



Observatorio

del Transporte y la Logística en ESPAÑA

Executive Summary

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EXECUTIVE SUMMARY

Introduction

The **Observatory of Transport and Logistics in Spain** (“**Observatorio del Transporte y la Logística en España**”, **OTLE**), created in 2013, has become a key tool for consulting and analysing information on the current situation and trends in transport and logistics in Spain, ensuring the transparency of this information for citizens.

The **Annual Report of the twelfth edition of the OTLE** presents the main results of the work carried out during the year 2024, in which the structure and contents of the OTLE, as well as the user-friendliness of the data, have been further improved. This step forward was made possible thanks to the engagement and collaboration of the management centres of the Ministry of Transport and Sustainable Mobility, its related companies and entities, as well as other government bodies and other organisations.

It should be noted that in this edition of the OTLE, information from **recent monthly or quarterly data** has been included for the first time in the analysis of the annual report, which is also available in the open database on the observatory's website. This has allowed for a more up-to-date study of transport and mobility in our country.

The main improvements that have been made to the OTLE elements in this edition are as follows:

- The maintenance and updating of the OTLE **database** contents has continued and the downloading of information included in the datasets has been improved. Additionally, this edition has seen a **revision and improvement of the graphics** for the datasets through the inclusion of filters, which allow for a more detailed analysis of the information. **Monthly and quarterly datasets** have also been included within the mobility and socio-economic blocks.
- The **indicators** published in dynamic panels with business intelligence tools, first introduced in the eighth edition of the OTLE, have been continuously updated. The interaction between the various elements of the indicators has also been further improved.
- This **Annual Report**, which provides a detailed analysis of the transport and logistics situation in Spain, will be **available both in downloadable format (PDF) and in HTML format**, ensuring the accessibility of the contents. As a new feature, this edition includes a table at the end of the PDF document with the **related OTLE elements** for each of its second-level sections, and in the HTML version, in each third-level chapter. As in previous editions, the **Methodology Annex** includes the changes made to the methodologies used by the different sources and to the corresponding contents of the OTLE arising from such changes.
- In this edition, **the Topical Report studies Transport Poverty**, describing the associated concepts, analysing the current situation, identifying measures and good practices to combat it, as well as the main challenges to be faced. This report will also be published in both formats (PDF and HTML).
- All OTLE content, including datasets, indicators, reports and all documentation related to the conferences, continues to be published on the publicly accessible **website**.

General mobility and business cycle

The **recovery of domestic and international passenger and freight transport following the pandemic** has been gradual and is reflected in 2023, although with variations depending on the area and segment.



As for **foreign transport**, which was most affected by the health crisis in 2020, **international freight transport in 2023** failed to exceed the pre-pandemic tonnage figure of 2019, with a decrease of **-3.2 % compared to 2019** and **-4.3 %** compared to the previous year. In contrast, **international passenger transport exceeded the 2019 figure by +1.7 % in 2023**, with an increase of **+11.0 %** compared to 2022.

On the other hand, **domestic passenger transport in Spain** grew by **+4.7 %** in 2023 compared to the previous year, reaching 470.8 billion passenger-kilometres and **exceeding the 2019 figure by +5.7 %**. **Domestic freight transport** also increased by **+1.1 %** year-on-year in 2023, registering 1,583 million tonnes, which is **+3.4 % more than in 2019**.

The increase in domestic mobility is usually accompanied by an improvement in economic activity. In 2023, **the annual variation in Gross Domestic Product (GDP) is greater than that of domestic freight mobility**, with GDP growth in constant 2015 euros of **+2.7 %** and an increase of **+1.3 %** in internal mobility in tonne-kilometres.

Road transport

According to data from the Directorate General for Roads (“Dirección General de Carreteras”, DGC, by its acronym in Spanish), **traffic on Spanish roads totalled 260,299 million vehicle-kilometres in 2023**, representing an **increase of +2.3 %** compared to the previous year and **+3.3 %** compared to 2019, the year before the pandemic. In terms of network ownership, **the State Road Network (“Red de Carreteras del Estado”, RCE, by its acronym in Spanish) in 2023 accounted for 53.5 % of total traffic**, with an increase of **+3.2 %** compared to 2022.

Passenger transport on Spanish roads registered 396,151 million passenger-kilometres in 2023, representing a **2.6 %** increase on the previous year. As for the types of vehicles used by travellers, motorcycle transport increased by **+45.6 %**, bus transport by **+11.4 %** and car transport by **+1.0 %**. **Freight transport on Spanish roads** registered, according to DGC, 328,126 million tonne-kilometres, a **+1.6 %** increase on the previous year. On the other hand, **road freight transport by Spanish vehicles** showed a **decrease of -1.3 % in tonne-kilometres**, according to data from the Permanent Survey on Road Freight Transport (“Encuesta Permanente de Transporte de Mercancías por Carretera”, EPTMC, by its Spanish acronym).

In 2023, **international road freight transport with origin or destination in Spain**, carried out by both Spanish and foreign vehicles and companies from countries reporting to Eurostat, experienced a decrease of **-5.2 % in tonnes** and **-4.3 % in tonne-kilometres** compared to 2022.

Provisional quarterly data on road freight transport by Spanish carriers for the **first three quarters of 2024** show an **increase of +1.9 % in tonnes** and **+0.4 % in tonne-km** compared to the same period in 2023.

Rail transport

In 2023, rail passenger transport in Spain showed remarkable growth. Compared to the previous year, rail passenger transport supply grew by **+11.8 %** in terms of trains-km. Demand also showed a significant increase in 2023, namely **+20.3 %** in number of passengers and **+26.1 %** in passengers-km.

Commuter services increased their supply (in passengers-km) by **+1.0 %** in 2023 and passengers-km demand by **+13.2 %**. On the other hand, medium and long-distance services experienced increases in seat-km supply of **+10.8 %** and **+28.5 %**, respectively, and in passenger-km demand of **+59.2 %** and **+25.3 %**, respectively.



The increase in passenger demand across all rail services in 2023 was mainly due to two factors: the recovery from the pandemic and the implementation of **public transport discounts** from 1st September 2022. These discounts included free travel on conventional commuter and medium-distance services for frequent travellers and 50 % discounts on Avant services declared as a public service obligation for frequent travellers, which were maintained throughout 2023. In addition, 50 % discounts were offered on 19 high-speed journeys of less than 100 minutes in duration for frequent travellers, valid from September 2022 to December 2022.

In contrast, **rail freight transport experienced a decrease during the year 2023**. The supply of rail freight transport on trains-km decreased by -3.3 % compared to the previous year. Demand in terms of net tonne-kilometres decreased by -11.7 % compared to 2022, while in terms of net tonnes carried, the decrease was -10.2 %. The year-on-year variation in rail freight demand was negative in 2023 for all operators compared to the previous year, except for private operators in terms of net tonnes transported (+3.7 %).

As for the **provisional data for 2024 from the National Statistics Institute** (“Instituto Nacional de Estadística”, INE, by its Spanish acronym), it can be seen that passenger rail transport has increased in demand compared to 2023. The **cumulative number of passengers transported by rail in 2024 up to and including November is 637.0 million passengers compared to 607.6 million in the same period in 2023**, which represents an **increase of +4.8 % in passenger numbers**.

Regarding **provisional data for 2024 on rail freight transport**, provided by the Rail Transport Statistics of INE, the number of **tonnes transported by rail in 2024 up to and including the third quarter of the year decreased by -6.4 %** compared to the same period in 2023. In terms of tonnes-km, for the same period in 2024 they decreased by -5.0 % compared to 2023.

Air transport

Air transport supply in 2023 reached similar figures to those of 2019, the year before the pandemic. **1.65 million flights** were operated on the AENA network, only -0.2 % less than in 2019. Both seat and flight supply increased compared to 2022, with increases of +11.8 % and +9.5 %, respectively.

The number of air transport passengers reached 236.1 million in 2023, representing an increase of +17.0 % compared to 2022. International traffic saw greater growth than domestic traffic, **with traffic between European Union (EU) countries belonging to the Schengen Area (EU Schengen) standing out**, with 101.8 million passengers, up 17.6 % on the previous year. The rest of international traffic totalled 88.0 million passengers, an increase of +18.9 % compared to 2022. On the other hand, domestic traffic reached 46.4 million passengers in 2023, representing an increase of +12.6 % compared to the previous year.

Provisional monthly data from the Directorate General for Civil Aviation (“Dirección General de Aviación Civil”, DGAC, by its Spanish acronym) of the Ministry of Transport and Sustainable Mobility for **air passenger traffic** showed **sustained growth during 2024** compared to 2023. The cumulative number of passengers in air traffic in 2024 up to and including November was 287.5 million passengers compared to 262.9 million in the same period in 2023, representing an increase of +9.3 %.

As for **air freight**, more than **one million tonnes** were transported in **2023**, representing an increase of +8.6 % compared to 2022. This growth was driven by a +16.1 % increase in international traffic outside the EU Schengen area. However, both intra-EU Schengen and domestic traffic experienced decreases of -7.2 % and -5.2 %, respectively.



Provisional monthly data from the DGAC indicate that **air freight traffic showed continued growth during 2024 compared to 2023**. Up to and including November 2024, cumulative air freight traffic was almost 1.2 million tonnes, compared to 980,000 tonnes in the same period in 2023, which represents a growth of +19.3 %.

It should be noted that **domestic airports handled 2.1 million operations in 2023, 282.9 million passengers and 1.1 million tonnes of cargo**. Madrid-Barajas and Barcelona-El Prat airports accounted for the majority of operations among the 15 main airports, together handling 37.7 % of total operations and 41.8 % of total passengers.

Maritime transport

The **year 2023** has shown a significant discrepancy between supply and demand for **maritime passenger transport**. While **supply decreased by -12.2 %** compared to the previous year, **demand** experienced a significant increase of **+24.7 %**, **reaching 26.7 million passengers**. The 28 port authorities handled fewer vessels in 2023 (35,870 passenger vessels), mostly domestic (29,843 vessels), which could indicate the need to adjust the supply to meet a growing number of passengers. The gross tonnage for passenger vessels was 437.4 million GT in 2023, -5.4 % less than the previous year.

Provisional monthly data from the National Statistics Institute (INE) on passenger maritime transport show a generally dynamic picture of demand. The cumulative number of passengers in 2024 up to and including November was 11.2 million passengers compared to 11.1 million in the same period in 2023, representing an increase of +1.3 %.

For **maritime freight transport** in the State-Owned Port System, the supply variables, which include both operations and GT units, experienced an increase of +10.6 % and +8.6 %, respectively, between 2022 and 2023. On the other hand, demand decreased by -3.4 %. 128,597 cargo vessel operations were carried out, reaching a total of 2,201 million GT units, with **496.3 million tonnes transported**.

Provisional monthly data from Puertos del Estado show that, compared to 2023, **freight transport** in 2024 (up to November) shows positive variations for all the months analysed except for the month of March. The cumulative tonnage in 2024 up to and including November was 468 million compared to 456 million in the same period in 2023, representing an increase of +2.8 %.

In all the port authorities analysed, the number of **passengers per Port Authority** increased in 2023 compared to the previous year. **Cargo handled by Port Authorities** showed negative variations in 2023 in all modes of presentation compared to the previous year, except for conventional general cargo, which grew by +1.0 %.

Urban and metropolitan transport

According to the analysis of the data from the **Metropolitan Mobility Observatory** (“Observatorio de la Movilidad Metropolitana”, OMM, by its Spanish acronym) **for 2022**, focusing on the six main metropolitan areas, there is a **general increase in metropolitan mobility compared to 2021**, with 2,263 million passengers using public transport.

Overall, **demand has grown more than supply in 2022**, with a year-on-year increase of +35.9 % in trips and +6.1 % in vehicle-km. The only exception was the vehicle-km supply of the city bus, which recorded a decrease of -7.5 % in 2022 compared to 2021.

Intercity bus demand increased in 2022 more than that of urban bus and rail modes (metro and tram) in terms of trips (+76.0 %), with a growth in passengers-km of +32.1 %, higher than that of



urban buses (+26.3 %) but lower than that of rail modes (+38.1 %). It is also noteworthy that intercity bus supply exceeded pre-pandemic levels of 2019.

The analysis of mobility in metropolitan areas shows that, in general, **the trips per inhabitant and the occupancy rates of the different modes of transport in 2022 exceed those of 2021**. In terms of pick-up rates and average trips, each area has its own particularities.

Using data from the **Passenger Transport Statistics of National Statistics Institute (INE)**, **4,611 million urban and metropolitan passengers were registered in 2023**, exceeding the pre-pandemic figure recorded in 2019 by +2.2 % and registering an increase of +17.9 % compared to 2022. The increase between 2022 and 2023 of buses in urban areas (+22.4 %), followed by metro (+18.9 %) and commuter rail transport (+17.7 %), stands out.

With regard to the **provisional data for 2024** of the Passenger Transport Statistics of INE, it should be noted that the number of passengers accumulated in 2024, up to and including November, is 4,527 million, which compared to the 4,225 million accumulated in the same period of 2023 represents an increase of +7.1 %.

Modal split

In 2023, the private car remained the prevailing mode of national passenger transport, with a share of **75.2 % of total passengers-kilometres**. However, this figure is lower than in 2022 (77.4 %) and 2019 (78.0 %), the year before the pandemic.

Significant changes are observed in the shares of **collective transport modes** compared to the pre-COVID-19 data. In 2019 aircraft was the main mode, with 35.7 % of total domestic passenger-kilometres, followed by buses with 33.9 %. In contrast, **in 2023 buses were the dominant mode, with a share of 36.1 %**, followed by air with 33.3 %. Maritime transport has reduced its share from 1.2 % in 2019 to 1.1 % in 2023, while rail has recorded a share of 29.5 % of domestic passenger-kilometres in 2023, exceeding that of 2019 (29.2 %). This post-pandemic recovery in rail passenger demand has been boosted by the public transport discounts implemented on 1st September 2022.

In the field of international passenger transport, the air mode dominated in 2023 with 50.2 % of passengers transported, increasing its share by +3.1 percentage points compared to 2022. On the other hand, road accounted for 47.8 % of all international travellers in 2023 (-3.4 percentage points less than the previous year), while maritime transport accounted for 1.5 % (+0.3 percentage points compared to 2022) and rail for 0.5 % (unchanged from the previous year).

In **national freight transport, road remains the prevailing mode** with 95.7 % of the tonne-kilometres transported by road modes, with rail accounting for the remaining 4.3 %. In **international freight transport, the maritime mode remained the main mode in 2023**, accounting for 77.7 % of tonnes transported, followed by road with 21.4 %, while rail and air transport accounted for 0.7 % and 0.2 %, respectively.

Based on the above analysis, it can be stated that the modal split of passenger transport in 2023 reflects a new mobility context in favour of more sustainable modes compared to that existing in 2019 before the pandemic. In the meantime, road has further increased its share in freight transport.



Investment and capital

The Gross Fixed Capital Formation (GFCF) of the public sector grew by +18.4 % in 2023 compared to the previous year, reaching 44.3 billion current euros. This significant increase narrowed the gap with the Economic and Monetary Union (EMU) in terms of public investment in relation to GDP (2.96 % in Spain compared to 3.30 % in the EMU).

As for the **GFCF of the private sector in Spain**, there was an increase of **+3.3 %** in 2023 compared to the previous year. In addition, investment in transport equipment experienced a year-on-year increase of **+20.7 %** in 2023.

Regarding the distribution of investment by mode of transport, **rail remained the main beneficiary of the investment of the Ministry of Transport and Sustainable Mobility, with a share of 47.0 %** of total investment in transport infrastructure.

In the **breakdown of Public Administrations' investment by mode**, the importance of investment in **roads in 2023** stood out, which absorbed **46.0 %** of investment in transport infrastructure.

Value added and productivity

In 2023 the Gross Value Added (GVA) of the "transport and storage" sector grew by +3.1 % compared to the previous year in constant 2020 euros, **higher than GDP growth**, which increased by **+2.7 %**. In addition, the sector has increased its share in the national economy, accounting for **4.6 %** of GDP in 2023.

On the contrary, **the number of annual hours worked decreased by -1.1 % in the "transport and storage" sector and by -0.9 % in the Spanish economy as a whole**. The gap between the number of hours worked in the sector and the national average has narrowed in 2023 compared to the previous year, with 109 additional hours per worker in the sector.

The variations of both parameters in the "transport and storage" sector compared to all sectors at the national level have brought **the sector's apparent labour productivity closer to the national average**. Productivity in the sector increased by **+0.3 %** in 2023 compared to the previous year, reaching 33.93 euros/hour. At the national level, the growth in 2023 was **+0.8 %**, with a value of 34.32 euros/hour. It is also worth noting that **the sector has surpassed pre-pandemic productivity levels** (33.82 euros/hour in 2019).

Employment

In 2023 employment in the "transport and storage" sector grew by +5.7 % compared to the previous year, reaching almost 1.2 million employed persons. **This growth was higher than the total of the economy**, which was **+3.1 %**.

The **quarterly data for 2023 and 2024** on the population employed in the "transport and storage" sector show an increase of **+1.5 %** in the cumulative number of employed persons in the first three quarters of 2024 (3,595 thousand persons) compared to the same period in 2023 (3,542 thousand persons).

The "transport and storage" sector reached a new all-time high in Social Security registrations in 2023 with 1,052,526 affiliates, representing an increase of **+4.4 %** compared to 2022. The special scheme for self-employed workers in the sector reduced its weight from **20.8 %** in 2022 to **20.0 %** in 2023, due to a decrease in the number of self-employed persons in the main sub-sectors.



Productivity and average personnel costs in the "transport and storage" sector experienced significant growth in 2022, continuing the recovery that started in 2021 after the mobility restrictions caused by the pandemic. Specifically, productivity increased by +14.8 % in 2022, reaching 53,501 euros, and average personnel costs grew by +4.5 %, at a slower rate than productivity and reaching 37,507 euros, because the reduction in personnel costs was less sensitive to mobility restrictions due to the pandemic.

It is worth noting that **in 2023 the net labour cost per employee in the "transport and storage" sector increased by +6.0 %** compared to 2022, reaching 36,725 euros, the highest value recorded since 2008. Labour cost per employee for the economy as a whole increased at a slower rate in 2023 (+5.4 %), as job destruction during the pandemic was greatest in the "transport and storage" sector.

Prices and costs

In 2023 the price of a barrel of Brent crude oil fell by -19.2 % compared to the previous year, slowing down the trend of rising energy prices in recent years, following the sharp fall in 2020 due to the pandemic (-35.9 %). This reduction in the price of Brent crude oil also affected the **price of petrol, which fell by -8.2 % in 2023** compared to 2022.

On the other hand, the average expenditure per person on transport fell by -1.1 % in 2023 compared to the previous year, which is very close to the transport expenditure figures before the health crisis. In contrast, there was an increase in the national income per capita (+7.3 %) and average total expenditure (+2.7 %) variables in 2023. The reduction in the average expenditure per person on transport may be the result of several factors such as the increased use of public transport as an alternative to private vehicles due to high fuel prices, the reduction in daily commuting due to teleworking or the implementation of sustainability policies such as the public transport discounts implemented on 1st September 2022 and in force throughout 2023 or the promotion of more environmentally friendly means of transport such as cycling.

As for the analysis of the **prices and costs** of transport, the data and estimates made by the Ministry of Transport and Sustainable Mobility indicate that **the cost of road transport has increased in 2023**. The cost of the private vehicle registered an increase of +0.4 % compared to the previous year, that of passenger transport by coach increased by +4.3 % on average for all types of vehicles, while for road freight transport the cost decreased by -0.2 % in 2023.

With regard to **rail transport**, the average passenger rail passenger-km for rail passenger services decreased again in 2023 for all services. Commercial revenues from long-distance passenger services continued their upward trend, surpassing pre-pandemic values. On the other hand, revenue from medium-distance services showed a mixed performance, growing on Avant high-speed medium-distance services and decreasing on all other medium-distance services. Commuter services reduced their revenues due to frequent passenger fare free policies in the last months of 2022 and in the whole year 2023. In the rail freight segment, the average revenue per tonne grew by +7.7 % in 2023 compared to the previous year and the average revenue per tonne-kilometre increased by +5.1 % for all rail freight companies.

Air transport saw a reduction in the level of revenue from scheduled services in 2020 (the latest year for which data is available) due to the impact of the pandemic, with its share of total revenue for the major airlines falling to 61.9 %.



As for **maritime transport**, it continued its upward trend, with revenues on regular scheduled passenger lines increasing by +12.7 % in 2023 compared to the previous year and with an overall growth in average revenue (euros/passenger-km) of +10.2 %.

Market and business structure

The **market and business structure of the "transport and storage" sector in Spain** presents some differences with respect to the leading European economies (Germany, France and Italy or the G-3). These differences can be detected, above all, in **lower levels of production and number of people employed in the sector**, although the national distribution is, in general, similar to the European average. In addition, it is important to highlight that **the number of companies in the sector is above the rest of the countries analysed** and that even in 2020 it continued to grow, reaching the highest value since 2010.

The **2020** figures were clearly influenced by the **impact of the pandemic on the global economy as a whole, and in particular on the transport sector**, leading to an across-the-board contraction in Spain and the G-3 countries. In 2020, GVA and the value of production in Spain fell by around -20 %, resulting in a significant decline in the sector's weight within the economy, which was more pronounced than in neighbouring European countries and led to a loss of -0.81 percentage points in 2020 (falling from 4.37 % in 2019 to 3.56 % in 2020). Recovery begins in 2021 (3.85 %), driven by de-escalation measures and a gradual return to normality, and consolidates in 2022 (4.56 %) and **2023 (4.58 %), surpassing pre-pandemic levels.**

In **road freight transport**, the **number of vehicles decreased by -3.2 % in 2023** compared to the previous year, with a **larger reduction in the number of companies (-4.9 %)**. In addition, a reduction of -10.0 % in the number of vehicles with lower load capacity (less than 3.5 tonnes) and an increase of +8.8 % in vehicles older than 20 years is observed in 2023 compared to 2022, confirming the long-term trend of an **ageing fleet**. The ratio of the number of **vehicles per company increased again in 2023 (+1.8 %)** compared to 2022, reaching a value of 3.2 vehicles per entity authorised to transport goods.

With regard to **road passenger transport**, an **increase in the number of vehicles (+8.6 %) and companies authorised (+3.4 %)** by the Ministry of Transport and Sustainable Mobility for interurban passenger transport has been observed in 2023 compared to the previous year. As for the ratio of **vehicles per company** in this segment, it increased by **+5.1 % in 2023** compared to 2022, reaching 12.9 vehicles per company and continuing the increasing trend of the historical series.

Financing

In 2023 the volume of indebtedness for the Spanish economy as a whole has decreased by -4.5 % compared to the previous year, only +0.8 % above the pre-pandemic value of 2019, with a cumulative decrease of -47.1 % since 2008. The **volume of indebtedness for the "transport and storage" sector has also decreased in 2023**, in this case by **-5.3 %** compared to 2022, which, although still above pre-pandemic levels (+5.1 % compared to 2019), follows the downward trend that started in 2022.

As regards default rates, they continue to fall for the economy as a whole in 2023, with a rate of 4.06 %, down from 4.21 % in 2022. Although **the default rate for the "transport and storage" sector is slightly lower than for the economy as a whole in 2023**, at **4.02 %**, it is slightly higher than in the previous year (3.82 %).



Research, Development and Innovation

Domestic research and development (R&D) expenditure in the "transport and storage" sector increased by +11.6 % in 2023 compared to the previous year, reaching **91.3 million euros**. However, both the R&D personnel and the number of R&D performing companies in the sector decreased in 2023, with reductions of -3.4 % and -21.7 %, respectively. Compared to the total economy, domestic R&D expenditure and R&D personnel showed positive year-on-year growth of +15.7 % and +45.1 %, respectively, while the number of R&D performing companies showed a negative variation (-5.1 %).

As regards **expenditure on innovative activities in the "transport and storage" sector**, the latest available data for **2022** indicate that this expenditure amounted to **482.2 million euros**. This data cannot be compared to previous years due to the methodological change in the statistical concept of company and the absence of data for the year 2021.

Regarding the analysis in relative terms, in 2023 the **ratio of domestic R&D expenditure to GVA** for companies in the "transport and storage" sector was 0.14 %, while for the total economy this ratio was higher, namely 0.92 %. As for the **ratio of expenditure on innovative activities to GVA**, the latest available data for 2022, it was lower in the "transport and storage" sector than in the total economy, at 0.86 % and 1.66 %, respectively. These figures indicate that **R&D and innovative activities in the "transport and storage" sector are significantly lower** than in the Spanish economy as a whole.

Internationalisation

In 2023 the internationalisation of companies in terms of **trade balance of goods experienced a growth of +44.7 %** compared to 2022, registering a trade deficit of -39,625.0 million euros, lower than in 2019 (-31,544.1 million euros) prior to the pandemic. On the other hand, **the services trade balance increased the surplus in 2022** compared to the previous year, due to the higher increase in exports in the services sector as a whole and in transport services (+26.4 % and +33.3 %, respectively) compared to the increase in imports (+18.8 % and +28.9 %, respectively).

In addition, the **net investment position of Spanish companies in the "transport and storage" sector abroad** increased by **+26.4 % in 2022** compared to the previous year, reaching a figure of 30,344.4 million euros, higher than in 2019 (22,477.0 million euros). On the other hand, the **net investment position of foreign companies in the "transport and storage" sector in Spain** decreased by **-0.4 % in 2022** compared to the previous year, reaching 19,070.0 million euros.

It should be noted that **Spanish foreign trade in 2023 experienced a greater reduction in monetary units (millions of euros) than in physical units (tonnes)** compared to the previous year. Monetary units decreased by -4.6 % compared to 2022, while physical units decreased by -4.1 %. Import performance was also negative (-5.4 % in physical units and -7.7 % in monetary units) as were exports (-2.3 % in physical units and -0.9 % in monetary units) in 2023 compared to the previous year.

Safety

The number of **road traffic accidents with victims reached a total of 101,306 in 2023**, an increase of **+3.5 %** compared to the previous year. Despite this increase, it is still below pre-pandemic levels, being -2.7 % lower than in 2019. These accidents resulted in **1,806 fatalities** representing an increase of **+3.4 %** compared to 2022. This figure follows the increasing trend observed in 2021 and 2022, reflecting a return to pre-pandemic levels of mobility.



In order to correlate the variations in accident and fatality figures, hazard and mortality rates are used, which showed opposite trends in 2023. While the **total hazard index (HI) on interurban roads increased by +3.7 %** compared to the previous year, the **total fatality index (FI) on interurban roads decreased by -1.1 %**.

On the other hand, **in 2023, a total of 192 rail accidents were recorded**, representing an increase of **+9.7 %** compared to the previous year and **+27.2 %** compared to 2019. Of these, 18 were serious accidents, a decrease of **-18.2 %** compared to 2022. On the other hand, significant accidents reached 77, showing a notable increase of **+30.5 %** compared to the previous year.

When analysing the impact of accidents on people, in 2023 there were **22 fatalities and 23 serious injuries** due to significant rail accidents, representing an increase of one fatality and a decrease of four serious injuries compared to the previous year.

These variations are reflected in the **risk indicator** for the different categories of users, where an increase of **+9.6 %** in 2023 is recorded for level crossing users, while all categories of users show a decrease of **-6.9 %**.

For air transport, **28 air accidents were recorded in 2023**, a decrease of **-17.6 %** compared to 2022. In addition, **12 serious incidents** were reported, **-53.8 %** less than in 2022. When comparing these figures with the average for the last ten years, it can be seen that accidents have fallen by **2.8 %** compared to the average of 28.8 accidents, and serious incidents have fallen by **5** compared to the average of 17.0 incidents, indicating a decrease of **29.4 %**.

With regard to **fatalities in air accidents in 2023 there were 3**, one more than the previous year, but **5.2** less than the ten-year average of 8.2 fatalities. As for **serious injuries in air transport operations, five were reported**, one more than the previous year, although this figure remains below the average of 6.9 serious injuries over the last decade.

Regarding **maritime safety, the Maritime Rescue and Safety Society** ("Sociedad de Salvamento y Seguridad Marítima", SASEMAR, by its Spanish acronym) **responded to 7,520 maritime emergencies in 2023**, an increase of **+1.7 %** compared to the previous year. As for the number of **vessels involved** in these emergencies, a total of **5,525** were recorded in 2023, a decrease of **-5.2 %** compared to 2022. Despite the **+56.1 % increase in people involved in maritime emergencies in 2023**, with a total of 61,824 people involved, **the number of fatalities and missing persons decreased by -25.8 % and -47.4 %**, respectively.

In 2023 an increase of **+2.6 %** was observed in the number of precarious vessels involved in emergencies attended by SASEMAR compared to the previous year. This increase was accompanied by a **+37.0 %** increase in the number of people assisted on these vessels, from 19,356 in 2022 to 26,521 in 2023. **Excluding irregular immigration, the number of people assisted in maritime emergencies increased by +76.3 % in 2023**, while the number of emergencies increased by **+1.6 %** and the number of vessels involved decreased by **-7.2 %**.

Environmental sustainability

Energy consumption in the transport sector in Spain grew by +4.7 % in 2022, with road transport accounting for **92.0 %** of final energy consumption in the sector.

In terms of energy efficiency, **rail continues to be the most energy efficient mode in terms of final energy**, mainly due to the high number of passengers and volume of freight that can be transported on each journey, with a reduction in energy consumption per unit transported of **-20.3 %** in 2022 compared to the previous year and the lowest value since 2005. On the other hand, road transport recorded its best energy efficiency value since 2013 in 2022, with a



reduction of -1.6 % compared to 2021, although this parameter remains fairly constant over time due to the low flexibility in terms of occupancy compared to other modes of transport. With regard to air transport, energy consumption per unit of transport fell by 12.4 % in 2022 compared to the previous year.

As for the use of **renewable energies**, there has been a gradual increase in the use of these types of sources, which has risen considerably in recent years to reach a share of **9.7 % in Spain in 2022**, higher than the EU-27 average (9.6 %).

In 2022 the share of emissions from transport increased by +1.1 percentage points in Spain compared to 2021, standing at 30.7 % of total greenhouse gas (GHG) emissions, while in the EU-27 as a whole it increased by +1.2 percentage points, standing at 23.7 % in 2022.

Of all modes of transport, road transport produces the highest amount of GHG emissions and pollutants (87.3 % of the total in 2022) because it has the largest modal share in domestic passenger and freight transport. Also, **rail transport continues to generate less direct GHG emissions per transport unit-km** (14.1 times fewer direct emissions than road transport in non-urban areas and 16.8 times fewer than air transport in 2022), while air transport is the mode with the highest emissions.

Logistics

In 2022 the contribution of the logistics sector in Spain to GDP was 2.72 %, slightly higher than 2.71 % of the previous year, but still below pre-pandemic levels (2.88 % in 2019).

On the other hand, **the number of people employed in the logistics sector increased by +2.7 %** compared to the previous year, reaching a total of 707,249 employees in 2022. This figure is +1.9 % higher than in 2019, the year before the pandemic, indicating a full recovery of employment in the logistics sector.

As for the **surface area of logistics facilities**, it reached 84.9 million m² in 2023, an **increase of +2.4 %** compared to 2022. Maritime and road transport accounted for 88.7 % of the total area of logistics facilities in 2023, and were also the modes that experienced the largest increases in area in 2023, with increases of +1.9 % and +3.6 %, respectively.

Total freight transport in Spain in 2023, which includes both national and international transport, **decreased by -0.4 %** compared to the previous year, reaching **2,139 million tonnes**. This represents an increase of +1.6 % compared to 2019, the year before the pandemic. Domestic freight transport grew by +1.1 %, reaching 1,583 million tonnes, while international transport fell by -4.3 %, standing at 556 million tonnes.

In 2023 **253.1 million tonnes** were transported in Spain via **multimodal chains** (15.5 % of the total) and 1,381.9 million tonnes via unimodal chains (road). Freight transport via multimodal chains experienced a **year-on-year decline of -0.1 % in 2023**, while transport via unimodal chains grew by +0.9 % compared to 2022.

Containerised intermodal transport reached 252.2 million tonnes in 2023, a **decrease of -4.6 %** compared to the previous year. Differentiating by mode, all of them decreased: road transport decreased by -3.1 %, rail transport by -11.0 % and maritime transport by -4.7 %.

