Market evolution: Railway rolling stock and parts (CN 86) — 2015–2025

Introduction

The EU's railway and tramway equipment sector, grouped under CN 86, covers a wide range of goods from locomotives and rolling stock to track fixtures, signalling apparatus, and containers. Over the 2015–2025 period, the EU remained a clear net exporter, yet the trade surplus narrowed significantly as imports grew more than five times faster than exports. This report examines the main patterns in trade flows, the shifting geography of partners, the structural evolution of production, and the emerging vulnerabilities that define the sector's current trajectory.

1. A widening import wave erodes the EU's external surplus

Exports recover past their pre-pandemic peak after 2020 contraction

EU exports of CN 86 products to non-EU countries increased from €4.96 billion in 2015 to €6.20 billion in 2025, a rise of 24.9%. After reaching a high of €6.79 billion in 2019, they dropped to €4.79 billion in 2020 before progressively recovering. Overall trade overview

Imports more than double, driven by rolling stock and parts

Imports jumped from €1.44 billion to €3.52 billion, a 144.2% increase, with especially strong growth in self-propelled coaches (8603) and parts (8607). The following table summarises the value of the main import segments in 2015 and 2025.

CN sub-heading	2015 (M€)	2025 (M€)	Change
8607 (parts)	635	1 396	+120%
8603 (self-propelled coaches/vans)	329	792	+141%
8609 (containers)	238	742	+212%
8606 (goods wagons)	35	234	+563%

Product segment comparison

The trade surplus shrinks, altering the net-exporter dynamic

The trade balance fell from a surplus of €3.52 billion in 2015 to €2.68 billion in 2025 (−24.0%). Net-import reliance (negative values indicate a net-export position) weakened from –17.2% to –8.0%, signalling that the EU's relative self-sufficiency has diminished. Net import reliance

2. Geopolitical forces redraw the partner landscape

China becomes the top import supplier while EU exports to China halve

Imports from China grew by 295%, from €261 million to €1.03 billion, making it the largest single source of EU imports of railway equipment by 2025. Over the same period, EU exports to China dropped by 49.7% (from €856 million to €431 million). This opposite movement points to a decoupling in certain high-value rail technology segments. Top partners

Switzerland remains the foremost export destination, but with extreme volatility

Switzerland absorbed €1.39 billion of EU exports in 2025, up 97.3% from 2015, remaining the top foreign customer. However, trade with Switzerland is highly erratic. A massive shipment of passenger coaches (8605) in 2021 caused export volumes to spike to 8.7 million units, sending unit values down to €92; a sharp price correction of –27.9% followed in 2022. Simultaneously, import prices from Switzerland jumped by 46.5% in 2022, illustrating two-way instability. Price shock events

Near-shoring and new regional hubs boost Türkiye, Serbia, and Ukraine

Several neighbouring economies gained prominence as suppliers:

- Imports from Türkiye surged by 1 008% (€28 million to €306 million).
- Imports from Serbia rose by 789% (€36 million to €322 million).
- Imports from Ukraine grew by 269% (€46 million to €169 million).

On the export side, EU deliveries to Serbia leapt by 641%, while exports to the United Kingdom increased by 33% to €842 million, confirming the UK's persisting importance post-Brexit.

Russia’s role collapses after 2022

Imports from Russia contracted by 83%, from €43 million to €7 million. Exports followed a similar path, reflecting the sharp trade disruption brought by sanctions and political de-coupling.

3. Production gains mask structural fragilities

Production value soars, but export propensity declines

EU production value for CN 86 rose from €22.1 billion in 2015 to €31.1 billion in 2024 (latest available), marking a 155% increase since the early 2000s. Yet the share of this output sold outside the EU (export propensity) fell from 22.9% to 16.6%. This suggests that domestic and intra-EU demand absorbed a growing portion of production, reducing the sector’s external orientation. Production value | Export propensity

Specialisation concentrates in Central and Eastern Europe

In 2025, the most specialised EU members in railway equipment (by RSCA) were Croatia, Austria, Slovakia, Bulgaria, and Czechia. Germany remained the largest exporter in absolute terms (€2.07 billion) but with a more balanced trade structure (RSCA 0.05). The table below lists the top five most specialised countries.

Reporter	RSCA (2025)	Share of EU exports in CN 86
Croatia	0.74	2.8%
Austria	0.54	11.1%
Slovakia	0.48	6.1%
Bulgaria	0.48	1.8%
Czechia	0.42	11.8%

Specialisation map

Import supplier concentration drops, but volume concentration hints at physical dependencies

The value-based Herfindahl-Hirschman Index (HHI) for imports fell from 2 540 to 1 848 (−27.3%), showing a more diversified pool of suppliers. In contrast, the volume-based HHI jumped from 2 059 to 4 109, indicating that a few partners (notably China for containers and rolling stock) dominate the physical tonnage. Concentration HHI

Price shocks underscore the lumpy nature of rail trade

The detection of sharp price anomalies—such as the +115% unit price jump on exports to the United States in 2021 and the –27.9% fall on exports to Switzerland in 2022—reflects the project-based character of large rail contracts. These events expose the sector to sudden demand shifts and to potential supply bottlenecks that can rapidly alter the value per unit traded. Volatility and shocks

Conclusion

The EU railway equipment sector has grown in production value and maintained its net-exporter status over the decade, yet the period 2015–2025 reveals a clear shift in its external trade fabric. Imports have outpaced exports by a wide margin, with China, Türkiye, and Serbia driving the supply side, while traditional technology exports to China have halved. Switzerland remains a top but unpredictable partner. The sector is increasingly characterised by concentrated physical import volumes and significant price shocks, even as export propensity declines. These trends suggest that while the EU remains a competitive producer of railway equipment, it is becoming more dependent on external sources for certain components and finished rolling stock, and more exposed to the volatility of large-scale, politically sensitive contracts.
