

Research for TRAN Committee – Expected impacts of ‘Fit for 55’ legislation on connectivity and mobility in Europe



KEY FINDINGS

- The ‘Fit for 55’ package aims to realise the European Climate Law objectives: a 55% reduction of net Greenhouse gas (GHG) emissions by 2030 and climate neutrality by 2050. The package contains **eleven legislative texts relevant to the transport sector**. Five are horizontal reforms and six are mode-specific.
- **The study assesses the foreseeable impacts of the transport-related ‘Fit for 55’ legislation on connectivity and mobility.** The analysis includes modal, geographic, economic, social and technological dimensions and adopts operational definitions of connectivity and mobility to assess how past reforms and the ‘Fit for 55’ package together contribute to changed dynamics and trends.
- Policymakers should **continue to navigate connectivity and mobility trade-offs, recognising that decarbonisation is achievable** alongside maintained or improved levels of connectivity and mobility.
- Member State implementation of the transport-related ‘Fit for 55’ legislation should be supported by EU funding that addresses the uneven distribution of transport (and cost of living) impacts over time, space and demographic groups. EU funding will also facilitate the delivery of modal shift targets.

The present document is the executive summary of the study on Expected impacts of ‘Fit for 55’ legislation on connectivity and mobility in Europe. The full study, which is available in English can be downloaded at: <https://bit.ly/3N1v7Jv>

The 'Fit for 55' package and its transport policy dimension

The 'Fit for 55' package aims to achieve a **55% reduction of net GHG emissions by 2030, compared with 1990 levels and climate neutrality by 2050**. It consists of **nineteen legislative texts, of which eleven with a transport policy dimension** to contribute to the climate goals.

Five horizontal reforms aims to ensure access to recharging or refuelling infrastructure of alternative fuels, increase the share of renewable energy sources by 2030 and address the social and distributional impact of the EU Emissions Trading System (ETS) in road transport. **Six specific reforms for road, maritime and air transport** also contribute to the climate objectives. For **road transport**, new rules introduce progressive emissions reduction targets for cars and vans and a 100% reduction target for new cars and vans for 2035. For **maritime transport**, the EU ETS has been extended to this mode in parallel with the promotion of the use of renewable and low-carbon fuels. For **air transport**, the relevant legislative texts aim to reduce the environmental footprint through a global carbon offsetting and reduction scheme with the EU ETS and enable a widespread use of sustainable aviation fuels.

This study assesses the foreseeable impacts of the transport policy dimension of the 'Fit for 55' package on connectivity and mobility in the EU.

Transport connectivity and mobility

Connectivity and mobility are concepts linked to the performance of transport networks. Connectivity relates to the availability of infrastructure and services and their integration for seamless travel. Mobility relates to the ease and efficiency of passengers and goods to travel. Within EU policymaking, mobility is a demand-driven concept, whereas connectivity focuses on creating high-quality services and integrated networks. This study takes **connectivity as the physical and operational characteristics of transport networks** enabling passenger and goods movement (i.e. supply of transport). **Mobility measures how well the transport system serves user needs** (i.e. demand for transport), including the ability to move effectively and efficiently.

Appraisal of the transport-related 'Fit for 55' legislative texts

The appraisal highlighted impacts on passenger and freight modes in road, maritime and air transport, emphasising the **transformative potential of the 'Fit for 55' package**. The impacts are both cross-cutting and mode-specific; and primarily economic and social. Overall, the 'Fit for 55' package will require **coordinated policy efforts, substantial investments in infrastructure and careful consideration of the economic and social impacts** to ensure equitable and efficient transitions in connectivity and mobility.

For **road transport**, stricter CO₂ emission standards for cars are expected to significantly increase the adoption of zero- and low-emission vehicles. Challenges remain in ensuring affordability for lower-income groups and developing a proper recharging infrastructure network. The second-hand zero- and low-emission vehicles market faces challenges such as limited battery longevity and uncertain resale value, which deter potential buyers and complicate efforts to increase adoption. The Social Climate Fund addresses the undesired effects of ETS extension.

The adoption of zero- and low-emission Heavy Duty Vehicles (HDVs) will necessitate significant investment in dedicated recharging and refuelling infrastructure. Subsidies schemes lowering the purchase price remain important for transport operators.

For **maritime transport**, the inclusion of voyages in the ETS and the imposition of stricter GHG intensity limits aim to lower emissions but will increase operation costs for the ships in scope, leading to higher passengers' ticket prices. Higher prices could induce passengers to choose other transport modes where options exist. Major changes in practice (e.g. ships slowing down or changing port calls) are not expected.

Maritime freight is similarly affected by the revised ETS Directive and FuelEU Maritime Regulation, increasing ship operation costs and freight rates. Higher freight rates are not expected to cause significant cost increases due to their low impact on final prices. The impact on connectivity may be smaller for freight ships, as they have more options to slow down to reduce fuel consumption or avoid compliance by calling at ports outside the scope of the legislation. This could have knock-on effects on employment and onward connections for EU ports that lose this traffic.

In **air transport**, passengers are likely to face higher ticket prices and a shift towards cheaper alternatives as the sector undergoes Sustainable Aviation Fuel (SAF) blending obligations and the phase-out of free ETS allowances. Significant investment in SAF production and infrastructure is crucial for decarbonisation. Connectivity effects may include reduced flight frequency on certain routes.

Air freight is subject to similar measures. A (limited) increase of freight rates appears unlikely to lower demand. A significant distortion of competitiveness with extra-EEA hubs is unlikely.

Policy recommendations

- EU policy does and should continue to navigate connectivity and mobility trade-offs, while recognising that decarbonisation is achievable alongside improved or maintained connectivity and mobility in most cases.
- Member States' implementation of the current EU transport legislation associated with the 'Fit for 55' package needs continued support, with particular attention on comprehensive funding strategies that address the uneven distribution of transport impacts over time, space and demographic groups. The necessity of policy and funding that facilitates delivery of modal shift targets needs to be emphasised.
- Ensure that Member States **achieve the alternative fuels infrastructure Regulation (AFIR) and TEN-T Regulation targets for charging infrastructure**. The assessment of their biennial progress reports will help to verify that the targets are met.
- **Monitor battery production costs and supply chain issues** and ensure that road transport adapts by following the pathways and actions identified by the European Battery Alliance and Batteries Regulation.
- Ensure that Social Climate Plans **support the affordability of cleaner vehicles**, particularly in lower-income Member States. Focus on (i) financing clean vehicle purchases, (ii) **support the research and innovation** for clean long-distance passenger vehicles using the Innovation Fund and Horizon Europe.
- Assess the impact of EU regulations on smaller vessels and **support short-sea shipping to avoid modal shift**. Update policies to prevent cost-driven avoidance of EU ports and strengthen international GHG and safety measures for shipping.
- **Ensure timely supply of renewable marine fuels** and clarify how revenues from ETS and FuelEU will support decarbonisation efforts.
- **Regional airports with a high share of low-cost airlines could be impacted relatively strongly**. Therefore, improve rail connections between cities served by these regional

airports and strengthen rail mobility by addressing challenges related to single booking systems and passenger rights. **Conduct research to identify income groups most affected by increased intra-EEA air ticket prices.**

- Promote a level playing field globally, pushing for stronger climate policies for aviation in third countries to maintain competitiveness for EU hubs. Support SAF production in outermost regions to mitigate connectivity impacts and leverage on their favourable conditions for renewable electricity production.

Further information

This executive summary is available in the following languages: English, French, German, Italian and Spanish. The study, which is available in English, and the summaries can be downloaded at: <https://bit.ly/3N1v7Jv>

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Research administrator: Davide PERNICE, Ariane DEBYSER Editorial assistant: Mariana VÁCLAVOVÁ
Contact: Poldep-cohesion@ep.europa.eu

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