TOWARDS SUSTAINABILITY?
THE ELECTRIFICATION OF THE AUTOMOTIVE INDUSTRY

27-30 June 2023
ULB / Brussels

The 2023 Gerpisa International Colloquium will take place in Brussels, at the Université Libre de Bruxelles and is co-organised with the METICES. It will be a full in-person conference for presenters with the possibility of virtual attendance for the audience. The conference will have a strong focus on the evolution of the regulatory frameworks with several events co-organised with European institutions.

The hardening of existing environmental regulations and the introduction of new trade and technical regulations for cars and batteries have been indeed playing a central role in the massive transformation that the global automotive industry is undergoing, and in particular in the accelerated transition towards electrification.

During the last couple of years, even before the official European ban of internal combustion engines for 2035, or the introduction of similar policies in the US aiming at 50% market share for Battery Electric Vehicles (BEVs) by 2035, almost all OEMs have announced that they will stop producing Internal Combustion Engines Vehicles (ICEVs) as early as 2030 for some of them, and not later than 2040 for all the others. In 2021 the investments in electrified transport have exploded, reaching $ 271 billion and in 2022 there were already 300 new gigafactories in the pipeline to 2032, with more than half of them owned by OEMs.

Our 2023 conference will be focused on the concept of sustainability and on the environmental, economic, social and political implications of the electrification process. The key, provocative question will thus be: how (environmentally, economically, politically, socially) sustainable is this transition of the automotive industry toward decarbonized mobility?

How sustainable is it for the workers of the automotive sector, where massive restructuring will take place with the accelerated phasing out of ICEs? For the core Western automotive countries that see their hegemonic position in the global automotive value chains contested by the growing influence of China on EV value chains and raw materials? For peripheral and semi-peripheral countries that so far appear excluded from this transition and relegated to the legacy production of ICEVs, the low-cost assembly of EV batteries for Western markets, and/or the extraction of the raw materials required for their production? For the traditional automotive players, which have to design their products around more costly EV powertrains, while facing increasing pressure from new players in EVs production, battery production and digital mobility services? For consumers and car users, who see the cost of acquiring and using a car rapidly increasing, to the point that many of them could be excluded from a personal mobility mode based on electrified vehicles? For carbon neutrality as the main reason for this
transition, since EVs require very significant amounts of energy to be produced and used, and the recent energy crisis highlights how much energy production still relies on fossil sources even in places like Europe where investments in renewable energies have been important? And, finally, for electrification itself, as this accelerated transition requires huge quantities of relatively rare raw materials, whose availability at reasonable costs to keep electrification going is not guaranteed in the years to come?

At the same time, all these and many other questions and concerns that have been raised by different stake-holders, experts, government agencies and lobbies have started to be addressed by a whole series of new tentative “answers”: new industrial policies to support the transition, to regionalise electric vehicles value chains, to protect automotive workers and create new jobs; new political concepts, such as the notion of “just transition” promoted by trade unions to support workers and communities threatened by electrification; new regulations to guarantee the social and environmental sustainability of the EVs value chains via CO2 footprints and due diligence norms and standards; circular economy business models and regulations to reduce waste and fight planned obsolescence; new battery technologies to reduce the reliance on rare and expensive materials, increase energy density, and further reduce cost per kWh; new dedicated EV platforms to optimise the production of electric vehicles and reduce production costs; new manufacturing technologies (I4.0, digitalisation) to reduce the production costs of both vehicles and batteries; and new business models based on service rather than ownership – mobility and/or battery as a service, autonomous vehicles – to reduce the number of vehicles and batteries needed for the mobility of persons and goods as well as its costs.

We welcome papers that look at the concerns, issues, challenges raised by electrification, and more generally by the current transition towards more sustainable automotive industries and mobilities, as well as papers that explore the “answers” to these issues and problems. We also welcome papers that analyse the interplay between electrification and the rise of new mobility services as a complementary way of implementing decarbonisation.

We welcome papers from academics, and all the members of our international network, but also from all actors that are involved in the public debate, such as trade unions, environmental NGOs, employers associations, government agencies, as well as auto manufacturers and their suppliers.

We welcome papers from all social sciences, both focusing on the current transition, but also providing historical accounts of previous transitions where the notion of sustainability of the automotive industry has been raised, as well as historical perspectives on the origins and causes of the current transition and related transformations.

The call is organised in three streams that focus on (1) labour issues; (2) on social and regulatory contexts; and (3) on companies, products, technologies and value chains.

**Deadline for sending the proposals:** Sun, 02/26/2023 - 23:59  
**Deadline for submitting the papers:** Fri, 05/05/2023 - 23:59

A selection of the best papers presented during the colloquium, including the winner of the young author’s prize (see below) will be included in a special issue of the International Journal of Automotive Technology and Management (IJATM).