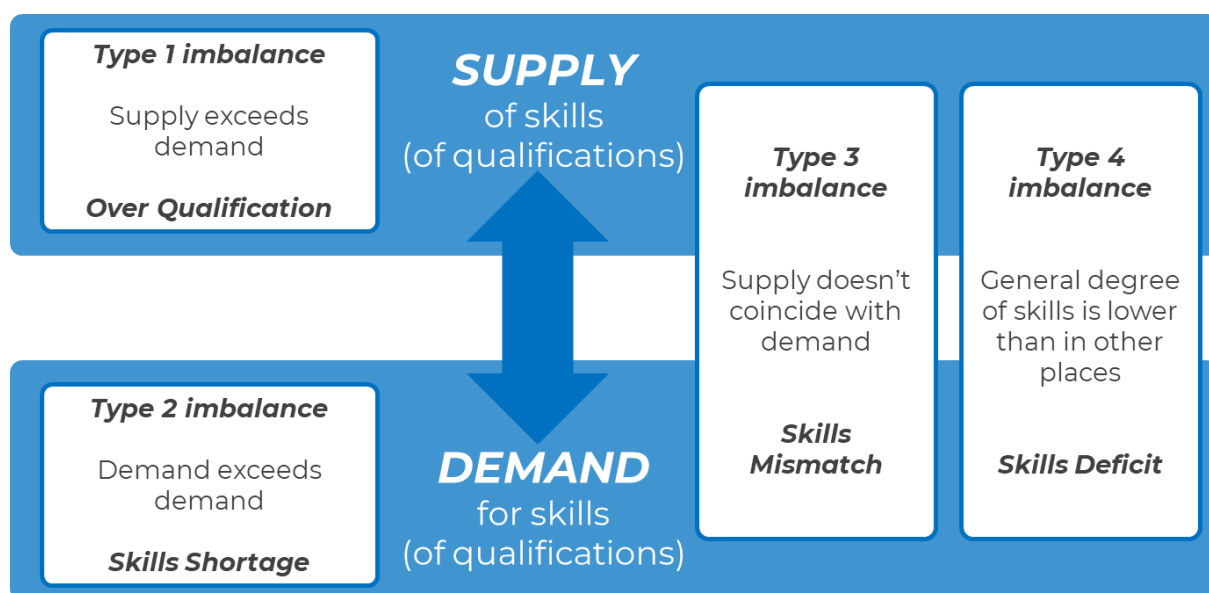
Under the first dimension, clusters should aim to understand what type of digital skills businesses need to pursue their digitalisation strategies. Skills in demand will differ, for example depending on the sector or the value chains under the influence of the cluster. Secondly, and to add real value, clusters should aim to **build a clear picture of the supply side of digital skills**. Regional employment agencies can be a good starting point to learn more about the regional labour market situation, and the skillsets of people entering the labour market. At the same time, businesses themselves will also have a clear picture of the skill levels of their current employees and potential digital skill and knowledge gaps. Ideally, businesses make already **use of skills matrices to monitor** staff development.

For the analysis, you can for example rely on a [model of four types of skill imbalance](#). Specifically developed for supporting skills for industry, the model can also be applied to a wider set of value chains and ecosystems. The four types are visualised in the figure below. In many cases, clusters will observe a type 2 or type 3 imbalance for digital skills, which suggests that further actions can be taken by clusters to support efforts for re- and upskilling.





Figure 5: Different types of skills imbalance



Source: ECCP (2021)

In many instances, clusters have an in-depth understanding of their ecosystems and the specific needs of their members, in terms of the digital skills required. Yet it can be helpful to reach out to businesses again to validate assumptions and map needs and demand consistently (especially if clusters have not provided skills-related services before). For example, **regular exchanges, interviews, or a short survey** can support these activities.

Action 2: Continue to upgrade digital skills internally

Clusters need to understand digital skills before assisting their members to re- or upskill their employees. Before the COVID-19 crisis (and as accelerated by it), clusters actively reflected on and built digital skills up themselves. However, this is a continual process. It will be important to understand the full potential of your digital skills and services, and to feel comfortable enough to provide related support to your ecosystem. During the pandemic, clusters were already forced to rethink their service offers and step up their digital skills to continue supporting members during lockdowns and while social distancing measures were in place.



Case study: A needs-based approach to supporting the digital upskilling of the labour force

The Transilvania IT Cluster considers itself working 'at the intersection between entrepreneurship, researchers, innovators, and public administration'. It supports its more than 115 member companies from the IT and technology sector by providing – among others – services related to capacity building, innovation, and matchmaking. From the beginning, capacity building support to enhance the digital skills of the employees of its member organisations has been a key focus area for Transilvania IT Cluster.



As its member organisations come from the IT and technology sectors, the cluster takes a two-tiered approach, combining training on digital skills (including e.g. on programming languages) with training on soft skills that help the employees of member companies to communicate effectively on technologies and digital solutions with clients from less tech-savvy sectors. To co-finance training for its member companies, the cluster monitors national initiatives and increasingly applies to EU programmes for funding.

The **training offer is needs-based**, matching the interests and demands of the cluster members. To better understand the needs of its members, the cluster resorts to four key channels of information. An annual questionnaire with all members explores their training needs. Monthly meetings by an HR meeting working group (with HR representatives from all member companies) and regular meetings with the account managers of the companies are two more channels through which the cluster staff learns about potential training needs. Finally, regular exchange and ad hoc discussions at events organised by the cluster are yet another important source of information to better understand the current needs of the companies. Since training is offered on a needs-basis, it does not occur regularly. Yet, over time, the cluster has compiled the materials, books, and a database of training providers and provides a **digital training library** that member organisations can make use of.

When asked about **advice** to other clusters that want to support the digital upskilling of their member organisations, **Bianca Muntean**, Cluster Manager of Transilvania IT Cluster, stresses two jobs that clusters should fulfil. Firstly, cluster managers need to **promote digital upskilling** among member organisations and convince them of the benefits of digitalisation. Bianca admits that this is easier in a cluster of IT and tech companies than in some other sectors.

To be convincing and understand the needs for and potential of digitalisation, Bianca considers an in-depth understanding of sector-specific market trends and developments to be key. Secondly, cluster managers should **identify relevant stakeholders**. Apart from member organisations, these can be other clusters to create synergies, but also training providers that can deliver towards the needs of the member companies. The Transilvania IT Cluster has mapped well-regarded training providers and prefers to **work with practitioners**, as they are able to provide the skills and hands-on training companies are looking for. Trainers can also come from member companies themselves. At the IT Cluster, a **'train the trainer'** programme helps these practitioners and experts to provide training sessions to other companies in the cluster.



Many of the typical activities of clusters, including **matchmaking events, conferences, cluster exchanges** and other services, can be (and have been) offered virtually. As restrictions are lifted in the future, you can critically reflect on which of these services they should continue to offer virtually, or if other services have the potential for digitalisation. Based on this assessment, you will have to understand if they already have the necessary skills to implement this digital transformation, or if in-house upskilling is needed. The tips, tricks, and [case studies developed by Cluster Excellence Denmark](#) - which also contain a **SWOT analysis of digitalisation of cluster services** – are a good starting point for reflections on the digitalisation of cluster services.

Action 3: Identify the need for action and partners for collaboration

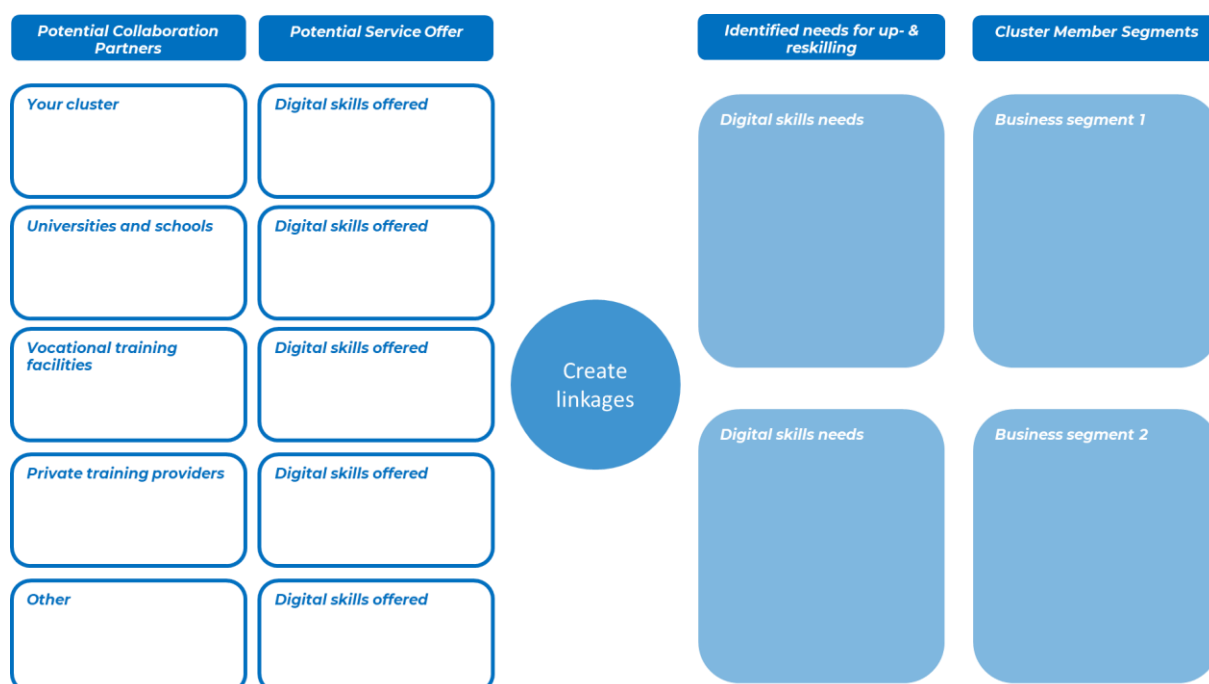
Once you have a clear understanding of the imbalance in skills, you can try to understand if your cluster can appropriately provide further support (if this is the case, see Action 4). As research suggests, some businesses find it easier to attract employees with the right skill set than others. In many instances, however, clusters will operate in ecosystems with SMEs and companies that struggle to upskill their employees themselves or to receive applications from people with the right set of digital skills. However, clusters may find it impractical to offer re- and upskilling services themselves (relying solely on in-house staff), especially if technical skills are required. In such cases, they can function as intermediaries to match businesses with skilled potential employees or actors that can provide the upskilling of the workforce. With regard to the latter, clusters can **reach out to training providers and knowledge institutions**. This includes, but is not limited to, universities and specialised schools, vocational training facilities and private training providers.

It will be helpful to **map the potential service offer** of the different prospective collaboration partners consistently. These can then be linked to identified skill needs of your cluster members, to assess which potential collaboration partners are the most promising. Optimal training or skills support approaches will differ, depending on your sectoral focus and ecosystem. However, the template below can be considered an inspiration to structure the relevant information, and so to map collaboration partners against the needs of member organisations.





Figure 6: Template for inspiration for a structured mapping of collaboration partners



Source: own elaboration

If you are the manager of a cluster organisation, it is sensible to look for economies of scale, pooling and representing the needs and demands of multiple businesses when contacting potential partners for collaboration. As a [discussion paper for the ECCP](#) suggests, clusters can create the critical mass necessary to incentivise collaboration or initiate sufficient demand for new service offers through linking different actors. Where [Digital innovation Hubs](#) exist, there is potential for close collaboration between hubs and clusters.

Action 4: Develop skills-related cluster services

Given that the digital transformation of the economy will continue and accelerate over the coming years, businesses will increasingly feel the pressure or urge to digitalise. Consequently, they will search for upskilling their current employees and attracting new workers with the right digital skillset.



As noted above, clusters can also think about **providing re- and upskilling services themselves**. Frequently, clusters have knowledgeable team members that can develop and offer advice or training services. As clusters are very familiar with their ecosystems and the needs of their members, these services can be highly tailored to the actual needs and build on good practise examples from the region.




For clusters, developing skills-related services offers the opportunity to reflect on your value proposition and to assess if you are in a position to provide up- or reskilling services to your members. These services might, for example, take the form of **masterclasses or training offers** that are tailored to the needs of the cluster members. To ensure that the services are sufficiently tailored and add real value, you should critically reflect on what your cluster can offer, and if this meets the requirements and needs of businesses. A useful tool for this assessment could be a business model canvas, such as the one below tailored for the [needs of clusters](#) presented in the figure below.

Figure 7: Example for a template to assess the value proposition of new skills-related services

The Cluster Member Card

 <p>NAME:</p> <p>AGE:</p> <p>POSITION:</p> <p>COMPANY:</p> <p>MEMBER TYPE:</p> <p>MEMBER ROLE:</p> <p><small>(Decision maker, influencer, peer, recommender, mission, saboteur, other)</small></p>	<p>CLUSTER'S SERVICE What does the innovation cluster offer this member?</p>	<p>MEMBER JOBS-TO-BE-DONE What is the job(s) the member needs done? This can be strategic, financial, learning, network, market access, partner or more?</p>	<p>MEMBER GAINS What are the positive outcomes the member wants to see? What does a fantastic innovation cluster look like to them?</p>
<p>CLUSTER VALUE PROPOSITION What value do you bring to the member? Why is this relevant to them?</p>	<p>MEMBER AMBITIONS What is the member dreaming of? What are their personal and/or professional ambitions?</p>	<p>MEMBER PAIN POINTS What are the biggest problems and pains the member has? How can these be solved by the innovation cluster?</p>	
<p>PERFECT FIT What value do you bring to the member? Why is this relevant to them?</p>		<p>INDUSTRY LEVEL CHALLENGES What industry level challenges does this member bring to the table?</p>	

Source: Clusters of Change (2020)

Depending on the type of digital skills gap(s) in the ecosystem, your cluster can consider either **developing and offering training services** or **identifying suitable collaboration partners** (see Action 3). Especially if the digital skills required in the ecosystem are more specific, it might be helpful to **reach out to collaboration partners** to ensure the service offers real value. The development of skill-related services may also be an opportunity to open a new stream of financing, as services could be designed as paid services. This is exceedingly feasible in cases where clusters collaborate with other training providers or where many resources (time, expertise) are required to provide the services.



Matchmaking between companies and new talent: Interview with Manuella Portier

Manuella Portier is the Director of European Affairs at [Cap Digital](#). With more than 1,000 members, it is the largest cluster in Europe. Cap Digital actively supports the digital and green transformation of its members. The cluster offers a wide range of services, ranging from R&D support and coaching to innovation and intelligence.



HOW DO YOU SUPPORT YOUR MEMBERS TO ENHANCE THEIR SKILLS AND BUILD UP CAPACITY?

One of our priorities is creating access to talent for our members. This is a strong need in our community now. For example, our members are invited to use Cap Digital's JobBoard, on which we relay and aggregate the job offers posted by our members. Since 2014, we have also organised the "How I Met My Start-Up" Day, a yearly programme. Start-ups from Paris and the surrounding region open their doors to students, allowing them to discover the inside life of a start-up. Students learn about job opportunities and the technologies used. They get inspired and encouraged to choose a career in the digital and innovation sector.

HOW HAS YOUR CLUSTER SUPPORTED ITS MEMBERS TO ENHANCE DIGITAL SKILLS SO FAR?

From 2016 to 2019, Cap Digital was equipped with a FabLab factory with state-of-the-art technical equipment (3D printers, laser cutting, workbench, electronic prototyping benches, graphic station, 4K screen, etc.). In 2018 and 2019, we launched the Cap Digital Campus, a programme of 15 training sessions built around three critical topics: culture of innovation, AI and data for mid and senior managers. In these sessions, participants could learn from experienced entrepreneurs in the most innovative fields of our digital era (chatbots, blockchains, virtual reality etc.). We realised that the market was not mature enough to develop constant sales for our Fablab factory, and the professional training market is very competitive and complex. We took the strategic choice not to develop these activities as long as there was no more dedicated place to operate them.

Apart from "hard skills", we also dedicate efforts to raising awareness among companies and employees for new jobs. For example, we organised EdFab Meetup, a series of monthly meetups where young professionals can learn from and meet senior professionals who pitch about emerging job opportunities.

DO YOU HAVE RECOMMENDATIONS FOR OTHER CLUSTER MANAGERS WHO WANT TO DEVELOP DIGITAL SERVICES FOR THEIR MEMBERS?

Before initiating any new service, cluster managers should check if there is a strong need and demand. For example, does the service concern most of their members, or just a few? Cluster managers should test services before implementing them broadly. They should be very careful about the business model behind these services. How to make it sustainable? Who will pay, and how much are they willing to pay? If clusters are looking for suitable trainers, they should also investigate engaging start-ups. Promoting people from start-ups as trainers rather than professional trainers is – in our point of view – an interesting, innovative, and promising alternative.

LOOKING AHEAD, WHAT ARE YOUR NEXT STEPS?

Currently, we are coordinating a proposal for a European Digital Innovation Hub (EDIH), called SUMITY, to reach out to companies which are not digitalised yet, and to provide them with the support they need.



Action 5: Showcase results to members to increase demand for services and digitalisation

Research - for instance from the European Investment Bank - suggests that many businesses, especially smaller ones, are still sceptical of or cannot transform digitally. Others are not aware of the potential offered by digital solutions. Therefore, clusters should **use the success stories** in their ecosystems to promote the benefits and rewards of investing in digital skills.

Showcasing good practice examples and case studies of successful upskilling can incentivise other companies to learn more about the benefits of digitalisation. Businesses can be inspired to reflect on opportunities to increase their capacity to remain competitive, or to gain a competitive edge ahead of other companies in the same or different ecosystems. Rising interest will, in turn, help to increase demand for skills-related services and associated support from the cluster.

Additional sources

- ECA-Webinar (2021) "Reskilling and upskilling for the future". Available at: <https://clustercollaboration.eu/content/reskilling-and-upskilling-future>
- ECCP Webinar (2021): "Key skills for cluster managers". Available at: <https://clustercollaboration.eu/webinars/eccp-capacity-building-webinar-key-skills-cluster-managers>
- European Commission (2021) "Updated Industrial Strategy". Available at: https://ec.europa.eu/info/sites/default/files/communication-industrial-strategy-update-2020_en.pdf
- European Union (2020) "Pact for Skills – the Charter". Available at: ec.europa.eu/social/main.jsp?catId=1517&langId=en
- Skills4industry High-Level Conference (2021) Recordings available via: <https://skills4industry.eu/skills-industry>





3. Clusters as builders of resilience through internationalisation

Introduction

Throughout the pandemic, cluster organisations have played a key role in helping their members to build resilience in their respective ecosystems. Resilience can be enhanced in many ways: from gathering intelligence on changing value chains in order to adapt; to reinforcing social cohesion and shared values; to strengthening human capital through re- and upskilling; to building critical mass through cross sectoral, interdisciplinary, and transnational cluster collaboration.

In the green and digital segments, this guide provided suggestions for key actions to be undertaken by clusters. Tackling the need for **up- and reskilling** among cluster members, functioning as **linchpins and facilitator** within and beyond their ecosystems, are critical actions clusters can take to build more resilience.

Another key activity for many clusters has been to **identify possible supply chain disruptions** and help mobilise resources and join forces to overcome them. In some cases, disruption has taken place at the local, regional, or national level. However, disruptions are more frequently international in scope. While internationalisation might not be seen as the most intuitive strategy for building resilience, it has proven to be a key instrument for SMEs to grow and increase their competitiveness. Beyond opening new business opportunities and markets for their members;

clusters can also see internationalisation as an opportunity to strengthen and diversify value chains to be prepared for disruptions in the future. Diversification reduces risks in supply chain shocks and geostrategic dependencies.

The pandemic has changed the dynamics around internationalisation. In almost all sectors, COVID-19 disrupted global value chains. The pandemic exposed weaknesses in “just in time” supply chains, and exposed the vulnerability of value chains which lack built-in redundancies or alternative procurement arrangements. Clusters can promote cross-sectoral and interdisciplinary collaboration to strengthen value chains. Yet, building distributed the recent recovery of the world economy suggests that also global supply chains have not - and will not - disappear, as building them is time-consuming and the fundamental rules of competitiveness still applies; the market will always seek the most cost-effective solution. With the new [*Global Gateway*](#) initiative, the European Commission together with a range of stakeholders aims to strengthen global collaboration on digital and green transition working together with the private sector and SMEs.

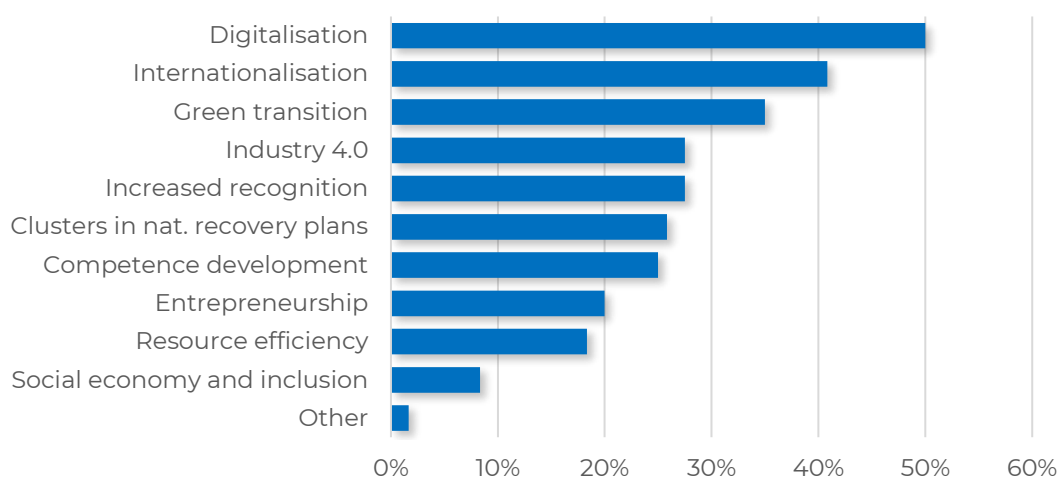


Before the pandemic, it was clear that knowledge, skills, and capital became increasingly global. Today, this is more accessible for many cluster organisations and their SMEs due to the massive digital push. With many new digital channels, the world is truly open for business and collaboration. An overview of organisations and tools supporting European SMEs internationalisation is available in [this portal](#).

Extending upstream and downstream verticals to international suppliers or customers can be challenging for SMEs which operate primarily in regional or national markets. They often do not have the resources, skills and time needed to go global, or lack contacts and connections. Foreign markets are complex and increasingly heterogeneous, and businesses, and especially smaller ones, can be constrained by administrative capacity, requiring support to overcome inertia or red tape. For an overview on tax, trade barriers and product requirements in 120 countries around the world, you may find the [Access to Markets](#) tool useful. Cluster organisations can play a key role in coaching SMEs to internationalise, organising study tours or co-host matchmaking events. Here, cluster organisations can accelerate SMEs to access global markets and new, international value chains.

Internationalisation is high up on the agenda for cluster organisations, as one of the top three topics coming out of a [needs survey](#) among ECCP clusters in late 2020. While many cluster organisations have multiple international members and a range of international activities, cluster organisations also have the potential to consider how they can support international engagement.

Figure 8: Key strategic priorities among cluster managers



Source: ECCP (2021)

Over the years, the European Commission has offered supporting activities to cluster organisations. These include the [ECCP](#), the most important hub for cluster organisations to connect with partners from EU countries and beyond, with over



1,200 cluster organisations registered for networking and matchmaking and organising international cluster matchmaking events (both online and physical) ECCP which are open to clusters and their SME members.⁴

Actions for clusters

Action 1: Make internationalisation strategic

Before the pandemic, it was not always easy to convince stakeholders to go international. Sometimes, the move towards an international strategy lacked support from the board of the cluster or other stakeholders working on internationalisation. Overcoming the pandemic offers a new chance to undertake strategic re-orientation and to build a strategy to match unique needs in the sector.

Disruption to global value chains have underlined how even very local clusters are connected at the international scale. Many cluster organisations have played a key role in tackling this disruption. In this context, an internationalisation strategy helps save resources and make better choices. As there are many opportunities and markets to consider, an internationalisation strategy will help navigate in an easier and goal-oriented way.

As a cluster organisation, your cluster internationalisation strategy should be aligned with the overall growth and development strategy of your cluster. For many clusters, internationalisation is fairly new, or this aspect remains less integrated into overall strategy. Therefore, ensuring that internationalisation follows the same general objectives for your cluster is very important. If clusters aim to become global leaders in their domain, it is crucial to **develop strategic objectives for creating global connections**. For example, if the focus of your cluster is on raising innovation in their sector, your internationalisation strategy needs to be aligned with this objective.

Christian Ketels, Principal Associate at Harvard Business School, suggested in an ECCP capacity building [webinar](#) that clusters can develop an internationalisation strategy via three distinct steps: diagnostics, choice, and action. Diagnostics acknowledge that each cluster and its challenges are unique. Therefore, clusters should first understand what needs and capabilities they have to identify clear objectives. Based on this diagnostic, clusters are better positioned to make deliberate choices about what actions to take to achieve these objectives.

⁴ In addition, the EU also supports market collaboration by signing agreements with core global markets such as Canada, Taiwan, Korea and Singapore.



Figure 9: Steps in defining an international strategy



Source: Christian Ketels during ECCP capacity building webinar (2021)

Action 2: Analyse your cluster and core markets

To make internationalisation successful – and to feed into the internationalisation strategy - an important step is to **analyse the cluster**.

In this sense, three core dimensions are relevant to consider:

- What is your market and cluster context? What specific value chain disruptions should you consider?
- What are the international ambitions and expectations of your members?
- What are the existing capabilities and resources of your cluster organisation?

There is a range of tools available to gather this information. For instance, **checking public procurement data or market and technology reports, value chain analysis, market trends or SWOT analyses** can help gather insights on the market and where there are potential risks in the value chains.

Many data sources can also be considered. Some information might come from your cluster members and partners inside and outside the cluster. Many cluster organisations have customer relationship management systems that might help collate and analyse data to gain deeper insights into the market and the cluster context. If this type of analysis is new for your clusters, be prepared to acknowledge that the analysis is likely to be imperfect at first. Yet, the more you seek to understand the context and markets in which your cluster operates, the more precise the analysis will become. In addition, clusters can reach out to get support.

Feeding this kind of unique market insights and analysis will help to position the internationalisation of your clusters as something special, and not something that overlaps or competes in a detrimental manner with other players working on internationalisation. The analysis can be used to support a strategy development process, through which your cluster members and the cluster board can be consulted to make the strategy inclusive and consensual for everyone in the ecosystem.



Case study: Hamburg Aviation – using an international network compass as a strategic guide

Using international partners as the key source for tackling global challenges is the new strategic approach taken by [Hamburg Aviation](#). Instead of the more classical approach based on selected target regions, Hamburg Aviation now follows a more dynamic strategic model in its international work. The focus of the cluster is the aviation industry in the metropolitan region of Hamburg. Over 300 companies are active in the cluster, and together they cover the entire value chain of aviation.



Since 2016, Hamburg Aviation has navigated its international activities by using an international strategy. This method has been very successful in bringing more SMEs into the international scene, with 42% of the SME members active internationally. Moreover, Hamburg Aviation has been running the global European Aviation Cluster Platform (EACP) for more than 10 years, having grown the network to 45 clusters in 18 countries. EACP provides Hamburg Aviation with a platform to grow closer to European and international partners, share best practices and collaborate on EU calls. However, as the world is becoming more digitalised and multipolar, there has been ongoing pressure for faster adaption to changing political and economic conditions. This makes predictions and planning less effective.

Therefore, in 2019 Hamburg Aviation decided to shift from a classic approach with target regions to a more dynamic internationalisation strategy, regularly readjusting its strategic compass. In this, a network of international actors plays a much more prominent role since matching partners to new problems and projects can be achieved more quickly. When choosing the right partners, a consultation process as well as considering the perspectives of different stakeholders (e.g. companies, research centres, public entities) are helpful.

With vast experience in intense international activities, the Head of Internationalisation, Dr. Christian Scherhag, has some key recommendations for other cluster managers:

“Every industry faces vast global challenges (in particular the green transition). Very often, solutions to these global challenges can only be found with international partners, as your own cluster lacks specific indispensable competences. Thus, international partners create win-win situations: finding the competences needed and exploring new international markets jointly. Our new network compass has been useful for adapting to a more flexible strategic model so we can use the input from our partners much more proactively.”

After more than 10 years of experience in internationalisation, Dr. Christian Scherhag also underlines other key success factors:

- 1) Internationalisation is time consuming, so be aware of this and put in time to make the investment.
- 2) Internationalisation is a learning process, therefore evaluate constantly (at least every 6 months) and change things that do not work.
- 3) People matter, both internally with a strong team working on this and externally with people you trust in your partner organisations.

The new internationalisation strategy is reviewed quarterly and revised where necessary. It serves as a building block for the overarching 2019 Hamburg Aviation Strategy.





Action 3: Define, redefine, or develop new international services

Cluster organisations should consider many internationalisation support activities, such as export and study tours, innovation projects, the provision of **common test beds, demonstration projects, matchmaking events or branding initiatives**.

Multiple cluster organisations have maintained and/or strengthened their international activities during the pandemic, offering a range of online services. Examples include online matchmaking, meet-the-buyer online events, online investment conferences and online co-creation fora. Many of these activities have become a strong complement to more traditional internationalisation activities.

To best support cluster member SMEs, planning for a sequence of activities may be the most promising way forward. Offering coaching and training as a starting point can also help to assess SME readiness and identify areas for business improvement before going international. Services such as study tours can help to identify broader opportunities and then, in the end, to put in place an innovation project.

In many cases these activities have helped to alleviate disruption in value chains. For example, by helping the cluster members to explore other options on productions – such as textile companies exploring new options for textile production in nearby countries –, or by helping to overcome disruptions in the logistics sector, offering new ways of transportation and helping companies to connect digitally.

Action 4: Build new partnerships

One of the core functions of a cluster organisation is to facilitate and manage a variety of stakeholders. This is the case at the national level, and with international activities. To execute international activities, it is important to **collaborate with a range of different players that can offer specific services for internationalisation**.

Many clusters have, over the years, initiated international collaboration with other clusters (or cluster-like) organisations. In such cases, collaboration can act as a platform for building trust, relations, developing common projects and helping SMEs and large businesses alike to make a better match to potential collaborative partners abroad. The [European Strategic Cluster Partnerships](#) have been a very useful tool to initiate international collaboration. For example, 'European Strategic Cluster Partnerships-Going International' (ESCP-4i) enables cooperative working between clusters to develop and implement joint internationalisation strategies for the benefit of their SME members.



Furthermore, you may find it valuable to engage with other actors that can assist with internationalisation. For instance, [Enterprise Europe Network](#) may help to **organise matchmaking events for companies** and find partners in Europe and beyond. It is very useful to map the core players and sign collaboration agreements to manage the collaboration successfully. Many of these partnerships have also been instrumental in anticipating value chain disruption, and exploring new possibilities for collaboration. The case of Hamburg Aviation demonstrates how global partners have become a new “strategic compass” for the cluster to test different options for collaboration, as the aviation industry navigates towards new, greener business models.

Action 5: Find financing to make it happen

International collaboration depends on additional funding, and it is rare to find substantial funding for cluster internationalisation in regional or national cluster programmes. Usually, new funding sources need to come into play.

Cluster organisations themselves are influential actors, and you may be able to make successful applications to support programmes. In many programmes, there are requirements for managing a group of complex stakeholders and bringing new and innovative ideas to the table. Here, many cluster organisations can offer something unique.

Understanding the landscape of funding, writing applications, and managing new funding programmes can be time-consuming and frustrating. In this context, an internationalisation strategy can help cluster organisations to identify the type(s) of funding sources needed to develop international engagement activities. In many cases, companies are willing to co-finance new activities, such as through **co-funded trade visits and market analysis**, even if such services are not typically part of the cluster service offer.

No matter the funding source, it is crucial to understand that there is no ‘free meal’ on funding. There is typically a co-funding limit attached to public support, whether regional, national or EU.





Internationalisation at the core of the cluster: Interview with Aiga Irmeja

Internationalisation has been fully integrated in the strategy of the [Latvian IT Cluster](#) since its establishment. The internationalisation journey of Latvian IT Cluster started very much at the same time as Latvia joined the EU back in 2000. At that point many Latvian companies realised that entering the EU could lead to new business opportunities in the European community. In this context, the cluster could play a key supporting role. When the cluster was legally founded in 2007, internationalisation was consolidated as a core area in the cluster.



Today the Latvian IT Cluster organises more than 50 members and is also a Digital Innovation Hub; this underlines the international profile of the cluster and puts even more emphasis on cross-industry collaboration both within and outside Latvia. As the CEO, Aiga Irmeja, explains it:

"ICT is not a separate industry. If you develop a product and you want to scale up, then you need to go international. Here we offer a range of activities – trade missions to target markets, matchmaking to specific partners and collaboration with a range of public entities to support the companies. Especially for opening new markets, the members of the clusters need a lot of support."

The COVID-19 pandemic has forced the cluster to become even more flexible and adjust to the new circumstances. The cluster is navigating its activities through an internationalisation strategy, but flexibility has been crucial during the pandemic. The Latvian IT Cluster has focused on preparing companies for internationalisation by offering coaching and training sessions. The cluster also encourages companies to carry out market research before starting their internationalisation. In the words of Aiga Irmeja:

"The success of internationalisation really depends on the maturity of the companies. In our experience, many companies need help to become ready. They lack analysis on why they want to internationalise, or insights on the markets or knowledge about how to best internationalise their company. Even for companies which are more advanced, we have a huge role in coaching and can act as a channel to facilitate access new markets".

After more than 15 years of experience in internationalisation, the Latvian IT Cluster has collaborated with many partners. Partners are essential to supporting the internationalisation of companies. In some cases, finding the right partner can be a challenge and it takes time to build trust. No matter how good a match might be, there are different ways of working together, since objectives and work styles might differ. In general, it can be easier to choose clusters from the same sector. In any case it is important to focus on defining common values and goals to create common ground for collaboration while still making sure that own business interest can be pursued.

Being also a candidate for the [European Digital Innovation Hubs](#) is an opportunity to build international bridges and widen the content and scope of collaboration. The Latvian IT Cluster is already involved in several international cooperation projects, in which communication among hubs is supported and strengthened through various activities, common platforms and actions. The mutually beneficial exchange of expertise and resources across the EDIH network is considered as a main advantage, yet also as a challenge for the network – something that everyone will have to master going ahead.



Additional sources

- Christian Ketels (2021) "Internationalisation of Flemish Clusters". Available at: www.flandersinvestmentandtrade.com/sites/corporate/files/FITtoolkitClusters.pdf
- Cluster Excellence Denmark (2021) "Models to strengthen internationalisation – in collaboration between clusters and other stakeholders". Available at: <https://clusterexcellencedenmark.dk/project/modeller-for-styrket-internationalisering-i-samarbejde-mellem-klynger-og-innovationscentre/>
- European Observatory for Clusters and Industrial Change (2019) "Smart Guide for European Strategic Cluster Partnerships". Available at: <https://clustercollaboration.eu/news/smart-guide-european-strategic-cluster-partnerships-escp>
- ECCP webinar (2021) "Strengthening cluster collaboration through strategic internationalisation". Available at: <https://clustercollaboration.eu/webinars/strengthening-cluster-collaboration-through-strategic-internationalisation>





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