KEY FIGURES ON EUROPEAN TRANSPORT

2024 EDITION

eurostat

KEY FIGURES

List of EU and EFTA countries

BE	Belgium	**ES**	Spain	**HU**	Hungary	**SK**	Slovakia
BG	Bulgaria	**FR**	France	**MT**	Malta	**FI**	Finland
CZ	Czechia	**HR**	Croatia	**NL**	Netherlands	**SE**	Sweden
DK	Denmark	**IT**	Italy	**AT**	Austria		
DE	Germany	**CY**	Cyprus	**PL**	Poland	***IS***	*Iceland*
EE	Estonia	**LV**	Latvia	**PT**	Portugal	***LI***	*Liechtenstein*
IE	Ireland	**LT**	Lithuania	**RO**	Romania	***NO***	*Norway*
EL	Greece	**LU**	Luxembourg	**SI**	Slovenia	***CH***	*Switzerland*

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2024 EDITION

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Foreword

Key figures on European transport presents a selection of transport indicators for the European Union (EU), EU countries and European Free Trade Association (EFTA) countries, drawing from the rich collection of data available at Eurostat. Transport statistics can describe not only the transport of people and goods, but also transport equipment, safety, infrastructure and the economy, as well as transport's environmental impact.

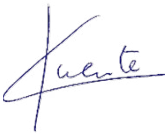
Transport is critical to European businesses, global supply chains and passengers. The transport sector contributes around 5% to the EU's gross domestic product and employs more than 10 million people. However, around 25% of the EU's total greenhouse gas emissions come from transport. Transport's importance has placed it at the heart of the European Green Deal which strives for cleaner, greener and smarter mobility.

Key figures on European transport starts with 2 chapters on transport measurement, providing information on the movement of people and goods by land, water and air transport modes. The 3rd chapter covers transport safety, for the various modes. The 4th chapter combines information on transport, the environment and energy. The final chapter looks at a range of economic indicators, such as employment, prices and expenditure in the transport sector.

This publication provides data up to 2022 or 2023. As such, it reflects also the impact on transport of the Russian military aggression against Ukraine and higher levels of inflation.

Our website provides a wide range of statistical information on transport. The latest and most comprehensive data available on the EU, EU countries and EFTA countries, as well as enlargement countries are available in our online database, while a range of online articles in *Statistics Explained* provide detailed analyses of the data and outline their context.

I hope that you find this publication interesting and useful.



Arturo De La Fuente Nuño

(Acting) Director of Sectoral and regional statistics, Eurostat

Abstract

Key figures on European transport presents a selection of transport indicators for the European Union (EU), EU countries and European Free Trade Agreement (EFTA) countries. For some readers, this publication may offer an introduction to European transport statistics, while others can use it as a starting point to explore further a wide range of data and information. These are freely available on Eurostat's website and in *Statistics Explained*.

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Introduction

Eurostat is the statistical office of the European Union (EU). Our mission is to provide high-quality statistics on Europe, offering both citizens and decision-makers key information on the EU's economy, society and environment.

Key figures on European transport gives an up-to-date statistical overview of transport and links it to related domains. The publication generally provides annual data up to 2022 or 2023, depending on the mode of transport and the type of indicator.

Structure of the publication

Key figures on European transport provides a snapshot of the transport statistics which are available on Eurostat's website and within its online database.

Chapters 1 and 2 of the publication provide statistics on the movement of people and goods by land, water and air. The 3rd chapter covers transport safety for the various transport modes. The 4th chapter links transport to the environment and energy. The final chapter looks at a range of economic indicators, such as employment in the transport sector, transport prices, and expenditure on transport.

Data extraction and coverage

Data extraction

The statistical data presented in this publication were extracted when data became available for a new reference year. Nearly all of the data in Chapters 4 and 5 were extracted in September 2024; most of the data for Chapters 1, 2 and 3 were extracted in October or November 2024. Eurostat's online database may contain revised data.

Spatial data coverage

This publication presents information for the EU (a sum/average covering the 27 EU countries), its individual countries (Member States) and EFTA countries. The countries in the figures are usually ranked according to the values for the indicator(s) illustrated.

References in the publication to northern, eastern, southern or western Europe are based on groupings in EU vocabularies.

The map on the inside cover page shows the EU and EFTA countries, pinpointing their capital cities.

Note that data related to rail transport aren't included for Cyprus and Malta as these EU countries don't have a rail network; the same is true for Iceland. Equally, data related to maritime transport aren't included for Czechia, Luxembourg, Hungary, Austria and Slovakia, as these EU countries are landlocked; Liechtenstein and Switzerland are also landlocked countries.

Country codes and names

BE Belgium
BG Bulgaria
CZ Czechia
DK Denmark
DE Germany
EE Estonia
IE Ireland
EL Greece
ES Spain
FR France
HR Croatia
IT Italy
CY Cyprus
LV Latvia
LT Lithuania
LU Luxembourg
HU Hungary
MT Malta
NL Netherlands
AT Austria
PL Poland
PT Portugal
RO Romania
SI Slovenia
SK Slovakia
FI Finland
SE Sweden

IS *Iceland*
LI *Liechtenstein*
NO *Norway*
CH *Switzerland*

World regions/continental aggregates

In Chapters 1 and 2, several maps show the size of air and maritime transport to and from various regions of the world. Eurostat's standard code list for partner countries defines these regions.

Temporal data coverage

If data for a reference year (or reference period) aren't available for a country, data are shown for the next most recent reference year (if available). These exceptions are footnoted. Readers should pay particular attention to these deviations when the reference year is 2020 or 2021: for some indicators – particularly those impacted by the COVID-19 crisis – large changes in 2020 and/or 2021 mean that earlier data may not be a good proxy for missing 2020 or 2021 data.

Notes and flags

Notes and flags are used to explain and define specific characteristics of data. In this publication, these have been restricted as far as possible to leave more space for illustrating the data. This publication includes only the main notes needed to interpret the data and to highlight when data for one year have been replaced by data for another. Data not shown in individual figures may simply not be available or may be confidential. The full set of notes and flags is available on Eurostat's website via the online data code(s) presented for each map or figure.

Accessing European statistics

The simplest way to access Eurostat's wide range of statistical information is through Eurostat's website. Eurostat provides users with free access to its databases and publications. The website is updated daily and presents the latest and most comprehensive statistical information available on the EU as well as individual EU, EFTA and enlargement countries. For some datasets, information may be provided for a wider range of non-EU countries.

You can use online data codes, such as *tran_hv_psmod*, to find the most recent data in Eurostat's online database directly or use the Eurostat website's search function. In this publication, these online data codes are mentioned within the Source below each illustration.

Some of the indicators presented in this publication can be complex. The *Statistics Explained* website provides a comprehensive online glossary containing definitions of a broad range of statistical indicators, concepts and terms. Whenever a specialist term is used in the text, it's linked to its glossary definition.

Modes of transport

Several subchapters analyse European transport statistics by transport mode. Some modes are common to passenger and freight transport, while others – such as pipelines – are specific to just one.

Passenger transport modes

1. Land transport
   - road transport, by
     - passenger cars
     - motorcycles and mopeds
     - buses and coaches
   - rail transport, including high-speed and conventional railways ([1])
2. Water transport
   - maritime (sea transport)
3. Air transport

Freight transport modes

1. Land transport
   - road transport
   - rail transport
   - pipelines
2. Water transport
   - maritime (sea transport)
   - inland waterways (such as rivers, canals and lakes)
3. Air transport

([1]) Railway statistics exclude (sub)urban, light rail, metros/underground railways and trams.

Territoriality and nationality principles

Territoriality principle

Most statistics related to the measurement of the transport of passengers or freight use the territoriality principle, in other words where the transport takes place. For example, information on rail transport in Luxembourg concerns transport on Luxembourg's rail network. National transport for Luxembourg is transport between 2 places within Luxembourg, while international transport concerns goods and/or passengers

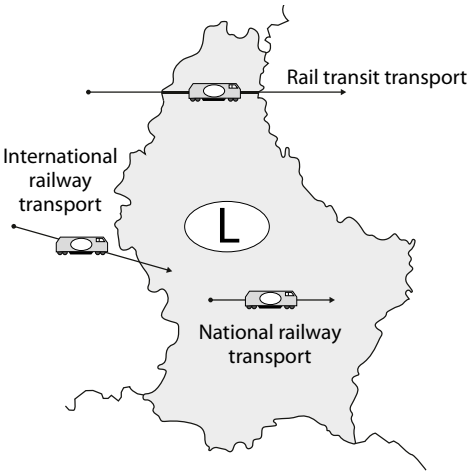
a) loaded/embarked in Luxembourg and unloaded/disembarked outside of Luxembourg or

b) loaded/embarked outside of Luxembourg and unloaded/disembarked in Luxembourg or

c) transiting through Luxembourg.

Transit through a country is not included in international rail data.

To measure the international transport of goods or passengers under the territoriality principle, only the distance travelled within the national territory is considered. For example, this principle splits a journey between a place in Luxembourg and a place in Belgium into the kilometres within Luxembourg and those within Belgium; only those in Luxembourg are in the international rail transport statistics reported for Luxembourg; those in Belgium are in the statistics reported for Belgium.



Nationality principle

EU road freight transport statistics are an exception to the territoriality principle. These data use the nationality principle, reflecting the nationality of the road vehicle performing the transport. For example, information on road freight transport for Luxembourg concerns transport by vehicles registered in Luxembourg. Another way to understand this is that these data concern transport by Luxembourg's road freight hauliers, regardless of the route.

Under the nationality principle, while national transport for Luxembourg is still defined as transport between 2 places within Luxembourg, it only concerns such transport performed by vehicles registered in Luxembourg. These statistics for Luxembourg don't include as national transport any transport between 2 places within Luxembourg by a vehicle registered in a different country; this is a type of international transport (cabotage) recorded in the statistics for the country whose vehicles performed this transport.

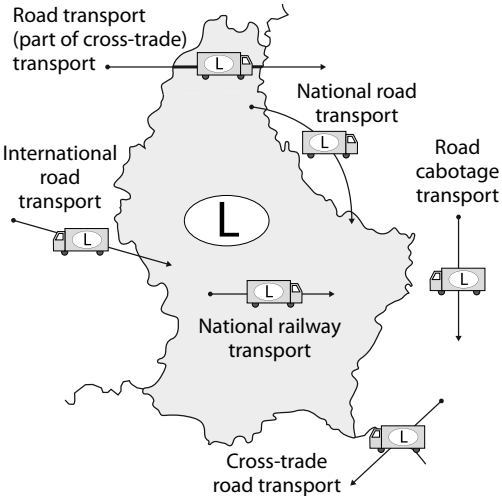
Similarly, Luxembourg's international transport statistics cover goods transported by road vehicles that are registered in Luxembourg, under the following conditions

a) goods loaded in Luxembourg and unloaded outside of Luxembourg

b) goods loaded outside of Luxembourg and unloaded in Luxembourg or

c) goods both loaded and unloaded outside of Luxembourg, regardless of whether

- **c1)** they pass through Luxembourg (transit) or
- **c2)** they stay within the borders of a single country other than Luxembourg (cabotage) or
- **c3)** they cross at least 1 border, but none of Luxembourg's border (cross-trade).



Note that Eurostat produces and publishes a limited set of road freight transport statistics on the territoriality principle. These estimates use the data collected according to the nationality principle with an adjustment for the routes taken for international transport based on a distance matrix.

This publication presents road freight transport statistics using both the territoriality and nationality principles

- the modal split of inland freight transport (see pages 24 and 25) uses estimated data according to the territoriality principle
- the focus on road freight transport (see pages 26 to 28) uses data based on the nationality principle.

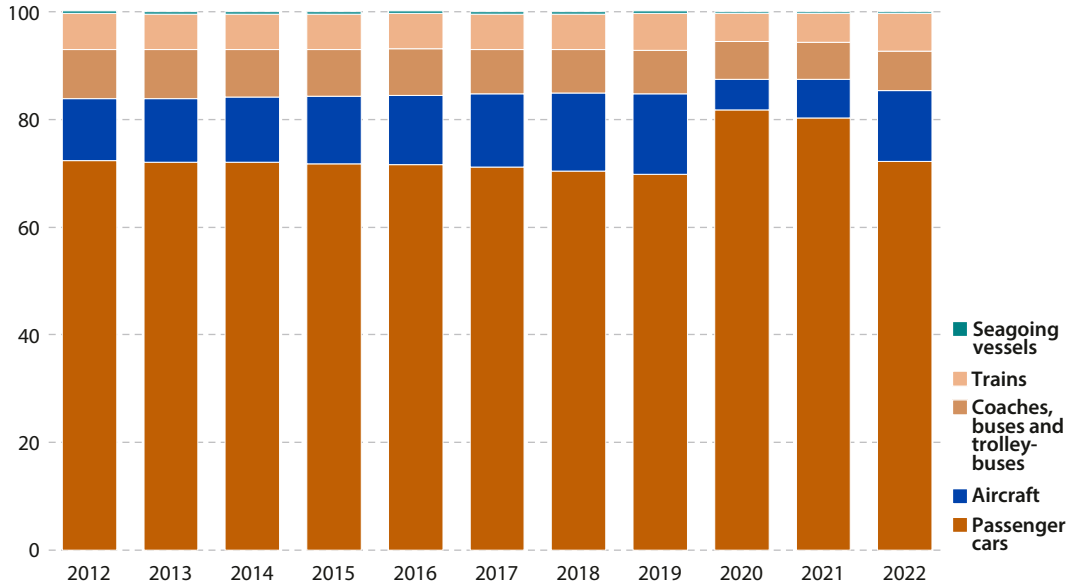
1

Passenger transport

Modal split of passenger transport

Changes in the modal split of passenger transport

(% based on passenger-kilometres, EU, 2012–22)



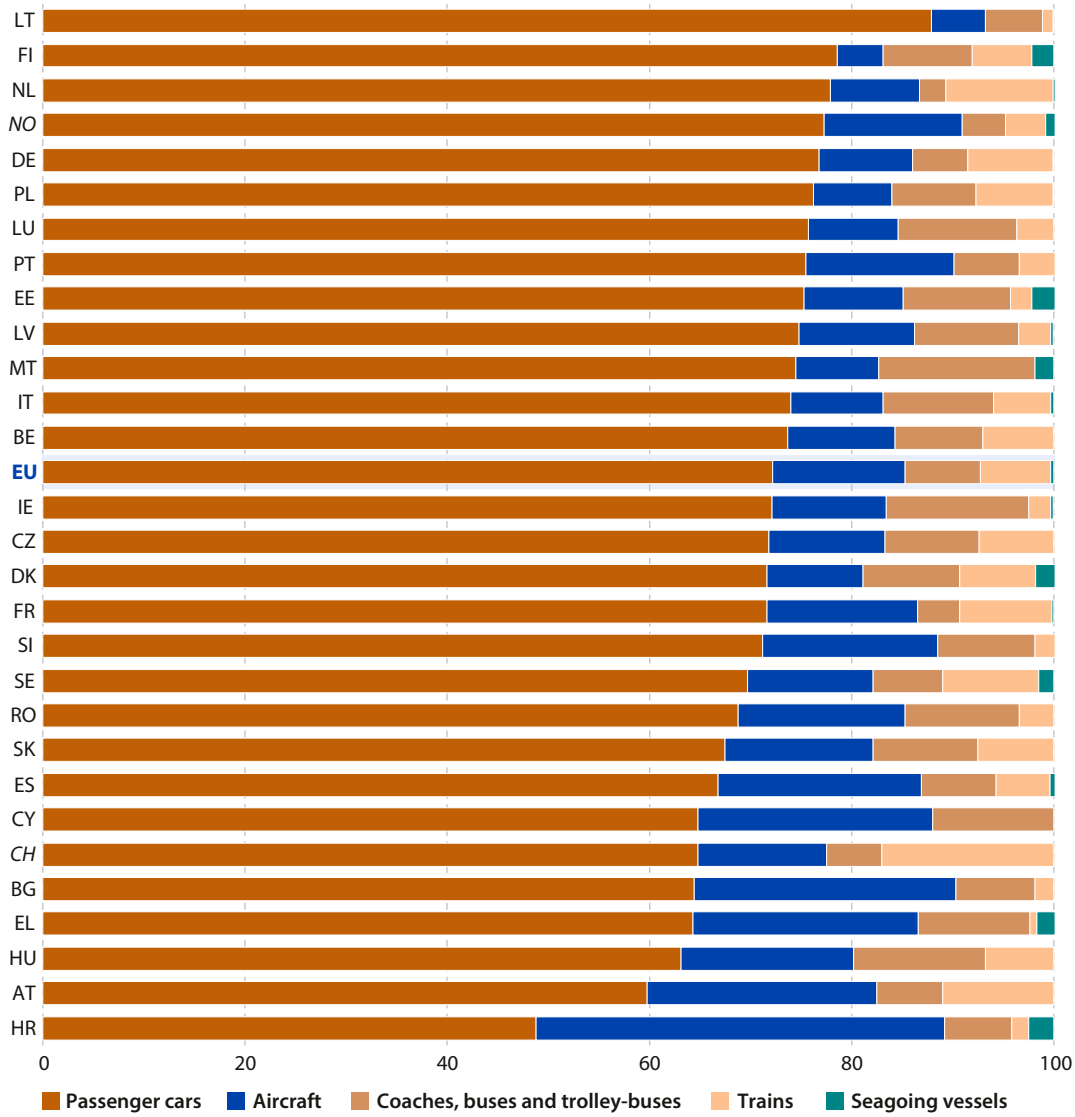
Source: Eurostat (online data code: tran_hv_ms_psmod)

The modal split describes the relative share of each mode of transport in terms of the vehicles used, for example by car, plane, coaches or trains, in the total for all transport modes. For passengers, the shares for each mode are calculated using the total passenger-kilometres (passenger-km) based on data following the territoriality principle (transport performed on the territory of a country); 1 passenger-km is 1 passenger transported over 1 kilometre. The presentation of the modal split currently includes passenger cars, aircraft, buses, coaches, trolley-buses, trains and seagoing vessels.

Between 2012 and 2019, passenger cars' share of passenger transport in the EU fell from 72.3% to 69.8%. It increased rapidly in 2020 to 81.8%, dropped back slightly in 2021 to 80.3% and then fell in 2022 to 72.2%, a share which was broadly comparable with earlier years. The share of aircraft in passenger transport grew from 11.6% to 15.0% between 2012 and 2019 but dropped to 5.7% and 7.1% in 2020 and 2021, respectively; in 2022, it rebounded to 13.1%. Most other modes of transport recorded similar patterns: a sharp drop in 2020; relative stability in 2021; a rebound in 2022. These substantial changes in 2020 reflect the impact of the COVID-19 crisis on the overall use of transport and the use of private cars rather than public transport, as well as COVID-19-related restrictions imposed on certain modes of transport.

Modal split of passenger transport

(% based on passenger-kilometres, 2022)



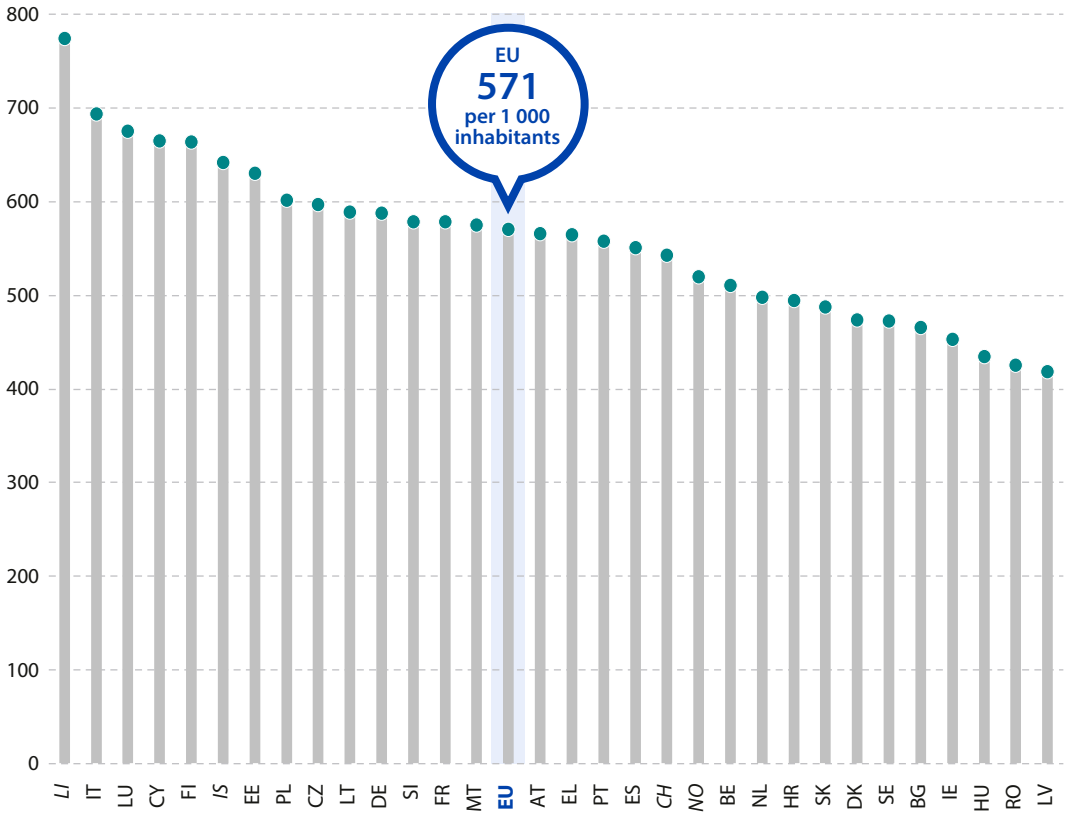
Source: Eurostat (online data code: tran_hv_ms_psmod)

Among the EU countries, Lithuania recorded the highest share of passenger transport attributed to passenger cars in 2022, at 87.9%, while the lowest share was in Croatia (48.8%). In turn, Croatia had by far the highest share for aircraft, 40.4%, followed by Bulgaria with 25.9%. In Malta, Ireland, Hungary and Cyprus, coaches, buses and trolley-buses accounted for at least 12.0% of passenger transport. The largest shares of passenger transport performed by train were in Austria, the Netherlands, Sweden and France, all above 9.0%. The use of seagoing vessels was below 1.0% in most EU countries and peaked at 2.5% in Croatia.

Road passenger transport

Motorisation rate: passenger cars relative to population size

(per 1 000 inhabitants, 2023)



Source: Eurostat (online data code: road_eqs_carhab)

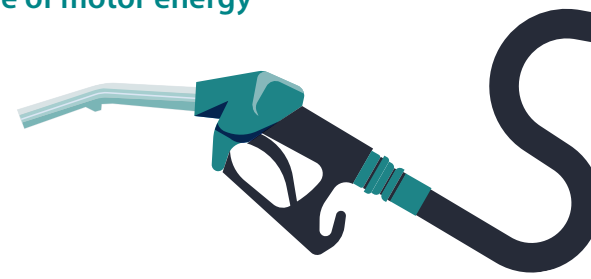
Passenger car statistics include vehicles registered and licensed to use public roads. The data presented here cover all vehicles owned by households, businesses and government (other than the military), including rental vehicles as well as special purpose passenger vehicles.

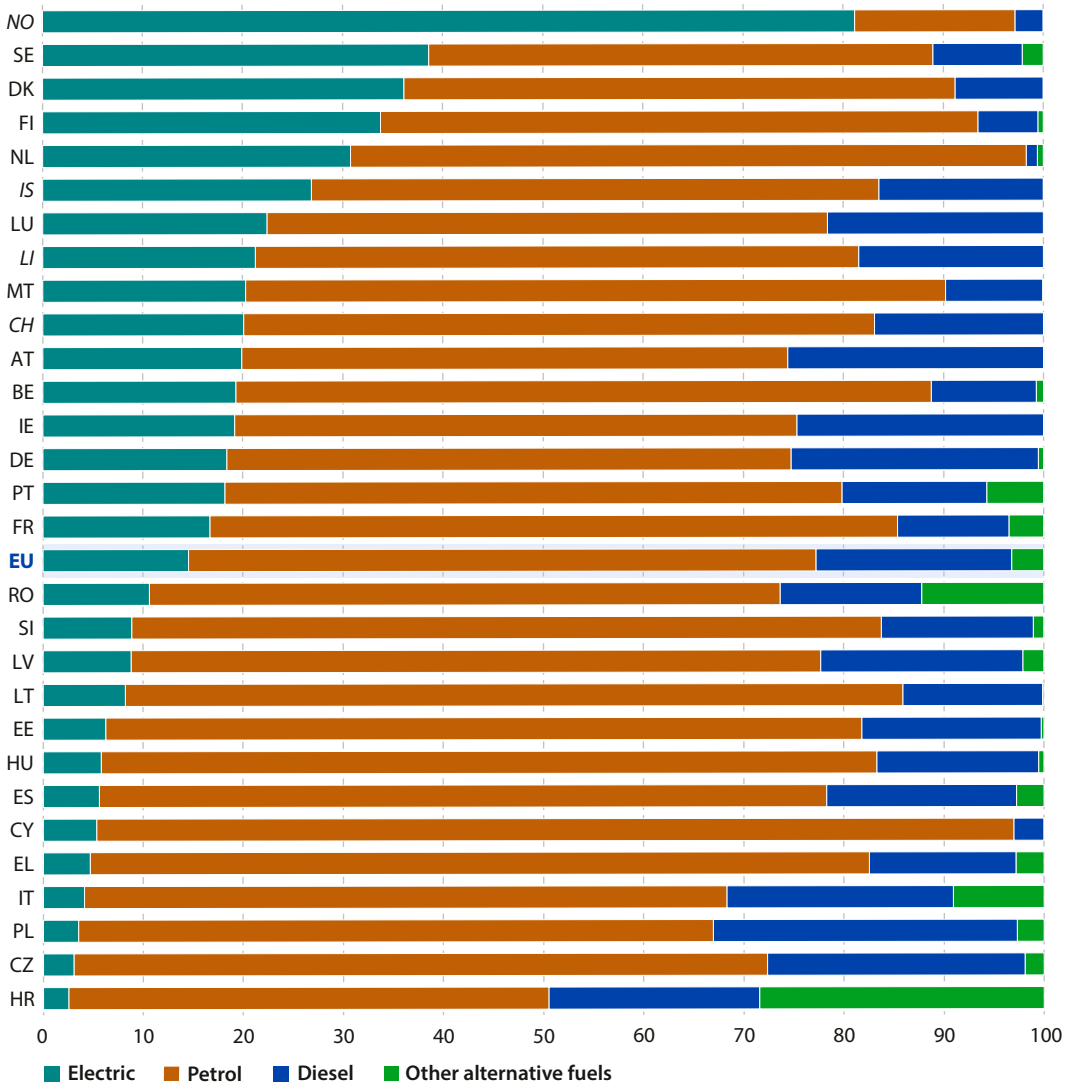
The motorisation rate for road passenger vehicles is the number of passenger cars relative to the size of the population. In the EU, this indicator averaged 571 passenger cars per 1 000 inhabitants in 2023. The highest motorisation rates were in Italy (694 per 1 000 inhabitants) and Luxembourg (675 per 1 000 inhabitants). The lowest were in Latvia (418 per 1 000 inhabitants), Romania (425 per 1 000 inhabitants) and Hungary (435 per 1 000 inhabitants).

Registrations of new passenger cars, by type of motor energy

(%, 2023)

In 2023, electric-powered vehicles accounted for more than a quarter of all new passenger car registrations in Sweden (38.6%), Denmark (36.1%), Finland (33.8%) and the Netherlands (30.8%). By contrast, the share was below 5.0% in Croatia, Czechia, Poland, Italy and Greece.



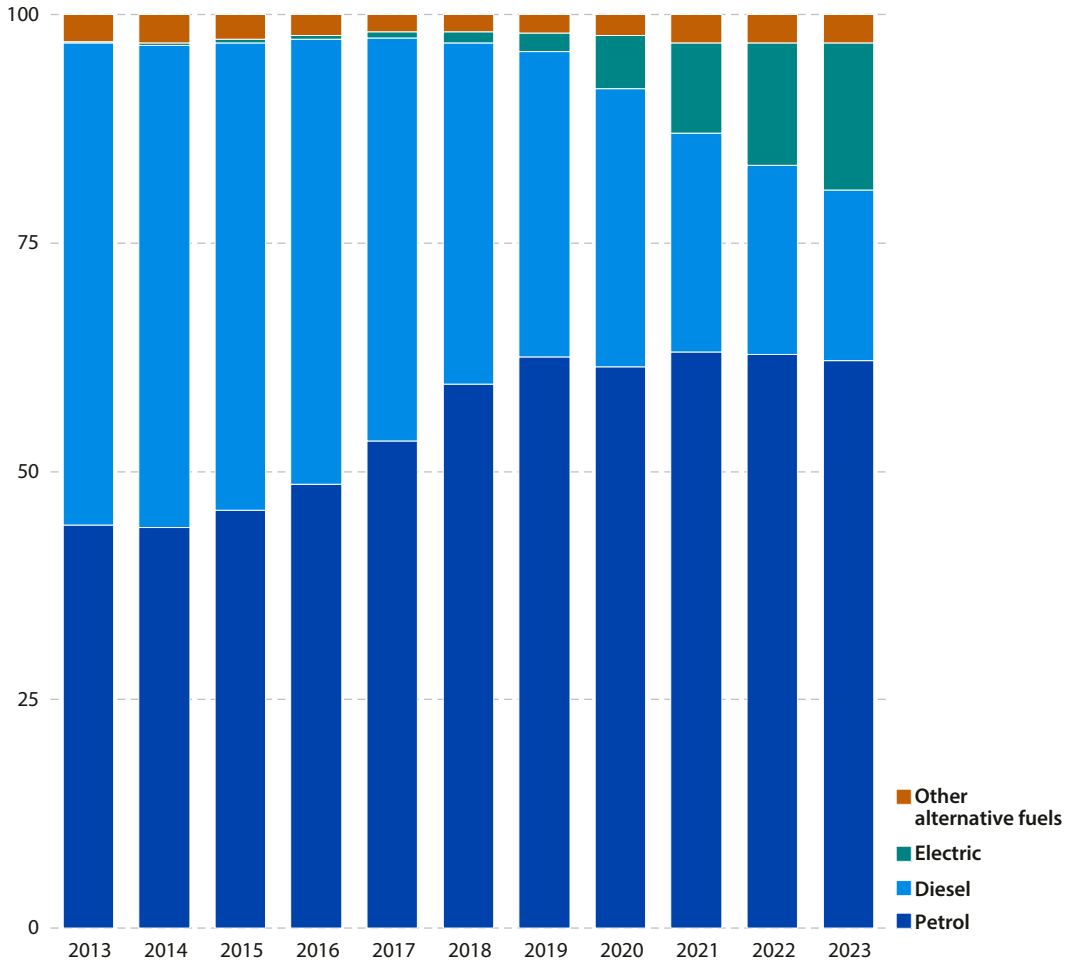


Note: ranked on the share for electric. BG and SK: not available.
HR: hybrids included in "other". EU: excluding BG and SK. IS: 2021

Source: Eurostat (online data codes: road_eqr_zev and road_eqr_carpda)

Registrations of new passenger cars, by type of motor energy

(%, EU, 2013–23)



Note: based on data for 18 EU Member States which collectively accounted for approximately 84% of new passenger cars within the EU.

Source: Eurostat (online data codes: road_eqr_zev, road_eqr_carpda and road_eqr_unlweig)

A time series based on data for 18 EU countries for all years from 2013 to 2023 shows how the types of motor energy of new passenger cars have changed. In these countries, which accounted for approximately 84% of new passenger cars within the EU, the number of diesel-powered vehicles (including hybrids) decreased 63% and the number of petrol-powered vehicles (including hybrids) increased 49%. For alternative types of motor energy, there were 69 times as many registrations of new electric vehicles in 2023 as in 2013, while registrations of other new vehicles were 14% higher.

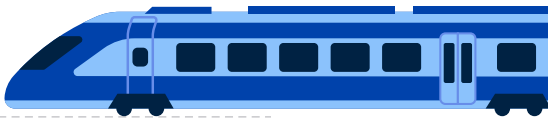
The share of electric vehicles among registrations of new passenger cars increased from 0.2% in 2013 to 16.0% in 2023.

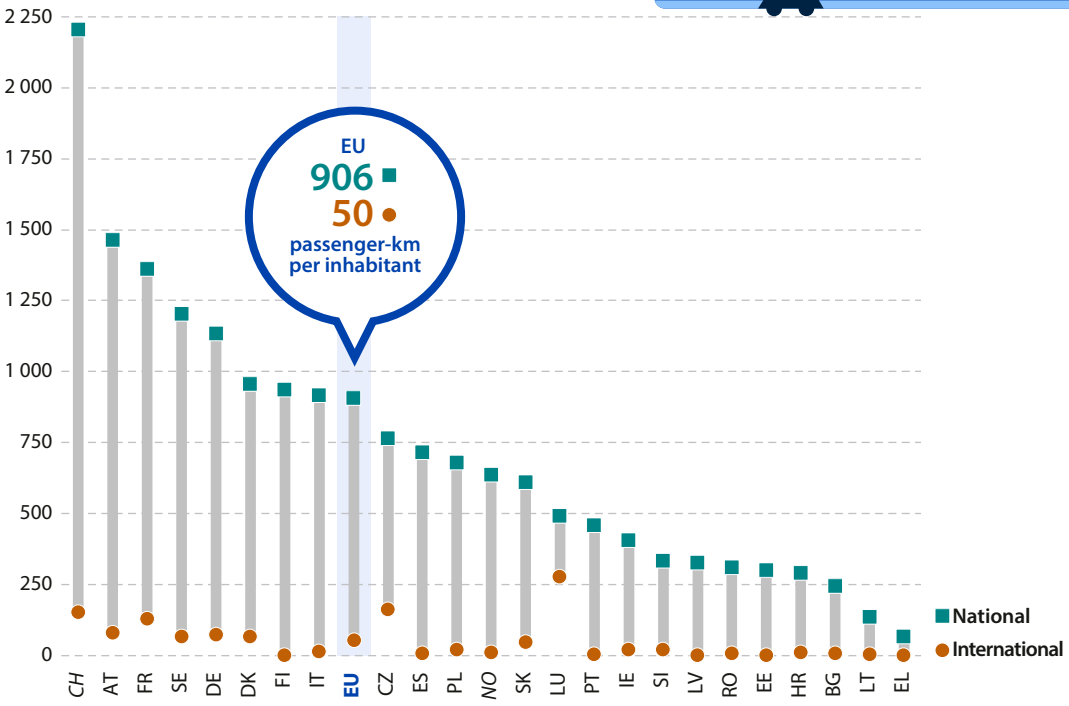
Based on a time series for all 27 EU countries, which is only available for electric vehicles, the share of electric vehicles among registrations of new passenger cars increased from 0.2% in 2013 to 14.6% in 2023.

Rail passenger transport

Rail passenger transport

(passenger-kilometres per inhabitant, 2023)





Note: no railways in CY or MT. BE, HU and NL: not available.

Source: Eurostat (online data codes: rail_pa_typepas and demo_pjan)

Rail passengers are people who travel by rail; the data presented here exclude members of the train crew. These statistics measure the number of passengers carried or the number of passenger-kilometres. For international journeys, the passenger-kilometre data only include the distance travelled on the national network, in other words the part of the journey within the national territory, not the distance of the whole journey.

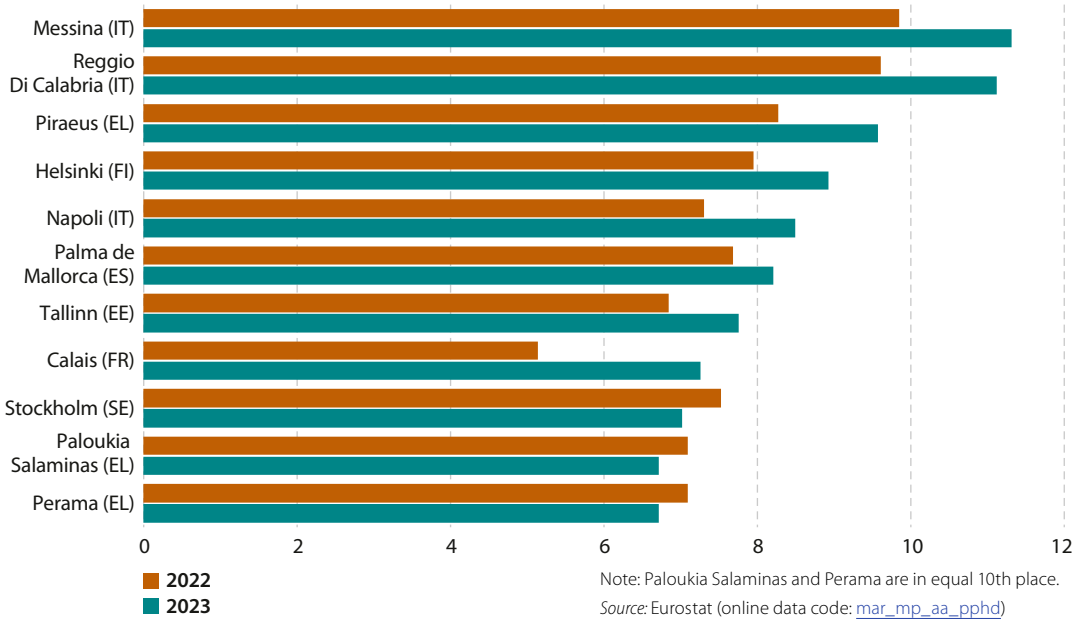
In 2023, 8.0 billion passengers made national journeys in the EU, travelling a total of 407 billion kilometres. In addition, passengers travelled 22.4 billion kilometres on international journeys. Relative to population size, this was an average of 906 kilometres per inhabitant on national journeys and 50 kilometres per inhabitant on international journeys.

Rail passengers in Austria and France travelled the longest average distance on national journeys in 2023, 1 463 and 1 361 kilometres per inhabitant, respectively. Rail passengers in Greece travelled the shortest average distance on national journeys, 65 kilometres per inhabitant.

Maritime passenger transport

Busiest passenger ports in terms of passengers embarked and disembarked

(millions, EU, 2022 and 2023)



Note: Paloukia Salaminas and Perama are in equal 10th place.

Source: Eurostat (online data code: mar_mp_aa_pphd)

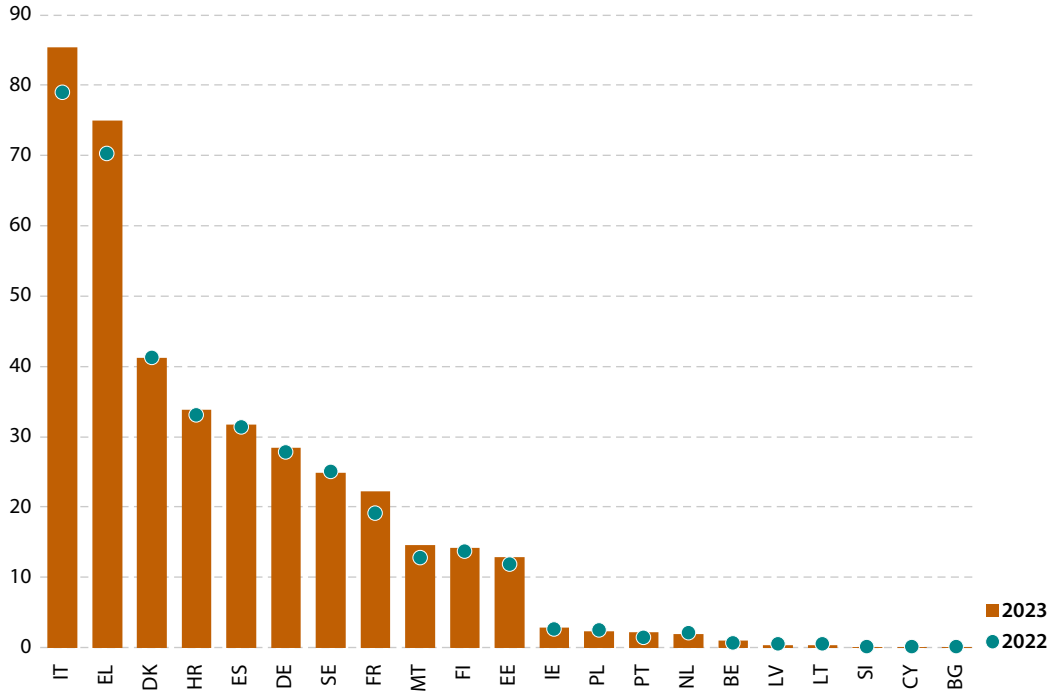
Sea passengers are people who make a sea journey on a merchant ship; the data presented here exclude service staff assigned to merchant ships, as well as infants in arms (infants who are carried). Merchant ships are typically passenger ships (for more than 12 fare-paying passengers) including cruise ships, as well as roll-on-roll-off (Ro-Ro) vessels.

Sea passengers embarked and disembarked relate to the activity of boarding or leaving a ship. A transfer from one ship to another is a disembarkation followed by an embarkation. Excursions from cruise ships aren't considered a (dis)embarkation.

The busiest maritime passenger ports in the EU in 2023 – the 'top-10' – included 3 ports in both Greece and Italy and 1 port in each of Finland, Spain, Estonia, France and Sweden; note that the list of the busiest passenger ports includes 2 Greek ports in joint 10th place, making a total of 11 ports. Among these ports, 7 were Mediterranean, 3 were Baltic and 1 was in the English Channel. Collectively these 11 ports accounted for nearly a quarter (23.6%) of all passengers embarking or disembarking in the EU.

Passenger embarked and disembarked in all ports

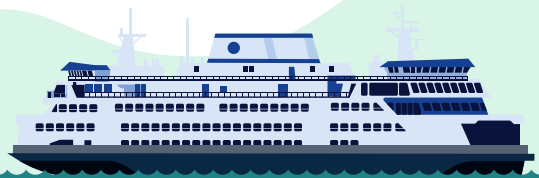
(millions, 2022 and 2023)



Note: CZ, LU, HU, AT and SK are landlocked. NL: data exclude cruise passengers. PT: break in time series as data coverage improved. SI, CY and BG: values below 50 000 passengers. RO: very low values, below the reporting threshold; data not available.

Source: Eurostat (online data code: mar_mp_aa_cph)

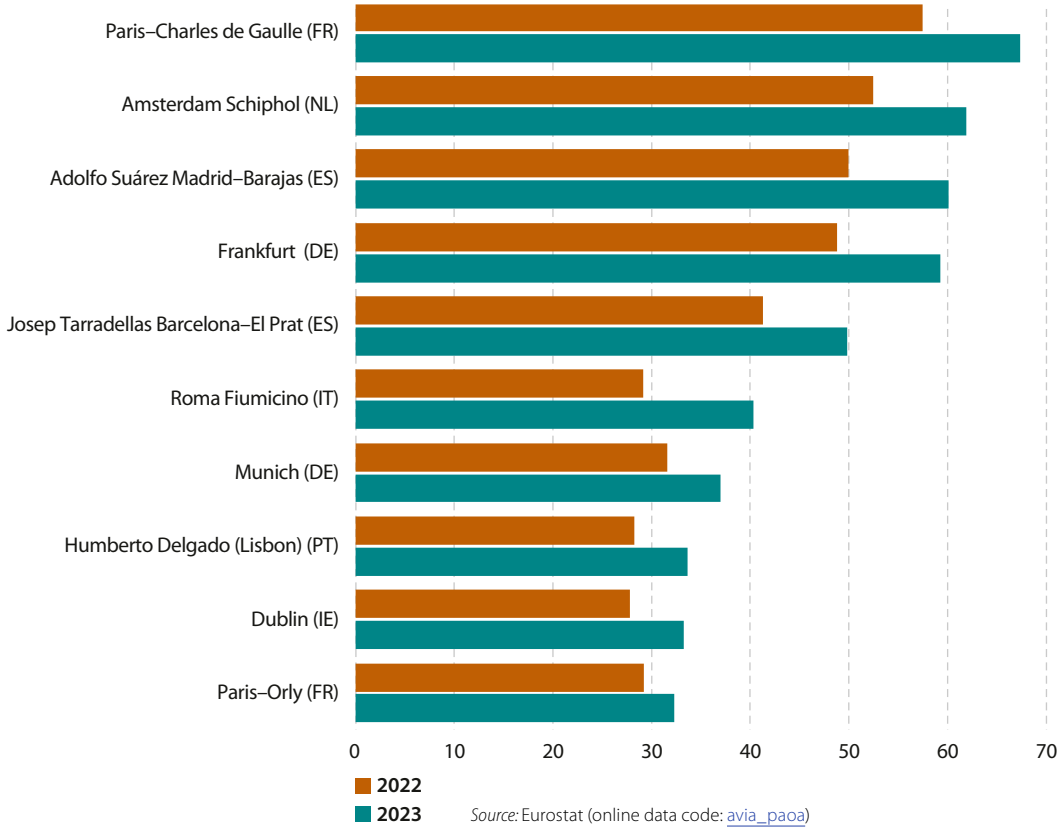
In 2023, a total of 395 million passengers passed through ports in the 22 EU countries with maritime transport (5 EU countries are landlocked). This represented a 5.8% increase compared with 2022, signifying the continuing recovery from the impact of the COVID-19 crisis. Italy (85.4 million) and Greece (75.0 million) had the highest numbers of maritime passengers, accounting for 21.6% and 19.0% of the EU total, respectively. Among the EU countries with at least 20.0 million passengers in 2023, the strongest annual growth rate was in France, up 16.7%.



Air passenger transport

Top 10 passenger airports in terms of passengers carried

(millions, EU, 2022 and 2023)

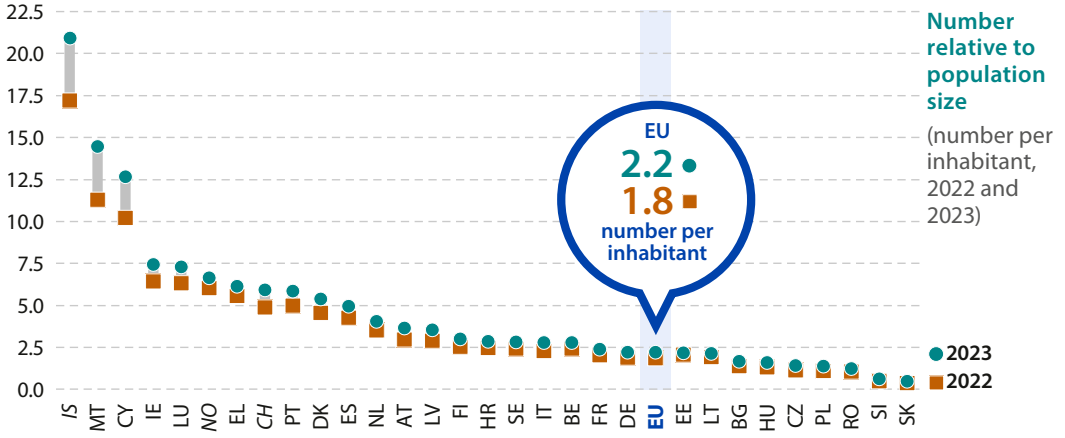


Source: Eurostat (online data code: avia_paoa)

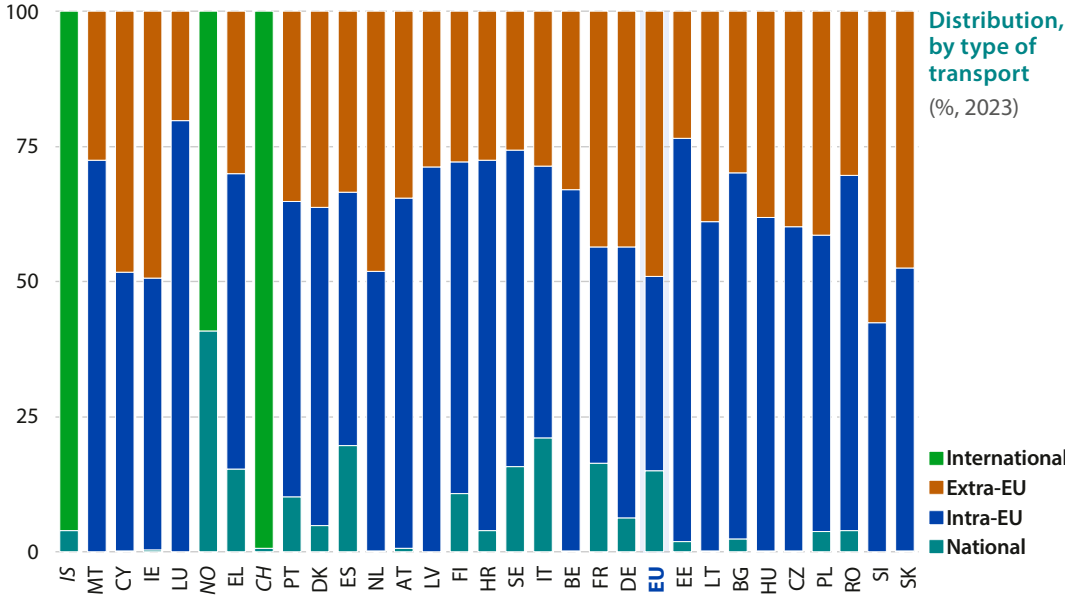
Air passengers are people who make a journey by air; the data presented here exclude on-duty members of the flight and cabin crews and include infants in arms (infants who are carried). The number of passengers carried counts passengers whose air journey begins or ends at the reporting airport; the data exclude direct transit passengers (on the same aircraft with the same flight number).

In 2023, air passenger numbers increased greatly compared with 2022 but remained somewhat below their pre-COVID-19 levels. The COVID-19 crisis had a particularly strong impact on international air passenger transport, while airports with a relatively large share of domestic transport were less affected. The list of the 10 busiest passenger airports in 2023 was similar to that in 2022, with Dublin airport in Ireland entering the top 10 and Palma de Mallorca airport in Spain dropping out.

Air passengers carried



Source: Eurostat (online data codes: avia_paoc and demo_pjan)



Note: ranked on the number of air passengers carried relative to population size. For the EU: only data for departures are considered for intra-EU transport to avoid double counting. For EFTA countries: all international flights are shown together.

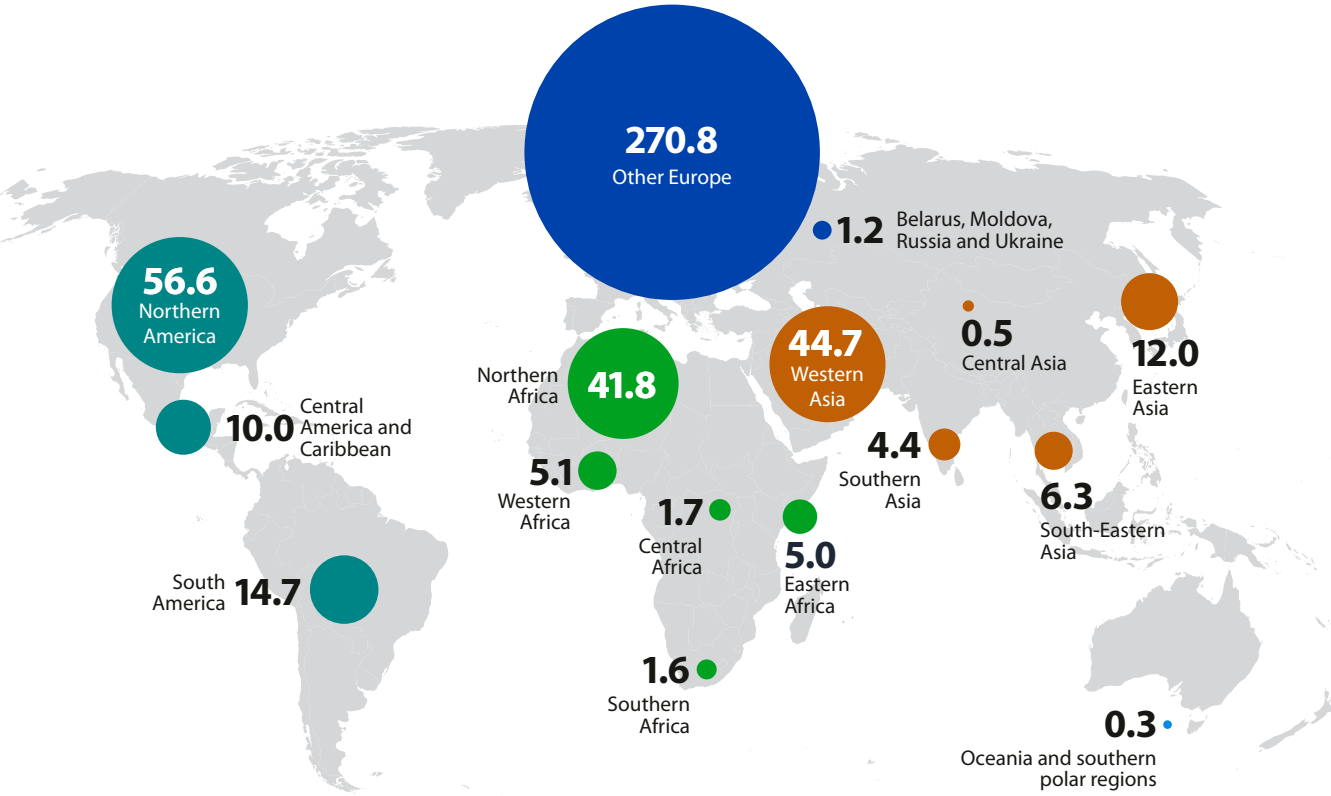
Source: Eurostat (online data code: avia_paoc)

The intensity of passenger air transport can be measured by the number of passengers carried on flights to and from each EU country compared with the resident population. Several southern EU countries that are major tourist destinations had a high ratio of air passengers to inhabitants in 2023, in particular the islands of Malta (14.4 per inhabitant) and Cyprus (12.6 per inhabitant).

Ireland and Luxembourg (7.4 and 7.3 per inhabitant, respectively) also had high ratios, reflecting high demand for air transport for business and tourist travellers. Eastern EU countries recorded the 7 lowest ratios, all below 2.0 per inhabitant. The average for the EU was 2.2 per inhabitant. The average for the EU considers only data for departures for intra-EU transport to avoid double counting.

Inward and outward extra-EU air passenger transport

(millions of passengers carried, EU, 2023)



Source: Eurostat (online data code: avia_paexcc)

The rest of Europe was the main origin or destination of passengers travelling to or from the EU by air in 2023: 56.8% of the extra-EU total was for flights to/from European countries other than Belarus, Moldova, Russia and Ukraine.

After growth compared with the previous year of 18.4% in 2021 and 162.0% in 2022, EU passenger air transport to/from non-EU countries increased 24.5% in 2023. This shows that the recovery from the impact of the COVID-19 crisis continued, but the number of passengers carried to/from non-EU countries in 2023 remained 8.2% below its 2019 level.

At a more detailed level, passenger air transport fell in 2023 with respect to the market of Belarus, Moldova, Russia and Ukraine, reflecting at least in part the impact of the Russian military aggression against Ukraine. For all other markets, air passenger numbers in 2023 were higher than in 2022. The largest increase in relative terms concerned transport to or from Eastern Asia, with passenger numbers 3.7 times as high in 2023 as in 2022.

2

Freight transport

Modal split of freight transport

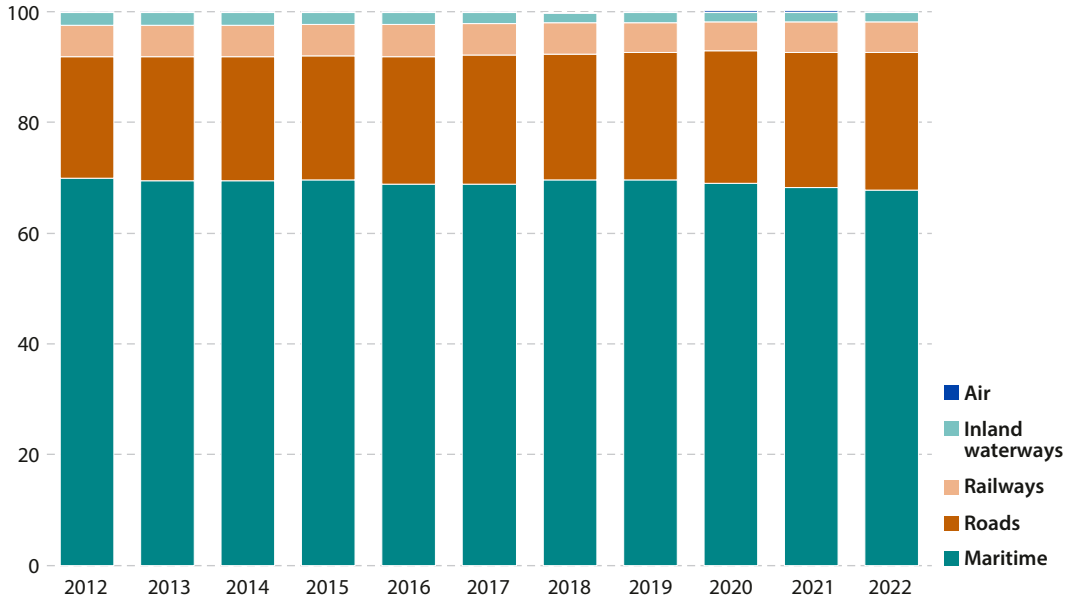
The modal split describes the relative share of each mode of transport, for example by sea, road or rail, in the total for all transport modes. For freight, the shares for each mode are calculated using the total tonne-kilometres (tonne-km) based on data following the territoriality principle (transport performed on the territory of a country); 1 tonne-km is 1 tonne of freight transported over 1 kilometre. The analysis of the modal split currently includes sea, road, rail, inland waterway and air transport.

Changes in the modal split of freight transport

(% based on tonne-kilometres, EU, 2012–22)

In 2022, maritime transport accounted for just over two thirds (67.8%) of freight transport in the EU, based on tonne-km. Freight transport by road accounted for most of the remainder (24.9% of the total), with smaller shares by rail (5.5%), inland waterway (1.6%) and air (0.2%).

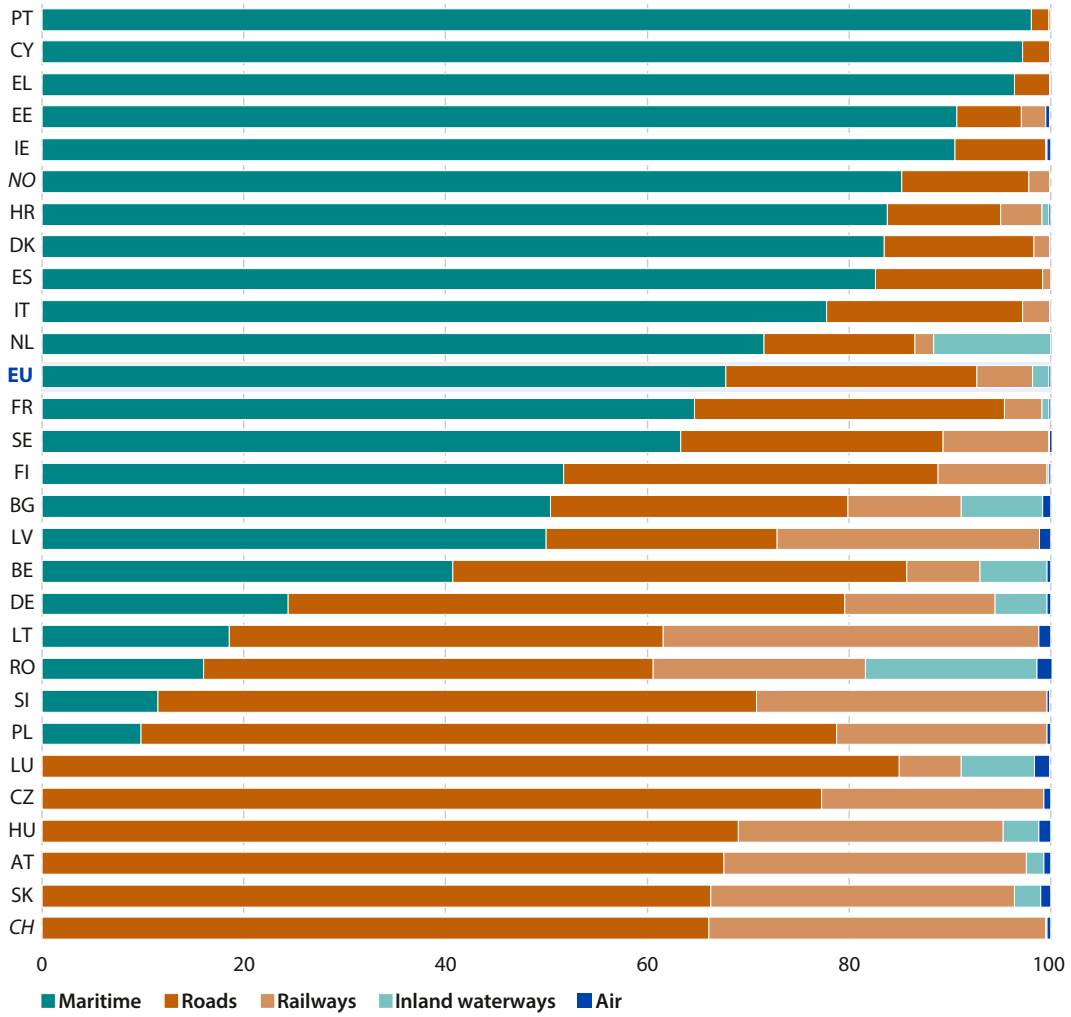
During the period 2012 to 2020, the share of maritime transport within all freight transport performance ranged between 68.9% and 69.9%. After a fall in 2020, this share fell to new lows of 68.2% in 2021 and 67.8% in 2022. The share of road transport increased most years between 2012 and 2022. By contrast, the share of rail in freight transport performance fell from 5.7% in 2012 to a low of 5.2% in 2020 before recovering to 5.4% in 2021 and 5.5% in 2022. The share of inland waterways declined from 2.2% in 2014 to 1.7% in 2018; it was then stable for 3 years before dropping to a new low of 1.6% in 2022. The share of air transport within all freight transport performance remained at 0.2% throughout the period under consideration.



Source: Eurostat (online data code: tran_hv_ms_frmod)

Modal split of freight transport

(% based on tonne-kilometres, 2022)



Note: MT, not available.

Source: Eurostat (online data code: tran_hv_ms_frmod)

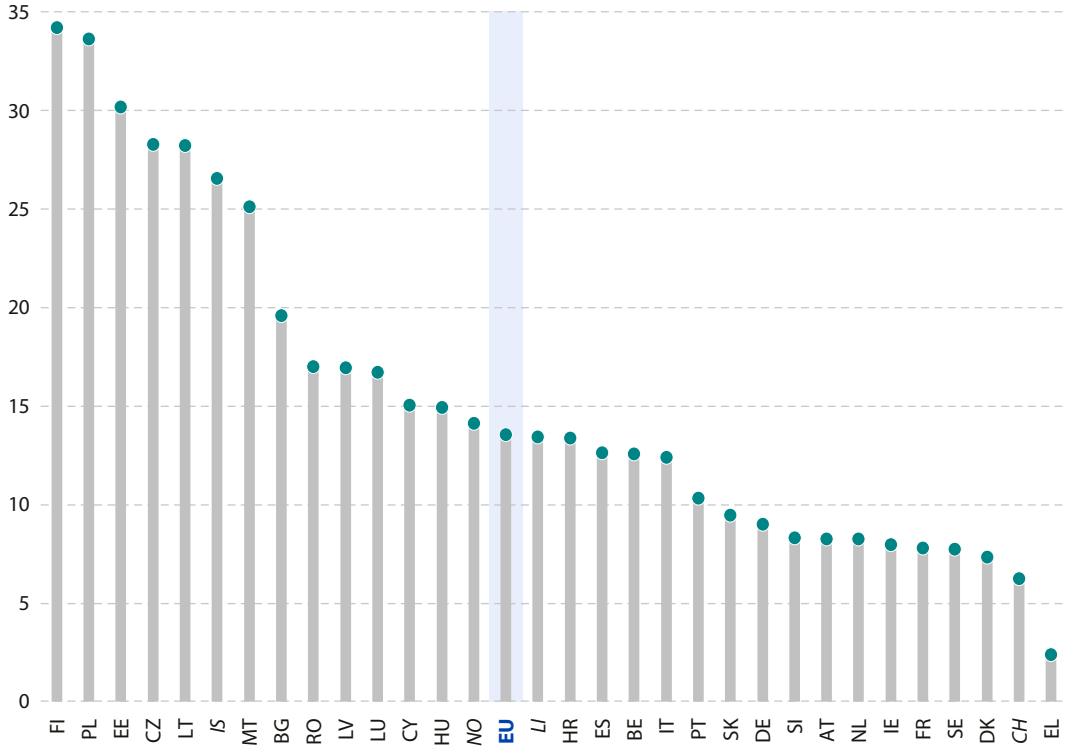
The 5 landlocked EU countries – Luxembourg, Czechia, Hungary, Austria and Slovakia – have no maritime transport. In 2022, they all recorded a share for road transport within all freight transport performance above 66.0%; Poland was the only other country with such a high share (3rd highest share, at 69.0%). The lowest shares for road transport were in Portugal, Cyprus, Greece, Estonia and Ireland, all below 10.0%. Conversely, these 5 EU countries recorded the highest shares for maritime transport, all over 90.0%.

Freight transport by rail was more than a third (37.2%) of the total in Lithuania, while Slovakia and Austria also had shares of at least 30.0%. The largest shares of freight transport by inland waterway were 17.0% in Romania and 11.6% in the Netherlands. The highest shares of air transport within all freight transport performance were in Luxembourg and Romania, both 1.5%.

Road freight transport

Motorisation rate: heavy lorries and road tractors relative to population size

(per 1 000 inhabitants, 2022)



Note: EU, excluding EL and SI. EL and SI: road tractors only.

Source: Eurostat (online data codes: road_eqs_lorroa and demo_pjan)

Road freight motor vehicles include

- single vehicles (such as a lorry) designed to carry goods
- road tractors, also known as semi-trailer tractors or (the towing part of) articulated lorries, designed to pull vehicles that aren't power-driven, typically semi-trailers.

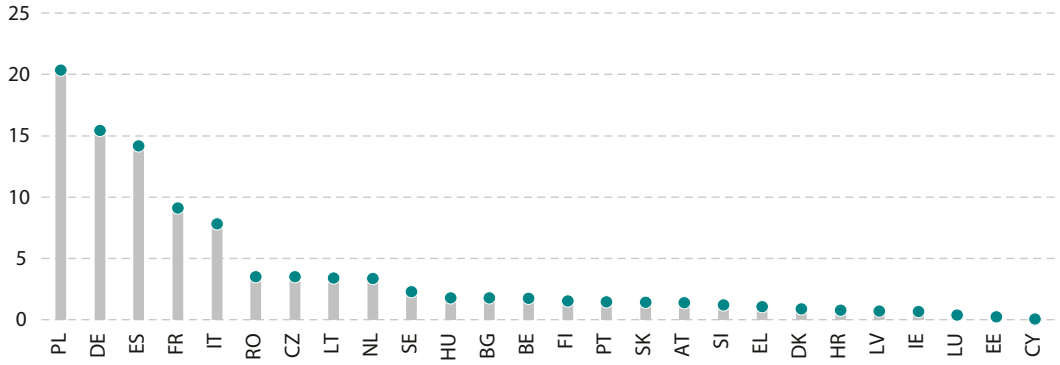
The motorisation rate for road freight vehicles is the number of heavy lorries (maximum permissible laden weight > 3.5 tonnes) and road tractors relative to the size of the population. In the EU in 2022, this rate averaged 13.5 per 1 000 inhabitants. By far, the highest freight motorisation rate among the EU countries was in Finland (34.2 per 1 000 inhabitants). The lowest rate was in Denmark (7.3 per 1 000 inhabitants). The lowest rate was in Denmark (7.3 per 1 000 inhabitants). While a lower rate was recorded in Greece, the data only include road tractors.

Road freight transport statistics published here relate to transport by heavy goods vehicles registered in the reporting countries. See the introduction to this publication for an explanation of the nationality principle used for road freight transport statistics.

The data presented here don't include transport by light goods vehicles. The threshold for inclusion as a heavy goods vehicle may relate to the load capacity (maximum permissible weight of goods) or the legally permissible maximum weight (the vehicle, the load, the driver and other people carried). Some reporting countries have a somewhat broader coverage as they apply lower inclusion thresholds.

Share of EU road freight transport, by country of vehicle registration

(% based on tonne-kilometres, 2023)



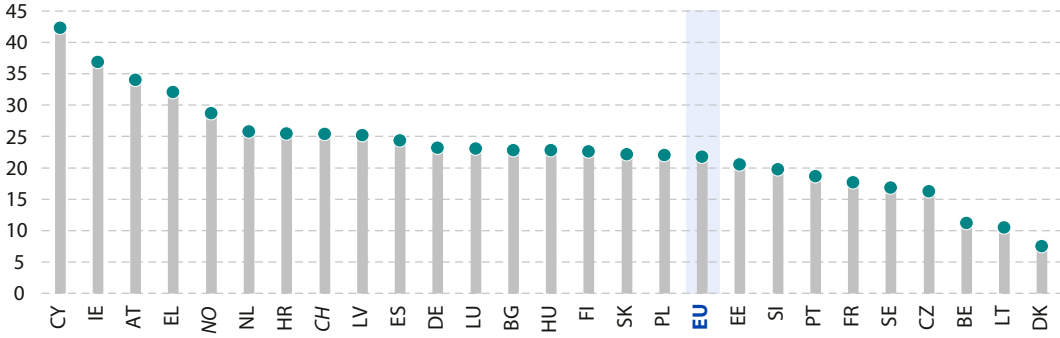
Note: MT, not available.

Source: Eurostat (online data code: road_go_ta_tott)

In 2023, Polish-registered vehicles performed a fifth (20.3%) of road freight transport (in tonne-km) by vehicles registered in the EU. German (15.4%) and Spanish (14.2%) transporters also had shares above 10.0%.

Share of empty road journeys, by country of vehicle registration

(% based on vehicle-kilometres, 2023)



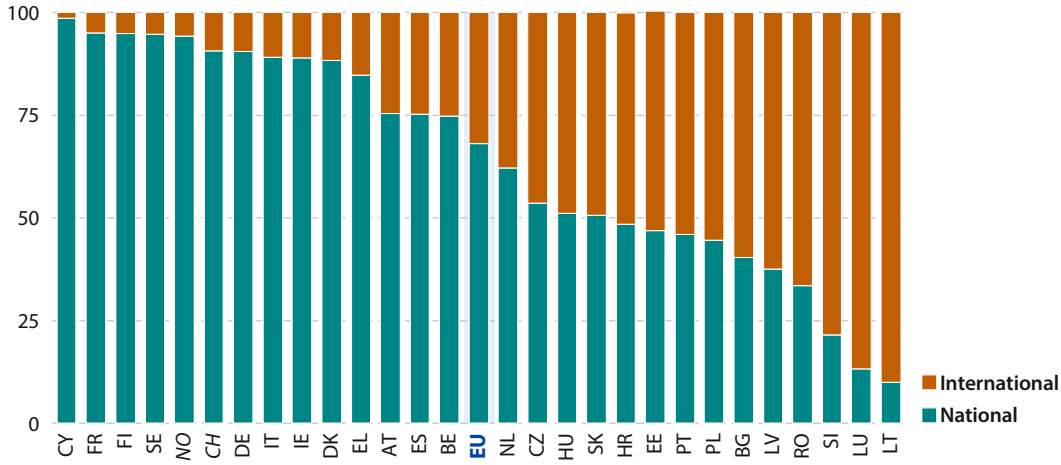
Note: EU, excluding IT, MT and RO. IT, MT and RO: not available.

Source: Eurostat (online data code: road_go_ta_tott)

Road freight transporters aim to avoid empty (unladen) journeys, for obvious cost reasons. The overall share of vehicle-kilometres (the distance travelled by vehicles regardless of the weight of any load carried) recorded for empty journeys in 2023 was 21.8% for vehicles registered in the EU. Vehicles registered in Greece (32.0%), Austria (34.0%), Ireland (36.9%) and particularly Cyprus (42.3%) recorded the highest shares among EU countries.

Distribution of road freight transport, by type of transport

(% based on vehicle-kilometres, 2023)



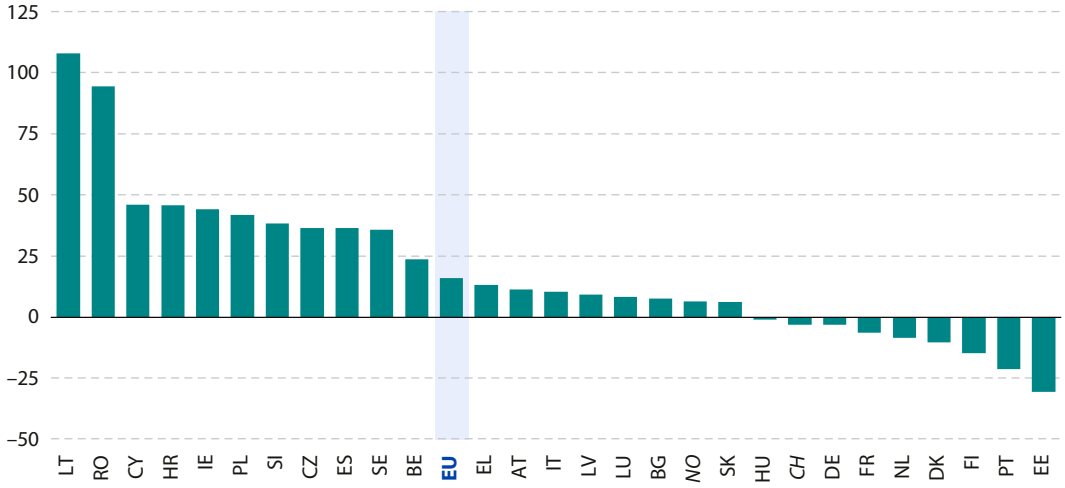
Just over two thirds (68.1%) of the vehicle-kilometres travelled in 2023 by vehicles registered within the EU were for national transport (within the EU country where the vehicles were registered). This share peaked at 98.7% in Cyprus but was as low as 10.0% in Lithuania.

Note: EU, excluding MT and including only loaded transport for IT and RO. MT: not available. IT and RO: loaded only.

Source: Eurostat (online data code: road_go_ta_tott)

Change in road freight transport

(% based on tonne-kilometres, 2013–23)



For vehicles registered within the EU, the number of vehicle-kilometres was 16% higher in 2023 than in 2013. The transport performance by Lithuanian-registered vehicles more than doubled (up 108%) between these years, while the performance by Romanian-registered vehicles (data only concern laden vehicles) increased 94%. By contrast, the performance of vehicles registered in Estonia, Portugal, Finland, Denmark, the Netherlands, France, Germany and Hungary was lower in 2023 than 10 years earlier.

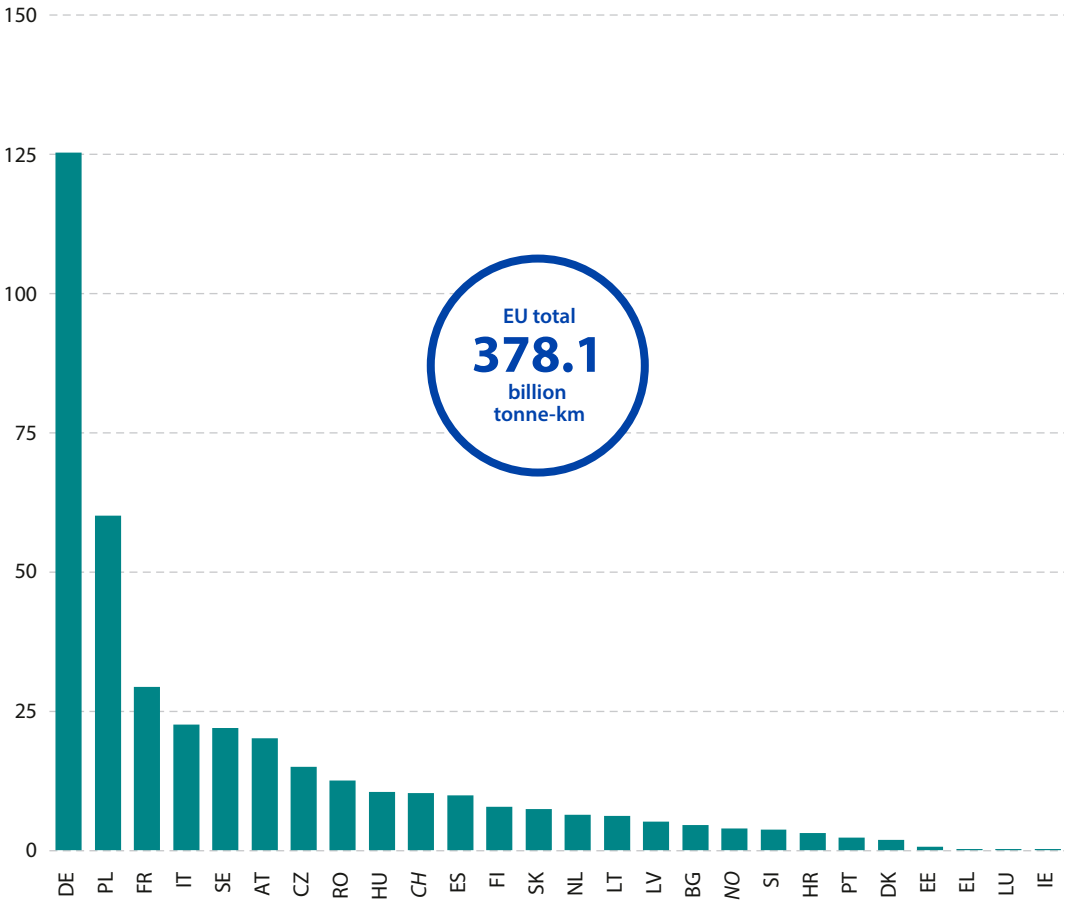
Note: MT, not available. IT and RO: loaded only.

Source: Eurostat (online data code: road_go_ta_tott)

Rail freight transport

Rail freight transport

(billion tonne-kilometres, 2023)



Note: no railways in CY and MT. EU: excluding BE. BE: not available.

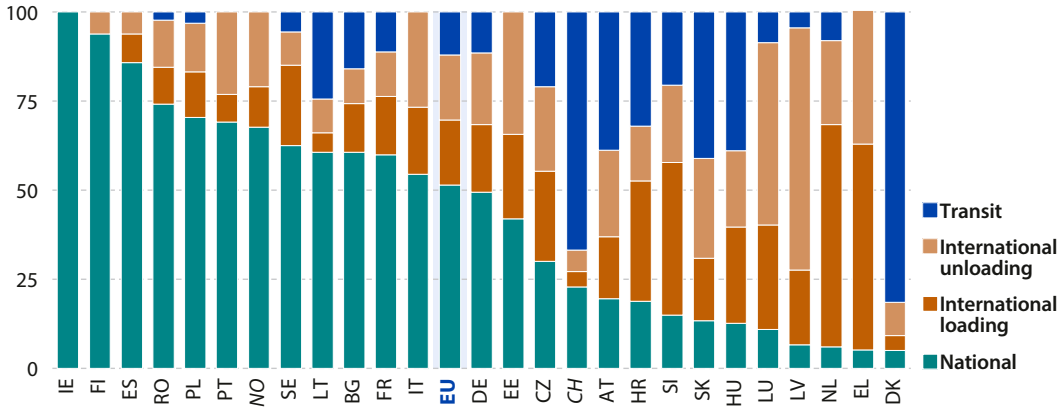
Source: Eurostat (online data code: rail_go_typepas)

Rail freight transport concerns the movement of goods using a railway vehicle on a railway network. The data are measured in tonne-km. For international journeys – whether just loaded or just unloaded in a country – the tonne-km data reported for a country only include the distance travelled on the national network, in other words the part of the journey within the national territory.

Germany was by far the largest contributor to rail freight transport performance in the EU, with 125 billion tonne-km in 2023, representing 33.2% of the EU total (excluding Belgium). Poland (60.2 billion tonne-km) and France (29.4 billion tonne-km) had the next highest levels of rail freight transport performance.

Distribution of rail freight transport, by type of transport

(% based on tonne-kilometres, 2023)



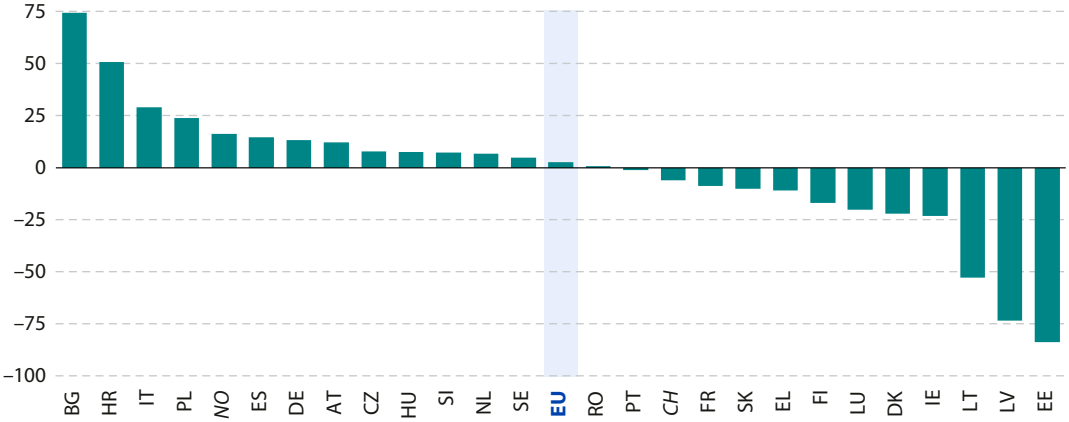
Note: no railways in CY or MT. EU: excluding BE. BE: not available.

Source: Eurostat (online data code: rail_go_typepas)

All rail freight transported in 2023 in Ireland was national transport. At the other extreme, national transport accounted for 5.1% of rail freight transport (in tonne-km) in Denmark and 5.2% in Greece. Among the EU countries, the highest shares for international rail transport were 62.3% for freight loaded in the Netherlands and 68.0% for freight unloaded in Latvia. Concerning the share of transit within rail freight transport, Denmark ranked 1st with a share of just over four fifths (81.4%), close to double the next highest share (41.1% in Slovakia) among EU countries.

Change in rail freight transport

(% based on tonne-kilometres, 2013–23)



Note: no railways in CY or MT. EU: excluding BE. BE: not available.

Source: Eurostat (online data code: rail_go_typepas)

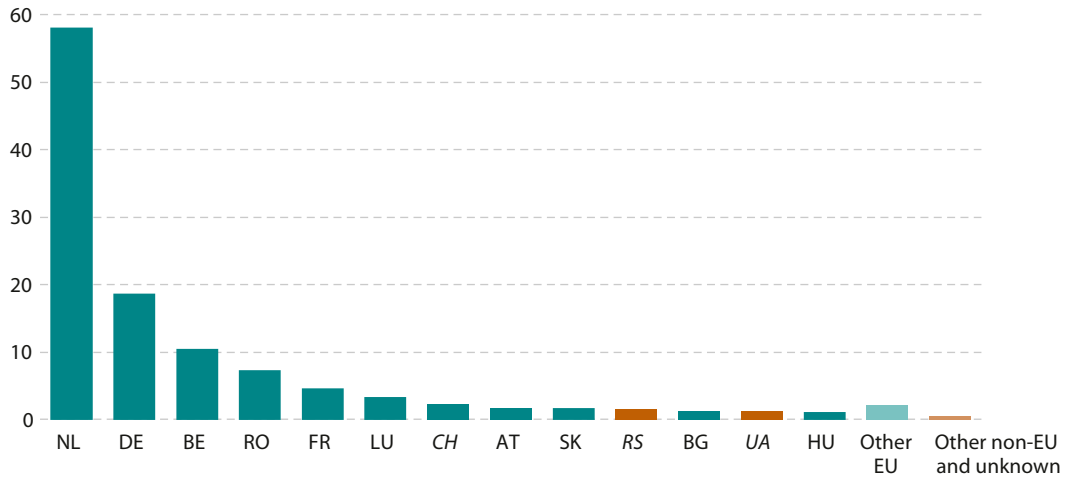
The rail freight transport performance (in tonne-km) in Bulgaria increased 74.2% between 2013 and 2023, the highest relative increase among the EU countries. The next highest increases were in Croatia (up 50.8%), Italy (up 29.0%) and Poland (up 23.9%).

In 2023, 11 EU countries reported less rail freight transport than 10 years earlier. The largest decreases were recorded in the Baltic EU countries: Estonia (down 83.7%), Latvia (down 73.4%) and Lithuania (down 52.7%).

Inland waterway freight transport

Inland waterway freight transport, by nationality of vessel

(billion tonne-kilometres, EU, 2023)



Note: RS is Serbia; UA is Ukraine.

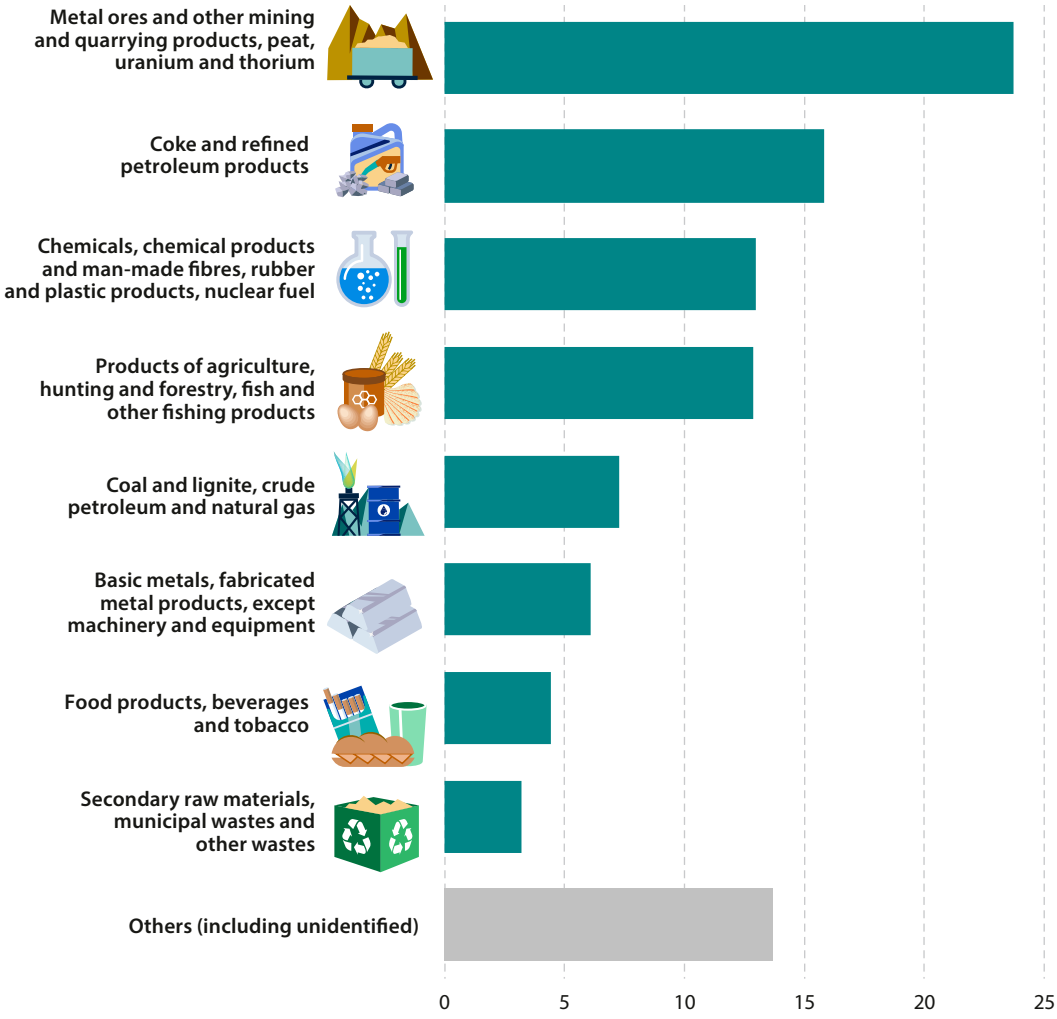
Source: Eurostat (online data code: iww_go_anave)

Inland waterway freight transport concerns the movement of goods using an inland waterway vessel, wholly or partly on navigable inland waterways as well as of seagoing vessels undertaking movements of goods solely on navigable inland waterways. The data are measured in tonne-km.

In 2023, 116 billion tonne-km of freight travelled along inland waterways in the EU. Vessels registered in the Netherlands dominated this mode of transport, as their 58.1 billion tonne-km of inland waterway freight transport in the EU accounted for nearly half (49.9%) of the total. The next largest levels of transport were 18.7 billion tonne-km by German-registered vessels (16.1% of the total) and 10.5 billion tonne-km by Belgian-registered vessels (9.0%), emphasising the significance of inland waterway transport in the regions surrounding the Moselle, Rhine and Elbe rivers. The 4th largest level of inland waterway freight transport in the EU was 7.3 billion tonne-km by Romanian-registered vessels (6.3% of the total).

Inland waterway freight transport, by type of goods transported

(% based on tonne-kilometres, EU, 2023)



Source: Eurostat (online data code: iww_go_atygo)

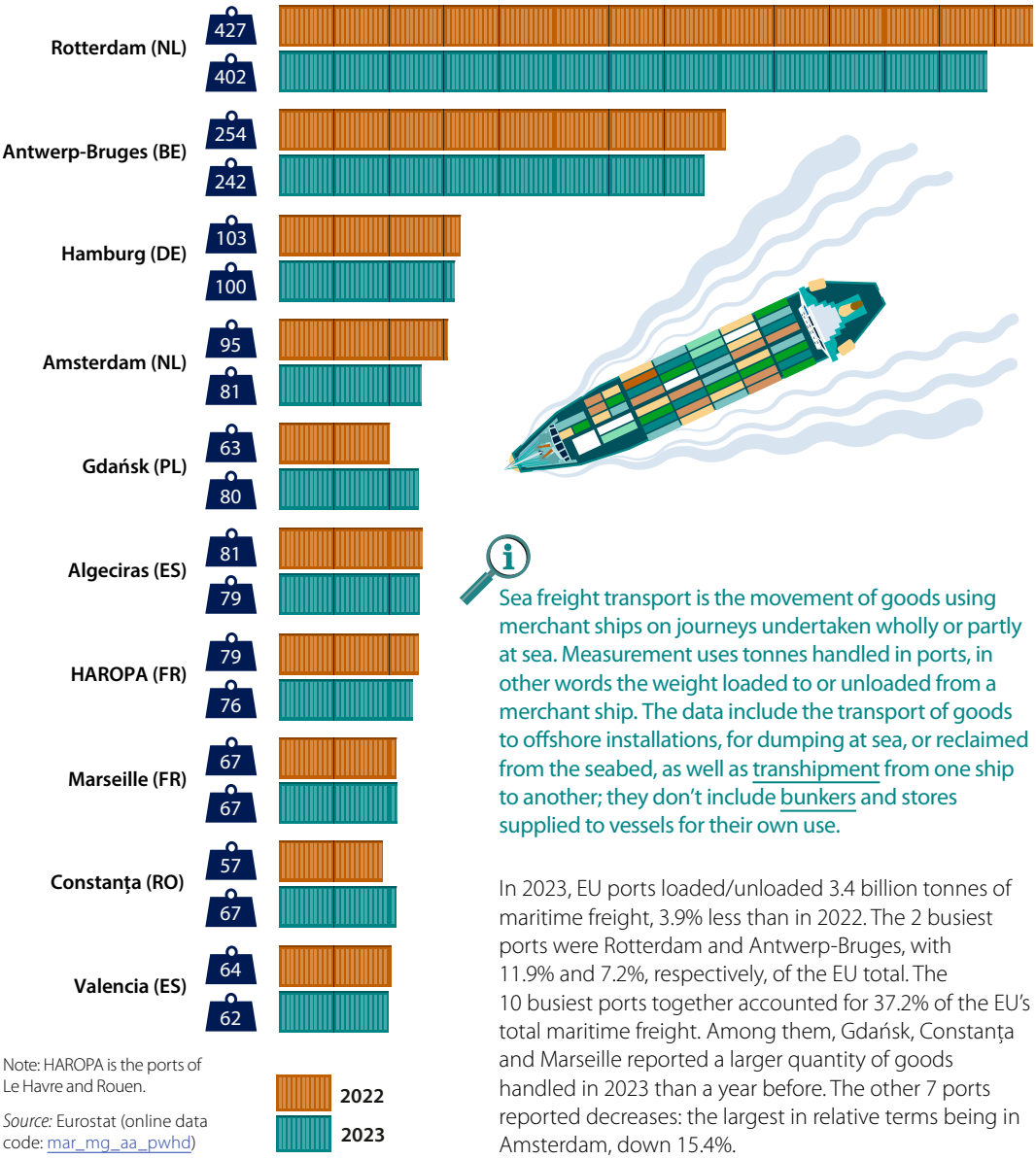
Together, 4 categories accounted for almost two thirds (65.4%) of all goods transported on the EU's inland waterways in 2023

- metal ores and other mining and quarrying products, peat, uranium and thorium (a 23.7% share of the total)
- coke and refined petroleum products (15.8%)
- chemicals, chemical products, man-made fibres, rubber and plastic products, and nuclear fuel (13.0%)
- products of agriculture, hunting and forestry, fish and other fishing products (12.9%).

Maritime freight transport

Top 10 cargo ports in terms of gross weight of goods handled

(million tonnes, EU, 2022 and 2023)



Note: HAROPA is the ports of Le Havre and Rouen.

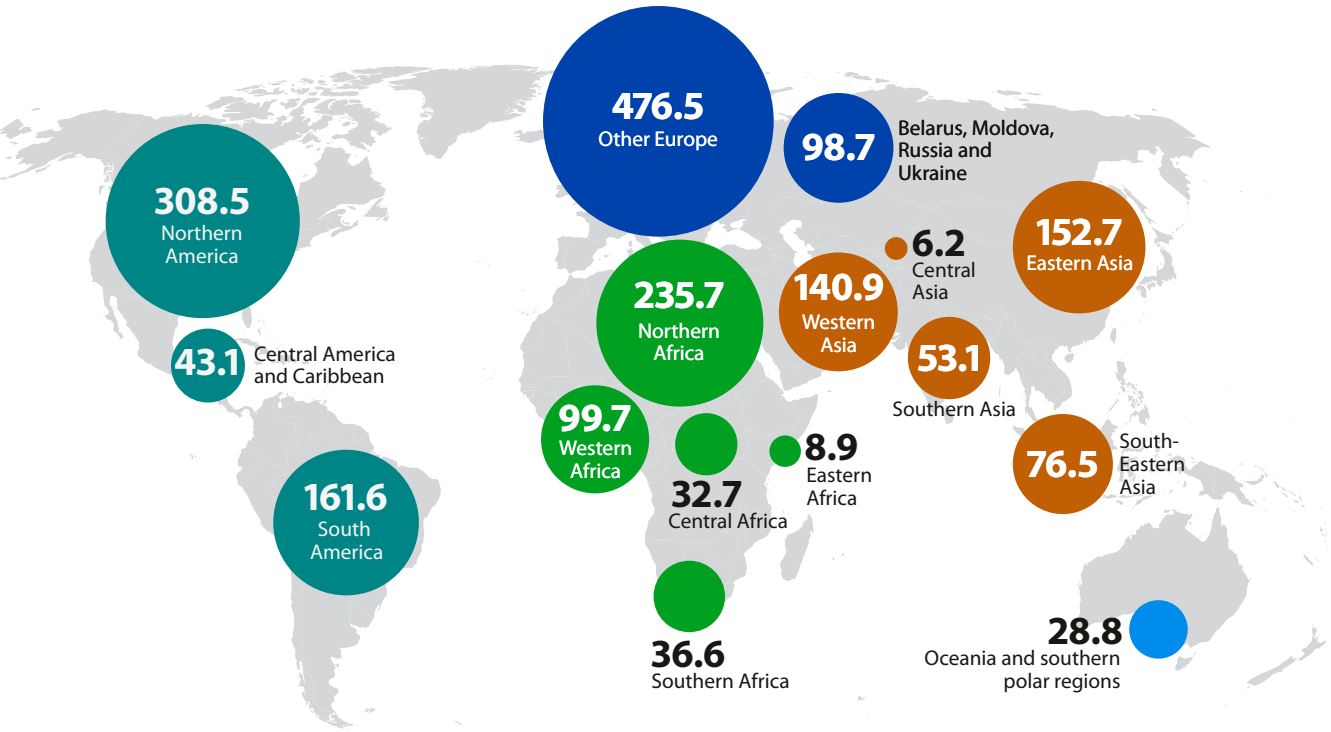
Source: Eurostat (online data code: mar_mg_aa_pwhd)

Sea freight transport is the movement of goods using merchant ships on journeys undertaken wholly or partly at sea. Measurement uses tonnes handled in ports, in other words the weight loaded to or unloaded from a merchant ship. The data include the transport of goods to offshore installations, for dumping at sea, or reclaimed from the seabed, as well as transhipment from one ship to another; they don't include bunkers and stores supplied to vessels for their own use.

In 2023, EU ports loaded/unloaded 3.4 billion tonnes of maritime freight, 3.9% less than in 2022. The 2 busiest ports were Rotterdam and Antwerp-Bruges, with 11.9% and 7.2%, respectively, of the EU total. The 10 busiest ports together accounted for 37.2% of the EU's total maritime freight. Among them, Gdańsk, Constanța and Marseille reported a larger quantity of goods handled in 2023 than a year before. The other 7 ports reported decreases: the largest in relative terms being in Amsterdam, down 15.4%.

Extra-EU maritime gross weight of goods

(million tonnes, EU, 2023)



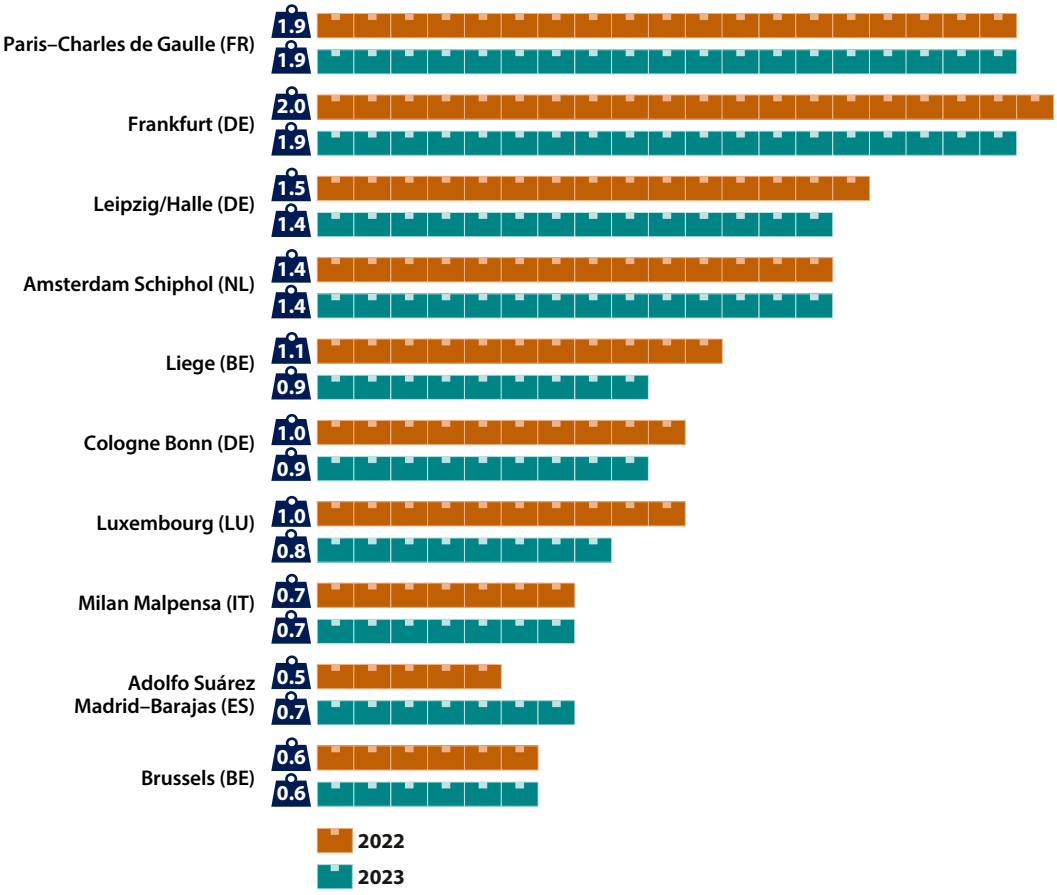
Source: Eurostat (online data code: mar_go_am_detl)

Of the 3.4 billion tonnes of maritime freight loaded/unloaded in EU ports in 2023, 2.0 billion tonnes were for transport to/from non-EU countries. This was 5.8% less than in 2022. The largest partners in 2023 were elsewhere in Europe, with Belarus, Moldova, Russia and Ukraine together accounting for 5.0% of the total and the rest of Europe for 24.3%. Outside of Europe, the 8 largest partners were Northern America (15.7% of the total), Northern Africa (12.0%), South America (8.2%), Eastern Asia (7.8%), Western Asia (7.2%) and Western Africa (5.1%). Maritime freight transported to/from these partners increased in 2023 (compared with 2022) for Northern Africa (up 19.2%), Western Asia (up 9.8%), Northern America (up 9.6%) and South America (up 2.0%). The largest decrease, in relative terms, was for Belarus, Moldova, Russia and Ukraine (down 55.5%).

Air freight transport

Top 10 main cargo airports in terms of goods loaded and unloaded

(million tonnes, EU, 2022 and 2023)



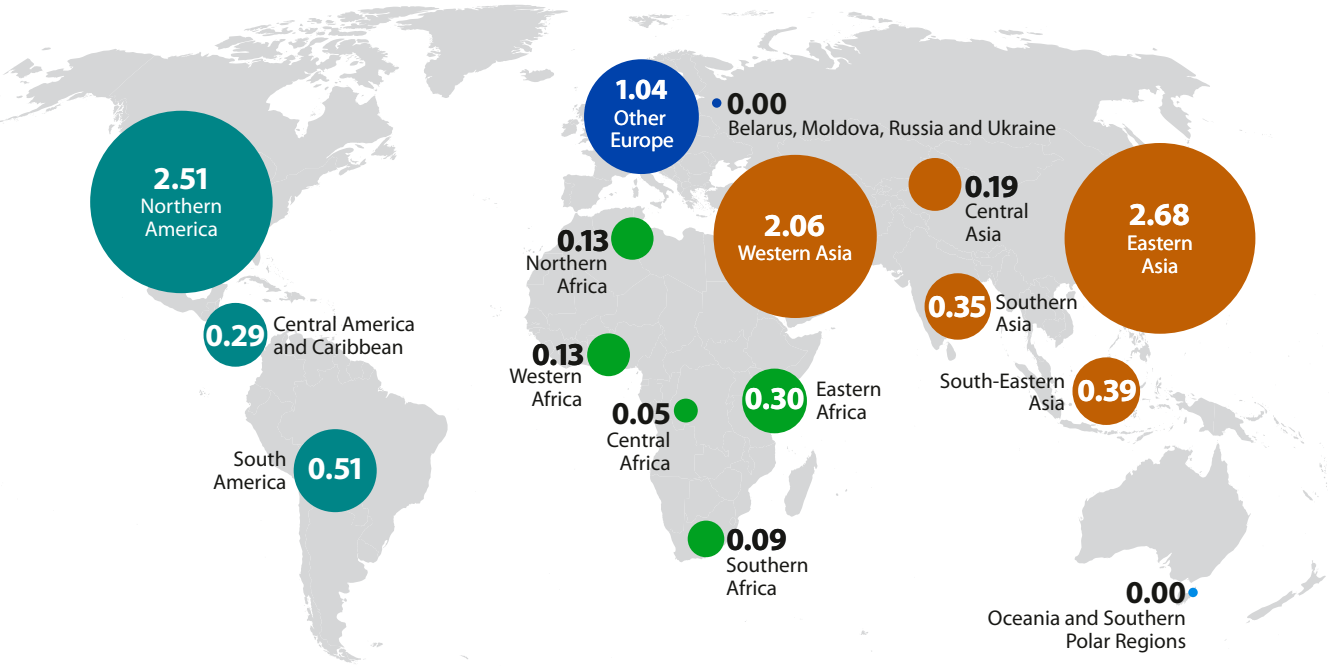
Source: Eurostat (online data code: avia_gooa)

Air freight and mail transport is the movement of goods on an aircraft. The data are measured using tonnes loaded or unloaded from aircraft at airports.

The COVID-19 crisis had a much smaller impact on air freight transport than on air passenger transport. The list of the EU's 10 busiest freight airports in 2023 was the same as in the 3 previous years, with only a few changes in the order of the ranking. For example, in 2023 Paris-Charles de Gaulle overtook Frankfurt as the EU's busiest freight airport.

Inward and outward extra-EU air freight transport

(million tonnes loaded and unloaded, EU, 2023)



Source: Eurostat (online data code: avia_goexcc)

Unlike for air passenger transport, the main origins or destinations of goods freighted to or from the EU by air in 2023 were quite varied, with relatively low shares for other European countries. The main partner for freight was Eastern Asia, with close to a quarter (24.9%) of the total. Northern America (23.3%) and Western Asia (19.2%) were the next largest markets. These 3 markets collectively accounted for just over two thirds (67.5%) of the extra-EU total for air freight transport.

EU air freight transport to/from non-EU countries decreased 5.3% in 2023. Air freight transport fell rapidly with respect to the relatively small markets of Belarus, Moldova, Russia and Ukraine, to less than 10 000 tonnes loaded and unloaded, impacted at least in part by the Russian military aggression against Ukraine. The largest relative increases concerned transport to or from Central Africa and Southern Asia, which increased 15.2% and 8.7%, respectively.

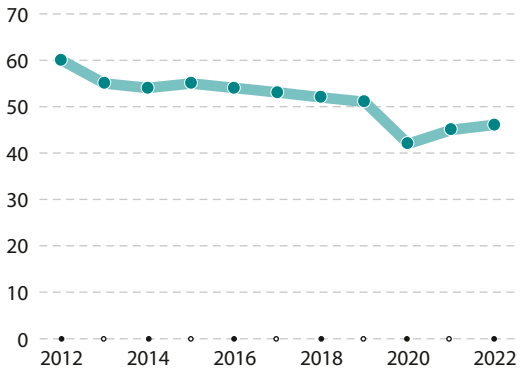
3

Transport safety

Road transport safety

Changes in the number of people killed in road transport accidents

(per million inhabitants, EU, 2012–22)



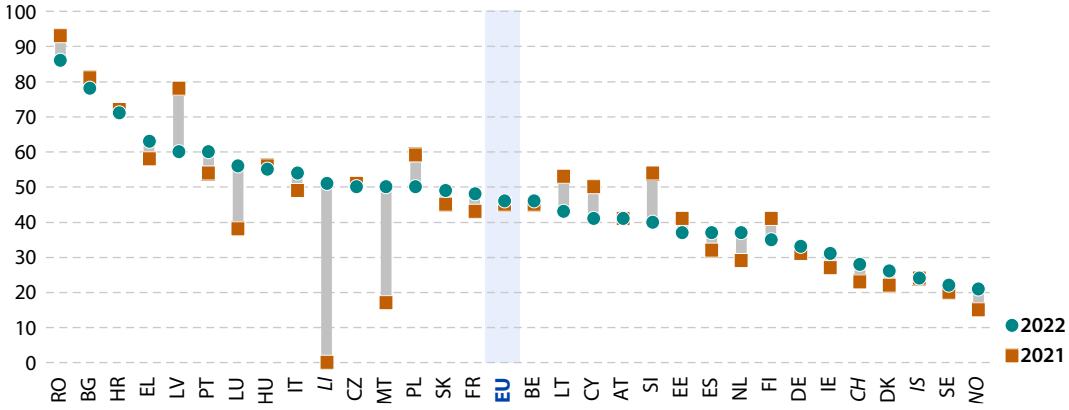
A fatal road accident involves at least 1 road vehicle in motion on a public road (or a private road to which the public have right of access), resulting in at least 1 killed person.

Between 2012 and 2019, the number of people killed in road accidents in the EU fell from 26 500 to 22 800 or from 60 per million inhabitants to 51 per million inhabitants. During this period, the ratio was stable or fell each year except for 2015. The COVID-19 crisis influenced the 2020 figures: the number fell to 18 800 people killed and the ratio to 42 fatalities per million inhabitants. In the next 2 years, the numbers rebounded somewhat, reaching 20 700 people killed or 46 fatalities per million inhabitants in 2022.

Source: Eurostat (online data code: tran_sf_roadus) and Community database on Accidents on the Roads in Europe (CARE)

Number of people killed in road transport accidents

(per million inhabitants, 2021 and 2022)



Note: the data for NL are believed to be under-reported.

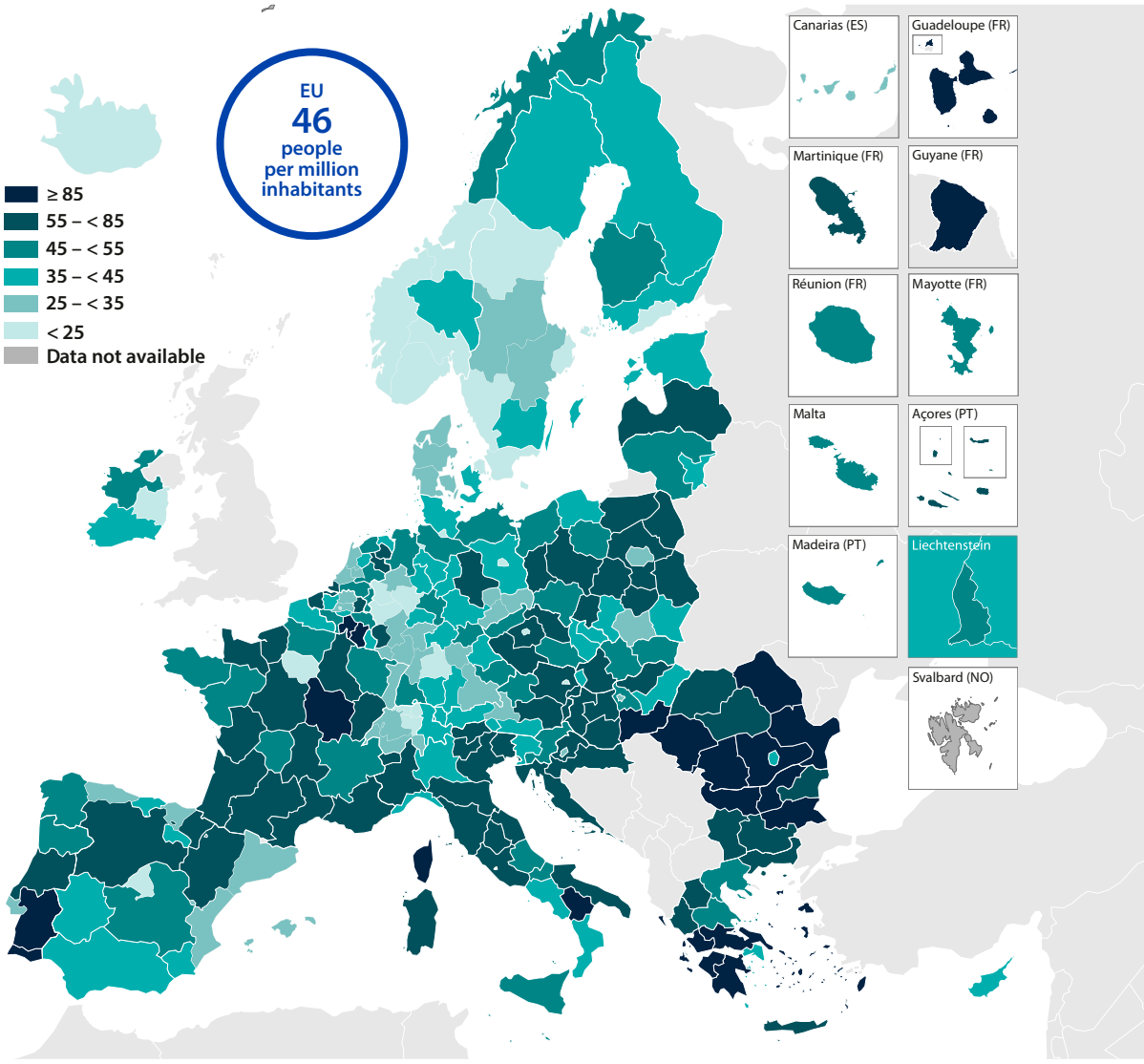
Source: Eurostat (online data code: tran_sf_roadus) and CARE

Among the EU countries, the highest incidence of fatalities through road accidents in 2022 was in Romania, with 86 deaths per million inhabitants. The lowest incidences were in Sweden (22 deaths per million inhabitants) and Denmark (26 deaths per million inhabitants).

A small majority of EU countries recorded a higher incidence of fatalities through road accidents in 2022 than in 2021. The largest absolute increase was in Malta, up from 17 to 50 deaths per million inhabitants. The largest decrease was in Latvia, down from 78 to 60 deaths per million inhabitants. Note that the number of road accidents with fatalities may be quite volatile over time, particularly for smaller countries.

Number of people killed in road transport accidents in regions

(per million inhabitants, NUTS level 2 regions, 2022)



Note: LU and IS, 2021.

Source: Eurostat (online data code: tran_r_acci)

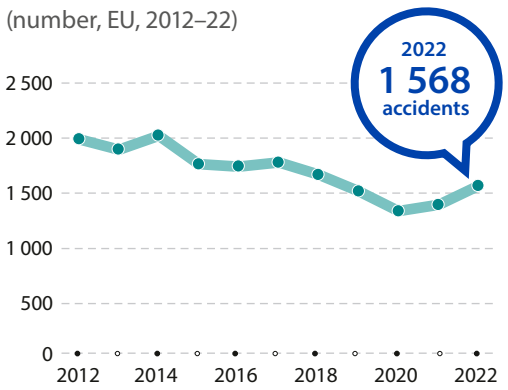
Statistical authorities provide regional data for road accidents. These statistics indicate that there were 12 regions across the EU with more than 100 fatalities per million inhabitants in 2022: 3 each in Greece and France, 2 each in Belgium and Bulgaria, and 1 region in each of Portugal and Romania.

The highest ratio was 149 fatalities per million inhabitants in the Portuguese region of Alentejo. In 2022, there were no road accident fatalities in the archipelago of Åland (Finland).

Rail transport safety

Changes in the number of railway accidents

(number, EU, 2012–22)



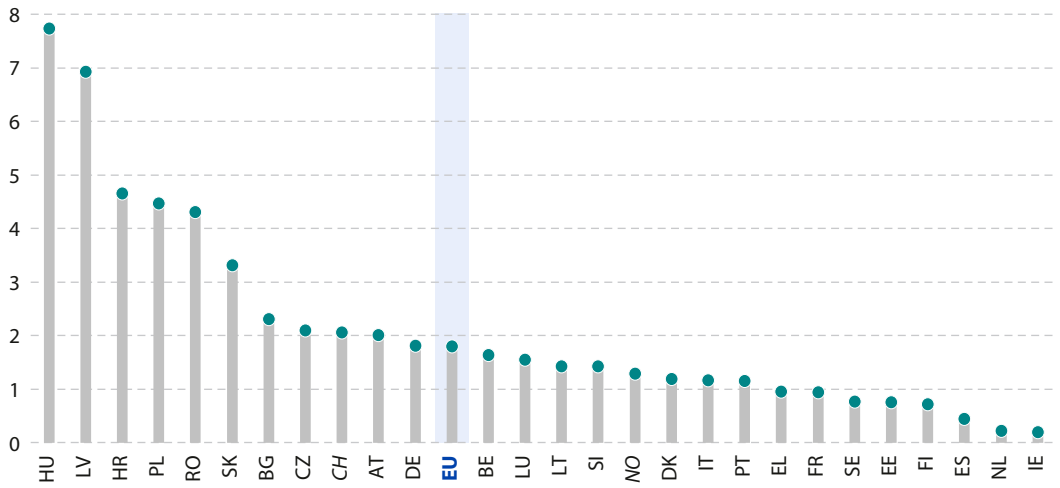
A rail accident may be a rail injury accident – with an injury or a fatality – or an accident with damage to railway stock, track, other installations or the environment.

The number of significant railway accidents in the EU fell from 1 992 in 2012 to 1 518 in 2019; overall, this was a decrease of 23.8%. In most years during this period, there was a fall in the number of rail accidents, with annual increases observed in 2014 and 2017. The decrease of 12.0% in 2020 and rebounds of 4.4% and 12.4% in 2021 and 2022 (to reach 1 568 accidents) reflects, to some extent, the impact of the COVID-19 crisis.

Source: Eurostat (online data code: tran_sf_railac) and European Union Agency for Railways (ERA)

Number of people killed in railway accidents

(per million inhabitants, 2022)



Note: no railways in CY or MT.

Source: Eurostat (online data codes: tran_sf_railvi and demo_pjan) and European Union Agency for Railways (ERA)

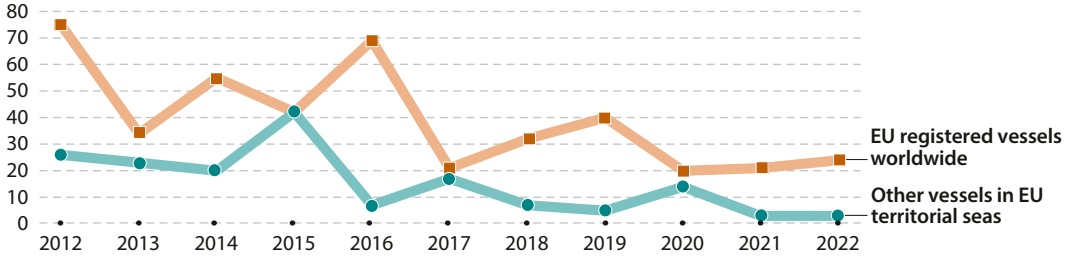
A total of 805 people died in railway accidents in the EU in 2022, equivalent to 1.8 deaths per million inhabitants. Among the EU countries, this ratio ranged from 0.2 deaths per million inhabitants in Ireland and the Netherlands to 6.9 deaths per million inhabitants in Latvia and 7.7 deaths per million inhabitants in Hungary. Note that the number of people killed in railway accidents may be quite volatile over time, particularly for smaller countries.

Maritime transport safety

Changes in the number of people killed in maritime transport accidents

(number, EU, 2012–22)

A fatal marine accident is one involving at least one marine vessel in motion resulting in at least one killed person.

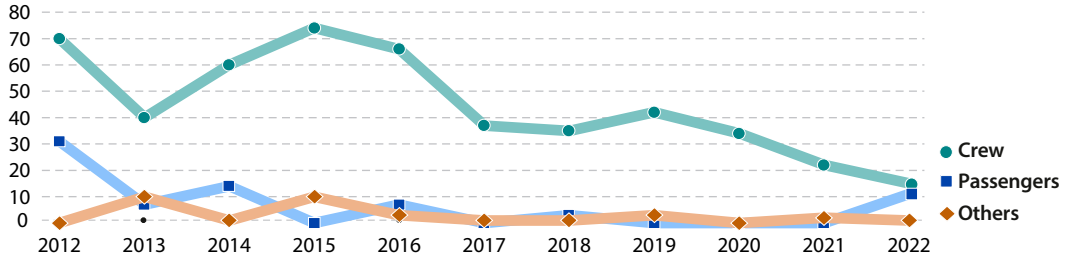


Source: Eurostat (online data code: tran_sf_marvper) and European Maritime Safety Agency (EMSA)

Between 2012 and 2022, the number of people killed in maritime transport accidents in the EU's waters or involving EU-registered vessels elsewhere in the world ranged between 24 and 101. Recent years witnessed the 3 lowest numbers: 34 deaths in 2020, 24 deaths in 2021 and 27 deaths in 2022. The vast majority of the EU's maritime transport fatalities in 2022 concerned EU registered vessels (24 fatalities), while other vessels in the EU's territorial seas accounted for the remainder (3 fatalities).

Changes in the number of people killed in maritime transport accidents, by type of victim

(number, EU, 2012–22)



Source: Eurostat (online data code: tran_sf_marvper) and European Maritime Safety Agency (EMSA)

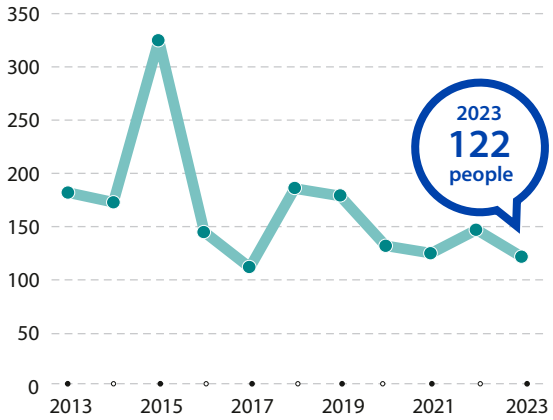
In 2022, 15 of the 27 fatalities in EU maritime transport accidents were crew members, while 11 were passengers and 1 was classified as other, a category which includes, for example, service personnel, dock workers, pilots and inspectors.

2022 was the 1st year since 2018 in which maritime transport accidents in the EU's waters or involving EU-registered vessels elsewhere included some passenger fatalities.

Air transport safety

Changes in the number of people killed in air transport accidents

(number, EU, 2013–23)



People killed due to the operation of an aircraft may be in the aircraft, in direct contact with any part of the aircraft, or directly exposed to jet blast.

Between 2013 and 2023, the number of people killed in air transport accidents in the EU or involving EU-registered aircraft generally ranged between 112 and 186. In 2015, the number of deaths was notably higher (325). A crash of a single commercial airliner, as was the case in 2015, can lead to notably larger values for a particular year. In 2023, 122 people were killed in air transport accidents in the EU or involving EU-registered aircraft.

Source: Eurostat (online data codes: tran_sf_aviaca, tran_sf_aviagah, tran_sf_aviagal and tran_sf_aviaaw) and European Union Aviation Safety Agency (EASA)

Number of people killed in air transport accidents

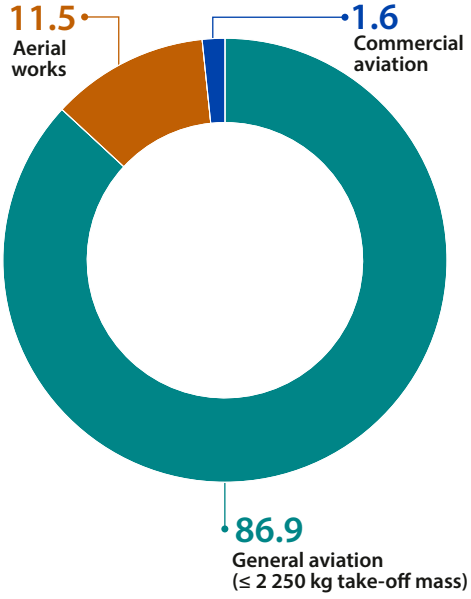
(%, EU, 2023)

The relatively low number of people killed in air transport accidents in the EU or involving EU-registered aircraft in 2023 reflects the absence of major accidents within commercial aviation.

There were 106 deaths (86.9% of the total) within general aviation involving aircraft with a take-off mass equal to or below 2 250 kg; this includes not only small aeroplanes and helicopters but also other craft such as motor-gliders, microlights and hot air balloons. The number of fatalities was much lower for other categories: 14 people were killed in aerial works (specialised services of aircraft used, for example, for agriculture, construction, photography, or search and rescue), 2 in commercial aviation and none in general aviation involving aircraft with a take-off mass above 2 250 kg.

Note: in 2023, no people were killed in general aviation (> 2 250 kg take-off mass).

Source: Eurostat (online data codes: tran_sf_aviaca, tran_sf_aviagah, tran_sf_aviagal and tran_sf_aviaaw) and European Union Aviation Safety Agency (EASA)



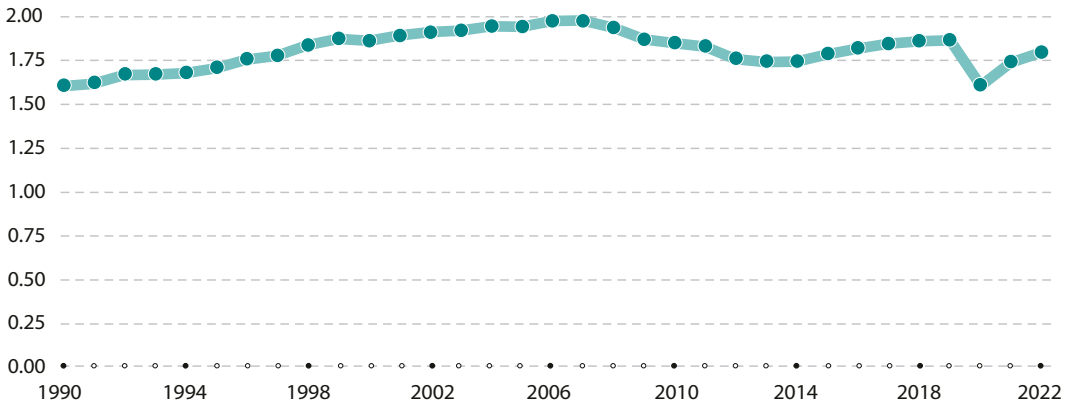
4

Transport, the environment and energy

Emissions

Greenhouse gas emissions from fuel combustion in transport

(tonnes of CO_2 equivalents per inhabitant, EU, 1990–2022)



Source: Eurostat (online data codes: env_air_gge and demo_pjan) and European Environment Agency (EEA)

Statistics on emissions in this publication use a territoriality principle, with gas emissions assigned to the place of emission rather than the residence of the emitter. Emissions of various greenhouse gases, which each have a different global-warming potential, are based on CO_2-equivalents. These convert quantities of emissions of other gases into the equivalent quantity of carbon dioxide which would have the same global-warming potential.

Between 1990 and 2019, emissions of greenhouse gases in the EU through fuel combustion in transport increased 23.9%, or 161 million tonnes of CO_2-equivalent; note that these values don't include international aviation or international navigation (shipping). Transport was the only fuel combustion source sector which recorded an increase during this period. In 2020, as the COVID-19 crisis impacted on transport, these emissions decreased 13.5% compared with 2019. Emissions through fuel combustion in transport rebounded, increasing 8.0% in 2021 and 3.2% in 2022. These data come from the European Environment Agency.

When adjusted for changes in population, emissions from fuel combustion in transport increased in most years from 1990 to 2007, decreased through to 2013 (during which time the global financial and economic crisis resulted in relatively restrained economic activity), and increased thereafter up to 2019. Overall, fuel combustion in transport per inhabitant was 16.0% higher in 2019 than it had been in 1990. This suggests that the average use of powered transport per inhabitant in the EU increased at a faster pace than any improvements achieved in terms of fuel efficiency. As for the overall level of emissions from fuel combustion in transport, the rate of emissions per inhabitant decreased strongly in 2020 (down 13.6% compared with 2019) and partially rebounded in 2021 (up 8.1%) and 2022 (up 3.2%).

Taxes

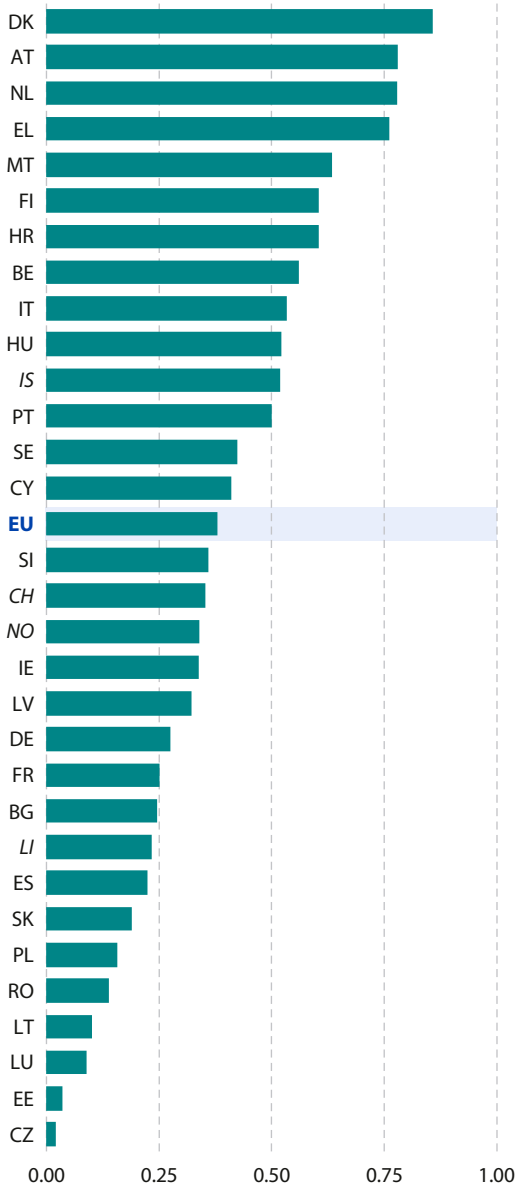
Environmental taxes can be taxes on energy, transport, pollution or resources. Environmental taxes on transport fuels are classified as energy taxes, not transport taxes.

In 2022, environmental tax revenue in the EU was €317 billion, equivalent to 1.98% of gross domestic product (GDP). Environmental transport taxes amounted to €61 billion, 19.2% of all environmental taxes, equivalent to 0.38% of GDP.

Among the EU countries, the relative importance of environmental transport taxes in 2022 ranged from 0.02% of GDP in Czechia and 0.04% in Estonia to 0.76% in Greece, 0.78% in the Netherlands and Austria, and 0.86% in Denmark.

Environmental taxes on transport

(% of GDP, 2022)



Note: LI, 2021. IS: 2019.

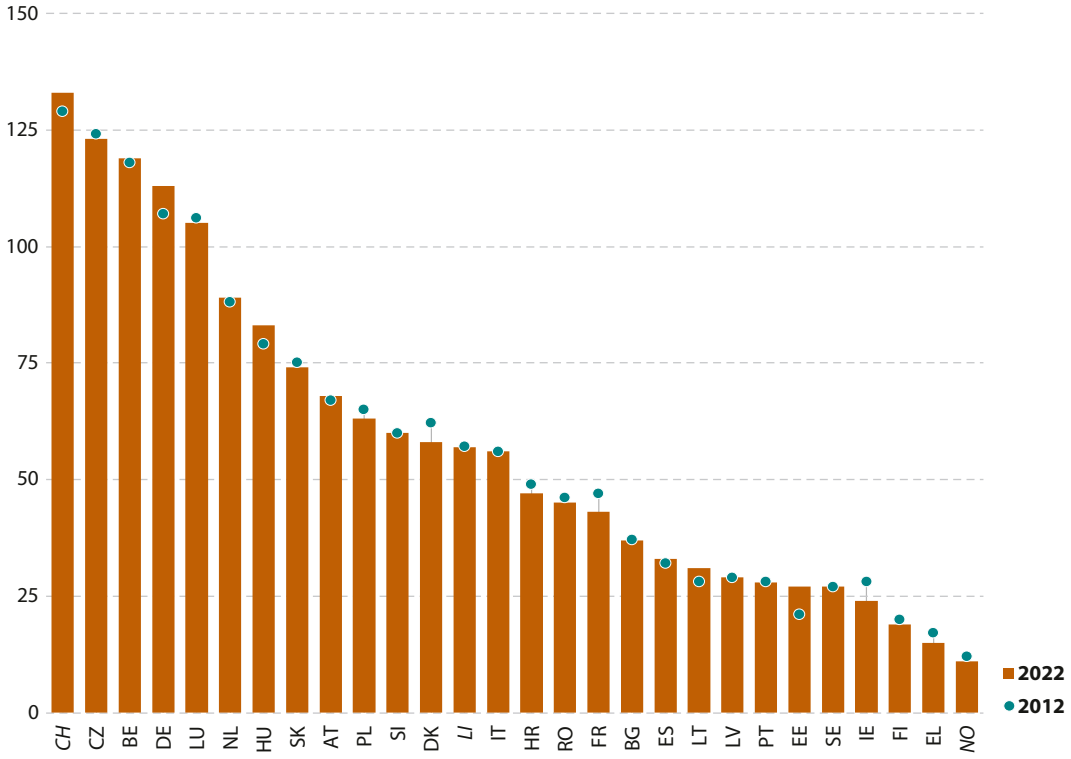
Source: Eurostat (online data codes: env_ac_taxind2 and nama_10_gdp)

Networks

Density of railway lines

(km per 1 000 km^2 of land area, 2012 and 2022)

The rail network includes high-speed and conventional lines. It excludes the networks of light rail and metros, as well as trams.



Note: no railways in CY, MT or IS. BE and CH: 2010 instead of 2012. CH: 2020 instead of 2022. PL: break in series.

Source: Eurostat (online data code: tran_r_net)

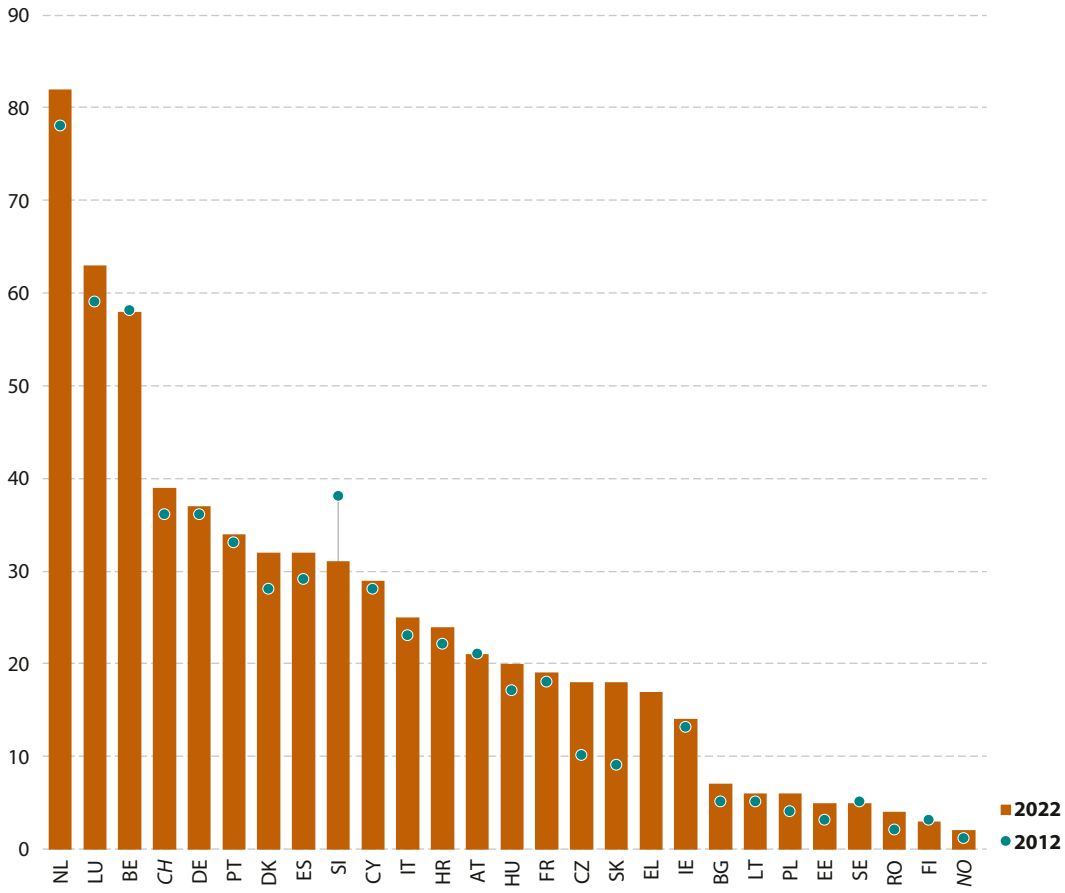
Among other factors, demand for rail passenger and freight services influences rail network density. Passenger services are mainly in, around and between urban areas, while freight services often connect sites of heavy industries as well as other logistics and transport infrastructure, such as ports.

Among the EU countries, the density of railway lines was highest in Czechia, Belgium, Germany and Luxembourg, all with more than 100 kilometres (km) of lines per 1 000 square kilometres (km^2) of land area in 2022. By contrast, in Finland and Greece the density was less than 20 km per 1 000 km^2.

Between 2012 and 2022, the density of rail networks increased in absolute terms most notably in Germany and Estonia, both up 6 km per 1 000 km^2 of land area, followed by Hungary (up 4 km per 1 000 km^2) and Lithuania (up 3 km per 1 000 km^2). The density of the rail network declined most strongly in Denmark, Ireland and France, each with decreases of 4 km per 1 000 km^2 of land area.

Density of motorways

(km per 1 000 km^2 of land area, 2012 and 2022)



Note: no motorways in LV, MT, IS or LI. EL: 2012, not available. IT and FI: 2021 instead of 2022. EE: break in series.

Source: Eurostat (online data code: tran_r_net)

The motorway network includes roads specially designed and built for motor traffic which don't serve properties bordering on them, have separate carriageways for traffic in 2 directions, have no crossings at the same level and have signs that they are motorways.

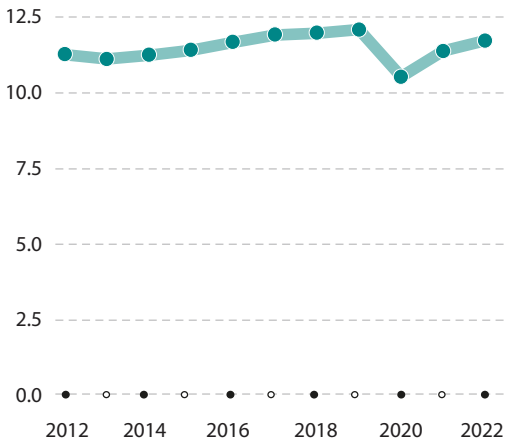
Among the EU countries, the Benelux countries – the Netherlands, Luxembourg and Belgium – had the highest motorway densities in 2022, followed at some distance by Germany. This reflects high population density, the industrial and logistics specialisation of some of these EU countries, as well as connections into mainland Europe from the EU's largest maritime freight ports: Rotterdam and Amsterdam in the Netherlands, Antwerp in Belgium and Hamburg in Germany. There were no motorways in Latvia or Malta. Elsewhere, the lowest motorway density was in Finland, reflecting its low population density.

Slovakia and Czechia reported the most substantial motorway expansions between 2012 and 2022, up 9 km and 8 km per 1 000 km^2 of land area, respectively.

Energy

Final energy consumption in transport

(million terajoules, EU, 2012–22)



Note: excluding fuel deliveries to aviation and maritime international bunkers.

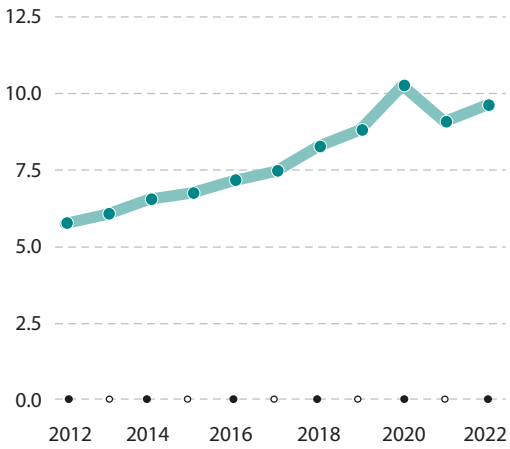
Source: Eurostat (online data code: nrg_bal_s)

The combination of data for various types of energy uses conversion factors to express the result in Terajoules (TJ). 1 TJ is 1 x 10^{12} joules.

Final energy consumption of the transport sector in the EU was 11.7 million TJ in 2022, up 4.0% compared with 2012. However, this overall development resulted from an initial decrease of 1.4% between 2012 and 2013, followed by a sustained overall increase of 8.8% between 2013 and 2019. The COVID-19 crisis strongly impacted final energy consumption in the following years, with an annual fall of 12.9% in 2020 and partial rebounds in 2021 (up 8.1%) and 2022 (up 3.0%). Note that the data for final energy consumption of the transport sector exclude fuel deliveries to international aviation and international maritime bunkers.

Share of energy from renewable sources in transport

(%, EU, 2012–22)



Source: Eurostat (online data code: nrg_ind_ren)

The share of energy from renewable sources in transport is calculated using specific accounting rules aimed at promoting energy from renewable sources. Renewable energy sources relevant for transport include mostly liquid or gaseous biofuels and electricity from renewable sources. The data presented here include all modes of transport except for international navigation (shipping).

Across the EU, the share of energy from renewable sources in transport rose from 5.8% in 2012 to 8.8% by 2019, increasing each year. This was followed by a larger increase in 2020, up 1.4 percentage points. A decrease in 2021 reversed most of the increase recorded in 2020, as the share fell 1.2 points. In 2022, a smaller increase was observed, up 0.5 points to 9.6%.

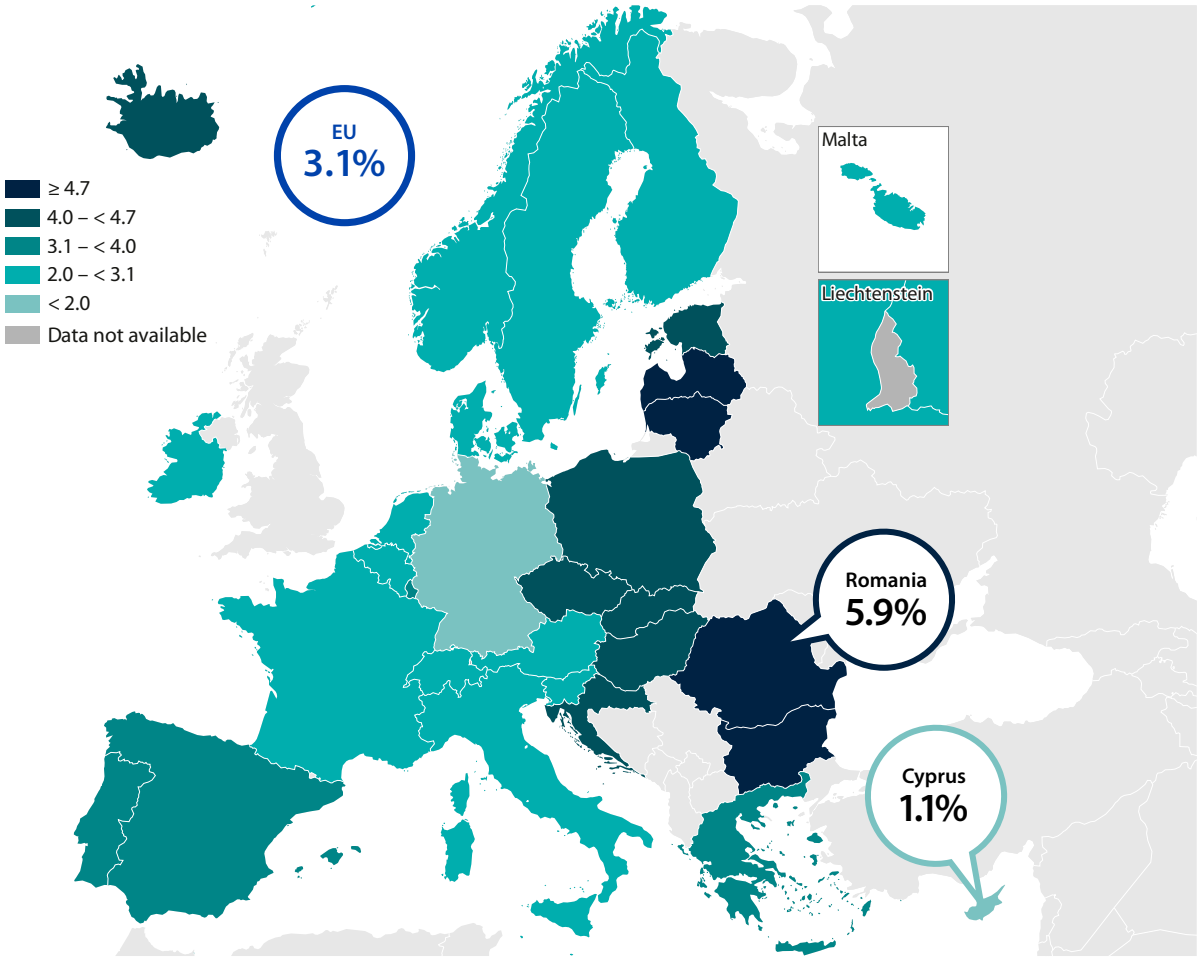
5

Transport and the economy

Employment

Employment in the transport sector as a share of total employment

(%, 2023)



Source: Eurostat (Labour force survey)

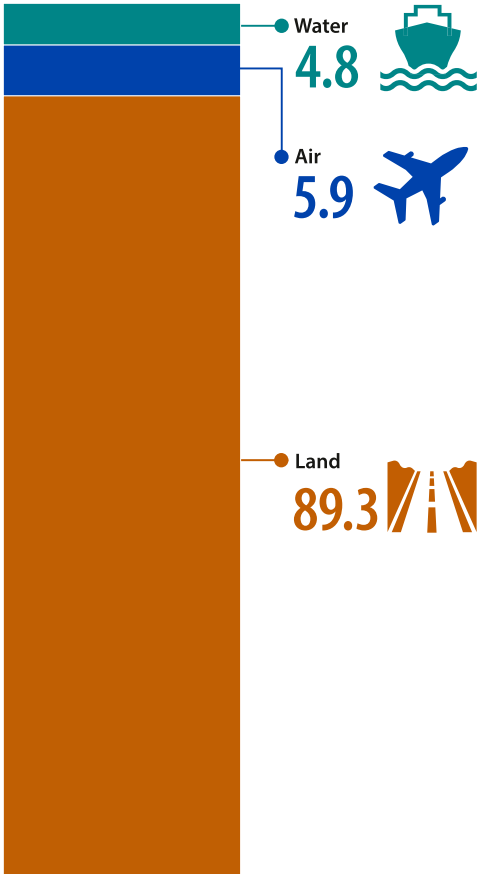
The statistics presented here concern people aged 15 to 64 years employed in the land, water or air transport subsectors.

In 2023, 6.2 million people in the EU worked in the transport sector, equivalent to 3.1% of all employment. Among the EU countries, Romania was the most specialised in transport services in employment terms, with 5.9% of total employment in these services. The least specialised countries were Cyprus (1.1% of all employment) and Germany (1.7%).

In 2023, the highest levels of employment in the transport sector were in France (851 000, 13.7% of the EU total), Spain (12.1%), Poland (12.0%), Germany (11.4%) and Italy (10.3%). The lowest levels of employment were in Malta and Cyprus (both 0.1% of the EU total).

Distribution of employment by transport subsector

(%, EU, 2023)



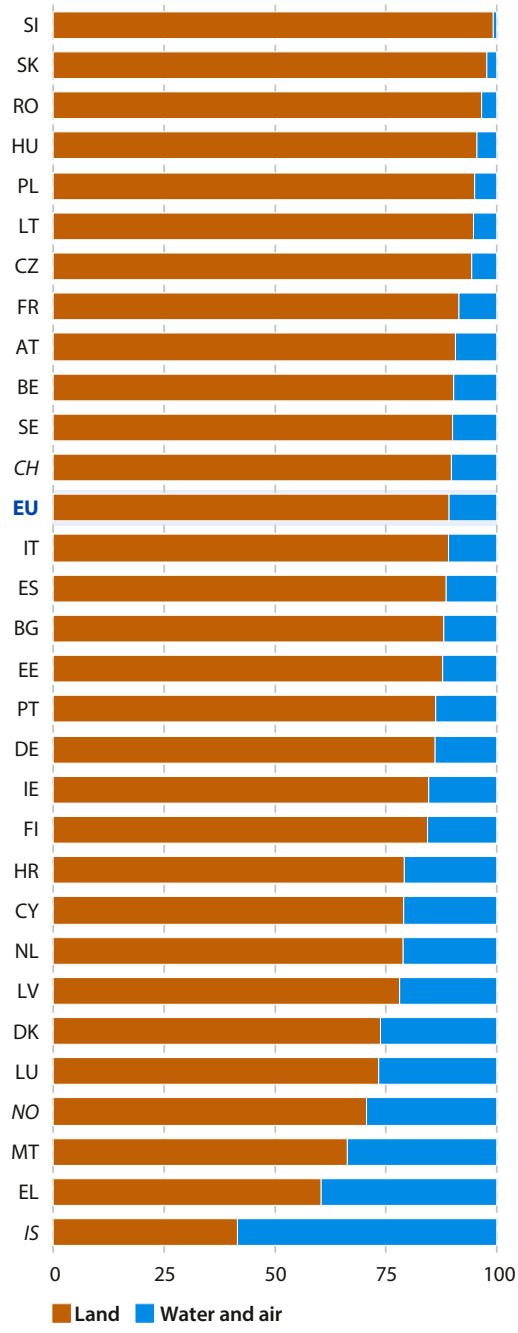
Source: Eurostat (online data code: lfsa_egan22d)

Within the EU's transport services workforce, 89.3% of people worked in land transport (such as road or rail), 5.9% in air transport and 4.8% in water transport (inland waterways or maritime).

Land transport dominated employment within the transport sector in 2023, accounting for a majority of transport workers in each of the EU countries. The share of land transport ranged from 60.3% in Greece to 99.2% in Slovenia. The combined share of water and air transport was particularly high in Malta and Luxembourg (mainly due to air transport) as well as in Greece and Denmark (mainly due to water transport).

Distribution of employment, by transport subsector

(%, 2023)

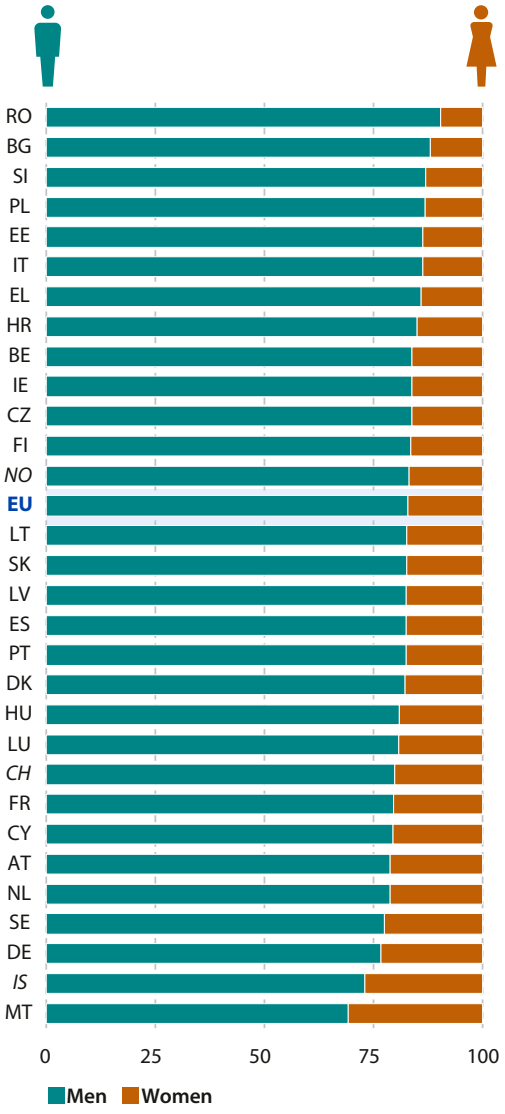


Source: Eurostat (Labour force survey)

Distribution of employment in the transport sector, by sex

(%, 2023)

In 2023, men accounted for a large majority of employment in the transport sectors of all EU countries. The highest share of women was 30.7% in Malta and the lowest share was 9.6% in Romania; the EU average was 17.1%.



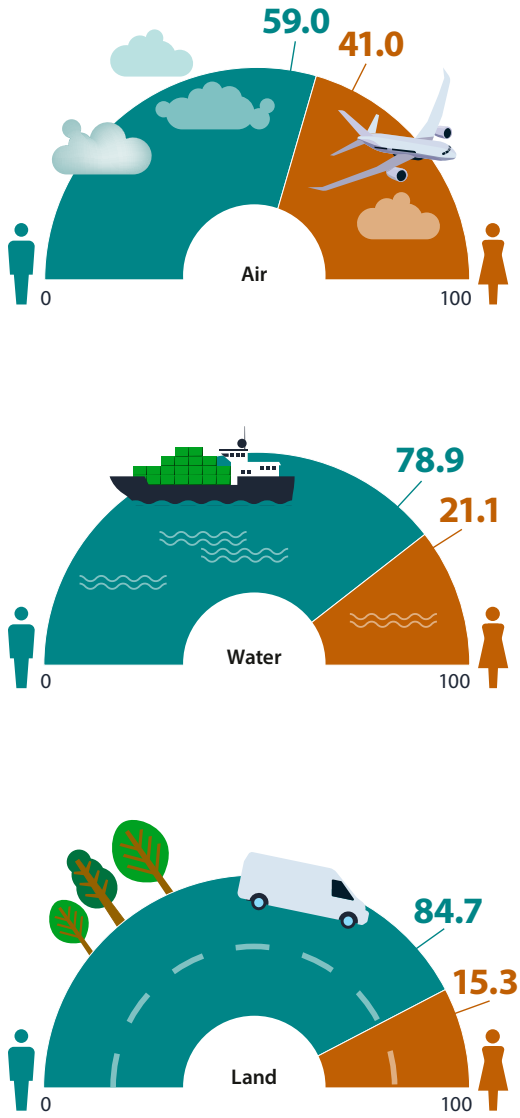
Note: CY, LU, MT and SI, women, low reliability.

Source: Eurostat (Labour force survey)

Distribution of employment in the transport subsectors, by sex

(%, EU, 2023)

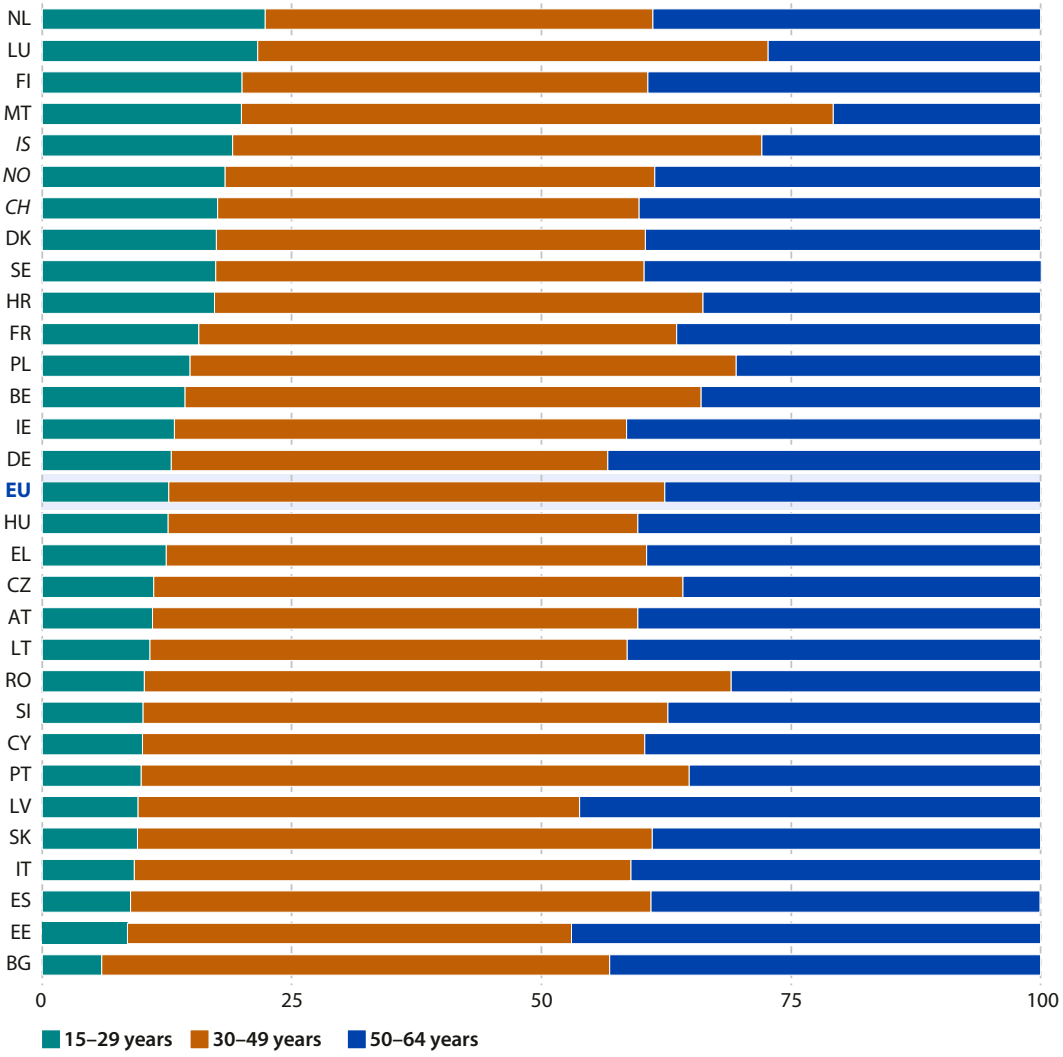
There are clear differences between the shares of men/women working in each transport subsector. For the EU as a whole, 41.0% of people working in air transport in 2023 were women, compared with 21.1% for water transport and 15.3% for land transport.



Source: Eurostat (online data code: lfsa_egan22d)

Distribution of employment in the transport sector, by age

(%, 2023)



Note: EE, IE, CY, LU, MT and SI, 15–29 years, low reliability. LU and MT, 50–64 years, low reliability.

Source: Eurostat (Labour force survey)

Looking at the age of people employed in the EU's transport sector in 2023, close to half (49.6%) were 30 to 49 years, 37.7% were older (50 to 64 years) and 12.7% were younger (15 to 29 years). The share of people aged 30 to 49 years was similar to that for whole economy. However, in the transport sector the share of older workers was comparatively higher and the share of younger workers was lower.

The transport sectors of the Netherlands, Luxembourg, Finland and Malta had the highest shares of younger people, each with at least 20.0% in 2023. Malta also had by far the lowest share of older workers, at 20.8%. By contrast, close to half of the people employed in the transport sector were aged 50 to 64 years in Estonia (47.0%) and Latvia (46.2%), while 7 other EU countries recorded shares of at least 40.0%.

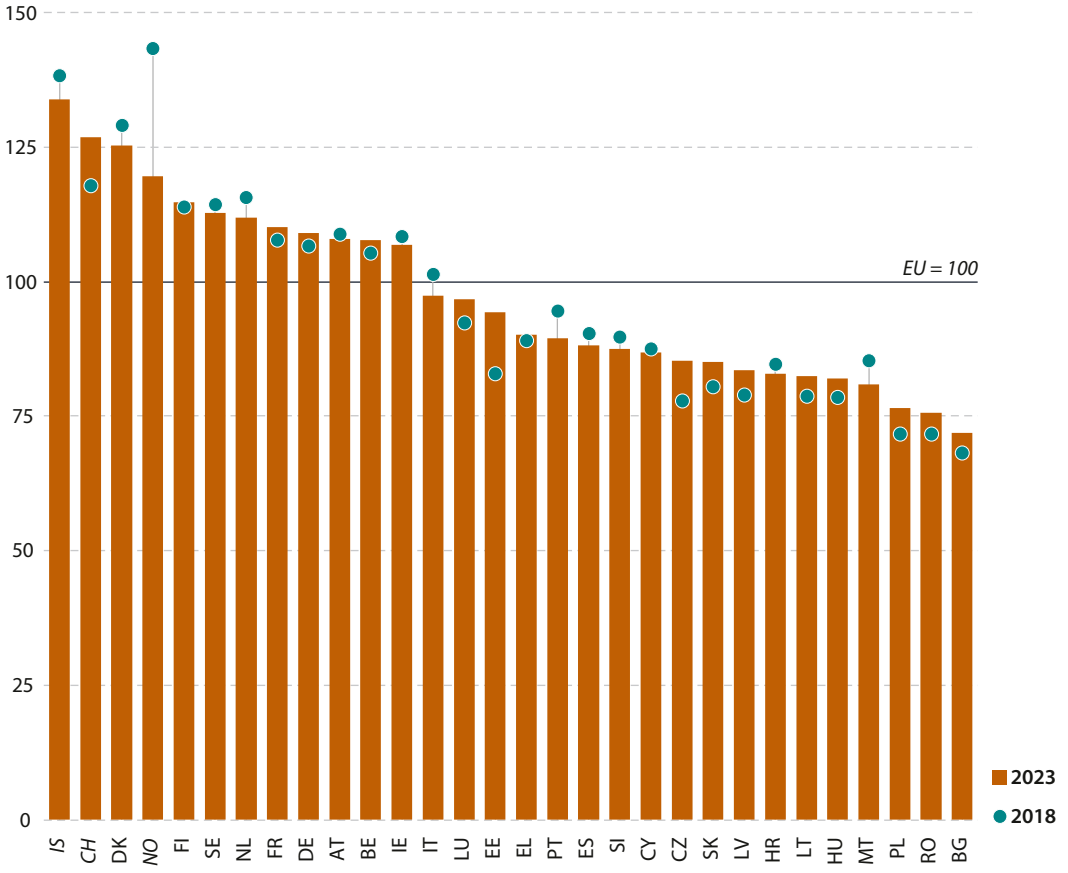
Prices

Price level index for transport

(EU = 100, 2018 and 2023)

In 2023, the price level for transport was equal to or above the EU average in all of the Nordic and western EU countries except for Luxembourg. In all Baltic, eastern and southern EU countries, the price level for transport was below the EU average. By far, the highest price level was in Denmark, while the lowest were in Bulgaria, Romania and Poland.

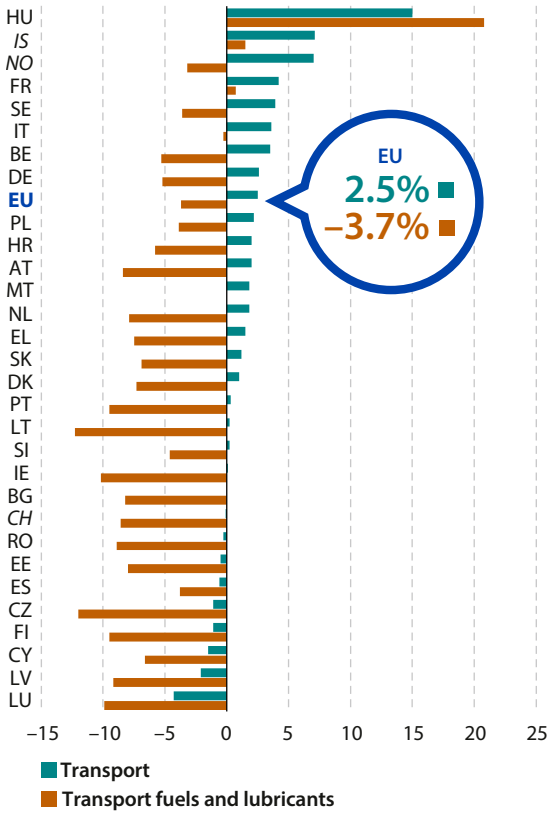
A price level index shows differences in price levels between countries. The data presented here have an index with a value of 100 as the average price for the EU. If the price level index in a country is higher than 100, the country concerned is relatively expensive compared with the EU average; if the index is lower than 100 then the country is relatively cheap compared with the EU average. The price level index for transport covers prices for equipment (such as vehicles), the operation of equipment (such as fuel, parts, and repairs) as well as transport services (such as tickets).



Source: Eurostat (online data code: prc_ppp_ind)

Annual price change for transport and for transport fuels and lubricants

(%, 2023)



Source: Eurostat (online data code: prc_hicp_aind)

An index can also reflect changes in consumer prices over time (deflation or inflation): in the EU, the index used is the harmonised index of consumer prices.

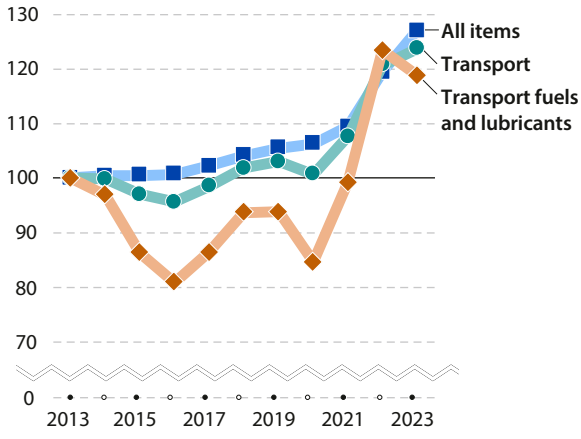
Restrictions in the supply of energy products linked to the Russian military aggression against Ukraine were in part responsible for rises in EU consumer prices for transport fuels and lubricants of 17.2% and 24.3%, respectively, in 2021 and 2022. The situation was more stable in 2023, with prices falling by 3.7% compared to 2022. This fall was in contrast to an overall increase of 2.5% recorded for transport consumer prices in general; this covers the purchase, maintenance, repair and operation of vehicles and the purchase of transport services.

A majority of EU countries recorded a rise in consumer prices for transport in 2023, peaking at 15.0% in Hungary; elsewhere increases didn't exceed 4.2%. The largest decrease was in Luxembourg, down 4.3%. The large price increase for transport as a whole in Hungary reflected its large price increases for transport fuels and lubricants, up 20.8%; by contrast, prices for transport fuels and lubricants rose 0.7% in France, were unchanged in Malta and fell in every other EU country.

Annual price index for all items, transport and transport fuels and lubricants

(2013 = 100, EU, 2013–23)

Looking at the period from 2013 to 2023, the EU's annual harmonised consumer price index for transport fuels and lubricants was relatively volatile, in part reflecting changes in the underlying oil price. This price index fell from a high in 2013 to a low in 2016 before increasing in 2017 and 2018. After stability in 2019 and a fall in 2020, price increases accelerated strongly in 2021 and 2022, before a modest fall in 2023. The broader index for the whole of transport was less volatile but followed a similar pattern, although notably without a fall in prices in 2023.



Note: index rescaled from 2015 = 100. The y-axis is cut.

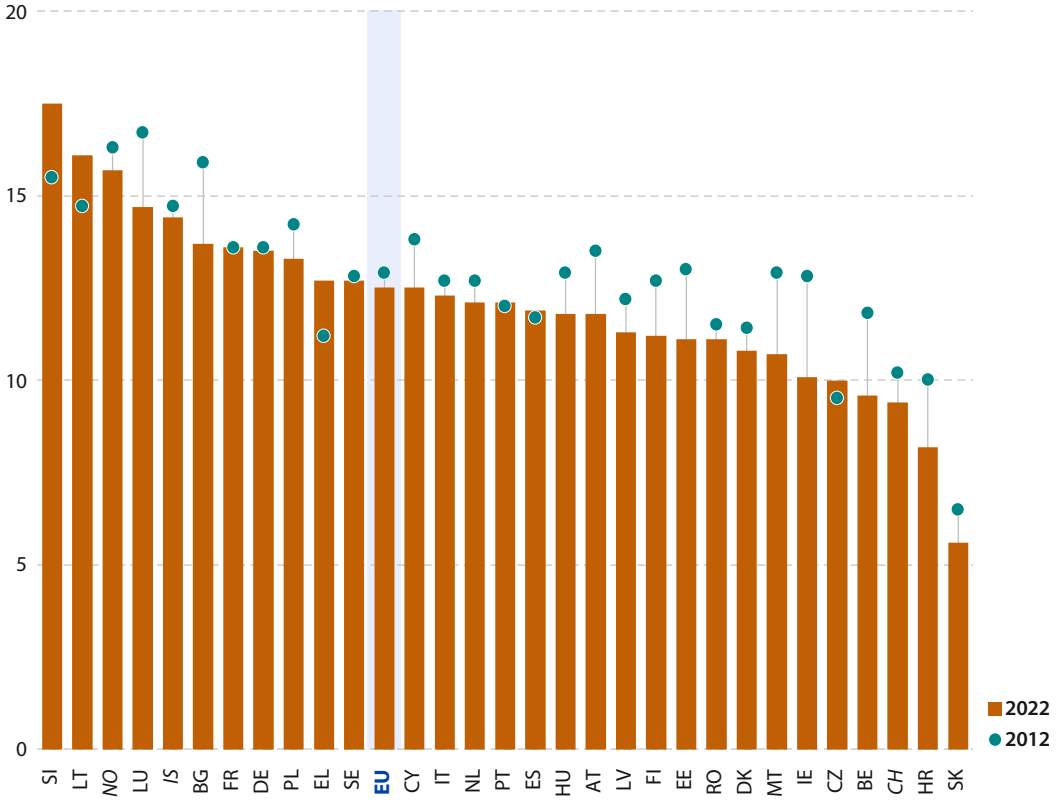
Source: Eurostat (online data code: prc_hicp_aind)

Expenditure

Share of household consumption expenditure on transport

(%, 2012 and 2022)

Household consumption expenditure on transport covers the purchase and operation of transport equipment, as well as payments for transport services.



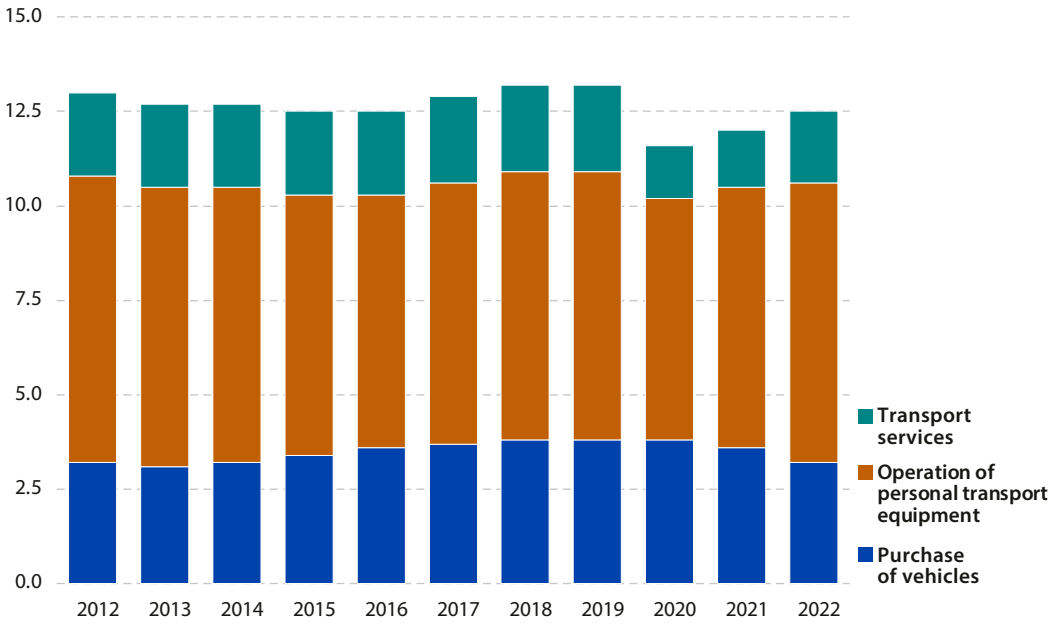
Source: Eurostat (online data code: nama_10_co3_p3)

In 2022, 12.5% of total household consumption expenditure in the EU was for transport, down slightly from 12.9% in 2012. Focusing on the most recent years, transport's share of household consumption expenditure in the EU fell in 2020 but increased in 2021 and 2022. Most EU countries (20 out of 27) reported a lower share of household consumption expenditure for transport in 2022 than in 2012. Ireland (down 2.7 percentage points), Belgium, Bulgaria and Malta (all down 2.2 points) recorded the largest falls, while the largest increases were in Slovenia (up 2.0 points), Greece (up 1.5 points) and Lithuania (up 1.4 points).

In 2022, Slovenia reported the largest share of household consumption expenditure for transport (17.5%), while Slovakia had the lowest share (5.6%).

Share of household consumption expenditure on transport

(%, EU, 2012–22)

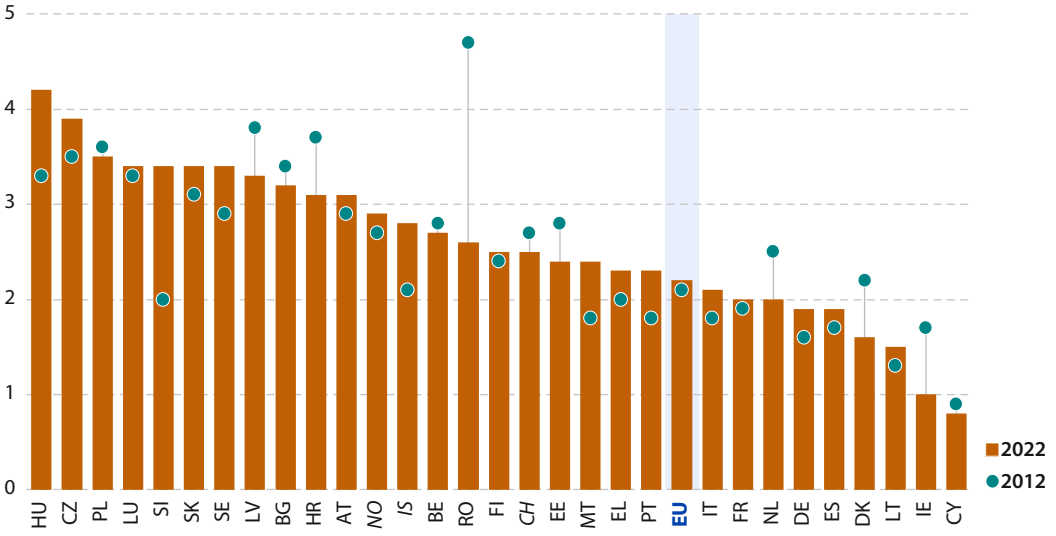


Source: Eurostat (online data code: nama_10_co3_p3)

In the EU, the share of household consumption expenditure for the purchase of vehicles was the same in 2022 as it had been in 2012. By contrast, the shares for the operation of personal transport equipment and for transport services were lower. In 2022, the shares for the operation of personal transport equipment and for transport services increased for the 2nd consecutive year, after relatively large falls in 2020. By contrast, the share for the purchase of vehicles decreased for the 2nd consecutive year in 2022, having remained stable in 2020.

General government total expenditure on transport

(% of GDP, 2012 and 2022)



Source: Eurostat (online data code: gov_10a_exp)

General government total expenditure on transport concerns expenditure on the administration of affairs and services concerning the operation, use, construction and maintenance of transport systems, as well as the supervision and regulation of users.

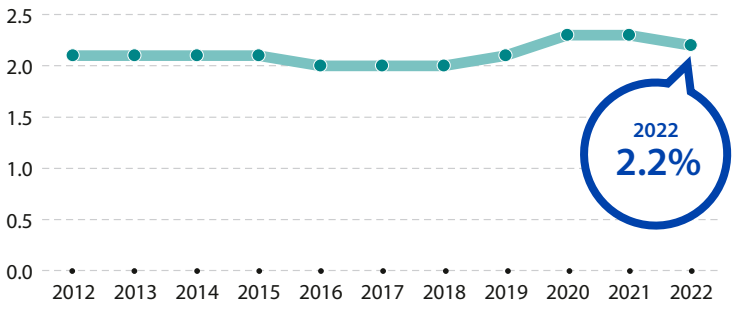
In 2022, general government total expenditure on transport in the EU was equivalent to 2.2% of gross domestic product (GDP), slightly above the 2.1% ratio observed in 2012. Among the EU countries, 11 recorded a lower ratio of general government total expenditure on transport to GDP in 2022 than in 2012, while 16 recorded a higher ratio. The largest increase in percentage point terms when comparing 2012 and 2022 was in Slovenia (up 1.4 points), while the largest decrease was in Romania (down 2.1 points).

In 2022, Hungary reported the highest level of general government total expenditure on transport as a percentage of GDP (4.2%), while Cyprus (0.8%) and Ireland (1.0%) had the lowest ratios.

Share of general government total expenditure on transport

(% of GDP, EU, 2012–22)

In the EU, general government total expenditure on transport as a ratio of GDP was 2.0% or 2.1% from 2012 to 2019. It increased to 2.3% in 2020 and remained there in 2021, reflecting increased expenditure to support transport operators alongside a smaller increase in nominal GDP. In 2022, the ratio dropped back slightly, to 2.2%.

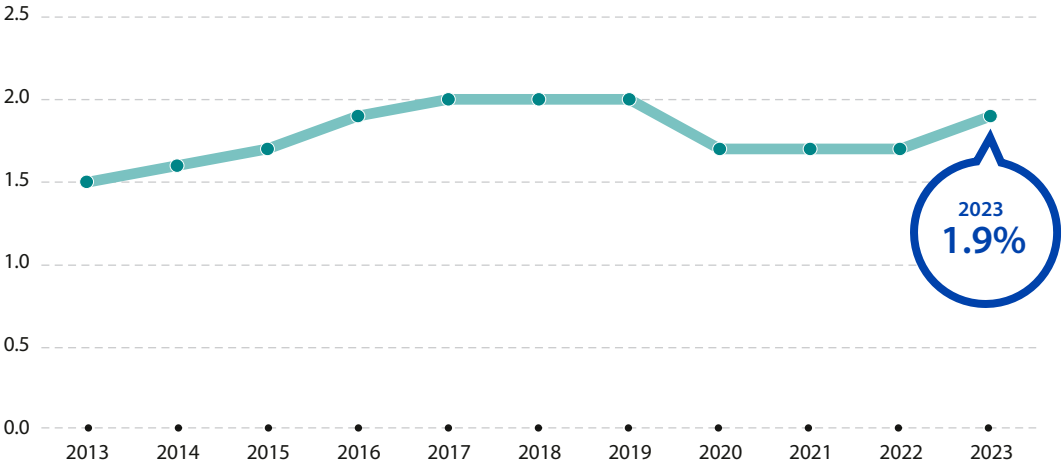


Source: Eurostat (online data code: gov_10a_exp)

Investment

Investment in transport equipment

(% of GDP, EU, 2013–23)



Source: Eurostat (online data code: nama_10_an6)

Gross fixed capital formation is more commonly referred to as investment in fixed assets.

Investment in transport equipment relative to GDP increased from 1.5% in 2013 through to a peak of 2.0% observed from 2017 to 2019. The impact of the COVID-19 crisis on such investment is clear, with this ratio dropping to 1.7% in 2020, 2021 and 2022, before increasing to 1.9% in 2023.

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Print: KS-01-24-021-EN-C
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KEY FIGURES ON EUROPEAN TRANSPORT

2024 EDITION

Key figures on European transport presents a selection of transport indicators for the European Union (EU), EU countries and EFTA countries. For some readers, this publication may offer an introduction to European transport statistics, while others can use it as a starting point to explore further a wide range of data and information. These are freely available on Eurostat's website and in *Statistics Explained*.

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