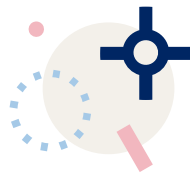


# FOUR THESES ON THE FUTURE OF TRANSPORT



The future of our transport system is taking shape before our eyes. The European Union Member States and cities across the EU are actively designing and constructing innovative mobility and logistics solutions. We are witnessing a profound systemic shift in the way we approach mobility and transport. The future's transport system should be built with and for users, and to be increasingly smart and sustainable.

## 1. EU's Leadership in Transport's Energy Transition

The European Union must assume a leadership role on the global stage in achieving carbon decoupling and paving the path for the fossil-free future. Emissions from transport, particularly road transport, are among the most challenging hurdles in meeting global emission reduction targets. We must recognise the differing paces at which various modes of transport transition to cleaner energy sources. Success in reducing emissions in road transport will largely determine our ability to achieve overarching emission targets. In the realm of transportation, the key to success lies in ensuring the availability of affordable fossil-free energy and fuel options. Significant investments are required to ensure Europe's energy independence, with a particular emphasis on local energy production and distribution.

The electrification of land transport requires substantial support from the upcoming Commission, particularly concerning the development of a robust charging network. Replacing nearly 300 million internal combustion vehicles with electric alternatives and establishing the required charging infrastructure is a substantial investment. It is vital for the European economy that this transition is not only cost-effective but also fosters European innovations and excellence. We need to invest in developing European energy expertise, support innovative solutions, and secure self-sufficiency in raw materials. Europe must take responsibility, also in global supply chains, for ensuring that the production of materials for battery technology are socially and ecologically sustainable. From a user's perspective, significant challenges still lie in data availability and price transparency, hindering the usability of charging infrastructure. Providing reliable information regarding the availability of charging points and introducing advanced planning and booking tools are critical enablers for electrifying heavy-duty transport. In the short and medium term, there is an urgent need for efforts to promote electrification throughout the Union, but going forward, the EU should also establish a vision for the coming decades and initiate a roadmap for the next phase of the energy transition to support the

2040 and 2050 climate goals. EU should also establish strategy for supporting the usage of Sustainable Aviation Fuels (SAF) to ensure level playing field compared to non-European airlines.

Considerable energy savings and CO<sub>2</sub> emission reductions can be realised in heavy-duty and maritime transport by promoting and enabling optimisation and energy-efficiency solutions. Support for research, development, and innovation, along with incentives for the widespread adoption of readily available solutions, can expedite our common sustainability goals. Establishing sectoral cross-modal partnerships or platforms focusing on energy efficiency would expedite knowledge sharing and development. Furthermore, advancing automation in transportation is essential to keep Europe competitive globally. When regulating increasingly automated and autonomous solutions, a pragmatic approach that supports technical development and innovation is needed.

## **2. Fossil-Free and Smart Transport System**

Efficient movement of information, people and goods is essential for prosperous life and global competitiveness. The transport sector is undergoing a profound transformation, thrived by trends of electrification, digitalisation, automation, and servitisation. Building a futureproof transport system is a key task for the incoming Commission. This transformation also presents a substantial opportunity for leveraging digital innovation for decarbonised future. Europe's strong competence in digital transport, built over recent decades, is underpinned by strong expertise as well as legislation boosting new services and automation. Leveraging this expertise can help us achieve stringent emission reduction targets, stimulate urban development, invigorate rural areas, and boost job creation and global footprint of the European companies.

Emission-free transport must be consistently more economically attractive than its polluting forms and thus we need regulation, pricing schemes and incentives that shifts behaviour towards greener options. Additionally, it's vital to enhance emission monitoring to include the entire life cycle and value chain, encompassing energy production. The aim should be to move towards data-driven and transparent carbon footprint accounting.

Data is already playing a vital role in making the physical transport system smoother, safer, and more aligned with customer needs. Digitalisation of transport has evolved from a supportive measure to an integral part of our core activities. Intelligent transport systems and digital need to be deeply integrated into the development of transport networks and daily traffic management. Increased data availability, coupled with advanced AI tools, enables sophisticated analyses of transport system utilisation and demand. The European Union should support the widespread and ethical deployment of AI in the transport sector, with applications ranging from improving road safety and traffic management to optimising routes and enabling autonomous transport.

Digitalisation is the linchpin of improving the efficiency and productivity of the transport system. It manifests in the development of new methods in the several fields: machinery automation, real-time weather and road condition information, predictive maintenance, smart traffic lights, mobile payments, route information, and interoperable mobility and transport services. Digital solutions must be seamlessly integrated into all transport sector plans and financing. It represents the fastest path to enhancing European resilience in the face of rapid changes. The EU's investment plan must account for the needs of a new digital economy, including the prerequisites of remote and hybrid work. For instance, comprehensive telecommunications networks along transport corridors are needed to provide high-quality connectivity to train passengers if market-based investments fail to deliver.

The overarching goal is to elevate the level of digitalisation across the entire transport system. Investments should be channeled into improving interoperability, data quality, data utilization, bolstering digital infrastructure, promoting data openness and standardisation, and enhancing system interface solutions. The implementation of the Internet of Things (IoT) at the transport system level requires investments in fast and reliable data transfer, sensor technologies, analytics, artificial intelligence, and cybersecurity, among other domains.

### **3. The Cities Mastering the Low-Carbon Future**

Cities play a pivotal role in addressing carbon emissions. Despite covering only 2% of the Earth's land area, they generate 70% of carbon dioxide emissions. Sustainable mobility within cities relies on active mobility, continually evolving mobility services and robust public transport networks. The share of these sustainable modes must be significantly increased to enhance cities' attractiveness, support active and healthy lifestyle and improve safety.

The future of mobility will be a seamlessly interconnected service network, offering diverse services, rather than a collection of isolated services. Public transport, while crucial, cannot alone provide an attractive alternative to private car ownership to support a sustainable modal shift. The European Union should persist in its efforts to promote open access to data across the transport sector and foster open sales channels for providing integrated and multimodal transport services. Ensuring the service level and interoperability of public transport with all other public and market-based mobility services, including payment, identification, booking, and sales, is crucial. Investments in improving cycling and pedestrian conditions, promoting safe micromobility, and enhancing mobility management are vital steps towards achieving an accessible and interoperable service network. A "digital by default" approach should underscore the development of transport chains.

Digitalisation in logistics is essential for enhancing the competitiveness of companies. The digital transformation promises increased efficiency and reduced logistics costs, ultimately leading to greater competitiveness and employment opportunities. Advancing digitalisation in logistics hinges on open information and process automation.

## **4. Competitive, Reconnected Europe**

The future brings a completely new era marked by unpredictable relations with Russia and the extensive support required to rebuild Ukraine. As the Union contemplates its future, with questions of potential geographic expansion and evolving global role, it becomes increasingly crucial to ensure that both the Union and its Member States remain closely connected to each other. The seamless mobility of people and goods, underpinned by robust transportation links, is critical for the Single Market and for preserving geographical and cultural unity within the EU. In light of intensifying global competition, Europe must not take its global competitiveness for granted.

The landscape of transport connections and trade routes in Russia's neighboring Member States has undergone significant shifts. These changes have had a profound impact on passenger transport and logistics services, resulting also in increased logistics costs and transport emissions. This is due to the disappearance of some of the most direct and efficient routes. For instance, Finland has become even more reliant on its sea routes and port operations, and the air connections from Helsinki to Asia have been rerouted along considerably longer paths. In response, the EU must direct its support to the northern and eastern European regions affected by these geopolitical changes. A targeted program is required to establish alternative transport and logistics routes for the affected areas in Northern and Eastern Europe, fortify the Union's security and supply chains, and enhance its resilience. Investments are necessary to improve rail and road links with neighboring EU countries, enhance port infrastructure, and bolster hinterland connections. As there are no prominent alternatives for maritime transport in the North-East Europe, creating competitive conditions for winter navigation in the Baltic Sea is essential, with due consideration of exceptions to EU regulations.

Within the framework of the TEN-T policy, greater attention must be directed toward supporting and facilitating the energy transition within the transport sector. Rapid scaling up of infrastructure for alternative fuels and electrification is essential across the Union. New instruments and models are required to encourage private sector participation and interoperability in this market. Encouraging sector coupling and joint initiatives among transport, energy, and digital sectors should be a priority. For example, when EU funding is allocated to transport or infrastructure projects, the creation of digital twins and access to relevant data should be mandated outcomes of these projects. This integrated approach will be pivotal in shaping a more sustainable, efficient, and resilient future for the European transport sector. Today, all new services and solutions in the transport sectors also include remarkable digital and sustainable transition aspects. While these aspects have featured in key strategies, programs, projects, and plans within the transport sector for years, they are yet to be fully reflected in transport funding commensurate with their importance. Consequently, increased investment in know-how and future solutions is imperative — it's time to "put the money where the mouth is."

IN COLLABORATION OF FINLAND CHAMBER OF COMMERCE AND ITS FINLAND

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