



INTERNATIONAL UNION
OF RAILWAYS

unity, solidarity, universality

Rail climate change mitigation

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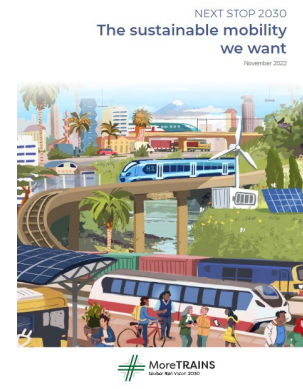
UNECE 4-6 September 2023 Transport and Economics

Rail to mitigate climate change

- Rail is the transport mode with lowest external costs (annex 2)
- Rail emissions are low, railways are working to reduce them with electrified rail, particularly when powered by renewables or nuclear power.
- Replace diesel trains : Hydrogen /battery electric trains / track electrification /charging points
- Rail reduces its emissions : Railway Climate Responsibility pledge signed – action and commitment
- Rsi Rail Sustainability Index : SDGs applied to the rail sector



Let's think how to optimize transport demand
explain external costs



Annex 1: To go further

- > UIC external costs web page :

<https://uic.org/support-activities/economics/article/external-costs#UIC-studies>

- > <https://www.iea.org/energy-system/transport/rail#tracking> for best practices and country projects

- > <https://uic.org/sustainability/energy-efficiency-and-co2-emissions/railway-climate-responsibility-pledge> for all railways that have signed the pledge and taking action and commitment to reduce emissions – information here [Railway Climate Responsibility Pledge | UIC - International union of railways](#)

- > Concrete examples of action - [Paper | Next step 2030: the Sustainable Mobility that We Want on More Trains campaign | Trello](#)

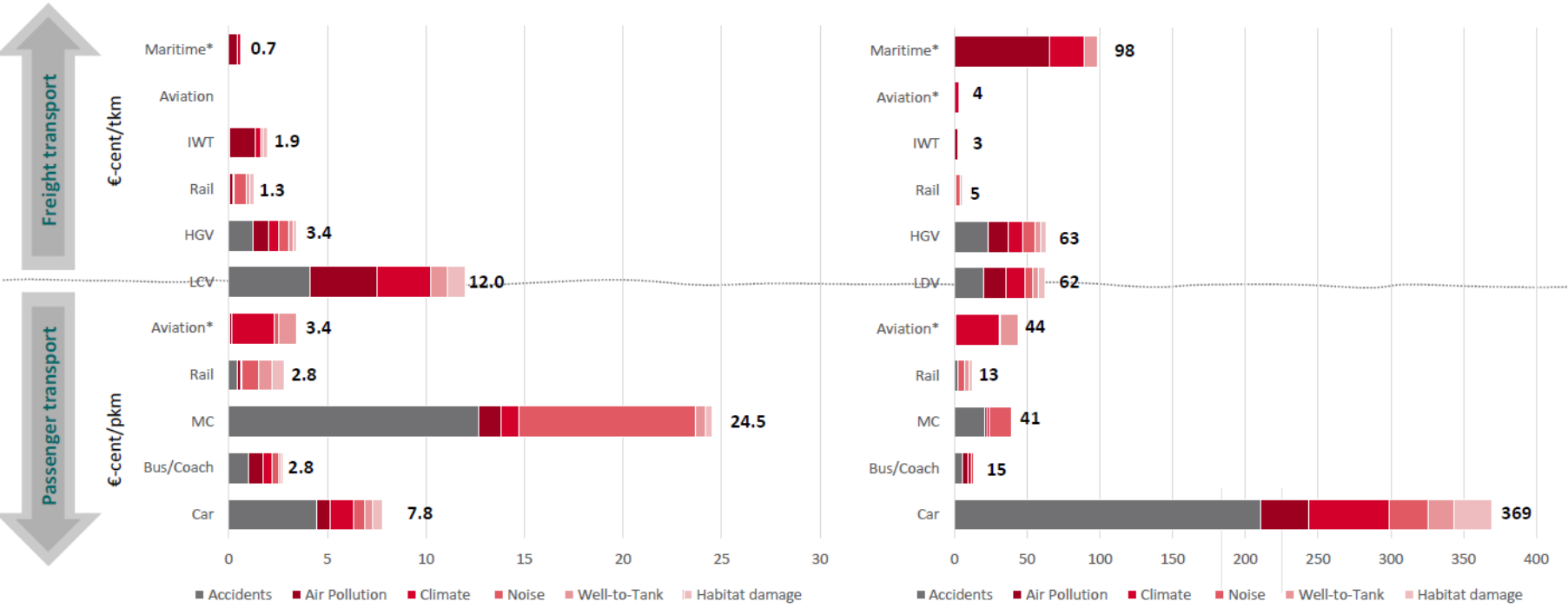
Annex 2

EU28 Figures from the Handbook

*Data for aviation and maritime: rough estimations for EU 28 based on selected ports/airports

Average external costs

Total external costs (billion € per year)

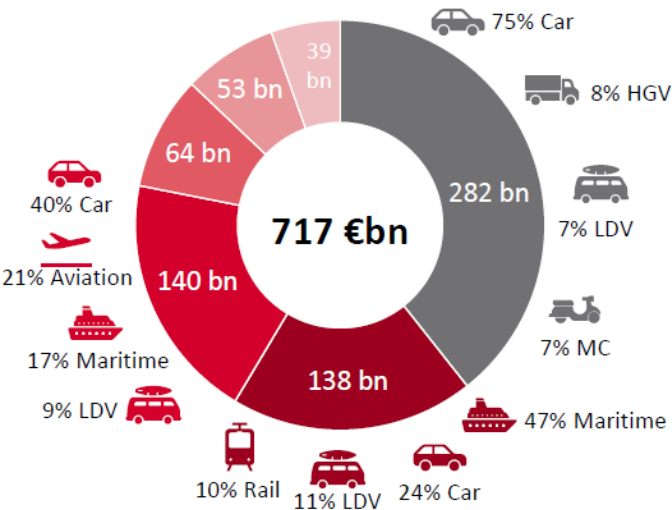


Annex 2 bis

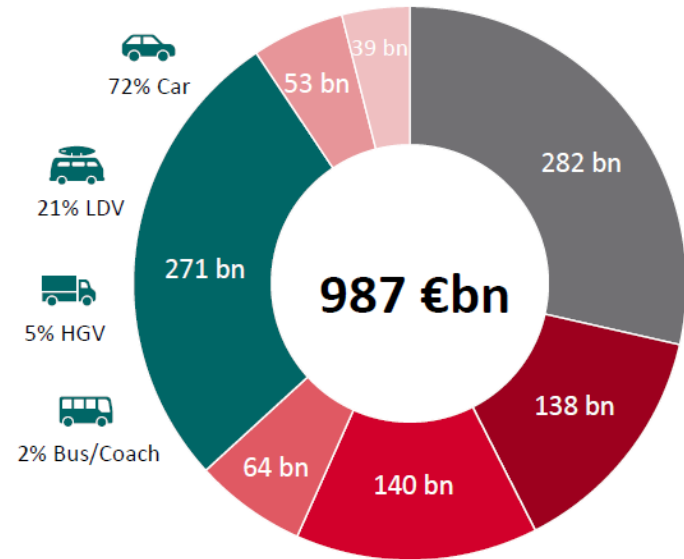
The effect of congestion: total external cost share

EU28 Figures from the Handbook

Without congestion



With congestion



- Accidents
- Climate
- Air pollution
- Congestion
- Noise
- Well-to-Tank
- Habitat Damage

More information :

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<https://uic.org/sustainability/>

■ ■ ■ Thank you for your kind attention

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