

Prague, October 24, 2024

Circular Economy as a Challenge for the Czech Automotive Industry

On Thursday, 17 October 2024, **EUROPEUM** Institute for European Policy in cooperation with the Institute for Circular Economy **INCIEN** organized a conference with a topic **Circularity in the Czech Automotive Industry: opportunities and obstacles**, in which **Czech Battery Cluster** was a partner. The conference was attended by representatives of the Czech automotive industry, state administration and research organisations.

The first session focused on batteries, highlighting the fact that the Czech Republic, unlike its neighbours, still does not have large-scale battery production, which puts it at a disadvantage also in terms of recycling. **Julia Poliscanova** of Transport & Environment started by saying that Europe can be self-sufficient in batteries by 2027, but that it is necessary to speed up the implementation of large projects under construction in Germany, Poland and Sweden, for example. **Tomáš Pešek** from REMA Battery focused on the impact of European legislation on battery take-back and recycling and reminded that new European rules, such as the obligation to provide batteries with a battery passport, will significantly affect the way companies handle batteries throughout their life cycle. **Markéta Michalová** from the Ministry of the Environment then presented an amendment to the End-of-Life Products Act, which harmonises Czech legislation with the European regulation on batteries, particularly in the area of waste battery management.

Tomáš Kazda from the Czech Battery Cluster and Brno University of Technology said that without greater investment in production and recycling capacity we will not be able to meet the growing demand for batteries on our own:

"The production of Li-ion batteries is a fast-growing industry that is central to many other areas such as transport and energy. Demand for batteries is therefore growing and battery production capacity is relatively small within the EU, even though expansion is one of the EU's objectives. This is a highly competitive industry, and the US is also investing heavily in its development and in trying to be as independent as possible, while China is trying to maintain its position in this area, making it more difficult for projects in the EU. The development of recycling capacity is also directly linked to production, as the largest source of recyclable materials is currently battery production.

Recycling is then, in the long term, one of the key sources in the EU of scarce materials for new production."

Filip Křenek from the EUROPEUM think tank highlighted the opportunities presented by strategic projects focused on critical raw materials and clean technologies that can help Czech companies develop the battery industry:

"Europe has set ambitious targets for the domestic mining, processing and recycling of critical materials such as lithium, cobalt, nickel or manganese, which are essential for the production of clean technologies such as batteries. However, these targets also need to be accompanied by appropriate support. And it does not just have to be financial support. Under the European Critical Materials Act, for example, there is the possibility of obtaining the designation of so-called strategic projects, for which the length of the permitting process should be significantly reduced - a maximum of 24 months for mining and 12 months for processing. This can greatly facilitate the development of promising industries. However, environmental and social considerations must be respected."

The second part of the conference focused on structural materials in vehicles, i.e. steel, aluminium or plastics. **Ben Hague** from INCIEN presented the policy and legislative framework, including the proposed European Regulation on Circular Vehicle Design and End-of-Life Vehicle Management (ELVR), while also outlining the opportunities and priority actions for decarbonisation and circularity of materials throughout the vehicle life cycle, from design to repair. **Carl Kuehl** from SYSTEMIQ followed up with challenges across the automotive supply chain, including rising prices and potential material shortages, and offered examples of solutions in the form of activities by international companies and their initiatives. Dalibor Kopáč of Škoda Auto mentioned that the company sees the targets for increasing the share of recycled materials positively, especially to reduce the emissions footprint of steel and aluminium, and is trying to stay ahead of legislation. He also noted that cars already contain a relatively high percentage of secondary plastics and aluminium, and explained that pilot projects are underway at Škoda Auto to expand its portfolio of low-carbon steel parts.

The panel discussion was attended by **Pavλίna Kulhánková** from the Ministry of Industry and Trade, **Daniel Houska** from EuRIC (European Recycling Industries' Confederation), **Milan Petr** from the Association of Scrap Metal Processors and **Ben Hague** from INCIEN.

The main theme was the need for cooperation between stakeholders from manufacturers through suppliers and recyclers, which is often lacking today. Milan Petr also pointed out the lack of communication and interest from ministries.

All participants agreed on the increasing pressure on end-of-life vehicle processors and the need to better integrate production processes with repair, remanufacturing and recycling in one cluster, similar to France (Renault) and Germany (Remondis).

"Closer integration of the entire supply chain would strengthen recycling systems, reduce material losses and set up a workable business model for all involved, based on foreign experience. The ELVR proposal is expected to contribute to these changes, among other things, an Extended Producer Responsibility (EPR) system by 2029 and then the introduction of digital vehicle passports by 2033," added Ben Hague, Head of Research at INCIEN.

Daniel Houska also highlighted the key role of regulation as a tool for promoting innovation and correcting market failures. **Pavλίna Kulhánková** highlighted the importance of legislation in terms of ensuring the availability of raw materials in the future and also explained that legislative trends are moving towards greater harmonisation in the form of regulations rather than directives and a focus on the whole life cycle, which is an opportunity to understand the wider context. Ben Hague added that systemic change cannot happen without regulation and that the Czech Republic still has a chance to influence the design and sub-measures in the ELVR proposal.

Two in-depth studies focusing on batteries (EUROPEUM) and construction materials (INCIEN) as well as a joint Summary for Policy Makers proposing key measures and recommendations to support circularity and decarbonisation of the Czech automotive industry will be published at the end of October 2024.