UIC
Sustainable door to door solutions

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INTERNATIONAL UNION OF RAILWAYS

unity, solidarity, universality

Hanoi, Vietnam, 2018

Dortmund, Germany, 2018

Nearby Osaka, Japan, 2018

California, USA, July 2018

India, 2018

Coonabarabran, Australia, 2018

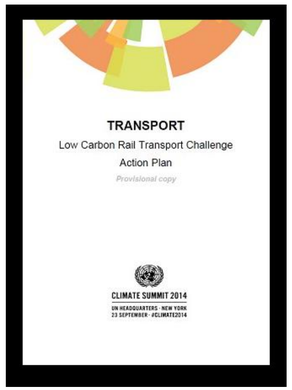
Lakeport, California, 2018

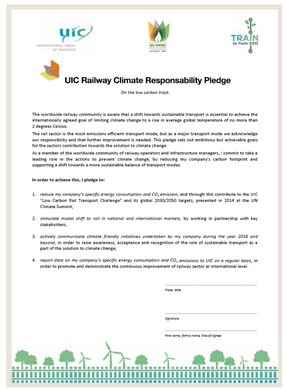
Japan,

UIC TARGETS

LOW CARBON RAIL TRANSPORT CHALLENGE

- Final energy consumption from train operations:
  - 50% by 2030 (1990)
  - 60% by 2050
- Average CO2 emissions from train operations:
  - 50% by 2030 (1990)
  - 75% by 2050
- Railway share of passenger transport (pkm) by 2030:
  + 50% (2010), +100% by 2050
- Railway share of freight land transport (tkm):
  = to road by 2030
  50% greater than road by 2050

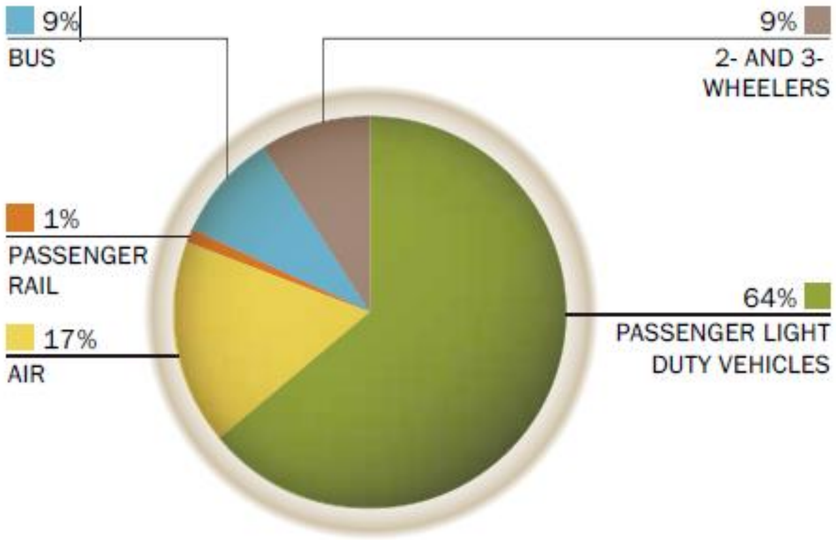




RAILWAY CLIMATE RESPONSIBILITY PLEDGE

- Contribute to the UIC “Low Carbon Rail Transport Challenge”,
- Stimulate modal shift to rail in national and international markets,
- Actively communicate to raise awareness,
- Report data on one’s company’s indicators above on a regular basis in order to promote and demonstrate the continuous improvements at an international level.

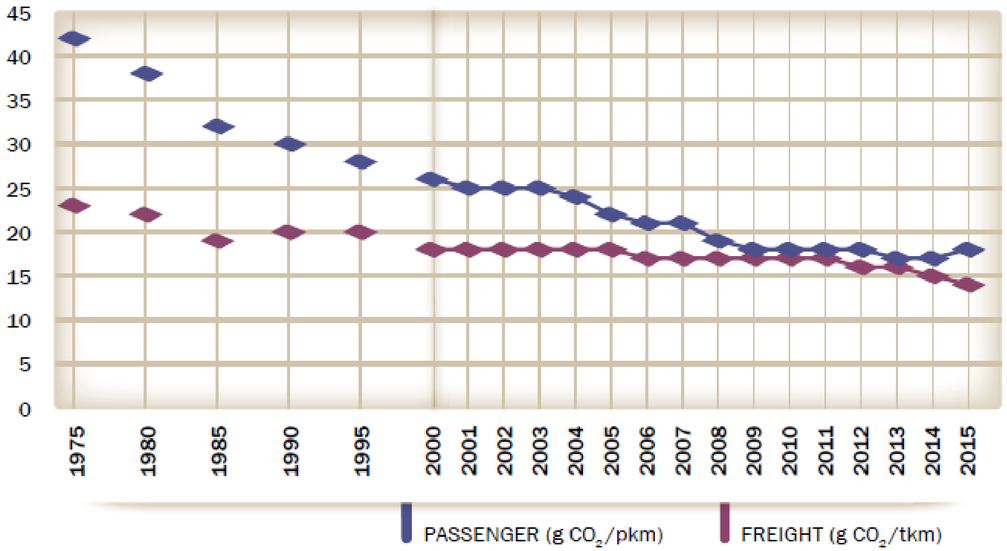
FOCUS ON PASSENGER RAIL TRANSPORT

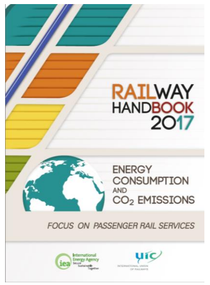


Source: IEA estimates based on IEA (2017b) and IEA (2017c)

- The most energy efficient passenger transport mode per pkm
- Requires less than 1/10th of energy needed to move an individual by car or by airplane.
- Despite accounting for 9% of the global passenger activity (in pkm) in 2015, it only represents 1% of the final energy demand in passenger transport.
- In 2015, around 75% of the passenger rail activity took place in Asia.

- Passenger Rail has decreased its energy consumption between 2005/2015
  - 27,8% per PKM
- Passenger Rail has decreased its CO_2 emissions between 2005/2015
  - 21,7% per PKM

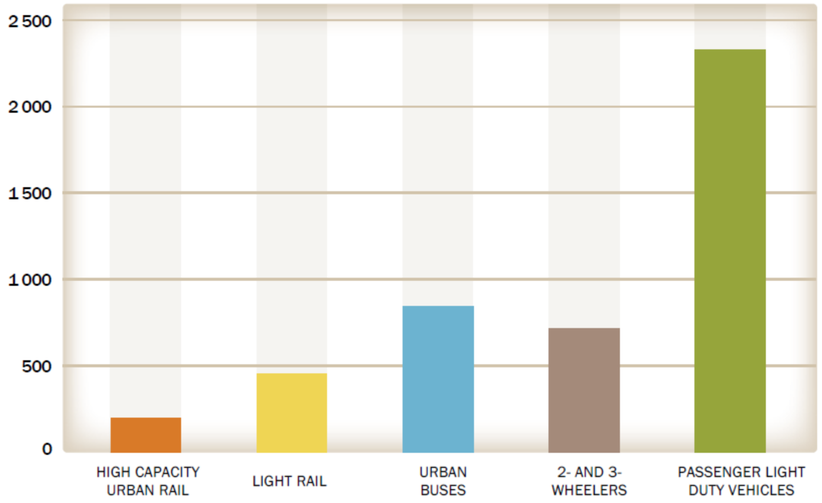




https://uic.org/IMG/pdf/handbook_iea-uic_2017_web2-2.pdf

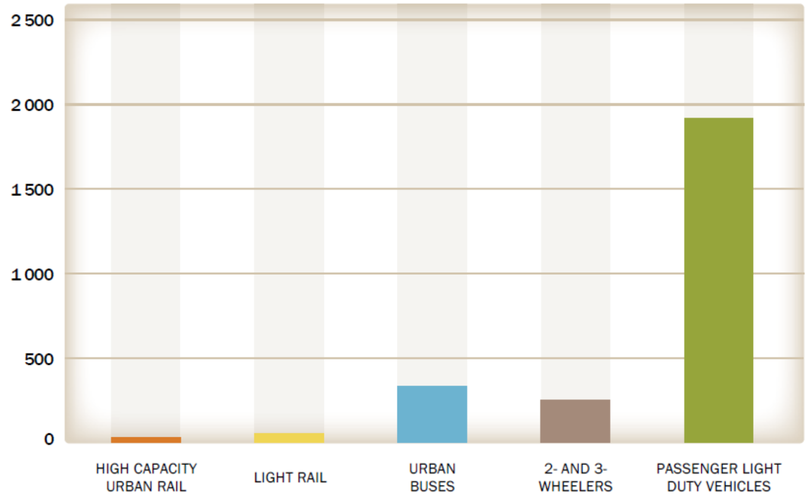
FOCUS ON URBAN RAIL

Fig. 106: Energy intensity by urban passenger transport mode (kJ/pkm), 2015



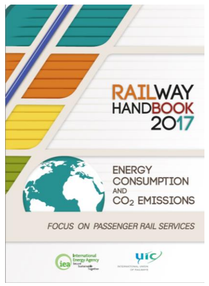
Source: IEA estimates based on IEA (2017b), ITDP (2014), UITP (2002) and UITP (2015b)

Fig. 108: CO_2 intensity by urban passenger transport mode (gCO_2/pkm), 2015



Source: IEA estimates based on IEA (2017b), ITDP (2014), UITP (2002) and UITP (2015b)

- The specific energy consumption of high capacity urban rail is the lowest of all urban passenger transport modes.
- The low energy intensities and mainly electric powertrains used for urban rail mobility further strengthen the advantages of urban rail over other transport modes.
- CO2 emission intensity of urban rail is less than one tenth the intensity of urban PLDVs.



https://uic.org/IMG/pdf/handbook_iea-uic_2017_web2-2.pdf

DOOR-TO-DOOR SOLUTIONS

Railway is the backbone of sustainable transport

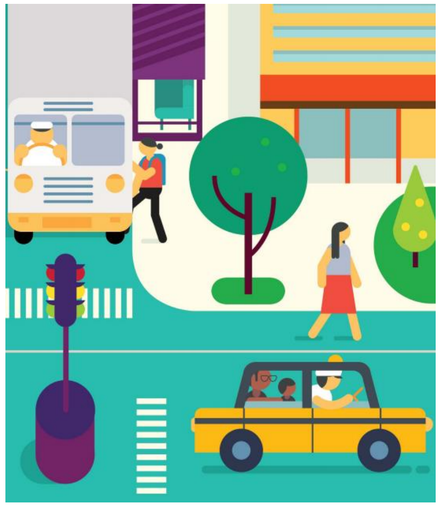
Rail has to be fully integrated into the broader network of mobility options:

- Challenge of the first and last mile of journeys
- Rail can be integrated in the wholistic approach needed

Rail can be the part of the answer to the change in passenger expectations, mobility patterns and technology

Optimising interfaces between rail and other modes of transport will result in:

- a public transport system faster and more flexible
- safer infrastructures and services
- easier to use and consequently more attractive



Images: www.sharedmobilityprinciples.org

- **The project**

➢ Methodological and political framework based on collective experience of members, with a strong focus on sustainable solutions.

➢ Guidance and recommendations for the alignment of policy regulation, institutions and strategies at national and city levels.

➢ Development of communication and mobility technologies, to keep Rail's market share and respond to customer satisfaction.

➢ Adaptation of the natural urban transport hubs that are Railway stations, so as to embrace new mobility solutions.

- **The workshop**

Opportunity for railways to discuss business opportunities for the first and last mile solutions, with a strong focus on sustainable solutions.

The goal of the workshop is to open a dialogue between railway companies and urban mobility providers for a new mobility offer to exchange best practices and stimulate partnerships and cooperation, in the frame of the new UIC project "Door-to-door solutions".

Link to the event: https://events.uic.org/uic-1st-door-to-door-solutions-workshop

Stay in touch with us!

Thank you for your kind attention…

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Thank you for your kind attention.