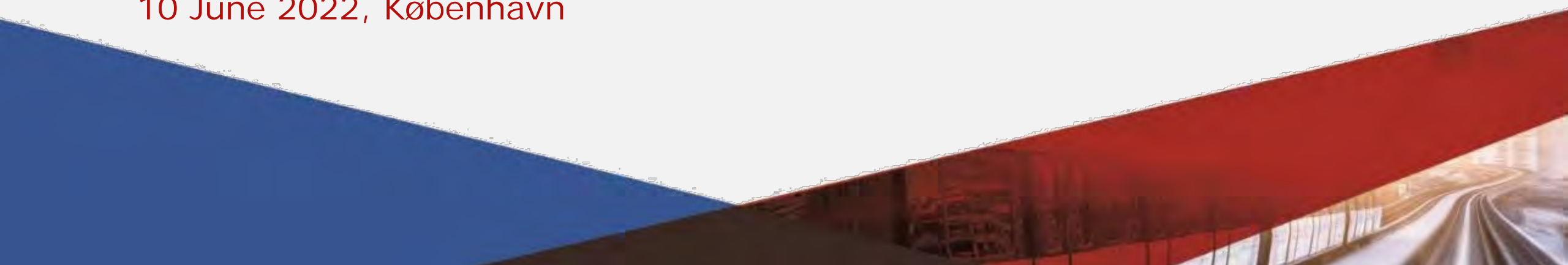


How can public transport contribute to a greener future mobility? – rail perspective

Blaž Pongračič, Senior Policy Adviser Passenger

19th Conference of the European Passengers' Federation

10 June 2022, København



Rail reduces the EU's carbon footprint



Rail's direct emissions account for less than 0.4% of transport emissions. This is less than half the GHG emissions of Cyprus, whereas road generates more than the total emissions of France and Spain combined. Aviation emissions grew the most during the last decades and now surpass the total GHG emissions of Romania.

EU energy-related GHG emissions from transport

Transport emits **26%** of energy-related GHG emissions (incl. international aviation and shipping)

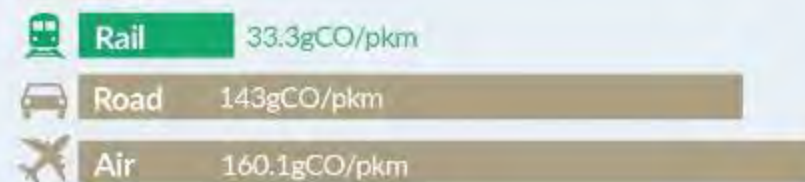


Rail is the closest mode to net zero. Rail is the most efficient form of passenger and freight transport in the EU27. Rail's well-to-wheel GHG intensity improved by more than 10% between 2014 and 2018.

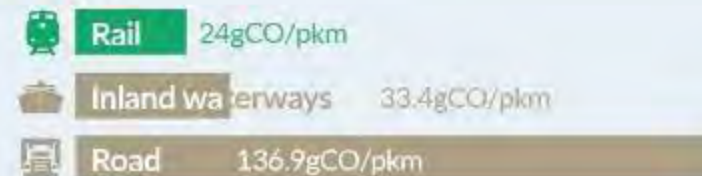
Well-to-Wheel

includes both the GHG emissions from the production and distribution of fuels and those from using them.

Passenger



Freight

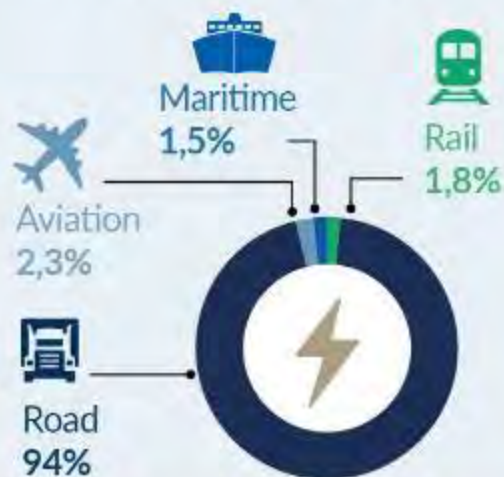


Rail contributes to major energy savings



Rail accounts for **1.8% of EU transport's energy consumption**, while it carried 17% of freight and around 8% of passengers of EU27 inland transport in 2019.

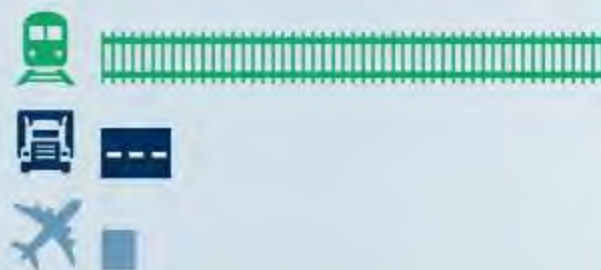
Transport represents
31% of the EU's final energy consumption



Rail is **7x more energy-efficient than road** and **15x more than air transport**.

Energy efficiency of rail

Distance per energy unit consumed



How?

- Rail is already an electric mode.
- Rail benefits from physical advantages such as lower rolling and air resistance.

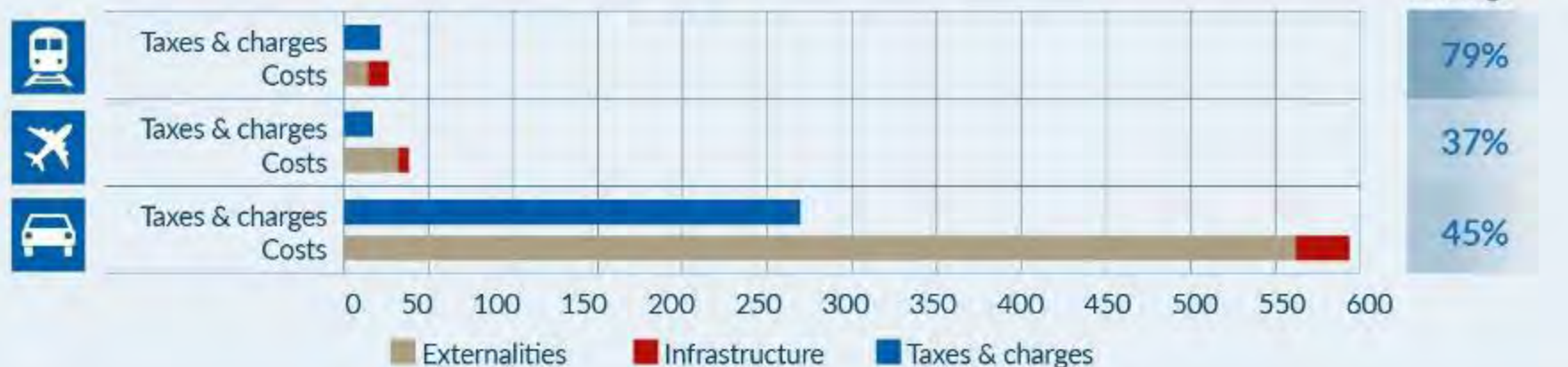
Rail externalities cost the least to society



Rail leads transport in variable-cost coverage

Rail covers most of its costs to society through the taxes and charges it pays. This is most visible when looking at variable costs (those increasing and decreasing according to the amount of trains, planes or trucks a company is running, as opposed to fixed costs), which are recognised as the most relevant when assessing the 'user pays' and 'polluter pays' principles.

Total variable external and infrastructure costs vs. total variable taxes and charges (bn €)



Railway to a green future



Rail is well equipped to remain the greenest mode of transport



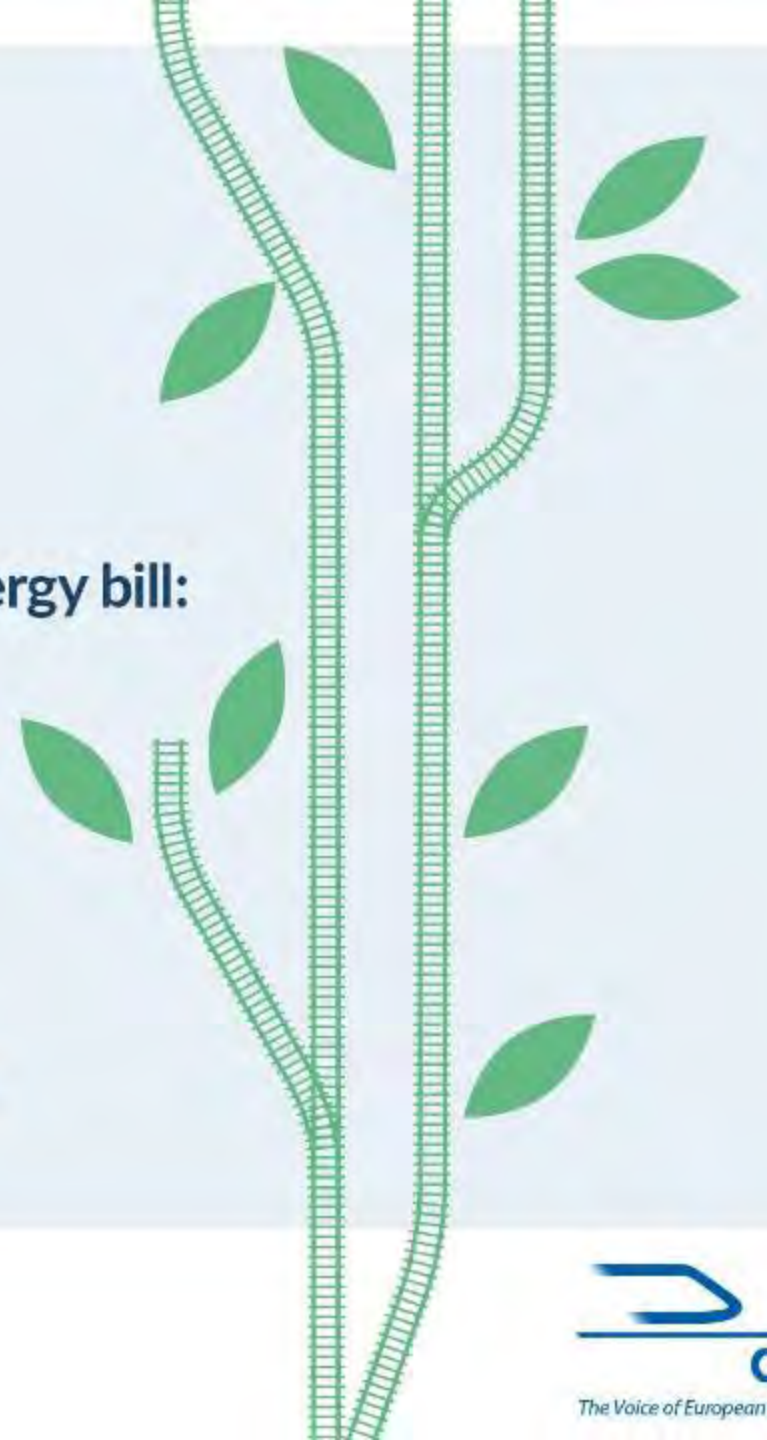
Rail reduces the EU's carbon footprint and energy bill: lowest emissions and energy consumption



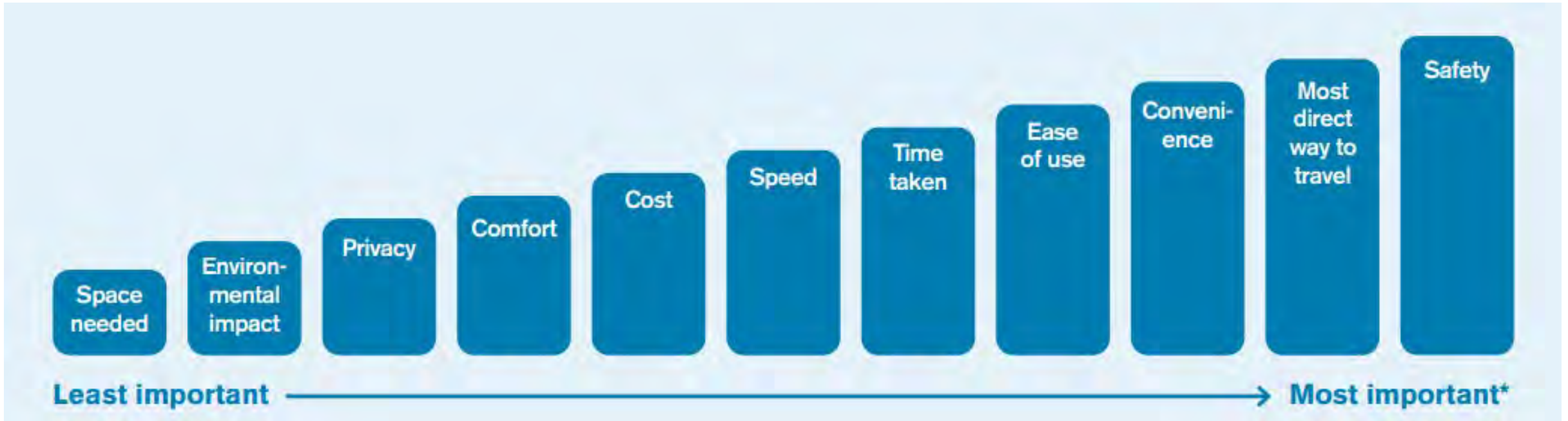
Rail gives back to society: lowest external costs and best cost-coverage



Rail is at the forefront of the green recovery: rail system fully included in the EU Taxonomy



Priorities for passengers when deciding how to travel



*Transport focus research August 2021

Make green transport ambition a reality

Without rail, the EU's Green Deal ambition of 90% emissions reduction in transport by 2050 is not possible. The EU set clear targets with the Sustainable and Smart Mobility Strategy in December 2020. It is time now to act with the Fit for 55 and Efficient and Green Mobility Packages:

- 1. Continue with the decarbonisation of railways:** Support electrification, fuel cells and hydrogen through Europe's Rail Joint Undertaking & the upcoming Alternative Fuels Infrastructure Regulation (AFIR).
- 2. Keep infrastructure a priority:** Dedicate annual budgets for the next two decades and deliver the TEN-T milestones.
- 3. Promote digital innovations:** Support railways in deploying the European Rail Traffic Management System (ERTMS) and Digital Automatic Coupling for even more efficient, smarter rail.
- 4. Seek synergies with other sectors:** Guide railways to achieve energy system integration.
- 5. Let transport modes compete in a fair regulatory environment:** Implement the 'user pays' and 'polluter pays' principles by making use of existing tools such as the EU ETS and road pricing.
- 6. Use carbon pricing revenues to deliver sustainable mobility:** Make intelligent use of revenues to further develop the least polluting transport modes and protect the most vulnerable from transport poverty.



Sector improvements

- Improve digital services (CER Ticketing Roadmap)
- Improve capacity (ERTMS, TTR, integration of timetables)
- Staff (Women in rail, train driver licence)
- The rolling stock authorization process should be simplified

For further information:

Blaž Pongračič

Senior Policy Adviser Passenger

Tel: +32 (0) 460 75 79 57

E-mail: blaz.pongracic@cer.be

For regular updates on CER activities,
visit our website: www.cer.be
or follow  [@CER_railways](https://twitter.com/CER_railways)