Carbon pricing as a tool for delivering sustainable mobility

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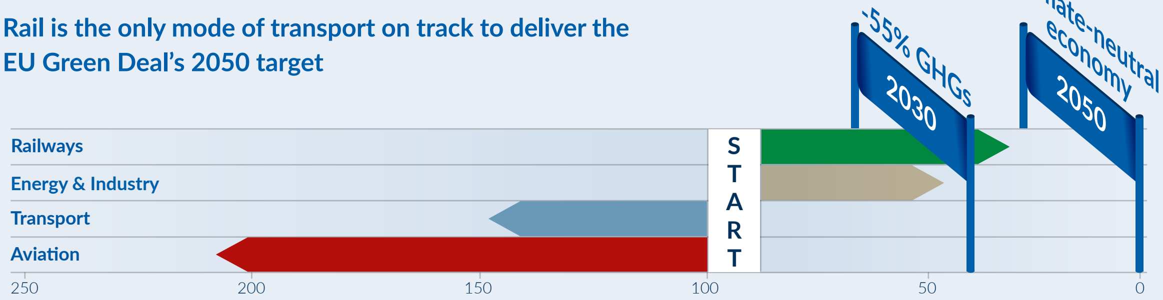
Transport is key to achieving the EU climate targets

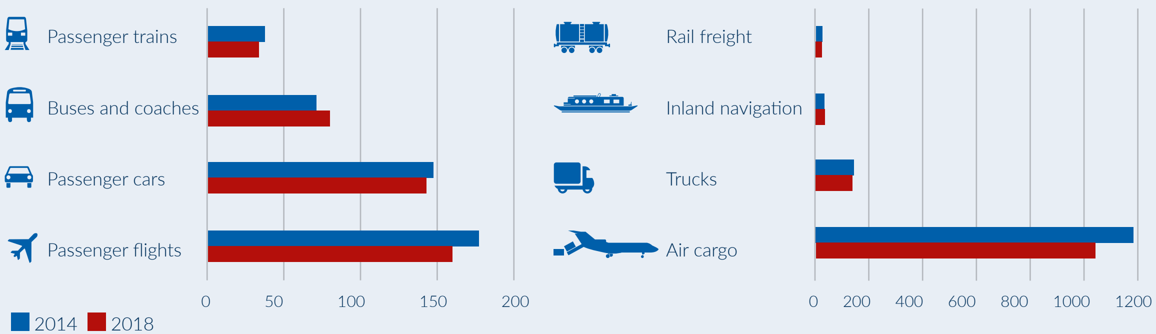
Transport represents 27% of the EU's greenhouse gas (GHG) emissions. The sector's emissions continue to grow while rail's emissions have fallen 32% in 30 years.

Rail is the only mode of transport on track to deliver the EU Green Deal's 2050 target



Source: EU Pocketbook, 2020

Rail continues to improve its GHG intensity (per passenger and tonne kilometre) and remains closest to zero emissions mobility



Source: EEA, 2021

To tackle the GHG emission gap, the EU climate and energy policy portfolio must include a robust carbon pricing component.

Carbon pricing 101

Understanding carbon pricing

Emissions Trading: the 'cap-and-trade' system guarantees a GHG emission reduction. A 'cap' is set on the total amount of certain greenhouse gases that can be emitted. Within the cap, emissions allowances (either bought at auctions or received for free) are then 'traded' among polluters as needed, thus the price for carbon is determined through a market, such as the EU Emissions Trading System (EU ETS).

Carbon tax: this is a tax that sets a price on emissions based on the carbon content of fuel. It provides a higher level of certainty about the carbon price but not about the level of GHG emissions reduction.

Why put a price on carbon in transport?

- Speed up the application of the **user-pays and polluter pays principles**.
- **Level the playing field for transport modes**, making low-carbon transport like rail more competitive.
- **Complement indirect ways of pricing carbon**, such as fuel and energy taxes and vehicle CO_2 standards.
- Funnel revenue back into low-carbon transport and **protect low-income households** from fuel poverty.
- **Incentivise behavioural change** among transport users.

To reverse the trend in transport GHG emissions and achieve greener mobility

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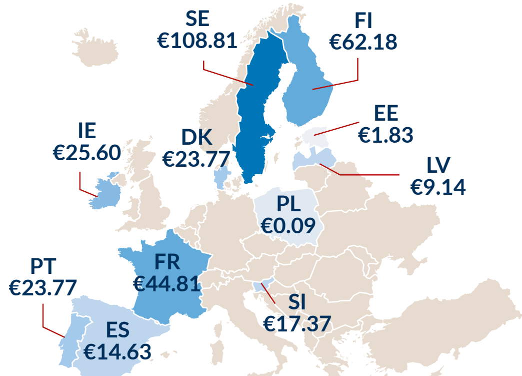
The path to effective carbon pricing

Carbon pricing dashboard

Carbon pricing for non-ETS sectors varies across the EU



The average price set by the EU ETS is still far below the level needed to reach EU climate targets

EU ETS carbon price — **€55/tonne of CO_2** July 2021

Recommended carbon price to reach the Paris climate target according to the European Investment Bank — **€250/tonne of CO_2** by 2030; **€800/tonne of CO_2** by 2050

In transport, all modes should pay for the carbon they generate – whether directly or indirectly – without exemption

- As a major consumer of electricity, rail pays around €500 million/year into the EU ETS and fully complies with the polluter-pays principle. Trains increasingly run on renewables, showing the sector's committment to sustainability but also the effectiveness of carbon pricing in influencing market behaviour.

  DYK Today, 4/5 trains in Europe run on electricity, with 1/3 already coming from renewables.

- For aviation, the current scope of the EU ETS covers only flights within the European Economic Area, just 1/3 of aviation CO_2 emissions.

  DYK The current system offers 85% of the allowances free to airlines, which also benefit from an energy tax exemption for kerosene.

- Road transport fuels are currently out of the scope of the ETS and are subject to fuel taxes at national level.

  DYK Even on major roads distance-based charging is only applied to trucks on about 20% of the network.

What policies influence carbon pricing?

Supporting policies	Governing policies	Key carbon pricing effects
• Energy Efficiency Directive • Vehicle CO_2 standards	• Emissions Trading System • Energy Taxation Directive	Switch to more efficient vehicles
• Renewable Energy Directive • Alternative Fuels Infrastructure Directive		Switch to low-carbon fuels
• Effort Sharing Regulation (to guide Member States' implementation of modal shift policies) • Eurovignette Directive (to apply the user pays & polluter pays principles)		Switch to sustainable modes and better managed transport demand

The Fit for 55 package includes legislative proposals on the revision of the EU ETS and the Energy Taxation Directive which both provide a basis for implementing EU-wide carbon pricing. For the short term, other policies support carbon pricing's key effects.

Carbon pricing revenues have huge untapped potential

€14 billion from auctioning ETS allowances (2019)

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€50 billion a year if ETS expanded to all transport modes

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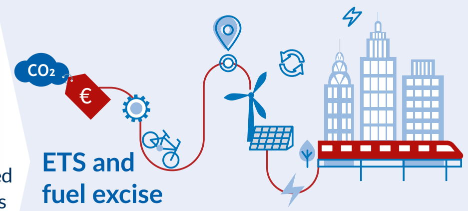
€170 billion fuel excise duties



ETS and fuel excise duties

To promote sustainable mobility and achieve political feasibility for carbon pricing

Less than 5% of current revenues are allocated to developing green transport!

How to make transport Fit for 55

1. **Focus on harmonised carbon pricing:** avoid the current patchwork of carbon pricing at EU-level and improve tolling systems with the Eurovignette Directive.
2. **Develop a separate ETS for transport:** include all modes under the ETS with a price control mechanism and no more free allowances for aviation.
3. **End fossil fuel subsidies in transport:** tax kerosene and high-carbon fuels.
4. **Facilitate efficient use of revenues:** make transparent use of the revenues from carbon pricing through earmarking them for greening transport.
5. **Strengthen the Effort Sharing Regulation:** require Member States to set interim targets for transport GHG emissions.

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