



Intelligence Briefing.

A breakdown of the latest
EU road freight volumes
and forecast to 2030

Contents

Chapter 1	Introduction	5
Chapter 2	Road freight volumes	6
Chapter 3	Own account versus hire or reward transport split	14
Chapter 4	National versus international transport split	18
Chapter 5	International operations	23
Chapter 6	Freight composition	28
Chapter 7	Average payloads by type of operation	34
Chapter 8	Freight distances	37
Chapter 9	Road freight volume forecast to 2030	42
Chapter 10	Key takeaways	44

Chapter 2

Road freight volumes

Total EU road freight volume grew by 22% between 2014 and 2022

In physics, work is defined as the application of force over a distance. This concept leads us to measure road freight volumes in tonne-kilometres (tkm), reflecting the transport intensity of road transport. Tonnes serve as a proxy for weight (force), while kilometres represent distance. This unit enables the comparison and aggregation of various transport operations, from heavy lifting over short distances to volumetric transport over long-haul journeys.

The total EU road freight volume grew by 22% between 2014 and 2022, at which point it peaked at 1.92 trillion tkm. In 2023, volumes fell slightly to 1.86 trillion tkm, 3% less than in 2022. This decline results from a combination of the economic

slowdown following rapid growth in 2021 and the energy crisis triggered by the war in Ukraine and related sanctions.

These factors led to high inflation rates – 9.2% in 2022 and 6.4% in 2023 – significantly exceeding the theoretical ideal of 2%. High inflation rates undermine the purchasing power of consumers and businesses, reducing demand and ultimately lowering road freight volumes.

In 2024, the inflation rate fell to 2.6%, enabling a potential economic rebound in 2025. The EU's real gross domestic product (GDP) per capita can serve as a proxy for linking road freight volumes with its economic performance, as shown in Figure 1.

Figure 1. EU road freight volumes follow GDP trends

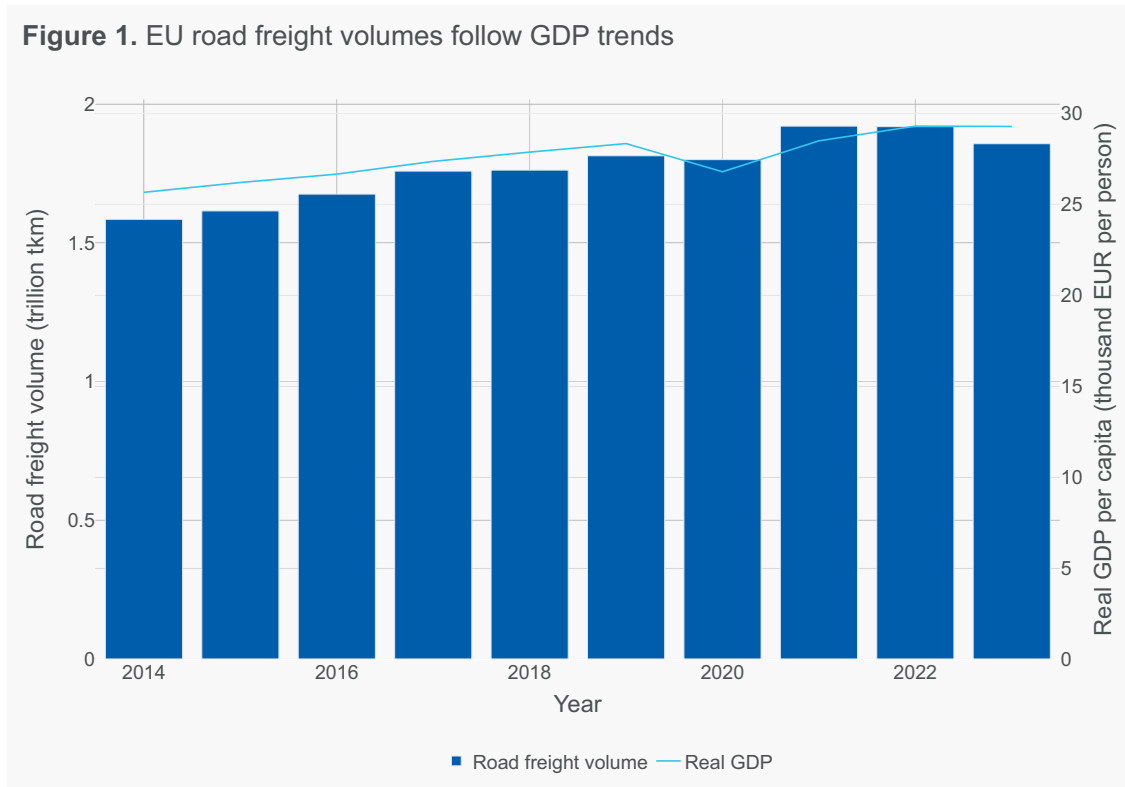
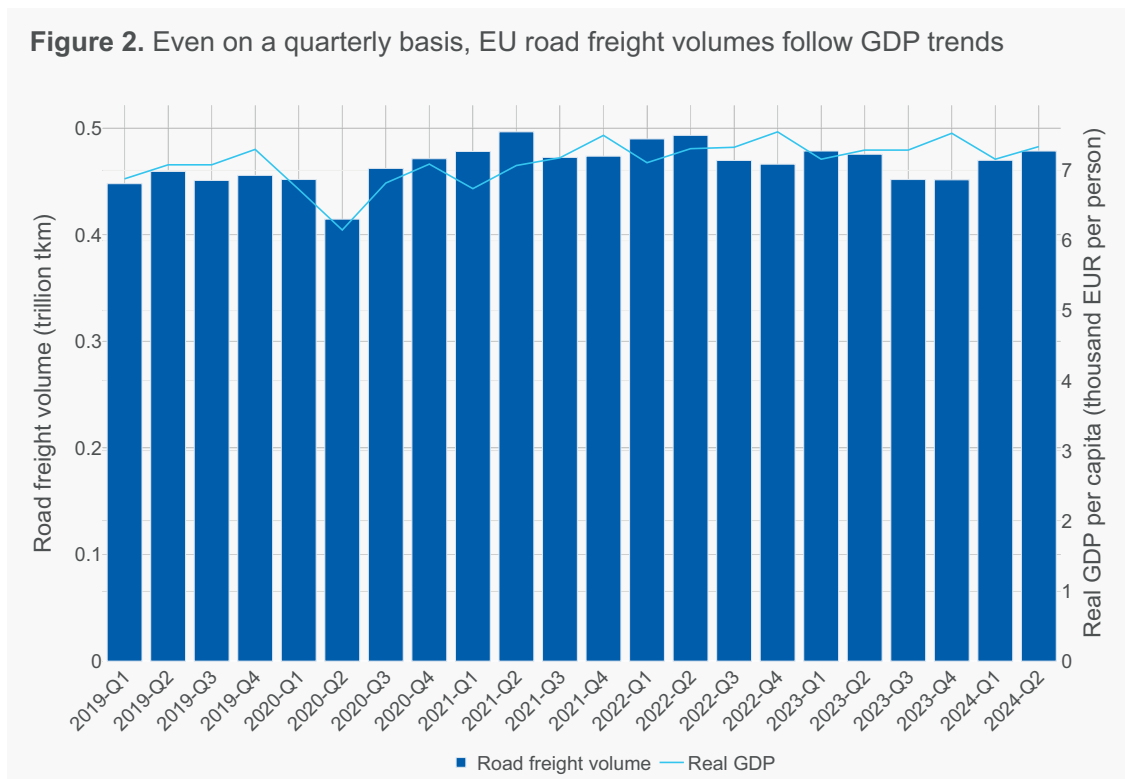


Figure shows real EU GDP per capita and road freight volumes.

Source: Eurostat ([road_go_ta_tot](#) & [sdg_08_10](#)) extracted on 2025-02-12

Figure 2 presents a quarterly view of the previous graph, highlighting the close correlation between road freight volumes and economic conditions.

Figure 2. Even on a quarterly basis, EU road freight volumes follow GDP trends



This figure shows quarterly real EU GDP per capita and road freight volumes.

Source: Eurostat ([road_go_tq_tot](#) & [namq_10_pc](#)) extracted on 2025-02-12

Chapter 3

Own account versus hire or reward transport split

90% of EU road freight operations are for hire or reward

A road transport operation can be analysed based on where the truck is registered, as previously demonstrated. Further analysis can be conducted by examining the ownership of the goods and vehicles. When both are owned by the same company, the transport operation is classified as "own account." Conversely, when the company producing the goods (the

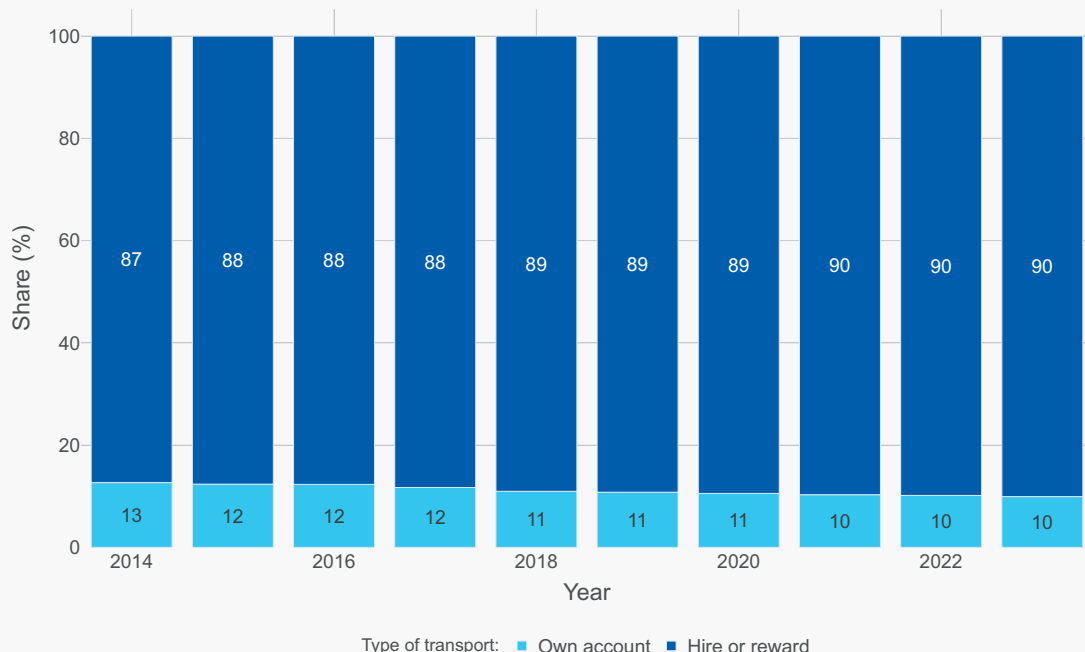
shipper) outsources the transport to another company (a carrier or freight forwarder), the operation is referred to as "hire or reward."

From a tonne-kilometres perspective, 90% of road transport operations are contracted to transport operators, with the level of own account transport falling below 11% for the first time in 2021.

This figure shows the share of EU road freight volumes by type of transport (tkm).

Source: Eurostat ([road_go_ta_tott](#)) extracted on 2025-02-12

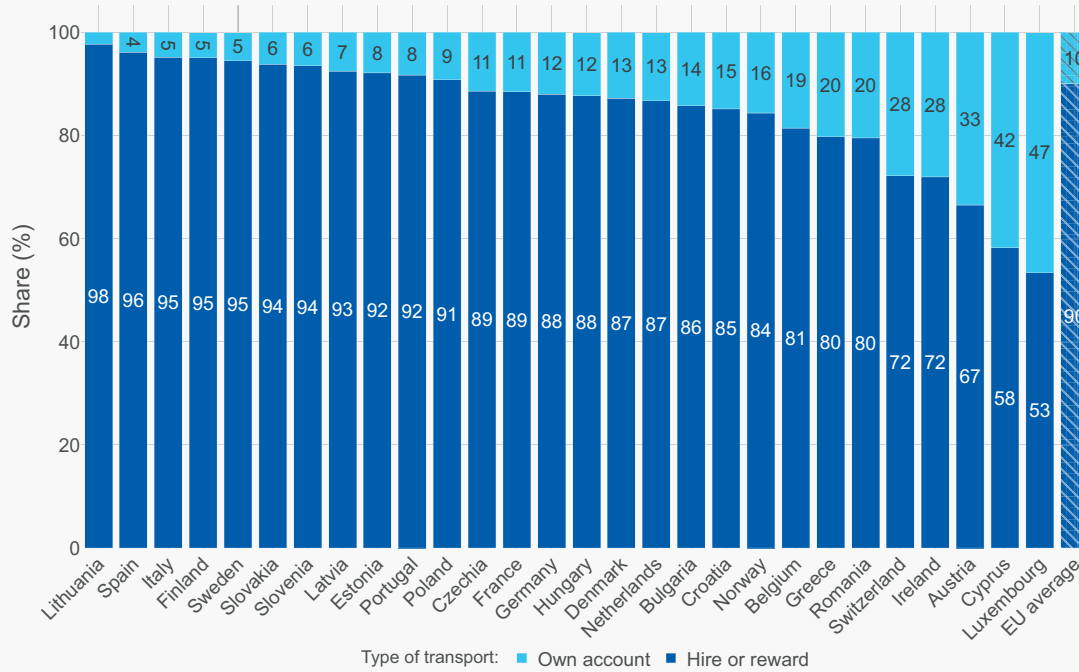
Figure 10. The EU share of own account transport has slowly decreased by around 22% over the past decade (tkm)



At the national level, some countries, including Austria, Belgium, Cyprus, Greece, Ireland, Luxembourg and

Romania, have more significant shares of own account operations, as shown by the next figures.

Figure 11. Only five EU countries have own account operations exceeding 25% of their transport activity



This figure shows the share of road freight volumes by type of transport per fleet in 2023 (tkm). EU average excludes EFTA countries.

Source: Eurostat ([road_go_ta_tot](#)) extracted on 2025-02-12

Chapter 5

International operations

Cabotage operations accounted for 7% of EU international road freight movements in 2023

To deepen the analysis of international operations, this type of road transport can be divided into four categories:

- **Cross-trade:** A vehicle from “country A” transports cargo from “country B” to “country C”.
- **Cabotage:** Temporary national transport conducted by an operator not established in the country and occurring right after an incoming international transport. For example, a vehicle from “country A” transports cargo inside “country B”.
- **Country export:** The vehicle crosses the national border to leave its own country.
- **Country import:** The vehicle crosses the national border to enter its own country.

In the EU, road freight cabotage operations follow specific rules governed by Regulation (EC) No. 1072/2009. Vehicles from one EU country can make up to three cabotage operations in another EU country within a seven-day period after arriving as part of an international loaded journey, which has been fully unloaded. Cabotage can be provided in one single or in

several host EU countries. In the latter case, the number of operations is limited to one per EU country within three days of the unladen entry into the territory of that EU country. A four-day cooling-off period is introduced at the end of a cabotage period in a host EU country. Cooling-off is possible in any EU country outside of the host EU country. ([More information available here.](#))

Please note that on 4 October 2024, the Court of Justice of the European Union [published its judgement](#) in Joined Cases [C 541/20 to C 555/20 Lithuania and others versus the European Parliament and Council](#). In its decision, the Court annulled the rule requiring vehicles to return to the operational centre of the transport undertaking every eight weeks. Regular updates on regulations and policy changes are available on the [IRU Intelligence Platform](#).

The share of cabotage operations has increased by approximately 40% (in tonne-kilometres) over the past decade, to reach a 7% share in 2023, as shown in Figure 23. This reflects the growing interconnectedness and integration of EU markets.

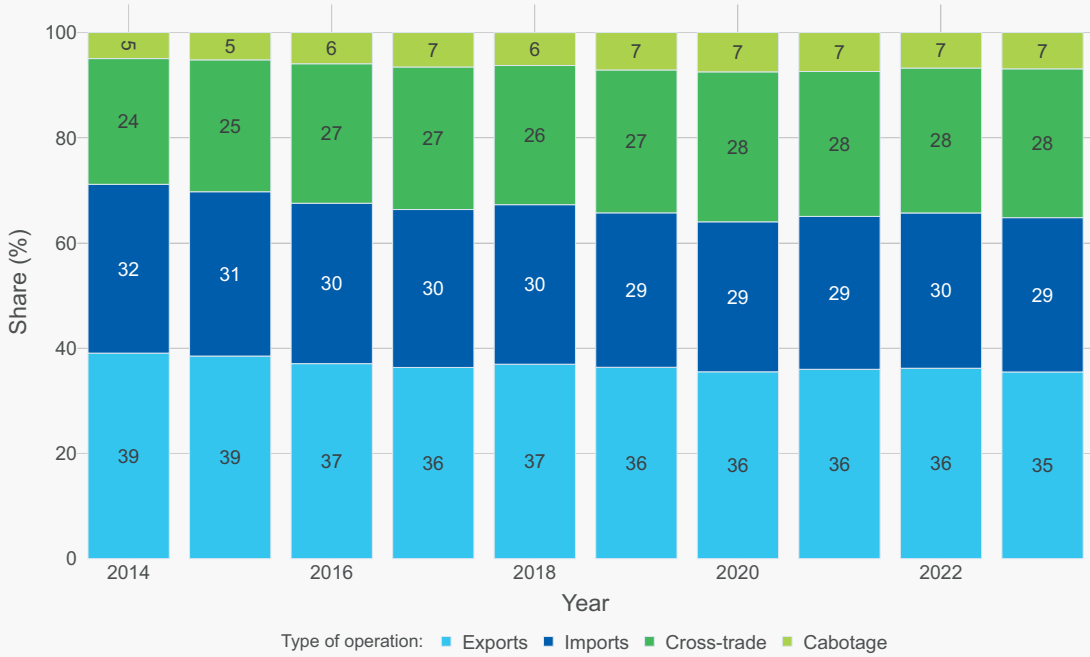
Among these international operations, EU exports hold the largest share (35.5%), as trucks must first leave their country before engaging in other international operations. The share of cross-trade has also increased over the past decade, while imports have been losing their share to

cross-trade and cabotage operations. This shift is primarily driven by the advantages of cross-trade movements, which enable transport operators to optimise fleet usage and reduce empty miles. However, there are some differences among EU countries, as shown in Figure 24.

This figure shows the share of EU international road freight volumes by type of operation (tkm).

Source: Eurostat ([road_go_ta_tott](#)) extracted on 2025-02-12

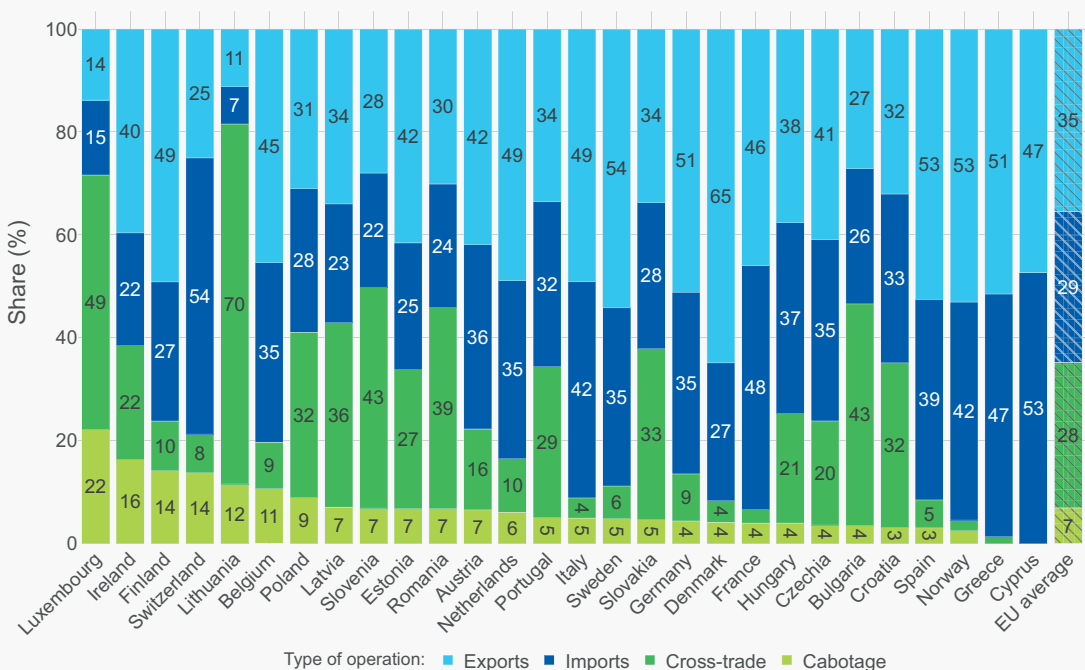
Figure 23. Share of EU cabotage operations has increased from 5% to 7% over the past decade (tkm)



This figure shows the share of road freight volumes by type of operation for each country's fleet in 2023 (tkm). EU average excludes EFTA countries.

Source: Eurostat ([road_go_ta_tott](#)) extracted on 2025-02-12

Figure 24. Export and import operations accounted for 64% of all EU international operations in 2023 (tkm)



Chapter 6

Freight composition

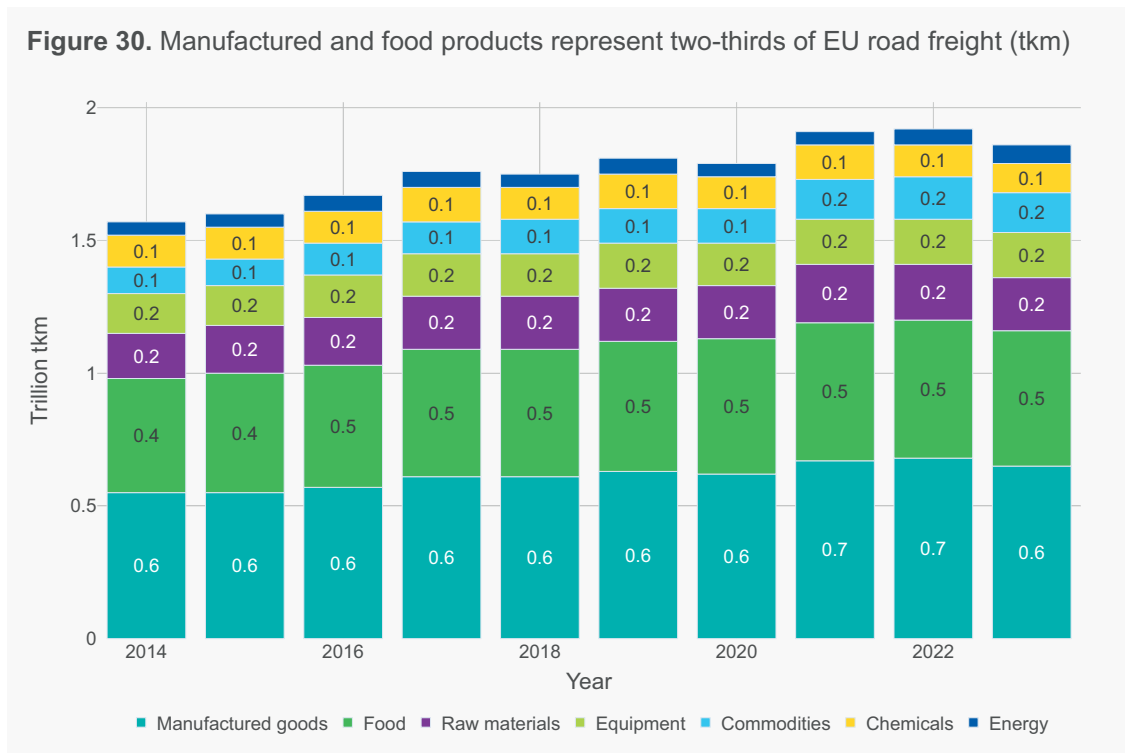
Manufactured and food products made up 62% of EU road freight operations in 2023

Goods come in many shapes and sizes. They can be stored in pallets, boxes or in bulk. The road transport fleet needs to adapt its tools to cover all usages, more detailed information is given in the IRU Intelligence Briefing titled "[The dynamics of road transport: what's moving across the EU](#)".

There are different ways to classify goods, such as the extensive NST 2007, CN or SITC. In the remainder of this IRU Intelligence Briefing, the Standard International Trade Classification (SITC) is used (a classification standards conversion was done when the sources were not using SITC). To further lighten the analysis, SITC categories have been regrouped as follows:

- **Food:** SITC categories 0 and 1
- **Raw materials:** SITC categories 2 and 4
- **Energy:** SITC category 3
- **Chemicals:** SITC category 5
- **Manufactured goods:** SITC categories 6 and 8
- **Equipment:** SITC category 7
- **Commodities and other goods:** SITC category 9

In 2023, manufactured and food goods accounted for 1.16 trillion tkm, representing two-thirds of all EU road freight volumes, as shown in Figure 30. This is explained by the central role of the EU in manufacturing knowledge-intensive goods, such as machinery and vehicles. Chemical transport is the only goods category that has slightly declined since 2014 (-8%), with the Chinese and US chemical industries increasing international market share compared to EU companies.

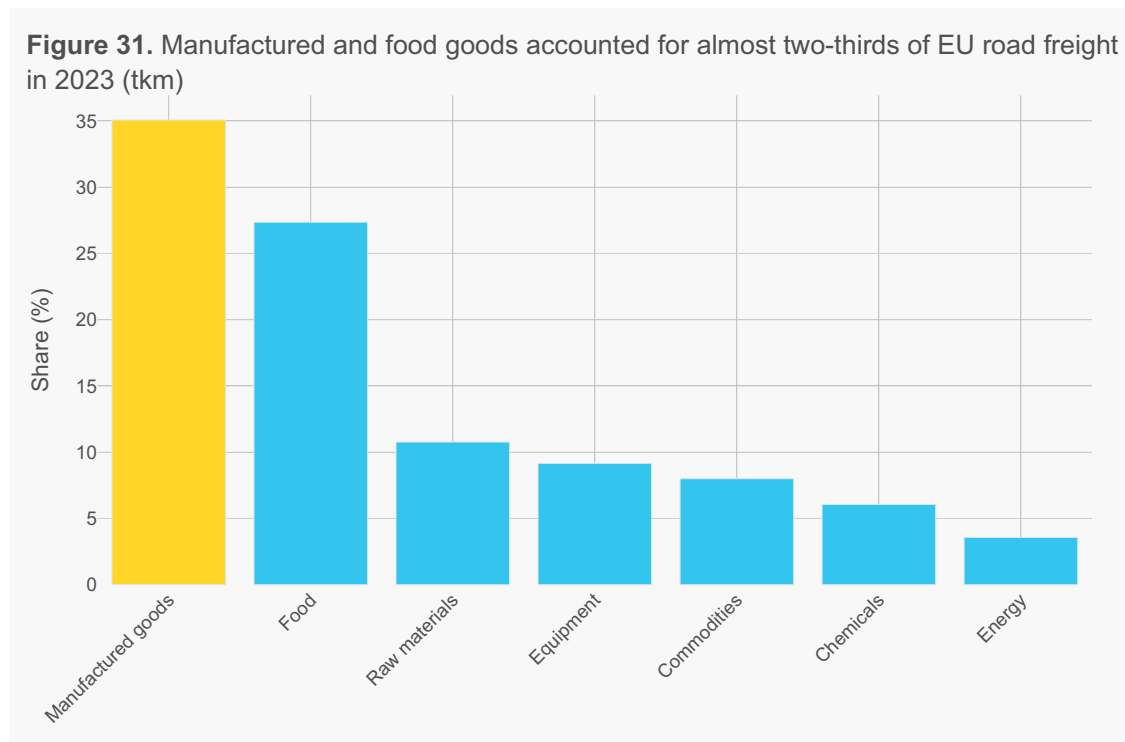


This figure shows the EU road freight volumes by types of goods (tkm).

Source: Eurostat ([road_go_ta_dctg](#)) extracted on 2025-02-12

Figure 31 shows the share of goods transport in freight in 2023, highlighting that manufactured and food products account for, on average, two to three times more

than product categories. All other goods are rather equally distributed, with energy accounting for the smallest share.



This figure shows the share of goods in EU road freight in 2023 (tkm).

Source: Eurostat ([road_go_ta_dctg](#)) extracted on 2025-02-12

Chapter 7

Average payloads by type of operation

Finland's average payload was 20 tonnes in 2023, while the EU average was 14 tonnes

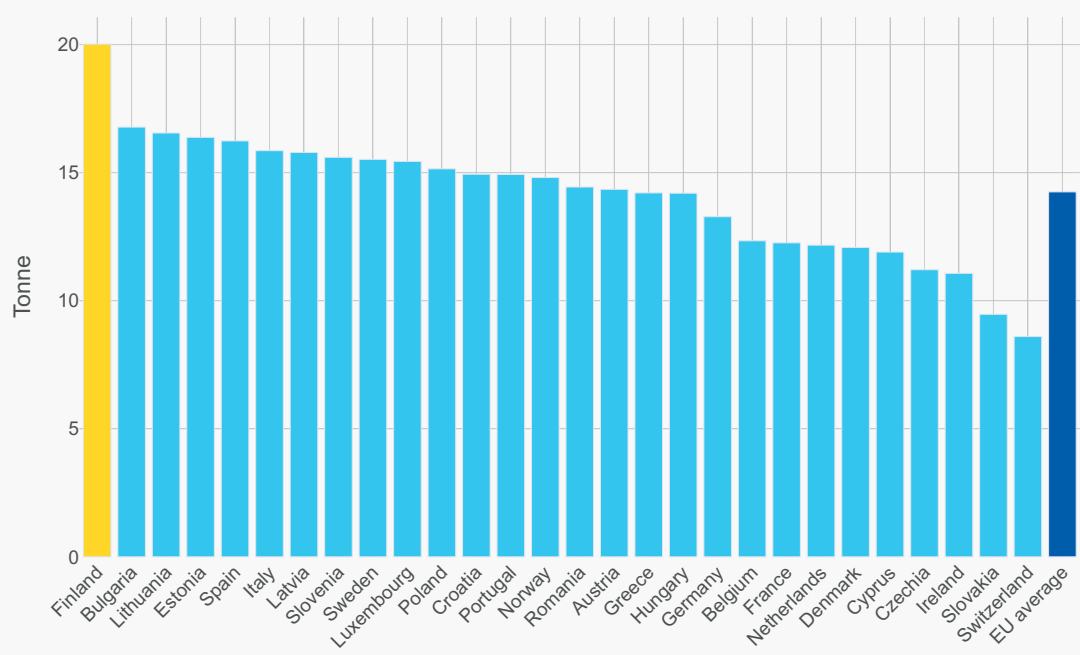
National and international operations need different logistics solutions. For instance, international operations can encompass long-distance trips, where fuel consumption is optimised to be as low as possible. This requires payload efficiency, leading to expected differences in payload between various types of operations.

Figures 38 to 40 show the average payload for loaded trips across total, national and international journeys across EU countries in 2023. On average, international trips have higher payloads compared to national ones (15.75 tonnes and 13.45 tonnes, respectively), for a total average of 14.25 tonnes. The Finnish fleet has the greatest payload value, certainly due to the fact that European Modular System (EMS) combinations are permitted in Nordic countries.

This figure shows the average payloads (for loaded trips only) across total transport operations by each country's fleet in 2023.

Source: Eurostat ([road_go_ta_tott](#)) extracted on 2025-02-12

Figure 38. Finland's average payload was the highest in the EU due to EMS trucks in 2023



Chapter 8

Freight distances

Over 70% of EU road freight volumes are transported over distances of less than 150km (in tonnes lifted)

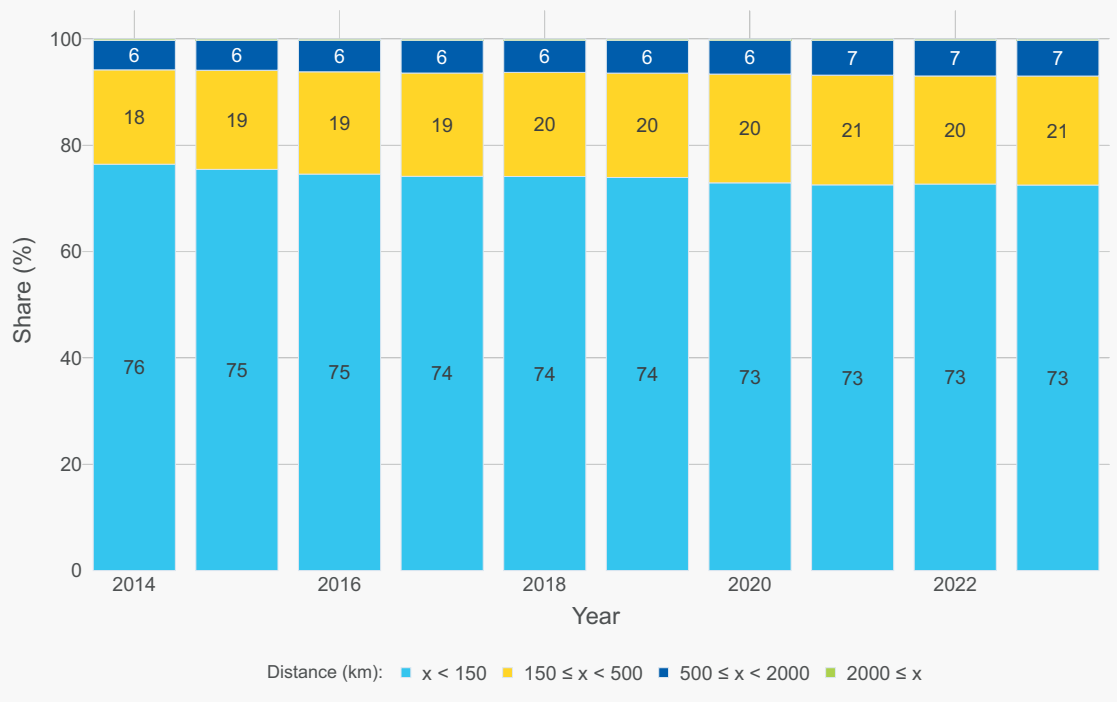
This chapter unpacks the evolution of average distances covered by goods at the EU level over the past decade. Figure 43 presents transport metrics in tonnes, while Figure 44 displays them in tonne-kilometres.

When examining road freight activity in tonnes, approximately 70% of goods, by weight, are transported over distances shorter than 150km. Over the past decade, this share has steadily declined, with medium-distance trips (150km to 500km) seeing a notable increase.

This figure shows EU road freight volumes by distance (in tonnes lifted).

Source: Eurostat (road_go_ta_dctg) extracted on 2025-02-12

Figure 43. The transport of EU road freight under 150km has declined in tonnes lifted since 2014



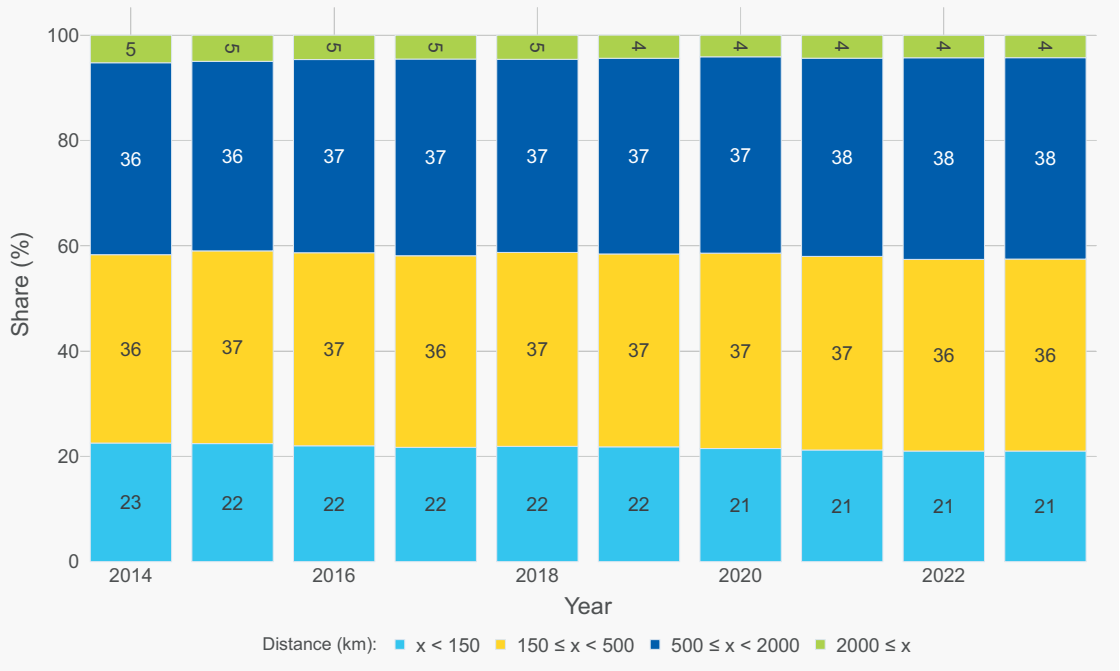
In tonne-kilometres, approximately 25% of goods are transported for distances under 150km. Around half of the goods are transported between 150km and 500km, which is close to the maximum daily mileage a driver

can perform in the EU. On the long-haul side, 25% of goods require multi-day trips. Over the past decade, there have been no major changes in the distance split.

This figure shows EU road freight volumes by distance (tkm).

Source: Eurostat (road_go_ta_dctg) extracted on 2025-02-12

Figure 44. Three-quarters of EU road freight was transported between 500km and 2,000km in 2023 (tkm)



This figure shows road freight volumes by distance for the French fleet (tkm).

Source: Eurostat (road_go_ta_dctg) extracted on 2025-02-12

Figure 45. The French fleet has been transporting fewer goods under 150km since 2014

