

Turning point for the automotive sector: working together to support transition and innovation in the European regions

 Impulse paper

The automotive sector is one of the leading industries in Europe – and currently experiencing the greatest upheaval in its history. The switch to climate-neutral drives and the radical overhaul of value creation through the digitalisation of vehicles and production must be mastered by the European automotive sector in the context of fierce competition from other international locations. Significant new American and Asian stakeholders have emerged in the field of pioneering technologies such as electric mobility or automated and connected driving. In light of this competition, the lasting effects of the coronavirus pandemic on supply chains, and the Russian invasion of Ukraine plus the ensuing energy crisis, a focused effort is required in order to ensure that Europe maintains its leading role within the automotive sector.

As the cradle of the automobile, Baden-Württemberg has evolved into one of the most important automotive ecosystems in the world over the last 130 years. And as one of the most innovative automotive regions in Europe, it is ready to tackle the challenges facing this sector. With the **strategic dialogue for the automotive sector in Baden-Württemberg (SDA)**, the State Government of Baden-Württemberg brings together politics, the economy, academia, associations, unions and civil society to jointly shape and advance this process of change.

The strategic dialogue for the automotive sector therefore helps safeguard the international competitiveness of Europe in the automotive sector. The successful transition of the automotive sector requires the right framework conditions on a European level. With this in mind and as part of its strategic dialogue, the State Government of Baden-Württemberg calls on the European institutions to lay the following essential foundations:

I. Reinforcing strengths and securing European competitiveness

Europe will only be able to compete in the context of global innovation by strengthening and expanding its powerful innovation clusters and regional economic ecosystems that are currently in the process of a significant economic transition. These innovation clusters in turn provide the basis for growing jobs and prosperity in other European regions ('locomotive function'). The necessary steps are as follows:

- **We need opportunities to ensure the preservation and expansion of economically strong regions undergoing transition.** The state of Baden-Württemberg expressly welcomes the European initiatives for supporting particularly relevant industries and technologies, e.g. via IPCEIs or the EU Chips Act. In addition, European state aid law should make it possible to support the transition process in highly innovative regions. We also wish to draw attention to a further challenge: when competing against other locations in seeking to attract the settlement of new companies, major industrial transition regions such as Baden-Württemberg are no longer able to keep up with regions that can offer greater incentives as a result of regional state aid and additional forms of direct EU support. This has the clear potential to weaken the most innovative leading locations and their ecosystems, which would in turn have a far-reaching negative impact on EU countries – and weaken the overall competitiveness of Europe.
- The existing **Important Projects of Common European Interest (IPCEIs)** for the development of high tech and green technologies in Europe must be updated and expanded. In addition, further IPCEIs must be implemented in areas where the EU is highly reliant on third countries.
- In order for the transition of the automotive sector to succeed, it is essential for representatives from regional automotive ecosystems and from alliances and networks of the European automotive regions to be directly integrated alongside representatives from industry, unions, academia and associations into the European Commission's ongoing **'transition pathway' process** aimed at guiding the green and digital transition within the mobility and automotive sector. Baden-Württemberg's strategic dialogue (SDA) could serve as a blueprint for the participation of various stakeholders on a European level.

- **Cooperation between economically and academically driven cluster initiatives in various European regions should be supported** in order to fulfil the strategic interest of developing new sustainable value creation chains and European delivery chains.
- **EU procurement law specifications must be adapted so as to make it quicker and easier for public institutions to work together with start-ups.** These changes must remove bureaucratic hurdles while ensuring appropriate risk management with regard to suitability and evaluation criteria as well as the recognition of technological innovations.
- **The innovation fund of the emissions trading system should also be opened up to innovations for the transition in industries such as the automotive sector. Beyond this, the next Multiannual Financial Framework (MFF) should involve the creation of a successor instrument for the Just Transition Fund (JTF) that enables funding for the transition of the automotive sector, particularly at the highly impacted SMEs in the supplier industry.**
- **Ensuring a secure supply of sustainably produced raw materials for the automotive industry is a prerequisite for successfully shaping the ongoing transition process.** As a result, political decisions taken in the future should always consider both the need for and the prospective availability of sustainably produced raw materials from the very start. If there are looming shortages, steps should be taken at an early stage so as to put the economy in a position to independently cover its raw material needs.

II. Swiftly expanding European infrastructure for the ramp-up of climate-neutral drives

Achieving climate goals demands the use of climate-neutral vehicles that are driven by electricity, hydrogen or reFuels. Further measures such as the prompt scaling of electrically driven vehicles and the necessary infrastructure are also required across Europe. Only a few EU countries currently feature sufficient public infrastructure. For electrically driven vehicles to be an attractive purchasing option, there must be a speedy expansion of charging infrastructure in all EU countries. The following points are key to this:

- **The level of ambition of the rules proposed by the European Commission for developing infrastructure for alternative fuels must be increased across Europe in a binding manner.** This would ensure the establishment of truly forward-looking and demand-oriented charging and refuelling infrastructure for electric and hydrogen vehicles throughout Europe.
- **We require a market forecast for the upcoming electrification of heavy goods traffic so as to have planning security for demand-oriented, forward-looking and future-proof power network development and hydrogen refuelling infrastructure.**
- To enable the smart integration of electric mobility grids and systems, there must be **EU-wide harmonisation of technical frameworks in the energy industry and in charging management for cars and commercial vehicles.**
- **The European Union must lay the foundations for a successful European hydrogen economy and ramp up the expansion of corresponding infrastructure in a swift and comprehensive manner.** Regulatory obstacles relating to market design must accordingly be removed: this also applies to the drafts submitted by the European Commission for a delegated act on renewable hydrogen and greenhouse gas emission savings. If criteria are defined too restrictively, this could put forward-looking projects at risk – for example through the loss of carbon credits. Should the establishment of a European hydrogen economy be stalled in the early stages due to excessively demanding requirements, this would not provide any benefit for climate action.
- **With regard to heavy long-distance trucks in particular, the foundations must be laid for the demand-oriented and timely development of hydrogen supply infrastructure.** This includes the definition of technical requirements,

the standardisation of refuelling protocols, the funding of technological developments, and above all the creation of a comprehensive refuelling station network and the provision of a sufficient supply of renewable hydrogen.

- **A suitable regulatory framework for producing climate-neutral synthetic fuels (reFuels) must be implemented swiftly as a matter of urgency in order to enable business cases and provide security of planning and investment for the economy.** The delegated act on greenhouse gas savings poses a particular risk to cost-effectiveness and states that CO₂ from point sources like cement factories can only be credited to fuel production up to the year 2035. That period should be extended until at least 2045 to ensure that direct air capture can be developed to a state of market maturity and broad deployment within this timeframe. Point sources outside of the EU-ETS should also be allowed, as should the use of bio-waste. Initial industrial plants should also be supported via funding measures.

III. Ramping up digitalisation and achieving European data sovereignty

The vehicle of the future is an instrument in the user-driven cloud-based data environment. The automotive sector is increasingly becoming part of the digital economy and generating value creation in digital settings. Clouds, cloud applications, economic platforms, new specific electronics solutions and software will play a sizeable role in deciding future economic success. Given the current dominance of the USA and Asia in this field, the EU must adopt a cooperative approach to secure its digital sovereignty – far beyond the production of chips, semiconductors and electronic components. The necessary steps for this are as follows:

- **From the perspective of Baden-Württemberg, the Data Act should contribute to enabling optimum conditions for the usage and sharing of mobility data.** In particular, it should be ensured that there is closer interaction between government data and commercial data (e.g. in mobility services). The EU has a significant responsibility for providing guidance and coordination in this context, with the objective being European harmonisation in the area of mobility data.
- **In terms of the legal framework conditions for artificial intelligence, a balance should be struck between safety and the potential benefits arising from the use of AI.** Data protection and data security should be factors that promote competitiveness and do not frustrate innovation.
- **The corresponding foundations must be established to ensure that, in the future, public service providers must gather and make available certain mobility-related data beyond the scope of the previous delegated regulations. This is to enable the possibility of offering consistent mobility services across Europe.** Baden-Württemberg welcomes the original proposal by the European Commission for updating the ITS Directive with respect to the scope of the data to be gathered and the timetable. Europe could assume a pioneering role if it adopted an ambitious approach.
- **The concept of strategic autonomy should be pursued further in a consistent manner that builds on an open research community engaging in international collaboration.** Strategic autonomy should involve Europe expanding its expertise in digital skills and information technology. These areas each play a vital role in the transition process of the automotive sector.