

EUROPEAN CLUSTER Collaboration platform

Mobility: Cluster perspectives for a resilient and sustainable ecosystem

Summary



EU Clusters Talks 22 February 2023, 8:30 – 9:45 CET

An initiative of the European Union





Mobility: Cluster perspectives for a resilient and sustainable ecosystem

The European Cluster Collaboration Platform organised this EU Clusters Talk on 22 February 2023, 8:30 – 9:45 CET, to discuss the critical challenges for the twin transition in the automotive – mobility – transport ecosystem, the role of clusters to support the transition, and cluster projects and activities that can serve as examples.

Agenda of the meeting

Moderation: Chris Burns

- 1. News from the European Cluster Collaboration Platform Nina Hoppmann, team member of the European Cluster Collaboration Platform
- 2. Video: RESIST Eurocluster
- 3. The Transition Pathway for the Automotive Mobility Transport Ecosystem Lorena Ionita, Deputy Head of Unit, DG GROW, European Commission

4. Panel debate

Freek de Bruijn, Programme Consultant, RAI Automotive Industry NL Giulia Maifrini, Head of European & International Affairs, next move Thomas Röhr, Secretary General, European Automotive Cluster Network (EACN)

5. Funding opportunities Nina Hoppmann, team member of the European Cluster Collaboration Platform

Key messages

- Companies are investing in changing their business models to meet the changes in the industry.
- Original Equipment Manufacturers (OEMs) determine the future way for the automotive industry. They need to be on board for solutions on European scale. However, their preparation for the electrification has been insufficient.
- We see first impacts of the US Inflation Reduction Act. Actions are needed from the EU to remain competitive.
- There is the suggestion to create a European circular economy in the automotive industry, in which the entire value chain is in Europe.
- Recycling will become more important for the battery industry to decrease its dependencies.
- Hydrogen applications and hydrogen storage should be further explored.





1. News from the European Cluster Collaboration Platform

Nina Hoppmann, team member of the European Cluster Collaboration Platform

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

- Donations in the area of health for Ukraine can be made <u>via DG ECHO</u>. Priority needs are medical equipment, critical emergency care equipment, antibiotics, antidotes, antivirals, and medicines for cancer treatment.
- 2. Last chance to <u>give feedback in the open consultation</u> on the European research and innovation programmes 2014-2027
- 3. Invitation to <u>"Clusters meet Regions" workshop</u> on EU-Ukraine Business Partnership in Kosice, Slovakia, on 29-30 March 2023
- 4. Invitation to join the C2Lab in Lund, Sweden, on 21-22 March 2023

2. Perspectives from the European Commission

Lorena Ionita, Deputy Head of Unit, DG GROW, European Commission

Lorena Ionita presents the Commission's work on the **transition pathway** for the Mobility – Transport – Automotive ecosystem. She introduces the concept of the ecosystems that is described in the updated Industrial Strategy and the key priorities to strengthen the Single Market's resilience, address strategic dependencies, and accelerate the green and digital transition.

The transition pathway follows the principles of **co-creation and co-implementation** in partnership with the industry, public authorities, social partners, and other stakeholders. The European Commission seeks to understand from the stakeholders, on the one hand, what else is needed in addition to the existing policy guidelines, and, on the other hand, to get commitments. The aim is to identify **concrete actions** for resilience and the twin transition.

The mobility ecosystem encompasses the automotive, waterborne transport, railway, and biking industry. The first stakeholder consultation was launched in January 2022, and following steps included stakeholder roundtables and a follow-up survey. For the end of the first half of 2023, the Commission will publish a **transition pathway report** and will ask for **commitments and pledges** from the industry.

Talking about the electrification of the industry, Lorena Ionita presents the **Route 35**, a monitoring process to check the preparedness of all actors involved in the ecosystem for the implementation of the policy framework. The Commission will identify barriers and potentially take actions to accompany the transition.

3. Panel debate

The discussion among the panellists focuses on the ongoing electrification of the industry, the role of the Original Equipment Manufacturers (OEMs), SME competitiveness, batteries, and hydrogen solutions.





Electrification and new solutions

Freek de Bruijn explains that the industry, with the support of clusters, is working on several technologies. Many start-ups are coming up with new ideas that they try to sell and find investments for. He says that the main challenge is creating **more sustainable and emission-free solutions** for the future. Most of the business models of their members is focuses on the internal combustion engine, so the companies are under pressure to invest in technologies of the future, while at the same time make profits. Therefore, companies are investing in **changing their business models** to survive.

Giulia Maifrini adds that in addition to the challenges of climate neutrality, companies are also faced with the digital transition and are bringing forward solutions for **connectivity and automated vehicles**. Depending on the technologies, they finance projects with calls on European or national/local level.

Role of Original Equipment Manufacturers (OEMs)

Thomas Röhr sees the decarbonisation as a challenge particularly for SMEs. The lines of work defined by the OEMs are mostly business-driven, and not society-driven, which is a problem for the transition, as the **OEMs determine the future way** for the automotive industry. The suppliers are followers and answer to the requests. While the discussion to end the production of internal combustion engines has been ongoing for more many years, **big players have not sufficiently prepared**. Clusters must be active to help their SMEs define the business models that are needed in the future.

Thomas Röhr shares that we see **first impacts of the US Inflation Reduction Act**. First projects in Europe were stopped. Problems could arise if big players leave the European market. They usually take the entire value chain or create new ones overseas.

Strengthening SMEs and competitiveness

Giulia Maifrini gives the example of organising **open innovation challenges** as a successful way of bringing together the big players and the SMEs. Moreover, they have made positive experiences with **working groups of SMEs** to create a common solution, e.g., on artificial intelligence to improve mobility services. That way, SMEs put together their competencies and complementary skills.

Looking at the bigger picture, Thomas Röhr highlights the need to **protect our industry** so that the companies remain in Europe, e.g., with the help of a taxation on carbon footprint of incoming products. Furthermore, we should try to build a **European circular economy in the automotive industry**, in which the entire value chain be in Europe. For this, we need the willingness of the OEMs. At the same time, we need to develop our energy and material supply, and one way to reduce our dependency on raw materials is **recycling**. Products needs to be designed from the very beginning to be recyclable and reusable.

Lorena Ionita confirms that the Commission is preparing a response to the US Inflation Reduction Act to keep industry in Europe.

Batteries

Freek de Bruijn shares that several start-ups are working on new forms of mobility, e.g., extending the life of batteries. The key here is to support them with cluster services and exchanges of best practices in Europe to scale up. He also gives the example of a company working on an improved battery





management system and battery packs. The cluster connected this SME with a big OEM, which was followed by a successful collaboration.

Freek de Bruijn highlights that **recycling** will become more important for the battery industry to decrease existing dependencies. We should find a system on European scale. Giulia Maifrini speaks about a French project that focusses on recycling of batteries, both materials as well as batteries that come from used vehicles. She remarks that it is important to have the skills to transform the production sites, which in turn is easier for the big players than for SMEs. Freek de Bruijn adds that the Netherlands are one of the fastest countries in electrifying vehicles. They have the densest charging infrastructure in the world. However, this requires a lot of energy, which relates back to having a strong power grid.

Lorena Ionita mentions the European Battery Alliance as the expert group working on this topic on European level.

Hydrogen

Freek de Bruijn mentions hydrogen, which can be produced in Europe, as an alternative for mobility solutions. He gives the example of a company that invests in fuel cells for hydrogen for the heavy-duty industry (bus, truckts, agricultural machines). **Hydrogen has many potential applications**. The cluster helps finding other companies to work on this solution and for the infrastructure needed for the supply of hydrogen. Storage of hydrogen needs to be further researched.

Lorena Ionita mentions the European Clean Hydrogen Alliance as the expert group working on this topic on European level.

4. Funding opportunities

Nina Hoppmann, team member of the European Cluster Collaboration Platform

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

- 1. <u>EU Member States/Associated countries research policy cooperation network to accelerate</u> zero-emission road mobility (2ZERO Partnership); Deadline: 20 April 2023
- <u>Circular economy approaches for zero emission vehicles (2ZERO Partnership)</u>; Deadline: 20 April 2023
- 3. <u>Innovative battery management systems for next generation vehicles (2ZERO & Batt4EU</u> <u>Partnership)</u>; Deadline: 20 April 2023
- 4. <u>Co-designed smart systems and services for user-centred shared zero-emission mobility of</u> people and freight in urban areas (2Zero, CCAM and Cities' Mission); Deadline: 27 April 2023

