



INTERNATIONAL UNION
OF RAILWAYS

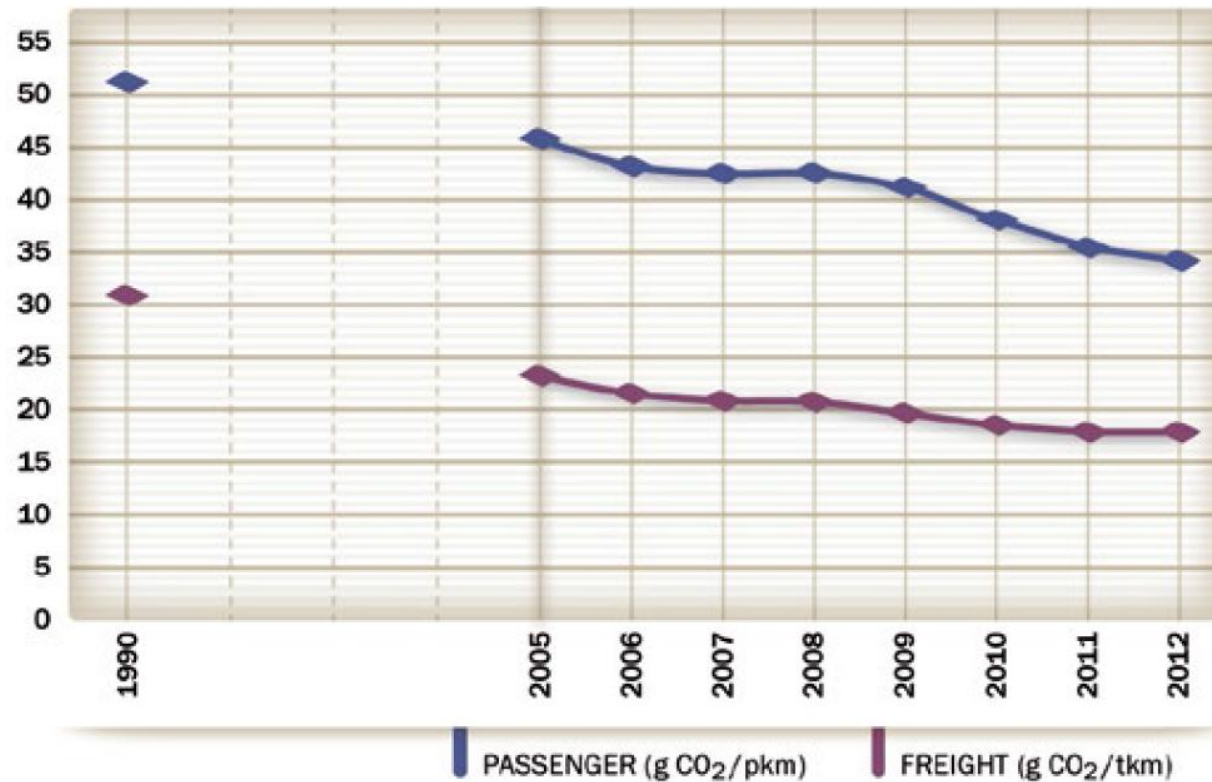
unity, solidarity, universality

Energy and Transport: how to meet decarbonisation, fuel security and efficiency targets of the future

20 April 2016

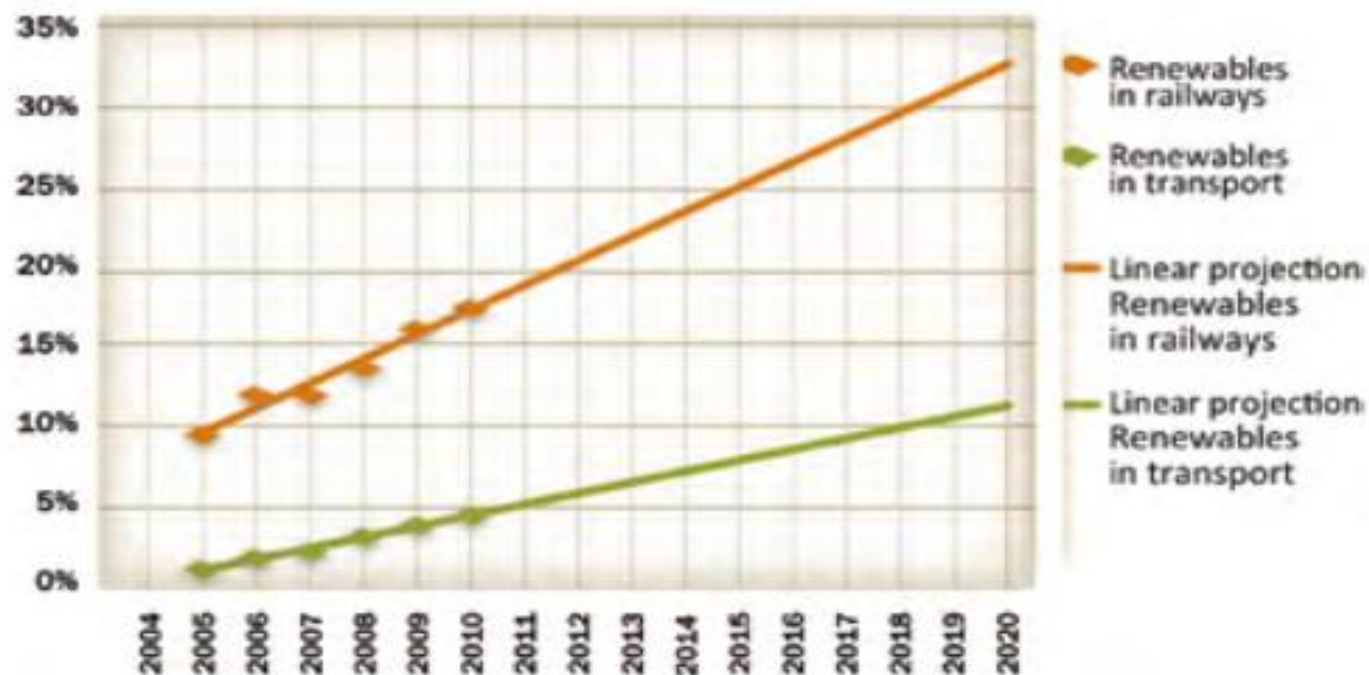
Reduction in European rail CO₂ emissions

Fig. 33: Railway specific CO₂ emissions, 1990-2012



Source: UIC (2014b)

Fig. 119: Forecast of the share of renewables in transport and in railways in EU27, 2005-2020



Source: Elaboration by Susdef based on IEA (2012b) and UIC (2012b)

- ◆ If the energy sources used by railways continue to follow the trends of past years, EU railways will go to almost 35% of renewables in 2020 (they were already at 18% in 2010). The fuel mix of the whole transport sector is now at 5% of renewables and is set to reach 12% in 2020.

Research & Innovation

Future potential energy savings

Energy saving

15-20%	Train weight reduction – target 30%
10-15%	Intelligent Traffic Management and Train Control
5-7%	Traction supply system efficiency
5-7%	Train Traction system efficiency
2-3%	Train Heat and Vent System efficiency
5-10%	Intelligent Train running gear
5-10%	Station heating and lighting
48 to 70%	Total