



The rail supply market

Modernisation and electrification will drive growth in the rail industry



How big is the rail supply market?

The Association of the European Rail Supply Industry UNIFE regularly issues its World Rail Market Study (conducted by Roland Berger) with insights about the global rail supply market. According to these data, the global rail market had a value of €177bn in 2019 and showed growth of 3.6% per year between 2017 and 2019.

Growth rail market by geography		
Market segment	CAGR 2017–2019	Market size, €bn
Total market volume	3.6%	177.3
- Rolling stock	6.8%	61.9
- Rail control systems	4.1%	16.8
- Infrastructure	2.3%	32.6
- Service	0.9%	65.0
- Turnkey	N/A	1.0

Source: UNIFE World Rail Market Study (conducted by Roland Berger)

What are the sector's main characteristics?

The sector is characterised by sustainable growth and is far less cyclical than the automotive industry, for example. Funding mainly comes from government or public bodies whose financial planning is focused on the long term and less dependent on short-term economic developments.

Other characteristics of the rail market are safety relevance, because the sector transports large amounts of people, and long product lifecycles, because components are mostly used for decades after being installed. Barriers to entry are therefore relatively high.

Rail infrastructure is largely a replacement market as developed countries do not often build new rail lines and extensions. Focus within the sector is on modernisation and electrification of fleet.

'Rail can play an important role in achieving CO2 reduction targets. Behind walking and cycling, rail's emissions are relatively low compared to other types of transport.' Johan van den Hooven, Benelux regional director

What are the growth rates in the industry?

Due to the COVID-19 pandemic, UNIFE predicts slower growth for the railway sector for 2019–2025 of 2.3% per year, which compares to the average growth of 3.6% in 2017–2019. This forecast includes an expected decline of 8% in 2020 due to the COVID-19 pandemic. Taking into account this predicted decline of around 8% in 2020 leaves a CAGR in rail of 4.6% per year for 2020–2025, including a recovery after the end of the pandemic.

Rail market segments	
Region	CAGR 2019–2025
Western Europe	2.0%
Eastern Europe	2.7%
North America	2.5%
Asia Pacific	2.6%
CIS	1.7%
Africa/Middle East	1.7%
Latin America	4.1%
Total	2.3%

Source: UNIFE World Rail Market Study (conducted by Roland Berger)

What are the main drivers of growth?

Anticipated growth in the rail market is driven by three factors:

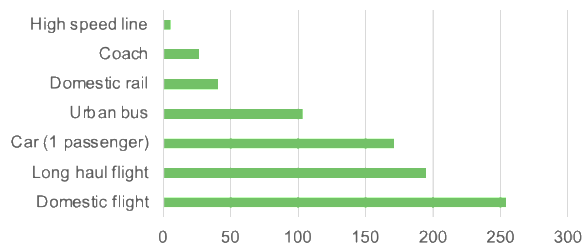
- Economic**, such as population growth and urbanisation. Based on estimates of the United Nations (World Population Prospects 2019), the world's population will increase from 7.7bn people in 2019 to 8.5bn in 2030, reflecting a CAGR of 0.95%. When looking at Europe and North America, the average growth rate is 0.2%. Growing populations will result in increased transportation needs for people and goods. Based on estimates of the United Nations (World Urbanisation Prospects 2018), the proportion of people living in urban areas will increase from 55% in 2018 to 60% in 2030, reflecting a CAGR of 1.85%. Urbanisation requires mass transit systems such as metros and trams.

- **Technology focused on energy efficiency, light weights, automation and digitisation.** Digital solutions, such as the internet of things, big data and data analytics, and modern train control systems can be optimised for predictive maintenance, reducing the lifecycle cost of vehicles and continual improvements in services and reliability of fleet. Rail operators can identify wear and tear patterns and avoid breakdowns by conducting maintenance before something breaks, at a time with the least effect on operations.
- **Decarbonising global transport.** The European Union wants to achieve carbon neutrality by 2050 and the UN Environment Programme Emissions Gap Report 2019 indicated global emissions need to be lowered by 7.6% per year, reflecting a reduction of 68% by 2030. The switch to more usage of rail might help to realise this target as gas emissions by rail are relatively low compared to other forms of transportation, as shown in the chart below.

crossings, point-heating systems, interlocking systems and components such as contactors and connectors.

Vossloh has a core focus on rail infrastructure, with products such as track-fastening systems, concrete ties and switch systems. Wabtec provides equipment, systems and digital solutions for freight and transit rail.

Greenhouse gas emissions (g) per passenger per km travelled



Source: BEIS. Greenhouse gas reporting: conversion factors 2019; [taken from ourworldindata.org](https://ourworldindata.org).

These (mega)trends will gradually change mobility solutions, as:

- intercity transport will become faster and cleaner;
- city centres will reduce their reliance on cars within their area;
- smart solutions will manage people flow due to increasing population density within cities; and
- passenger comfort will increase to attract them to use railways more often.

What are the main drivers of growth?

Knorr-Bremse's rail vehicle systems division equips mass transit vehicles with braking systems, entrance systems and auxiliary power supply systems, among other things.

Schaltbau Holding realises around 70% of its revenues from rail supply. Its product range comprises entry systems for rolling stock, level