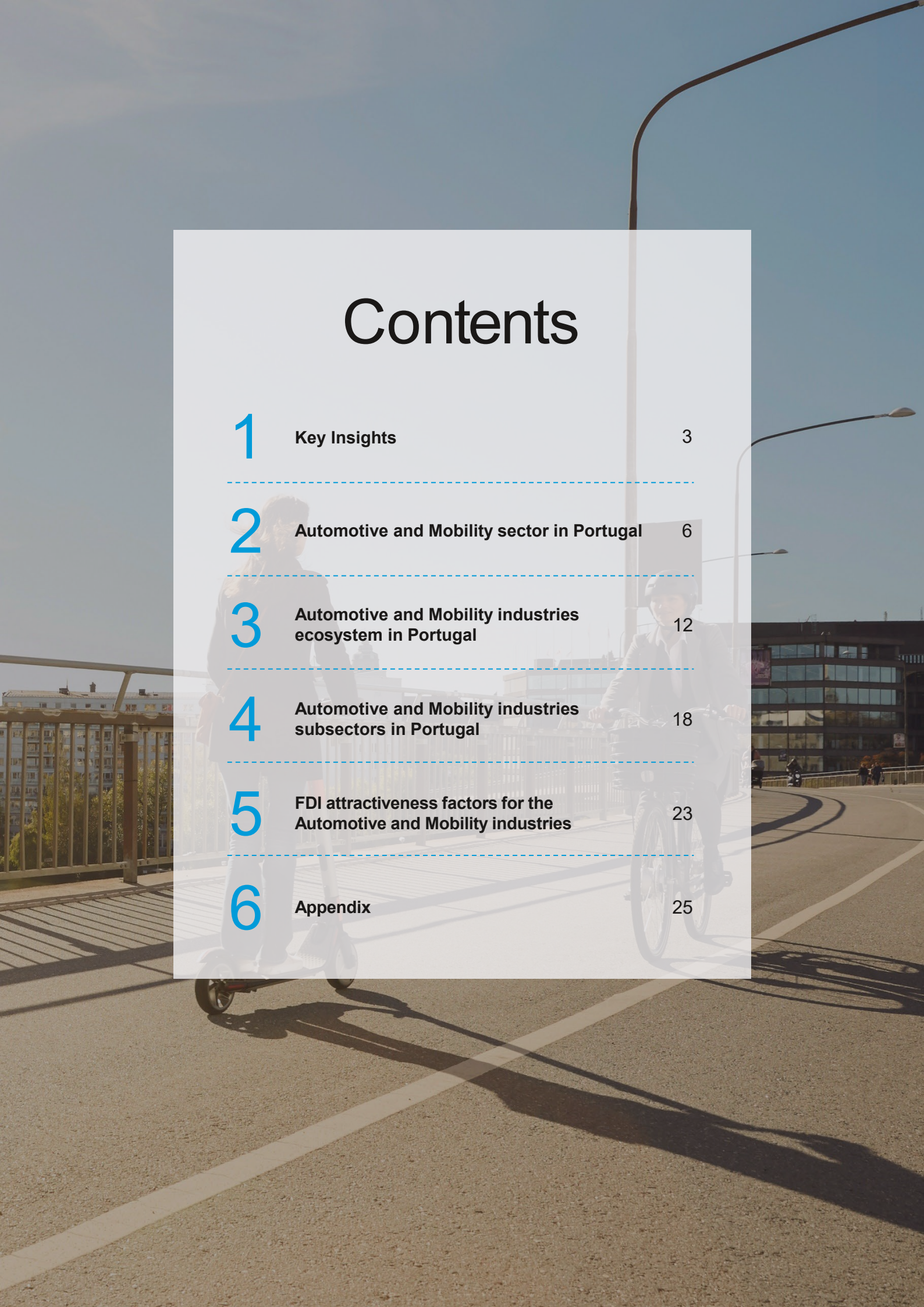
Invest in Portugal

Automotive and Mobility Industry Report

2024

AICEP
Portugal Trade & Invest

EY Parthenon



Contents

1 **Key Insights** 3

2 **Automotive and Mobility sector in Portugal** 6

3 **Automotive and Mobility industries ecosystem in Portugal** 12

4 **Automotive and Mobility industries subsectors in Portugal** 18

5 **FDI attractiveness factors for the Automotive and Mobility industries** 23

6 **Appendix** 25

1

Key Insights

Portugal offers a unique set of conditions for the automotive and mobility industry…

For the purposes of this report, the scope of the Automotive and Mobility industry in Portugal encompasses:

- Vehicle components
- Vehicle production
- Two-wheeler Industry
- Engineering

Automotive and mobility industry in figures | 2021

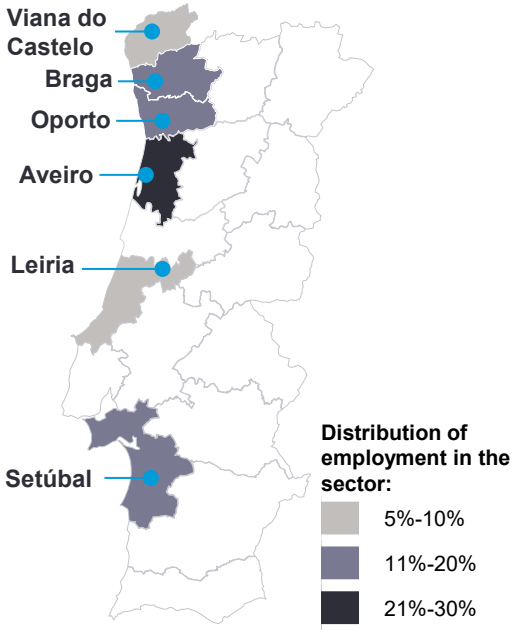
58.189
Employees
▲ 4,5%[1] (2015-2021)

€12,4B
Turnover
▲ 6,5%[1] (2015-2021)

€2,2B
Gross Value Added
▲ 5,7%[1] (2015-2021)

Employment in the sector | 2021

The regions highlighted on the map are the most significant in terms of employment in the automotive and mobility industry in Portugal (82% of total employees).



Industry exports | 2022

Exports in 2022

€14,8B

3,8%

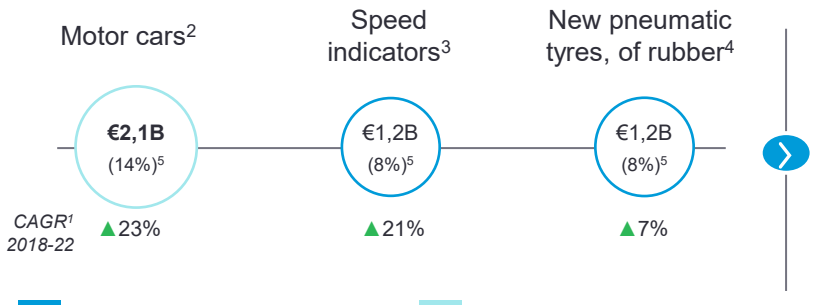
CAGR[1] 2018-22

Largest export markets:

	DE	ES	FR	GB	IT
	22%	21%	13%	7%	6%
CAGR[1] 2018-22	▲5%	▲5%	0%	▼7%	▲6%

Portugal exports to the main European countries where the largest OEM are located.

Export categories | 2022



The top three main products exported by Portugal account for 31% of total exports of this industry.

1.Compound annual growth rate.
2. NC 8703.22.10: Motor cars and other motor vehicles designed for the transport of <10 people.
3. NC 9029.20.31: Speed indicadors for land vehicles.
4. NC 4011.10.00: New pneumatic tyres, of rubber, of a kind used for motor cars.
5. Weight on total Portuguese automotive and mobility products exports (%).

Source: Eurostat, Sabi, Statistics Portugal, Banco de Portugal.

… that translates into an innovative ecosystem with multiple attractiveness factors

Automotive and mobility industry ecosystem

Education

- In 2021, 19% of all graduates were engineers.
- **University of Lisbon is in 4th place in the IberoAmerican rank,** in the engineering field, in 2022 (out of 2.881 universities).
- ATEC and CENFIM, offer courses in robotics and automotive technology.

Innovation and Technology centers

- This industry invested, in 2021, €91M in R&D (an increase of 65% since 2014).
- **Bosch Portugal is one of the biggest R&D centres** and has partnered with the University of Minho investing, since 2013, €76M, in creating innovative technological solutions.

Companies

- The sector comprises multiple suppliers for the automotive industry, OEMs (car manufacturing) and engineering and digital hubs, such as BMW, Mercedes, Daimler, Volkswagen, Bosch or Continental Engineering.

Industry Associations (IA)

- IA have networks that facilitate the exchange of knowledge and innovative practices, equipping enterprises with insights and cutting-edge advancements.
- It is supported by a developed and robust Engineering & Tooling cluster.

Foreign investors in Portugal

Portugal has been chosen as an investment location by several multinational companies.

FDI attractiveness factors

- Highly skilled workforce
- Robust R&D system
- High diversity of suppliers
- Reliable transport network
- Strategic location
- High exports share
- Connected ecosystem
- Well-established OEMs

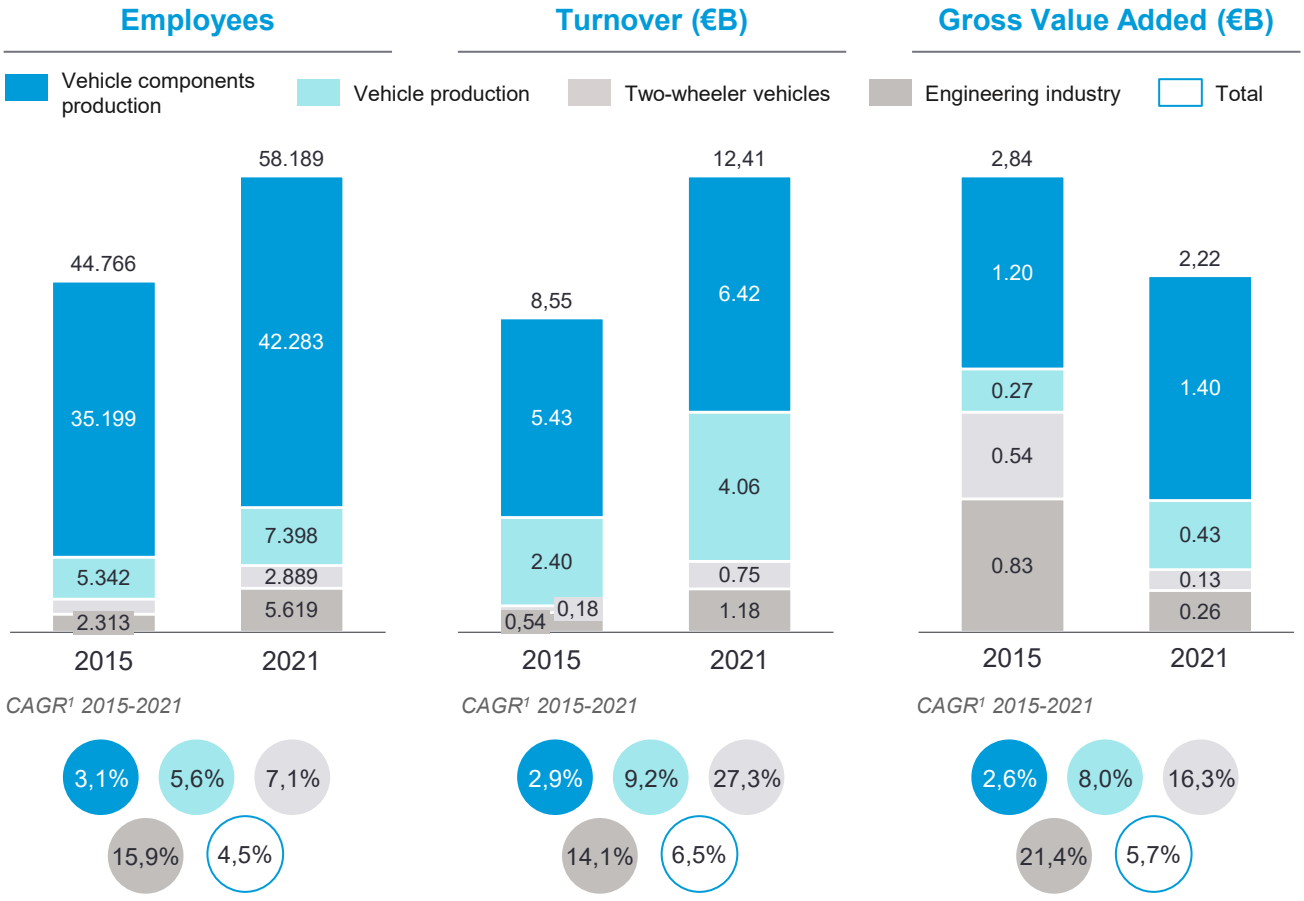
Source: Scmiagoir, Eurostat.

2

Automotive and Mobility sector in Portugal

The automotive and mobility industry is one of the most important industrial value chains in Portugal

- **The automotive and mobility industry is one of the most important industrial value chains in the Portuguese economy**. It represents 12,1% of the turnover of the manufacturing industry. 95% of the vehicles assembled in Europe have components produced in Portugal.
- While the sector initially grew due to FDI in vehicle assembly, it has diversified significantly due to automotive components production. In fact, in 2021, this subsector accounted for 73% of the total workforce in the automotive industry.
- **In 2021, Portugal was the main producer of bicycles in Europe.** The growing importance of the two-wheeler industry is observed in the increase of its turnover (27%) and GVA (16%) between 2015 and 2021.
- Portugal is increasingly integrated into international innovation networks. As an example, the Associations AFIA and AEP coordinate the participation of Portuguese companies in the IAA Mobility 2023 and the Automotive & Manufacturing Meeting.
- Due to a strong increase in digital capabilities and production know-how, several large automotive players selected Portugal to establish engineering and technology hubs, such as BMW in partnership with Critical Software, Mercedes-Benz.io, Volkswagen Digital Solutions, Aptiv, Continental Engineering Services, Daimler and Bosch.



> **"The technological and intellectual ability of the workforce in Portugal together with a lower production cost and a mix of portfolio in renewable energies are what makes Portugal attractive to investors."**
>
> Carlos Tavares, CEO
>
> Stellantis (French Company) was established in Portugal in 1962

1. Compound annual growth rate.

Source: Statistics Portugal, Sabi.

Portuguese automotive exports have shown robust growth in the last years

- The **automotive and mobility industry in Portugal exported €14,8B of products in 2022**, showing growth since 2018 (3,8%) and a relevant **weight on the total exports in Portugal (19%)**.
- **80% of the Portuguese production in the automotive industry goes to external markets**. The vehicle production subsector exports 91% of its production.
- In 2022, 7 out of the top 10 biggest exporters of goods in Portugal were from the automotive sector.

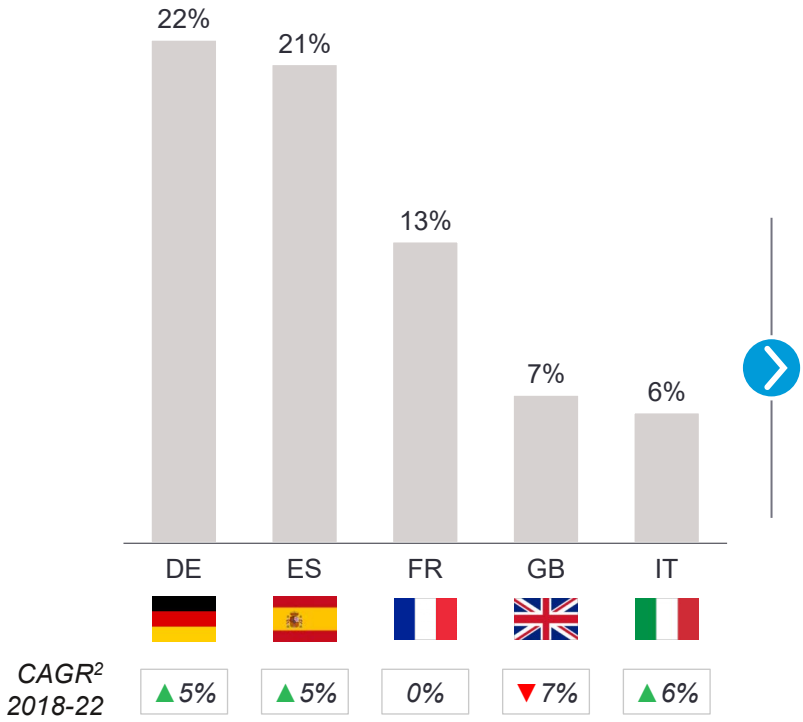
Main export indicators[1]

€14,8B
Exports of automotive[1] and mobility products, 2022

▲3,8%
CAGR[2] 2018-22 of automotive and mobility industry exports

19%
Weight of automotive and mobility exports in total Portuguese exports of goods, 2022

Largest export markets[1] | 2022



- **In 2022, Germany was the main destination for automotive exports, followed by Spain**.
- Portugal exports mainly to European economies, such as Germany, Spain, France, Great Britain and Italy, where the main OEMs are located.
- The top 10 products exported are motor cars, tachometers/revolution counters, pneumatic tyres of rubber, parts for tractors, apparatus for broadcasting radio, motor vehicles for the transport of goods and seats.

Continental

> **"We take pride to expand our activities to Oporto and build a first-rate team. We believe that Portuguese engineers are highly demanding professionals."**
>
> Jochen Diehm, Director of Continental Engineering Services
> Continental, (German Company), was established in 2019

1. Does not include engineering subsector exports due to data unavailability.
2. Compound annual growth rate.

Source: Eurostat; Banco de Portugal.

Vehicle components and vehicle production subsectors have a dominant presence among the automotive exports

Top exported products of the Automotive and Mobility Industry in Portugal[1] I 2022

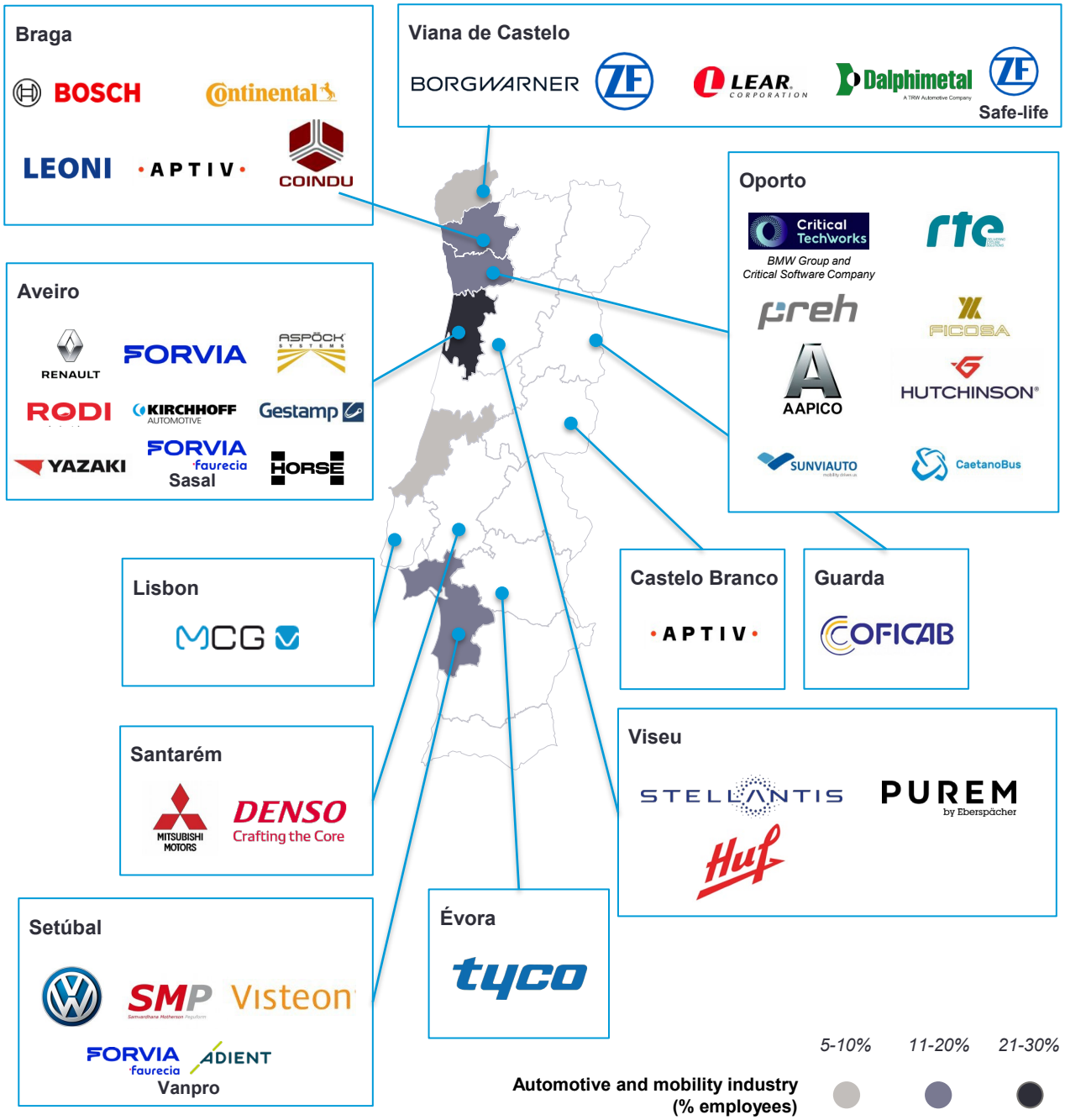
	Product name	Automotive subsector	Exports in 2022 (€M)	CAGR[2] 2018-22 (%)	Weight on total Portuguese automotive exports (%)
1	8703.22.10: Motor cars and other motor vehicles principally designed for the transport of <10 persons, incl. station wagons and racing cars, with only spark-ignition internal combustion reciprocating piston engine, of a cylinder capacity > 1.000 cm³ but <= 1.500 cm³	Vehicle production	2 132	▲23%	14%
2	9029.20.31: Speed indicators for land vehicles	Vehicle components	1 239	▲21%	8%
3	4011.10.00: New pneumatic tyres, of rubber, of a kind used for motors cars.	Vehicle components	1 196	▲7%	8%
4	8708.92.20: Silencers "mufflers" and exhaust pipes, and parts thereof, for the industrial assembly of: pedestrian-controlled tractors, motor cars and vehicles (..), vehicles for the transport of goods with compression-ignition internal combustion piston engine "diesel or semi-diesel engine" <= 2500 cm³ or with spark-ignition internal piston engine <= 2800 cm³	Vehicle components	728	0%	5%
5	8703.21.10: Motor cars and other motor vehicles principally designed for the transport of <10 persons, incl. station wagons and racing cars, with only spark-ignition internal combustion reciprocating piston engine of a cylinder capacity <= 1.000 cm³	Vehicle production	685	0%	5%
6	8527.21.20: Radio broadcast receivers of capable of receiving and decoding digital Radio Data System signals	Vehicle components	672	▲2%	5%
7	8708.99.97: Parts and accessories for tractors, motor vehicles for the transport of ten or more persons, motor cars and other motor vehicles principally designed for the transport of persons, motor vehicles for the transport of goods and special purpose motor vehicles	Vehicle components	666	▲3%	4%
8	8704.21.91: Motor vehicles for the transport of goods, with compression-ignition internal combustion piston engine "diesel or semi-diesel engine" of a gross vehicle weight <= 5 t, of a cylinder capacity <= 2.500 cm³	Vehicle production	616	▲4%	4%

1. Includes all products' exports that represent more than €500M; Does not include engineering industry exports due to data's unavailability.
2. Compound annual growth rate.

Source: Eurostat.

The North, Center and Setúbal regions have a strong presence of the automotive industry

Regions and top 40 employers I 2022



- **The regions highlighted in the map comprise 82% of the total automotive and mobility industry employees.**
- **In terms of turnover, the North West and Setúbal regions have the highest turnover.** Together, these regions accounted for 75% of the total turnover, in 2022.
- **Oporto, Braga and Lisbon are the regions with the highest quantity of vehicle components production.** Setúbal has the highest number of employees in the vehicle production (explained by the Volkswagen plant) and Aveiro has the highest number of employees in the two-wheeler industry.
- **The top 9 biggest companies in this industry, in terms of number of employees, are in the North West Region of Portugal.**

Source: Sabi.

Portugal has been chosen by global market leaders to settle high value operations

Most recent investments undertaken by foreign companies in Portugal

- Volkswagen plans to invest €600M, in the 2021-26 period, in the production of a new hybrid model that will take place in the Palmela (Setúbal region) factory, introducing it to the public in 2026.
- The company highlighted the importance and quality of the vehicle production teams in Portugal, ensuring further investments.

- In 2023, Stellantis announced plans to manufacture electric vehicles in Mangualde.
- It will be the first assembly plant in Portugal to build battery electric light commercial vehicles for Citroën, Fiat, Opel, and Peugeot in large-scale production.

- The American Borgwarner has invested, in 2022, €100M in a new plant in Viana do Castelo to produce motors for electric vehicles, creating over 300 new jobs.

- In 2019, Continental Engineering Services invested in an engineering and services office in Oporto, with more than 300 engineers who would work in the fields of electric vehicles, autonomous driving and cybersecurity.
- Also, the German Group announced an investment of €60M in the tyre factory in Famalicão (North of Portugal) to automate tyre loading.

- In 2018, Bosch established, in Braga, an R&D Centre for smart integration solutions for entertainment, navigation and driver assistance, in which €240M were invested in the period of 2016-2018.
- Since 2013, Bosch has partnered with the University of Minho with an R&D investment of €165M to create smart, autonomous and connected vehicles.

Source: Companies' website; Press releases.

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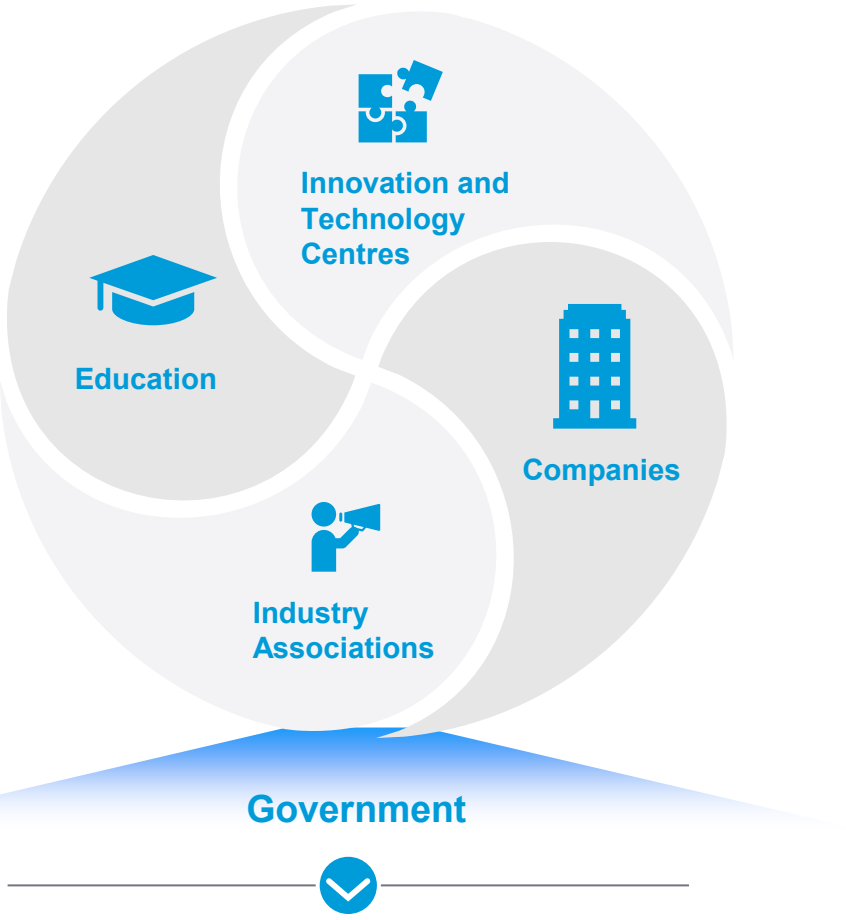
Automotive and Mobility industries ecosystem in Portugal

The strong dynamics of the automotive and mobility ecosystem in Portugal enhances its international position

Automotive and Mobility ecosystem in Portugal



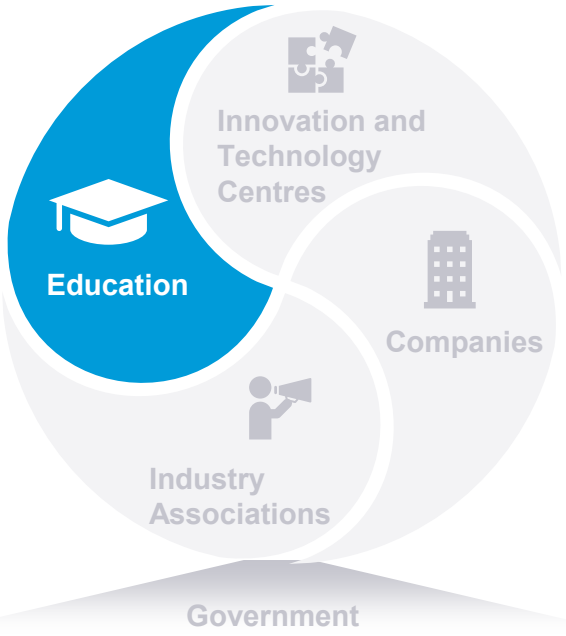
The **automotive and mobility ecosystem in Portugal comprises four main axes**, **connected with each other and the Government**, a key stakeholder in facilitating its growth.

- The **Government of Portugal considers the automotive and mobility industry a priority sector of the country's economy.**
- In the last years, the Government worked closely with key players of the industry to create new public policies and industrial strategies to strengthen the value chain's resilience and investment attractiveness.

> **"Portugal is the ideal location to accompany the global trends, namely sustainable mobility."**
>
> Alexander Seitz, Executive Chairman of Volkswagen in South America
> Volkswagen (German Company) was established in Portugal in 1995

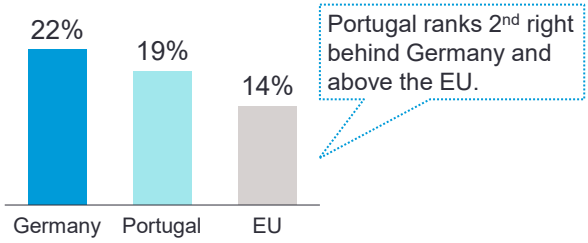
Portugal offers a highly educated labour force, supported by its renowned universities

Automotive and Mobility ecosystem in Portugal | Education



- **Portugal presents a highly educated and talented workforce**. Higher education institutions in Portugal have specialised in engineering areas (19% of graduates in 2021) that allows them to respond to an increasing industry's demand for highly skilled work and R&D capabilities.
- **The University of Lisbon ranked 4th in the engineering area, in 2022, in the IberoAmerican ranking** (out of 2.881 universities)[1].
- Some higher education institutions offer bachelor's and master's degrees in **automotive** engineering, such as **ISEP,** in Oporto with 581 students in engineering, and **IPL,** in Leiria with 729 students.
- In addition to internationally recognized engineering degrees, **Portugal hosts a diverse portfolio of specialised educational programs tailored for the automotive industry.**
- **ATEC Training Academy,** with over 4.000 graduates, offers undergraduate courses in industrial maintenance and robotics, tooling and moulds, automotive technology and electrical and electronic engineering; **CENFIM, a professional training centre focuses on the metallurgical and metal-mechanical industry.**

Share of engineering graduates in total | 2021



Students and graduates in the sector[2] | 2022

BOSCH

> **"The partnerships between the company and universities as an alternative to direct funding is a great strategy and it is being copied by several other countries."**

Carlos Ribas, CEO

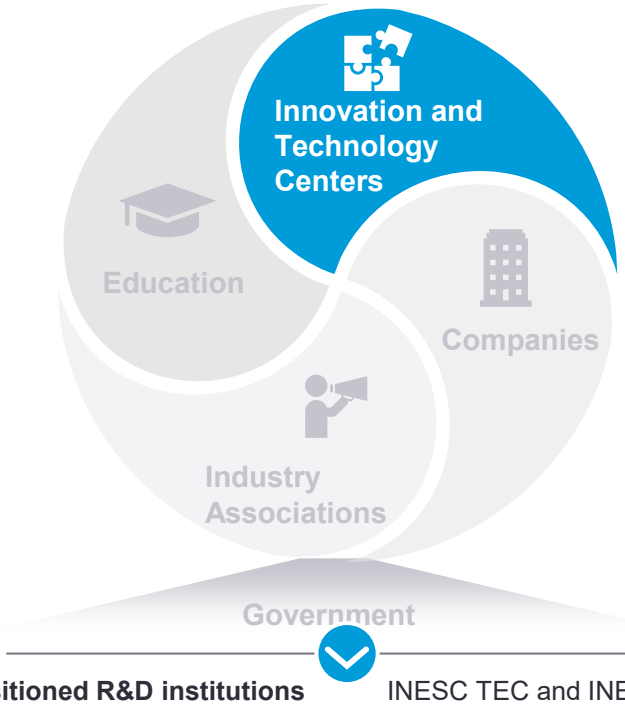
Bosch Car Multimedia, a German Company, was established in 2003

1. Scimagoir (2022).
2. Includes engineering (electromechanics, mechanics, electronic, automotive, industrial automation, industrial and automation, control and instruments), automation, robotics, industrial control, engineering electrotechnics/mechanics sciences and automotive, maintenance and mechanics technology.

Source: Scimagoir; Eurostat; DGEEC.

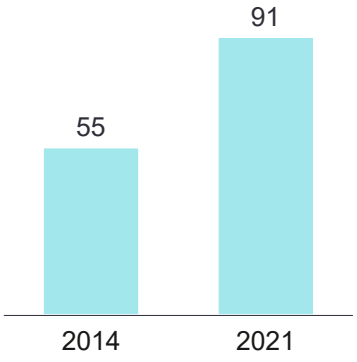
The R&D Centres are internationally recognised, establishing more partnerships with key global players

Automotive and Mobility ecosystem in Portugal | Innovation and Technological Centres



- Portugal has **well-positioned R&D institutions in the fields of robotics, industry 4.0 and digital tools** that boost technological development with advanced production techniques.
- **CEiiA - Centre of Engineering and Product Development, one of the top R&D investors in Portugal**, develops, implements and operates technological solutions that foster innovation in the automotive and mobility industry.
- Leiria Polytechnic School has dedicated laboratories in automotive, industrial engineering, prototyping, and reverse engineering. ISEP, INESC TEC and INEGI also have laboratories dedicated to automation, materials, mechanics, robotics and software engineering.
- The R&D ecosystem has introduced **higher cooperation between universities, companies, scientific and technological entities, clusters and engineering centres**.
- Bosch Car Multimedia and University of Minho have been partners in several **relevant R&D projects** over the last few decades, resulting in 70 registered patents and an investment of €76M, since 2013, in the creation of innovative technological solutions.

Automotive and mobility industry R&D's investment (€M) | 2014-2021



4% Weight in total R&D investment, in 2021

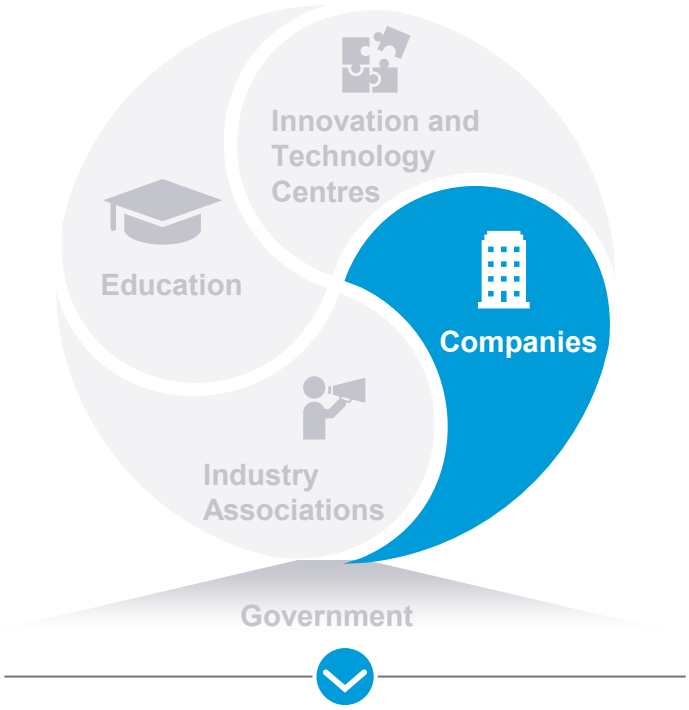
▲8% CAGR[1] 2014-21

1. Compound annual growth rate.

Source: IPCTN; Eurostat; Bosch Website.

The automotive and mobility industry is recognized by its flexibility and production efficiency

Automotive and Mobility ecosystem in Portugal | Companies



- **This industry demonstrates an excellent performance.** It comprises multiple suppliers for the automotive industry, as well as some of the main car manufacturers, namely VW and Stellantis.
- It is worth noting that the **top 5 automotive and mobility companies operate in vehicle production and vehicle components.**
- The creation and expansion of **engineering hubs** performed by large OEM or Tier 1, such as BMW, Mercedes, Volkswagen Digital Solutions, Bosch and Continental Engineering, have been accomplished through strong investments.

Top 10 foreign automotive and mobility companies in revenue | 2021

Volkswagen	Vehicle production	APTIV	Vehicle components
BOSCH	Vehicle components	FORVIA	Vehicle components
Continental	Vehicle components	preh	Vehicle components
STELLANTIS	Vehicle production	HORSE	Vehicle components
PUREM by Eberspächer	Vehicle components	BENTELER	Vehicle components

“With the offices in Portugal, we are integrating a key location for the development of digital services. At the same time, we will benefit from a growing and dynamic environment with young talents who fit our DNA perfectly and are passionate about our products.”

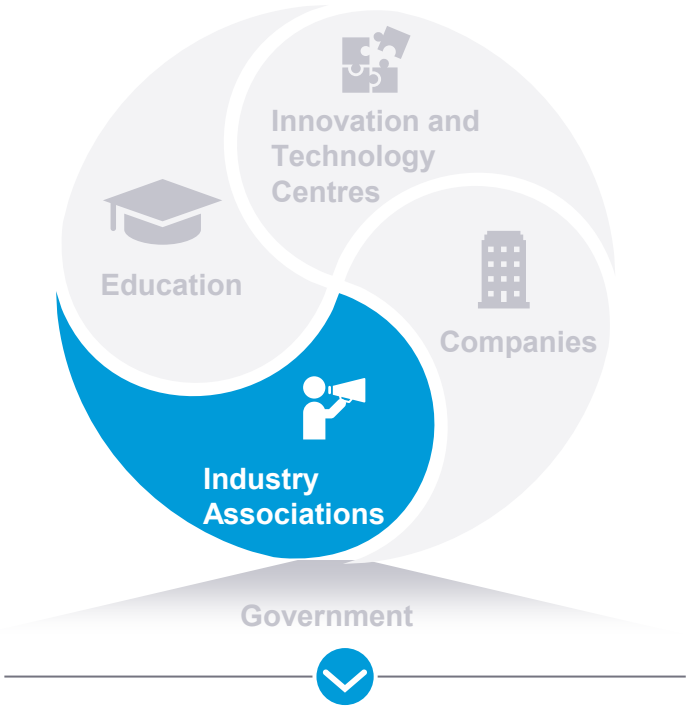
Christoph Grote, Senior Vice-President BMW Group Eletronics

BMW (German Company) was established in Portugal in 2003

Source: Sabi.

The automotive industry associations have strong public awareness and are connected internationally

Automotive and Mobility ecosystem in Portugal | Industry Associations



- Portugal presents **well-known industry associations** that have celebrated several partnership agreements with international clusters and associations.
- **Institutional entities,** such as the ACAP, AFIA, Mobinov and ABIMOTA **play a key role in promoting synergies between companies and the R&D system.**
- **These associations have established industry pacts with Government entities** to foster a friendlier businesses environment, to increase exports and promote FDI, as well as R&D and entrepreneurship.

ACAP …is a private association with more than 100 years that represents the automotive sector at a national level. It has an important role in promoting the sector before the government and public administration and stimulating the sector's internationalization.

afia …represents components suppliers for the automotive industry at national and international level. It focuses on representing this sector, liaise with different stakeholders, promoting the competitiveness and internationalisation of its members and supporting the establishment of foreign investors in Portugal.

ABIMOTA …represents the two-wheel industry as well as promotes the sector internationally. Abimota has developed over 200 projects/fairs (e.g., Portugal Bike Value, which presents the country's potential regarding industries associated with bikes production, that shall benefit from the presence of technology centres, universities and local authorities) and 800 vocational training courses. Furthermore, it has 6 accredited laboratories where more than 150.000 tests and calibrations were carried out on bicycles.

MOBINOV …promotes the automotive cluster, the growth and competitiveness of the national automotive industry (in a sustainable manner) through higher cooperation and coordination between companies, associations, R&D centers and public administration.

4

Automotive and Mobility industries subsectors in Portugal

There are OEMs with production sites in Portugal that have recognised the country's potential

Vehicles production

- **The presence of 4 OEMs** (Volkswagen, Stellantis, Mitsubishi Fuso Trucks and Toyota[1]) **shows that Portugal can produce great quality products with a highly skilled workforce and productivity**. In 2022, Portugal, produced +300k vehicles, with a CAGR[4] of 11% and comprised 7% of the total Portuguese exports. Portugal and Spain together are ranked 3rd in Europe in the vehicle production sector.
- Vehicle production companies in Portugal ally the **best quality standards** required by the industry with high levels of **efficiency and flexibility.**
- Through partnerships with technological companies, R&D centres and universities, **OEMs are well-positioned in the field of automation and digital tools**.
- **The main international investors[2]** are Volkswagen, Stellantis and Mitsubishi and most **vehicles produced in Portugal have international markets as destinations**, mainly to European countries, such as Germany (22%), France (15%), Italy (11%), Spain (11%) and United Kingdom (10%)[3].

€5,2B

Vehicles' exports | 2022
Source: Eurostat

322.404

Number of vehicles produced | 2022
Source: ACAP

▲11%

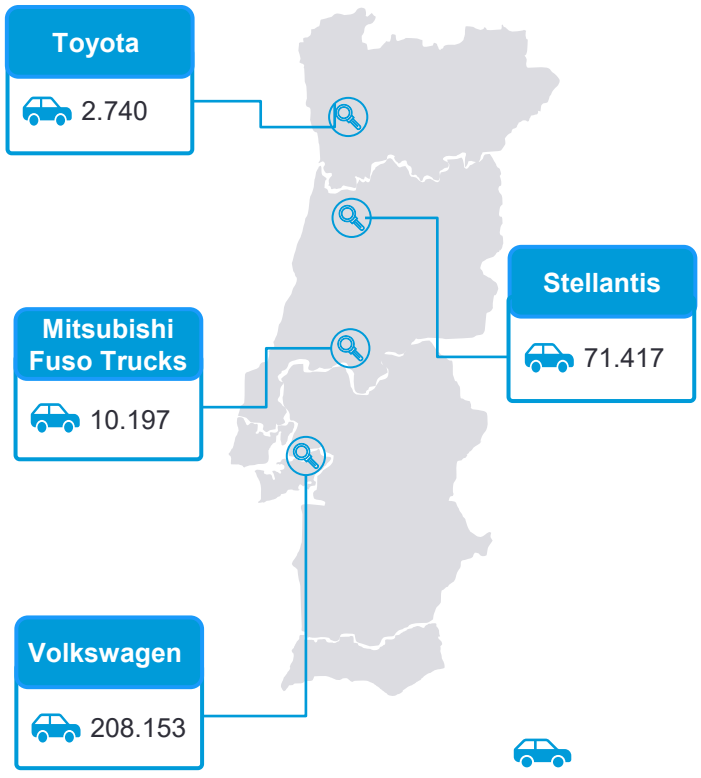
Turnover CAGR[4] of the vehicle production industry | 2017-2021
Source: Eurostat

Types of vehicles manufactured in Portugal | 2022

- Light passenger vehicles
- Light goods vehicles
- Heavy passenger vehicles
- Heavy good vehicles

Source: ACAP

Vehicle production in Portugal



… Volkswagen Autoeuropa[5], in 2025, is going to produce a new hybrid model, investing €600M which is deemed crucial towards the continuous decarbonization trend…

1. Larger to smaller in order of the number of vehicles produced.
2. SABI. Top 3 international firms with highest turnover in the vehicle production subsector (2021).
3. Eurostat (2022); weight on total vehicle production.
4. Compound annual growth rate.
5. Main international investor in 2021.

Source: Eurostat; ACAP.

Automotive suppliers' sector in Portugal is a highly exporting industry

Vehicle components production

- **The automotive components production represents most of the value added of the automotive industry in Portugal** and exports mainly to Europe – Spain (27%), Germany (22%), France (12%), USA (6%) and United Kingdom (5%)[1].
- **Portugal has strong capabilities in the metallurgical and mechanical, electric and electronic, plastic and rubber and textiles' industries.** Indeed, supported by a metalworking and plastics industry of excellence, the automotive sector benefits from **world-class moulds and plastic injected for auto parts manufacturers**.
- Consistent technological investments have been made over the last decades equipping the sector with state-of-the-art technology, allowing high **flexibility and operational efficiency levels.**
- There has been a strong investment in areas such as **electrification and green mobility**, aligned with global market and supply chain trends.
- Even though most of the top component manufacturers established in Portugal are **non-domestic investors** (e.g., Bosch, Continental Mabor, Faurecia[2]), some Portuguese groups are emerging **in the international scene**, such as Coindu, MCG Automotive and Simoldes Group (Tier 1). The last one has, over the years, moved up the value chain, from mould manufacturing to sophisticated auto parts.
- This has been a path followed by several SMEs which have contributed, in the last decades, to a stronger sector's performance.

€9,1B
Vehicles components' exports | 2022
Source: Eurostat

1.159
Companies | 2021
Source: Statistics Portugal

42.283
Employees | 2021
Source: Statistics Portugal

25th
Portugal's rank in exports (out of 100 countries) | 2021
Source: ITC Trade Map

1. Eurostat (2022); weight on total vehicle components production.
2. SABI. Top 3 international firms with highest turnover in the vehicle components production subsector (2021).
3. Recently invested in Portugal.

Source: Statistics Portugal, Eurostat; ITC Trade Map.

Portugal is the leading bicycle producer in the European Union

Two-wheeler vehicles production

- **The two-wheeler vehicle industry in Portugal** comprised, in 2021, 69 companies and 2.889 employees after a significant growth in recent years (6% CAGR[1] 2017-2021).
- **This industry is mostly concentrated in the Centro Region**, where 62% of the two-wheeler companies are based, representing 60% of total employment in this sector.
- **Portugal is now the leading manufacturer of bicycles in the EU, supplying almost a quarter of the region's market,** while also counting with the presence of one of the biggest bicycle manufacturing companies in Europe, RTE (Portugal), and bicycle wheels producer, Rodi (Portugal), as well as other key players in the industry, such as FJ Bikes Europe (Taiwan), Bike Ahead (Germany) and Alubike (Spain)[2].
- **The main destination markets for bicycle production are** Germany (28%), Spain (20%), France (17%), Netherlands (7%), and Italy (5%)[3].
- With the **growing demand for e-bikes**, international companies are choosing Portugal to expand their value chain.
- **Bosch's Ovar and Braga units are taking on an important role in the development and production on this segment**. More specifically, the Ovar unit has launched a new area for the development of e-bikes with an investment of €6,5M.

1st

Portugal's rank in bicycles production in EU | 2021
Source: Eurostat

7th

Portugal's rank in bicycles world exports – (out of 192 countries) | 2022
Source: ITC TradeMap

€557M
(▲12%)

Exports | 2022
(CAGR[1] 2018-2022)
Source: Eurostat

…RTE is one of the biggest bicycle assembly production factories in Europe, producing 1,5 millions of bicycles per year…

…Triangle's is the first factory in the world to produce aluminium bike frames robotically, by using the innovative technology of aluminium transformation, where the welding process is fully automated…

…CarbonTeams, a joint venture between Miranda and Irmão (PT), Rodi (PT), Ciclo Fapril (PT), Bike Ahead (DE) and Art Collection (TW) **with an initial investment of €8.4M, is the first company in Europe to manufacture bicycle boards in carbon fibre…**

1. Compound annual growth rate.
2. SABI. Top 3 international firms with highest turnover in the two-wheel vehicles subsector (2021).
3. Eurostat (2022); weight on total vehicle components production.

Source: Statistics Portugal, Eurostat; ITC TradeMap.

The investments on STEM education is boosting a flourishing engineering hubs in the country

Engineering centres

- **Portugal is a talented and innovative hub that is being used by the automotive industry to develop solutions for the mobility of the future**. In recent years, several relevant investments were made by international companies that have found in the country the right skills to develop innovative solutions for the future of mobility.
- **Portugal's engineering is increasingly recognised as a reference that allies a strong innovation capacity with digital technologies capabilities,** which can be attested by the recent investments from BMW, Mercedes Benz, Volkswagen or Continental Engineering in Portugal.
- This progress has been driven by strong and consistent investments in **higher education in STEM areas and R&D infrastructures** throughout the past decades.
- **A strong link between engineering companies and innovation ecosystems, including engineering schools, is fuelling the increasing demand for highly skilled work and R&D capabilities.**
- For example, Bosch Car Multimedia and the University of Minho have been partners in several relevant R&D projects over the last few decades, having developed 70 registered patents.

3rd in EU

Share of engineering graduates in total | 2022
Source: Eurostat

27th

Portugal's rank in R&D centers (out of 141 countries) | 2019
Source: Global Competitiveness Report

…Critical Techworks, a joint venture of BMW and Critical Software, has been developing, since 2019, the BMW eDriveZones, an automatic system that allows for the most recent automatic models to pass automatically to electric mode as soon as the vehicle enters in low CO_2 emissions zone…

… Volkswagen Digital Solutions was established in 2018 in Lisbon. This centre is aimed at **enhancing the company's digital transition by producing cloud-based software solutions for process optimization**. It also focuses on developing user-friendly programs and specific mobile apps to streamline operations…

… Daimler Trucks & Buses, in 2018, established a technology hub in Lisbon that focuses on **creating innovative technological solutions and digital services for the transportation industry**. This is part of the company's commitment to digital transformation, researching future technologies, and developing digital products focused on connectivity and mobility…

… In 2017, **Mercedes-Benz established Mercedes-Benz.io, a Technology Development Centre** in Lisbon. The centre focuses on creating state-of-the-art software solutions and technologies to broaden Mercedes-Benz's digital footprint. It is intended to facilitate digital touchpoints for marketing, sales, and after-sales services with a customer-focused approach…

Source: Global Competitiveness Report; Eurostat.

5

FDI attractiveness factors for the Automotive and Mobility industries

Portugal has a group of characteristics that enhance its international positioning

Highly skilled workforce

Portugal has a highly educated and talented workforce, supported by world-class engineering universities and institutes, with over 3.5k graduates and 7.5k students, in 2022, that assist in the development of digital tools and innovative products

Developed R&D and innovation ecosystem

A diverse innovation ecosystem with strong capabilities in enabling technologies for the future of mobility (e.g., autonomous and electric vehicles)

High diversity of suppliers

The automotive components production comprises 76% of the automotive and mobility industry companies, in 2021. It is a strategic exporter subsector with a substantial impact on other manufacturing sectors

Reliable transport network

Portugal's extensive transportation infrastructure includes over 3.000 km of highways, and a wide-reaching rail network. Integrated port and rail connections further enhance this comprehensive system

Strategic location

Portugal's strategic location makes it easier and faster to supply European OEMs, such as the ones in Spain and France, where 3M vehicles are produced every year

High exports' share

The automotive and mobility industries represent 15% of Portuguese total exports of goods. Spain, Germany, France, Italy and UK are the main destinations.

Connected ecosystem

High level of collaboration between companies, universities and industry associations. This enhances the creation of living labs to experiment on innovative components and vehicle products.

Well-established OEMs

Portugal counts with the presence of 4 OEMs, showing that it can produce great quality products and services with high flexibility and productivity.

External challenges to which the Automotive and Mobility industries in Portugal is responding

Artificial intelligence, big data, and other digital cutting- edge technologies boosting

Investment on **new hybrid and electric models**

Growing demand for e-bikes; well-equipped companies are expanding their value chain

Source: EY-Parthenon Analysis.

6

Appendix

Economic Activity codes* and combined nomenclature[22]

NACE	Description	Subsector
22111	Manufacture of tires and tubes and tire reconstruction	Vehicles components production
25734	Manufacture of metal molds	
2920	Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers	
2931	Manufacture of electrical and electronic equipment for motor vehicles	
2932	Manufacture of other parts and accessories for motor vehicles	
2910	Manufacture of motor vehicles	Vehicle production
3091	Manufacture of motorcycles	Two-wheeler vehicles
3092	Manufacture of bicycles and invalid carriages	

CN	Description	Subsector
8703.22.10	Motor cars and other motor vehicles principally designed for the transport of <10 persons, incl. station wagons and racing cars, with only spark-ignition internal combustion reciprocating piston engine, of a cylinder capacity > 1.000 cm³ but <= 1.500 cm³, new (excl. vehicles for travelling on snow and similar vehicles of subheading 8703.10)	Vehicle production
8703.21.10	Motor cars and other motor vehicles principally designed for the transport of <10 persons, incl. station wagons and racing cars, with only spark-ignition internal combustion reciprocating piston engine of a cylinder capacity <= 1.000 cm³	
8704.21.91	Motor vehicles for the transport of goods, with compression-ignition internal combustion piston engine "diesel or semi-diesel engine" of a gross vehicle weight <= 5 t, of a cylinder capacity <= 2.500 cm³	
4011.10.00	New pneumatic tyres, of rubber, of a kind used for motor cars, incl. station wagons and racing cars	Vehicle components production
8527.21.20	Radio broadcast receivers of capable of receiving and decoding digital Radio Data System signals	
8708.92.20	Silencers "mufflers" and exhaust pipes, and parts thereof, for the industrial assembly of: pedestrian-controlled tractors, motor cars and vehicles (..), vehicles for the transport of goods with compression-ignition internal combustion piston engine "diesel or semi-diesel engine" <= 2500 cm³ or with spark-ignition internal piston engine <= 2800 cm³	
8708.99.97	Parts and accessories for tractors, motor vehicles for the transport of ten or more persons, motor cars and other motor vehicles principally designed for the transport of persons, motor vehicles for the transport of goods and special purpose motor vehicles, n.e.s. (excl. of closed-die forged steel)	
90.29.20.31	Speed indicators for land vehicles	

22. The combined nomenclature codes mentioned in the table above are exclusively the ones referenced in this report in page 9. For the purpose of computing the industry's overall figures, the list available at the Invest in Portugal website was used.
* Engineering industry was not considered due to the unavailability of data.
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AICEP is a single point of contact for foreign investors in all phases of the decision process:

- **Enquiry-handling phase**: provides comprehensive, accurate information, data, and benchmark reports.
- **Site Location**: provides different site proposals according to project specifications. Help partnerships with local entities.
- **Fact-finding visits**: organizes site visits to meet local authorities, recruitment firms, office space providers, and universities, among others.
- **Aftercare**: a key account manager will assist regularly.

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