Cluster perspectives for a green and digital construction ecosystem

Summary
Cluster perspectives for a green and digital construction ecosystem

The European Cluster Collaboration Platform organised this EU Clusters Talk on 16 November 2022, 8:30 – 9:30 CET, to discuss the critical challenges for the twin transition in construction, the role of clusters to support the transition, and cluster projects and activities that can serve as examples of future involvement.

Agenda of the meeting

Moderation: Chris Burns

   - Jan-Philipp Kramer, team member of the European Cluster Collaboration Platform
   - Iryna Krymus, Ukraine Support Task Force, Energy Community Secretariat

2. From Our Own Correspondent: AEC Eurocluster

3. The Transition Pathway for the Construction Ecosystem
   - Ilektra Papadaki, Team Coordinator, DG Internal Market, Industry, Entrepreneurship and SMEs (GROW), European Commission

4. Panel debate: What are the ecosystem’s most urgent issues for the green and digital transition?
   - Carmen Devesa Fernández, Director for innovation and internationalisation, AEICE Cluster of Efficient Habitat
   - Irena Lobocka, Cluster Coordinator, Sustainable Infrastructure Cluster
   - Jorge López Conde, Deployment Chief Manager for New European Bauhaus, European Clusters Alliance
   - Vladimir Gumilar, Director, Construction Cluster of Slovenia

5. Funding opportunities

Key messages:

- Current challenges for SMEs are shortage of staff, high inflation, and limited resources to work on long-term visions and corresponding investments. Therefore, it is difficult to get SMEs on board of innovation projects.
- The green transition requires a good quality of the construction work, skilled architects, and a conscious society and local authorities.
- Cascade funding and the Euroclusters are appropriate tools to implement the policies.
- There are many opportunities in foreign markets, and clusters support in internationalisation activities.
- Work on sustainable construction technologies has already been carried out in the past years, so there is a good basis to further implement the green transition.
- The New European Bauhaus translates the ideas of the European Green Deal into reality. There is work being done to create a label that certifies the technical aspects of the New European Bauhaus.
- Indoor climate and the quality of the air, biobased materials, humidity, acoustics, and lighting are important construction aspects for our wellbeing.
1. News from the European Cluster Collaboration Platform: Support for Ukraine

Jan-Philipp Kramer, team member of the European Cluster Collaboration Platform

After the introduction by moderator Chris Burns, Jan-Philipp Kramer presented the results of the survey on supply chain disruptions and possible solutions that was conducted by the European Cluster Collaboration Platform in summer 2022. The participants were mostly SMEs, which were affected by the external shocks in the recent years. The biggest issues are around **price increases for supply and services, delivery delays, and shortage of staff**. To make supply chain more resilient, the participants highlight capacity shortages of regional supplies, identification of new suppliers, and insufficient competitiveness of regional suppliers. To improve resilience, the main measure needed is **diversification**.

At EU level, the measures to be prioritised over the next five years to support supply chain resilience are **financial support, mapping of the supply chains, and R&D project funding**.

Regarding suggestions for future projects and initiatives to improve supply chain resilience, the most current answers are a **supply chain platform**, which was created by the Enterprise Europe Network in collaboration with the European Cluster Collaboration Platform, projects to increase energy and resource independence, and support for innovation ecosystems.

2. The Transition Pathway for the Construction Ecosystem

Ilektra Papadaki, Team Leader, DG Internal Market, Industry, Entrepreneurship and SMEs (GROW), European Commission

Ilektra Papadaki gave an update on the development of the Transition Pathway of the construction ecosystem, explaining the complexities, the policy and regulatory landscape, and the co-creation process that was initiated to involve all relevant stakeholders. The construction ecosystem encompasses all activities during the **whole life cycle of buildings, infrastructure, and the built environment**. Its transition is framed by the Industrial Strategy, the Renovation Wave, the Construction Products Regulation, the Skills Agenda, the Climate Adaptation Strategy, the Data Act, and the Circular Economy Action Plan among others. The process to create the Transition Pathway has included an open consultation, high-level stakeholder meetings, workshops, and events.

The **Transition Pathway is scheduled to be presented in the first quarter of 2023**.

As part of her presentation, Ilektra noted that clusters can play a role in the transition of the construction ecosystem, notably in the following areas:

- **Greening**: experiment and mainstream the use of biobased and circular construction materials and nature-based solutions
- **Digitalisation and innovation**: foster the use of 3D printing, 3D scanning, drones, IoT, and robotics
- **Resilience**: contribute to upskilling of construction professionals, enable collaborations, and support internationalisation of SMEs
3. Panel debate

The discussion focused on the challenges for the green transition and how initiatives and clusters are addressing them.

Carmen Devesa Fernández explains that many of their members are very small companies and that it is very difficult for them to make the needed investments. Problems that affect the business in the present prevent a long-term vision. She says that the companies can use their cluster to help them navigate this difficult landscape and to be involved in an active innovation ecosystem.

Irena Lobocka analyses that the challenges are on global and local level. In Poland, they have been working on sustainable construction technologies in the past ten years and have actively promoted energy saving construction technologies and passive building standards. Creating the demand in the market has led to attention from the local authorities. She highlights that we need to keep in mind the renovation work for old buildings for the green transition. In addition, there is a shortage of staff on the construction market and high inflation, which cause immediate problems and makes a collapse of the market probable.

Jorge López Conde speaks about proposals in the frame of the New European Bauhaus to accelerate the transformation of various economic sectors, for example on biomaterials and circular economy. They work on the creation of a label to certify the technical aspects of the New European Bauhaus. They are in the conceptual phase, defining the characteristics of the New European Bauhaus. It is a big opportunity to create the ecosystems with all parts of the construction sector. Carmen Devesa Fernández asks how to transmit the added value of being part of this initiative. Jorge López Conde explains that the New European Bauhaus translates the ideas of the European Green Deal into reality, and we create pilots and prototypes to demonstrate the value to the society.

Vladimir Gumilar sees the main challenges in getting the European SMEs on board on innovative projects, since they are short on resources. For him, cascade funding and the Euroclusters are the most appropriate tool to implement the policies. Their cluster is working on internationalisation projects, which however require a lot of effort and training for SMEs. He sees many opportunities in foreign markets.

Irena Lobocka adds that EU regulations might be an obstacle for local municipalities, but they as clusters try to make them aware of the opportunities as well as the obligations as a society to pursue the green transition. She highlights that they suffer from air pollution problems, which is why the society is conscious about the need for sustainable solutions. Carmen Devesa Fernández points out that in Spain, they have not yet achieved this consciousness and market demand in the society.

Irena Lobocka points out that, technologically, the implementation of resource efficient solutions is not very difficult, but it needs skilled architects and a good quality of the construction work to have the building as it was designed. In addition, we should put a focus on indoor climate and the quality of the air, biobased materials, humidity, acoustics, and lighting for our wellbeing.
4. Funding opportunities

Nina Hoppmann, team member of the European Cluster Collaboration Platform

Closing the EU Clusters Talk, Nina Hoppmann shares the following funding opportunities:

4. The second Horizon Europe Strategic Plan 2025-2027. A public consultation will open in November to collect input from stakeholders.