



EUROPEAN CLUSTER  
COLLABORATION PLATFORM

# Transition Pathway for Construction: How to green and digitalise the ecosystem

## Summary



EU Clusters Talks  
3 May 2023, 8:30 – 10:00 CET

An initiative of the European Union





## Transition Pathway for Construction: How to green and digitalise the ecosystem

The European Cluster Collaboration Platform organised this EU Clusters Talk on 3 May 2023, 8:30 – 10:00 CET, to discuss the Transition Pathway, the critical challenges for the twin transition in the construction ecosystem, and the role of clusters to support the transition.

### Agenda of the meeting

Moderation: Chris Burns

1. News from the European Cluster Collaboration Platform  
*Martina Fumagalli, team member, European Cluster Collaboration Platform*
2. From Our Own Correspondent  
*Cluster Eco-Construction*  
*METABUILDING project*
3. Transition Pathway for Construction  
*Ilektra Papadaki, Team Coordinator, DG Internal Market, Industry, Entrepreneurship and SMEs (GROW), European Commission*
4. Panel debate  
*Pablo Saiz, Chief Architecture Officer, WOODEA*  
*Rodica Lupu, Director, Technology Enabled Construction Cluster – TEC*  
*Victor Ferreira, President, Sustainable Habitat Cluster*  
*Zoi Boutopoulou, Coordinator, Intelligent Solutions for Zero & Positive Energy Buildings*
5. Funding opportunities  
*Martina Fumagalli, team member of the European Cluster Collaboration Platform*

### Key messages

- The Transition Pathway for Construction provides a valuable orientation for the European countries. Now the challenge is the implementation and the translation to national actions.
- The ecosystem is very fragmented. Especially micro-enterprises will need support to not fall behind in the transition.
- The market is very competitive, and price and sustainability continue to be on opposing sides. This could be solved by a life-cycle point of view and clear criteria for green procurement.
- A wise combination of materials and products is needed for the transition. A “passport” for materials could help increase recycling and reuse after the end of the life cycle.
- The connection between clusters and among ecosystems helps upscale innovative solutions.



# 1. News from the European Cluster Collaboration Platform

Martina Fumagalli, team member, European Cluster Collaboration Platform

After the introduction by moderator Chris Burns, the following news item were presented:

1. New [ECCP Profile Registration Process](#): Users can become Pro Users to gain access to new features, including extensive industry information, data on cluster growth, partnerships, and networks, and information on special thematic areas
2. [Trend Universe](#): A new feature for Pro Users to better understand future trends and build the cluster strategy
3. Application is open for the second [Cluster Booster Academy](#), which take place from 6-7 June 2023 (online) and 21-22 September 2023 (in person).
4. A new [Public Buyers Community Platform](#) to improve public procurement in the EU by bringing together public authorities and other stakeholders

# 2. From Our Own Correspondent

Claudia Hunziger Keller, Head of Innovation Ecosystems, NOBATEK/INEF4

Germain Adell, Deputy General Director of NOBATEK/INEF4

METABUILDING and METABUILDING LABS are two HORIZON projects for innovation in the construction ecosystem. In a cascade funding scheme, the partners distributed funding to SMEs for cross-sectoral innovation with construction at the core and adding circularity and recycling, digital solutions, nature-based solution, or additive manufacturing. Building on this experience, they created an EU-wide network of testing facilities and innovation services for new building envelope technologies and products. The project covers 13 countries, and in each they are doing **meta clustering actions** build on an analysis of the stakeholders. The project started by conducting an analysis of the ecosystems in each participating country, providing a comprehensive overview, and then mapping and engaging all stakeholders and clusters in collaboration. They developed a [digital platform](#) to have an **online meeting point** and offer tools for clusters and SMEs to improve collaboration.

# 3. Transition Pathway for Construction

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

Ilektra Papadaki explained that the Transition Pathway is made of **six building blocks**: competitiveness, skills and talent, enabling framework, R&I and technology, finance, and a safe and fair built environment. Each building block consists of an **analysis and proposed actions**. These are recommendations that derived from the feedback during the consultations.



She gave an overview of the building blocks:

- **Competitiveness:** The analysis focusses on how the European ecosystem works in comparison to the world, where the strategic dependencies are, and what growth we are expecting. The proposed actions for the industry include diversification of suppliers, materials and products as well as using local materials and building techniques. They are also advised to invest in automation and technology.
- **Skills and Talent:** The role of the EU is to monitor, coordinate effort, and provide incentives to upskill construction professionals. Stakeholders are invited to join the Pact for Skills and work on diversity. Public authorities are called to foster contracts that include upskilling and promote apprenticeships.
- **Enabling framework:** This building block is about policy and the legal framework, especially for digitalisation. Authorities are called to contribute through a series of actions that support circularity and modernisation of their processes. Industry can also contribute by deploying circular and zero-emission solutions.
- **Research, Innovation, Technology:** There are challenges for R&I to pass to the construction market. Industry should help develop standards and fund research themselves.
- **Funding:** The pathway describes both public funding schemes and private investments.
- **A safe and fair built environment:** There are recommendations on how to make buildings safer and housing fairer.

Ilektra Papadaki highlighted that the commitments of industry and Member States that correspond to the described actions are outlined in Annex II to the Pathway.

## 4. Panel debate

The discussion among the panellists focused on competitiveness of sustainable solutions, the necessity for life cycle thinking, challenges on national level and the fragmentation of the ecosystem, eco-design for housing, and a passport for materials to enable recycling.

Rodica Lupu confirmed that the consultation process on the Transition Pathway was very thorough and that the feedback from the consultations is reflected in the Pathway. The building blocks are logical, but the **implementation will require a huge amount of work**. Pablo Saiz said that the transition is not going as quickly as it should. He sees a strong focus on renovation. However, we need an encompassing view in the Pathway that includes new buildings. At the C2Lab, which took place in Sweden in March 2023, a group of clusters and companies developed a new project proposal to develop a **pilot prototype for the house of the future** based on the New European Bauhaus and zero emissions. Zoi Boutopoulou added that the Transition Pathway sets a **good orientation** for all European countries, e.g., for funding, to adopt new practices. She sees challenges in national regulation.

The speakers emphasised the **fragmentation** of the ecosystem and the differences between the European countries. While digitalisation is critical, Rodica Lupu expressed her concern that it might increase the ecosystem's fragmentation. 37% of the companies are **micro-enterprises**, which are very unlikely to go digital without financial support. TEC cluster is working with Digital Innovation Hubs to reach the micro-enterprises. However, Digital Innovation Hubs should offer specific measures for



micro-enterprises. Victor Ferreira sees the value of the European Digital Innovation Hubs is the information gathering and exchange especially for the eco-design of products and buildings. He added that R&D institutions should be included into this process. Zoi Boutopoulou's cluster builds webinars and trainings to upskill the workforce. They bring together big and small companies for knowledge transfer. Internally, they develop AR and VR software that help builders especially in renovation works.

Regarding affordability, the speakers agreed that the market is very **competitive**. Even though sustainability has become a market value, solutions need to meet the requirement of **economic sustainability**. Pablo Saiz confirmed that while they are working on competitive products, they experience that going sustainable can take you out of the competition. The market works according to price, but the regulation is about sustainability. Regulations must set the minimum standards to bring change to the market. Trading system for embodied carbon might be an idea. In addition, costs need to be evaluated from a **life-cycle point of view**, not from acquisition prices. Victor Ferreira emphasised that **green procurement** could be an important tool that make a difference. Cities and public authorities should incentivise sustainable solutions and amplify their **selection criteria**. Clear guidelines for acquisition could help, including criteria on circular economy and eco materials.

The speakers agreed that working on the entire life cycle of the building and a **wise combination of materials and products** will enable the transition. For example, Pablo Saiz works on a methodology to include building disassembling in the process. He believes in a **"passport" of materials** to capture the knowledge of what to do with the materials at the end of the life cycle. Zoi Boutopoulou remarked that keeping track of every stage of the supply chain is difficult. Currently, useful information for recycling and reuse gets lost.

Regarding digitalisation, Rodica Lupu highlighted the role of the states. They should **digitalise the procedures**, especially **permitting**. In these areas, many countries still have a long way to go.

The speakers stressed that the connection between clusters and among ecosystems can help **upscale innovative solutions** and exchange ideas to develop new sustainable products and processes.

## 5. Funding opportunities

### Martina Fumagalli, team member of the European Cluster Collaboration Platform

Closing the EU Clusters Talk, Martina Fumagalli shared the following examples of funding opportunities:

1. [Fast-tracking and promoting built environment construction and renovation innovation with local value chains \(Built4People Partnership\)](#); Deadline: 5 September 2023
2. [Supporting the creation of an accessible and inclusive built environment \(Built4People Partnership\)](#); Deadline: 5 September 2023
3. [Demonstrate built-environment decarbonisation pathways through bottom-up technological, social and policy innovation for adaptive integrated sustainable renovation solutions \(Built4People Partnership\)](#); Deadline: 5 September 2023
4. Opportunities for SMEs: Calls from Euroclusters; published on [European Cluster Collaboration Platform](#)