UIC Traction Energy & Emission Data

Each year, UIC collects data on energy consumption and emissions from railway undertakings to monitor the performance of railways towards decarbonisation targets set out by the UIC and CER for 2030 and 2050. With this data collection, UIC produces a yearly report on Traction Energy and Emissions, which provides key insights for policy and decision makers, financing institutions and academia, among other important stakeholders in the rail ecosystem. Tracking progress is the key to continued promoting of the role of rail as the cleanest mode of transport.

What is the data useful for?

- UIC advocacy work, e.g. during COP meetings
- IEA data on transport sector
- Carbon footprint tools
- UIC members to compare/benchmarking

Read more

2007

UIC defines the methodology
- *CO2 emissions guidelines*
- *CO2 calculation methodology*

2008

CER and EIM committed to reducing CO2 emissions from traction of the European railway sector by 30% in 2020 and 50% in 2030 (baseline 1990)

2015

The reduction target of 30% has been raised up to 40% during the "UIC-Combined meeting of the European Management Committee and 20th Regional Assembly

2019

Switch of the baseline from 1990 to 2005
➔ Include more companies
➔ Make the target more challenging

2022

- Worldwide extension of the monitoring
- Focusing on **Net zero emissions in 2050**

Which data are collected?

Electric traction
Consumption
CO2eq emissions
Activity (pkm, net tkm, trainkm)

Diesel traction
Consumption
CO2eq emissions
Activity (pkm, net tkm, trainkm)

PM and NOx emissions

Electricity and energy efficiency

Separate data for passenger and freight trains

UIC TED reports (Members only)

IEA - Tracking clean energy progress

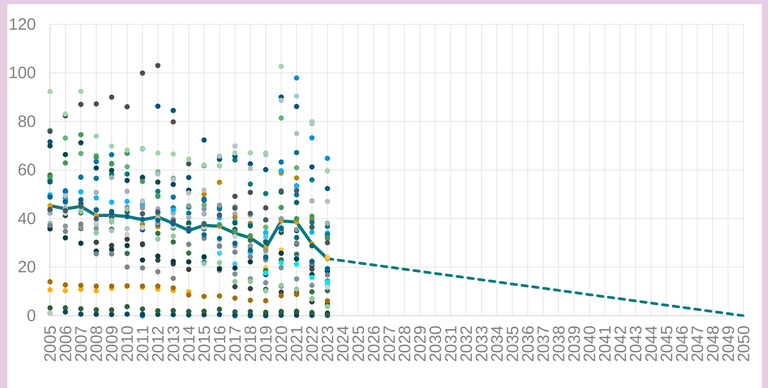
IEA The Future of rail

IEA-UIC Railway handbooks

SUSTAINABILITY Action Week

2024 campaign
Tracking zero – 2023 data

Specific passenger CO_2eq emissions (gCO_2eq/pkm)



Specific freight CO_2eq emissions (gCO_2eq/tkm)