



The automotive industry in Catalonia

May 2019

Sector Snapshot

The automotive industry in Catalonia: Sector Snapshot

ACCIÓ
Government of Catalonia



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Collaboration
CIAC, the Cluster of the Automotive Industry of Catalonia

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Global automotive sector overview



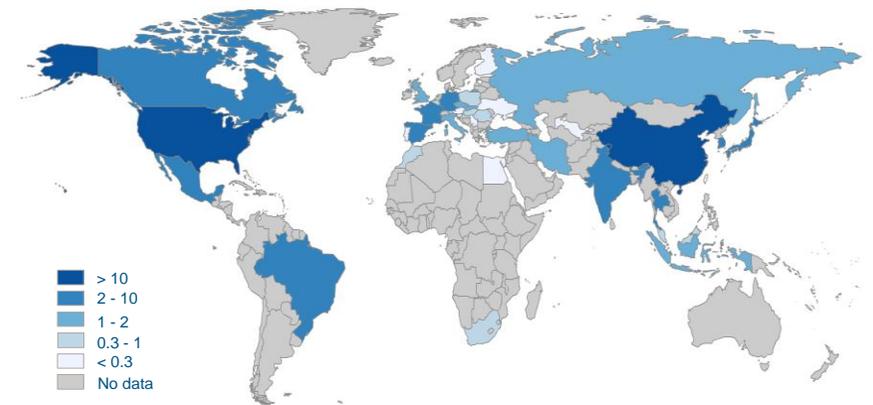
The global automotive industry

The global automotive industry

(2018)

- In 2018, Spain reached **9th place** in the worldwide automotive manufacturers ranking, with **2,819,565** units produced. This represents **2.9%** of worldwide production.
- The **Chinese automobile industry is the largest in the world**, followed by the United States, Japan, India and Germany.
- **Russia** is the country in the top 15 worldwide automotive manufacturers with the **largest production growth in 2018 (13.9%)**.

Countries by million units produced, 2018

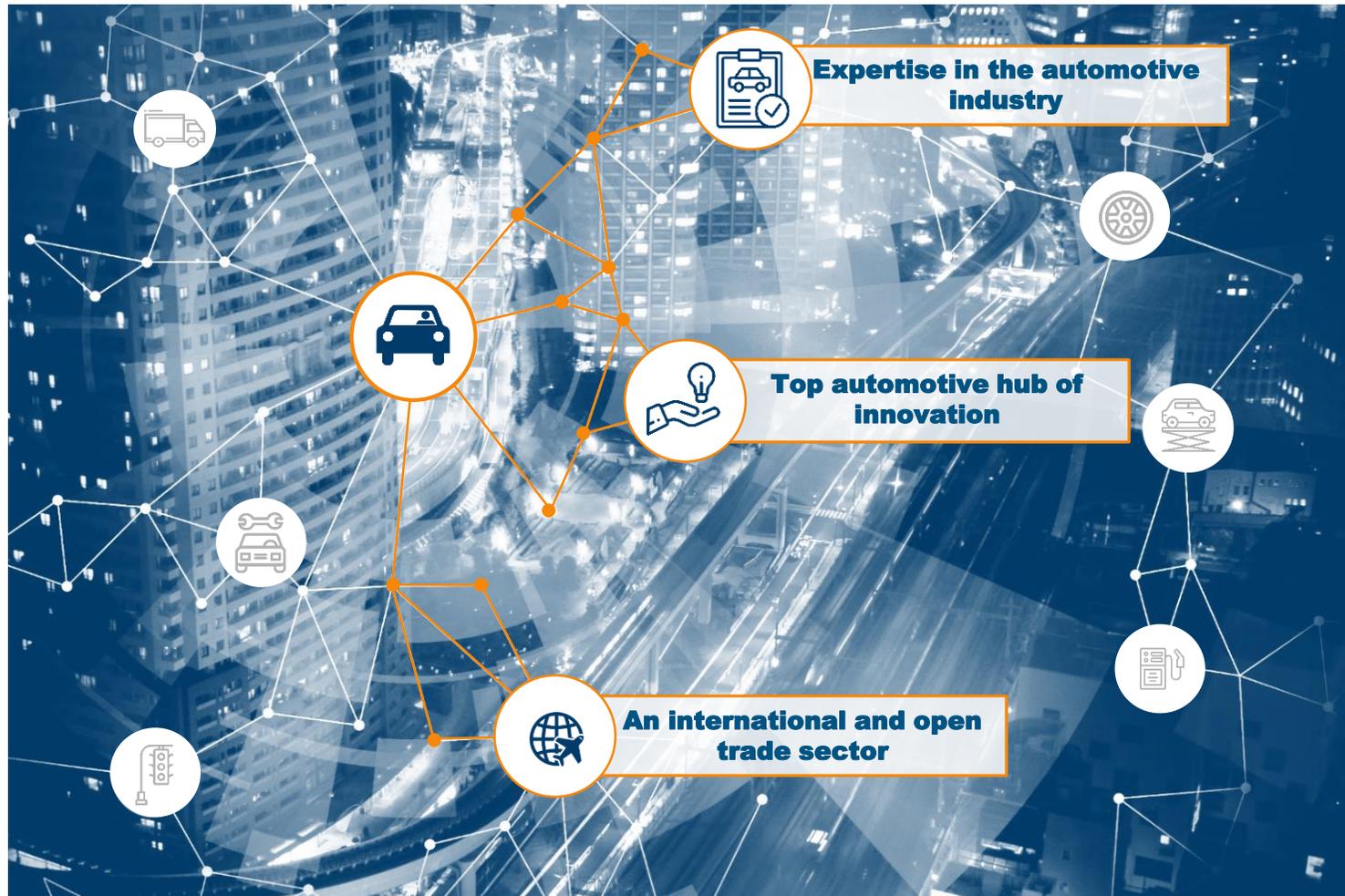


The EU automotive industry

(2017-2018)

- The European Union accounts for **20%** of global vehicle production.
- **Germany, Spain, France and the United Kingdom** have a consolidated position as the main motor vehicle manufacturers within the European Union.
- **13.3 million people** (6.1% of the EU-28 employed population) work in the Automotive sector.

The automotive industry in Catalonia



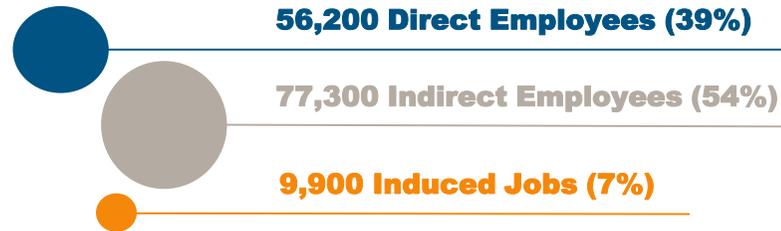


The automotive industry in Catalonia, 2018



143,400 EMPLOYEES

OEMs, Tier 1 and Tier 2



- For every **direct job generated** in the industry, **two more places of work are created** (Indirect or Induced).



548,172 UNITS PRODUCED



19.6% of the production in Spain

- Catalonia is a significant **automobile industry centre in Spain**: one of every five vehicles is produced in the region.



€23,842 M TURNOVER

OEMs, Tier 1 and Tier 2

- **Turnover** in the Catalan Automotive Industry represents **10.16% of the total GDP value**.
- The Automotive Industry is the second **largest Industrial sector** by turnover in Catalonia, after food*.



10,895 COMPANIES

Manufacturers of motor vehicles, components and vehicle sales and repair

- **1.8%** of Catalan companies
- **15%** of the sector in Spain

418 COMPANIES

Manufacturers of motor vehicles, trailers and semi-trailers

- **1.1%** of total Catalan industry
- **23.4%** of the sector in Spain



Catalan automotive industry value chain



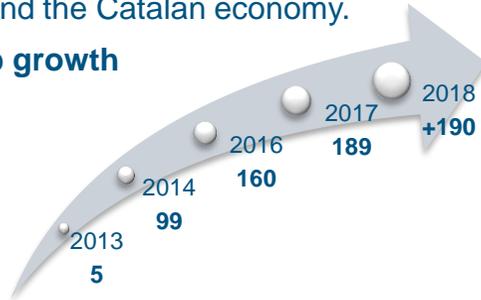


CIAC: the Cluster of the Automotive Industry of Catalonia

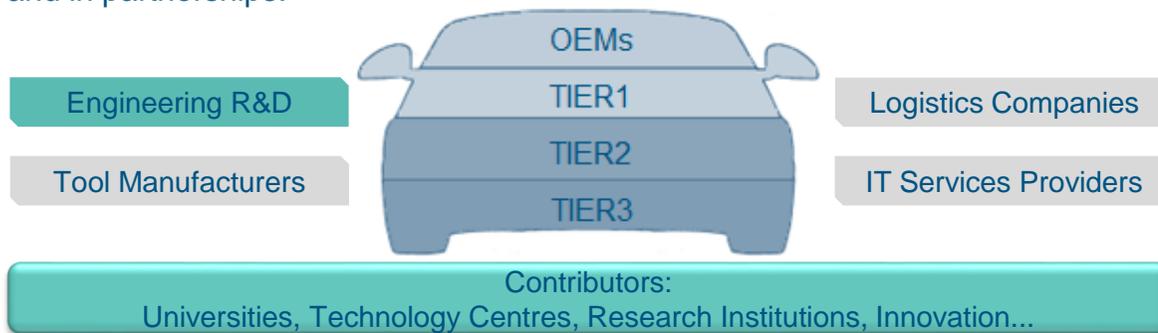


Objective: Boost the competitiveness of the automotive industry as the driving force behind the Catalan economy.

Membership growth



Commissions: Comprised of team partnerships formed up of the different member companies, who work together to **create, innovate, organize, compete and produce**. Their objective is to lead projects with a view to **becoming stronger, more productive and industry leaders** both on an individual basis and in partnerships.



COMMISSIONS

Training



54 COMPANIES / 159 PEOPLE

E-Mobility



22 COMPANIES / 131 PEOPLE

Logistics



84 COMPANIES / 264 PEOPLE

Technology



78 COMPANIES / 274 PEOPLE

Sustainability



33 COMPANIES / 93 PEOPLE

Competitiveness



71 COMPANIES / 304 PEOPLE

Source: CIAC (Cluster of the Automotive Industry of Catalonia)



R&D centres focused on the automotive industry

Tech centres focused on the automotive industry providing technology development, innovation, testing and industrialization of the entire value chain

Centres with the TECNIO accreditation:



Other centres:



IT tech centres developing technologies and materials for connected and self-driving car, including car cybersecurity

Centres with the TECNIO accreditation:



Other centres:



Sources: TECNIO. EIC (DGI – ACCIÓ). Technological centres websites



Catalonia's automotive OEM development centres



SEAT (Volkswagen)
develops its cars in Catalonia



Nissan Technical Center Europe
is located in Catalonia



- Catalonia has **most of the engineering units** of the parts suppliers Tier 1 and 2.
- Catalonia is one of the **major automotive R&D and engineering hubs in Europe**, as well as a hub in IT solutions and software development.

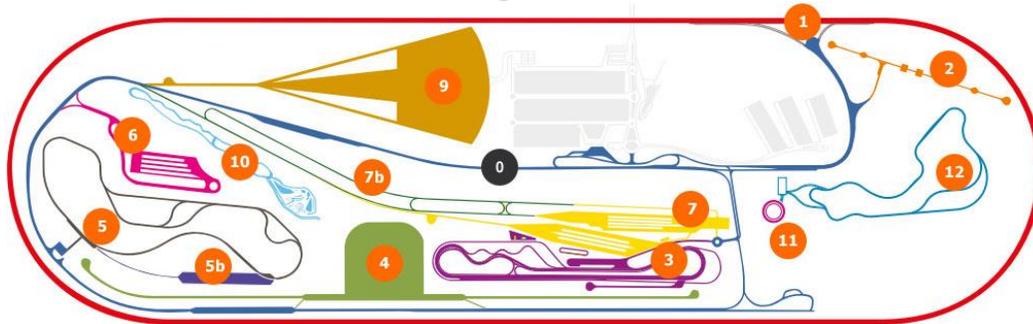
Source: Catalonia Trade & Investment (DGI - ACCIÓ)

Applus+ IDIADA

Applus+ IDIADA is one of the world leaders in testing, inspection, homologation, certification, design and engineering services for the automotive industry worldwide, operating in 70 countries.

- Highest level of customer support combined with first-class test tracks and fully-equipped confidential workshops.
- Excellent climatic conditions allow for year-round testing.
- Allocation of a dedicated customer service representative for each testing team ensures that the testing program runs smoothly and that objectives are achieved on time and within budget.
- Confidentiality and security, which are of the highest priority, with the complex designed to easily monitor all movement.
- Foresight of the industry's needs, as Applus+ IDIADA and TASS International have a global agreement to jointly design and manage next-generation test sites for connected and automated vehicles.

Proving Ground



- | | | |
|-----------------------|------------------------|----------------------|
| 0 General road | 4 Dynamic platform A | 9 Dynamic platform B |
| 1 High-speed circuit | 5 Dry handling circuit | 10 Off-road track |
| 2 External noisetrack | 6 Test hills | 11 Wet circle |
| 3 Fatigue | 7b Comfort track B | 12 Wet handling |



Engineering

- Body development
- Active and passive safety
- Powertrain
- Noise, Vibration & Harshness (NVH)
- Heating, Ventilating and Air Conditioning (HVAC)
- Reliability
- Electronics
- Advanced Driver Assistance Systems (ADAS)
- Smart mobility

Homologation

Official homologation capabilities recognized in all markets worldwide

Testing facility design

Integrated project management of test facilities for the automotive sector



The best facilities for the automotive industry



Circuit Parcmotor Castellolí

- The complex covers an area of 100 hectares offering **top-class facilities for every discipline and level of motorsport.**
- The ideal setting for **competition races, team training sessions, vehicle testing and development, manufacturer presentations and events, training courses, and leisure activities.**
- One of a kind racetrack thanks to the agreement with Cellnex Telecom, tasked with making the complex a **state-of-the-art, innovative testing area for the development of ITS technology.**



Circuit de Barcelona-Catalunya

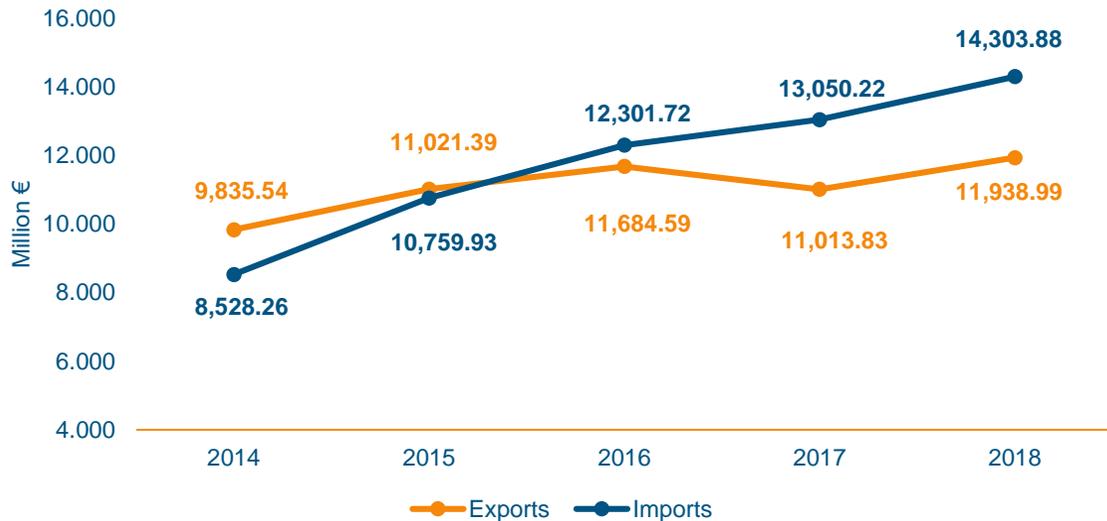
- With the **staging of the F1 Grand Prix, the MotoGP Grand Prix, the FIA Rallycross World Championship and other important motor sport competitions,** Circuit de Barcelona-Catalunya showcases its own name at a worldwide level.
- In addition to the **competition activity,** Circuit de Barcelona-Catalunya rents its facilities throughout the year for **private and collective tests, driving courses, incentive and training days, world presentations and many other events.** The rest of the spaces can also be used to carry out all kinds of **commercial, social and/or PR activities.**



Source: Circuit Parcmotor Castellolí. Circuit de Barcelona-Catalunya

Catalan Trade in the Automotive Industry

Catalan Foreign Trade in the Automotive Industry



- In 2018, **23.2%** of Spanish Automotive Exports were Catalan and **16.7%** of Catalan Exports came from the Automotive Industry.
- **Between 2014-2018, Automobiles Production** were the most exported subsector (**75.1%**), followed by **Components Production** and **Other motor vehicle parts (23.7%)** and **Production of vehicle bodyworks (1.2%)**.
- Between 2014 and 2018, **Germany, United Kingdom and France** were the three main destinations for Catalan exports.

- **Catalonia** is the Autonomous Community with the largest number of regular* exporters: **899 companies**, which account for **30.8% of the total in Spain**. In 2018, regular exporters accounted for **18.7%** of the total exporter companies in Catalonia.
- Exports from regular* companies established in Catalonia accounted for **11.411 M€** in 2018, which represents **95.6%** of total exports from Catalonia in the automotive sector.

Some of the most important regular exporters

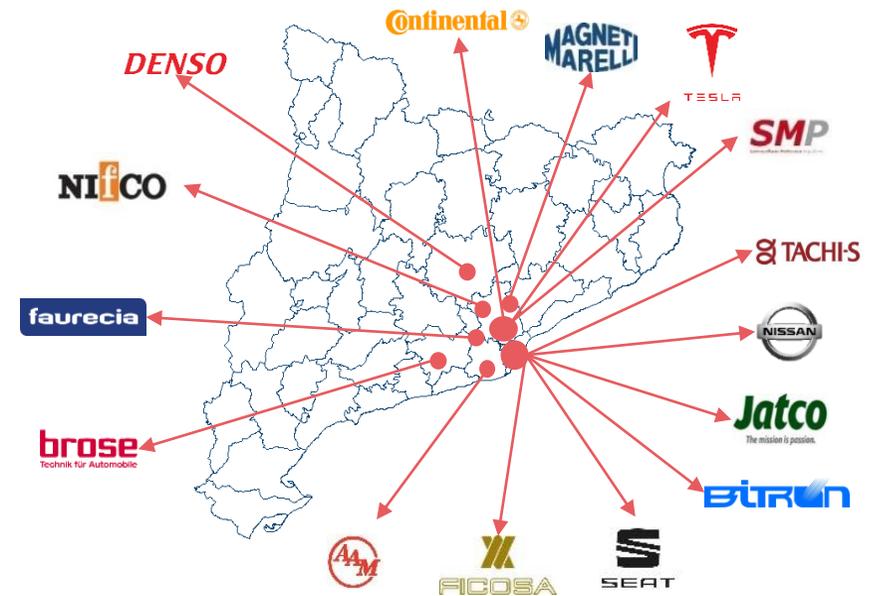


A leading destination for automotive FDI

From 2014 to 2018...

32 FDI projects were recorded
€4.127.72 M was invested
3,001 jobs were created

... in the sector in **Catalonia**



Between January 2014 and December 2018...



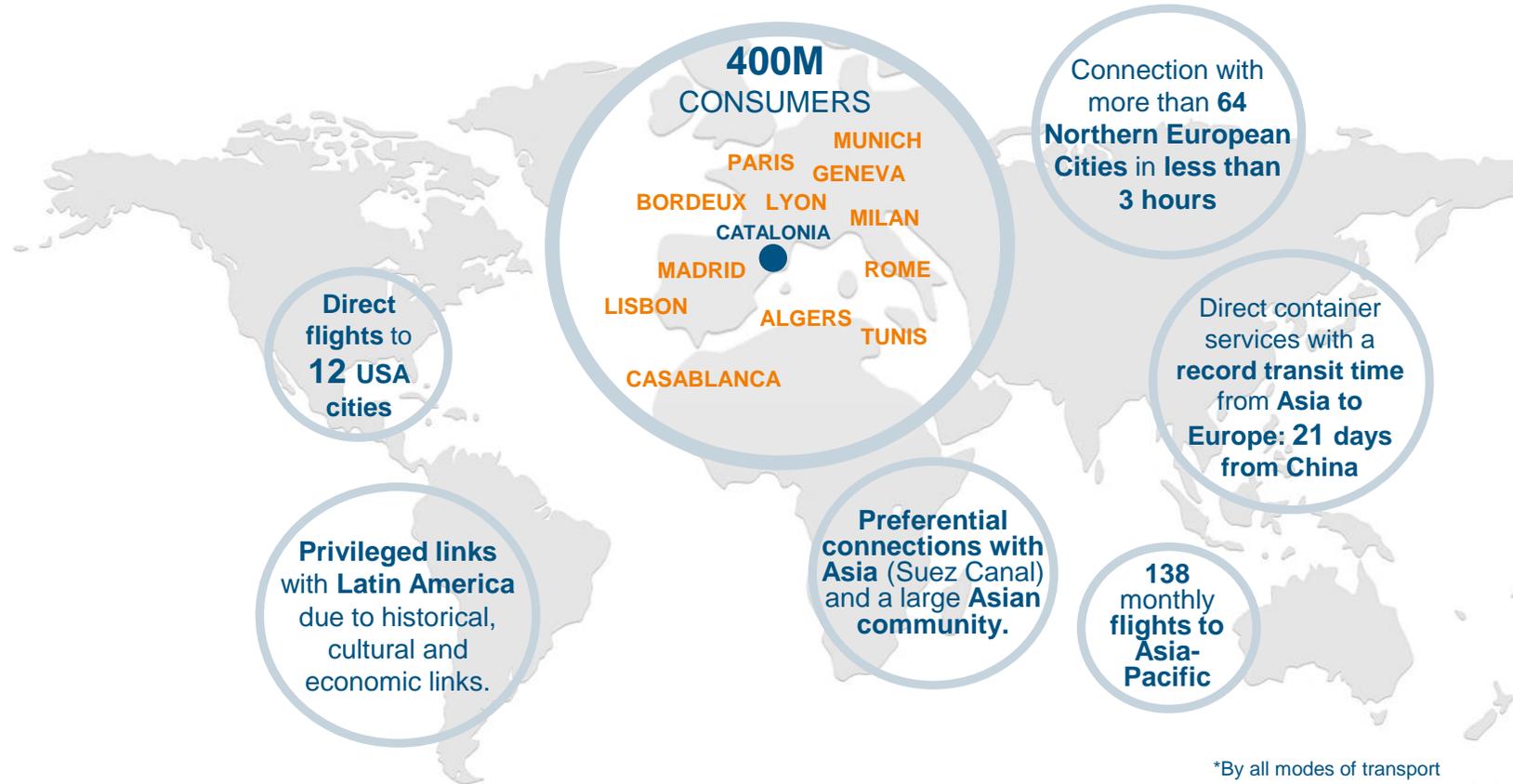
<p>Catalonia was the 5th European region in terms of capital investment, the 10th in number of projects and the 23th in job creation</p>	<p>Catalonia was the 1st region in Western Europe in terms of capital investment, the 4th in number of projects and the 5th in job creation</p>	<p>Compared to Eastern Europe, Catalonia was the 5th region in terms of capital investment, the 6th in number of projects and the 18th in job creation</p>
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... in the Automotive Industry 

Source: fDi Markets, 2014 –2018. Including both Automotive OEM and Automotive components

Unparalleled distribution capacity

Catalonia's excellent geostrategic position allows for efficient intercontinental connections to Asia and the Americas and easy fast distribution to Southern Europe and North Africa. The logistics network can reach **400M consumers** in Europe and the Mediterranean/Africa in less than **48 hours***.



*By all modes of transport
Source: Port of Barcelona (2018), Aena (2017)

Southern Europe's largest intermodal logistics hub

Catalonia is home to two of the main ports in the Mediterranean, a high-speed train station, an awarded international airport and highways seamlessly connected to the rest of the European road system.



Port of Barcelona

- Only port in Spain to be connected to the European continent using international gauge track.
- Holds the largest offer of logistics and transport services in Spain and Southern Europe.
- Have connectivity with the strategic points in its hinterland (such as Aragon, Madrid or Navarre)

Port of Tarragona

- 1st position in the AFNAC ranking about Quality Port for Vehicle Maritime Transport in Spain (2016)
- 2 specialized terminals with 5 Ro-Ro ramps
- Terminal Capacity for 11,400 vehicles
- 27,000 vehicles of storage capacity
- 200,000 vehicles transported in 2017 (all-time record)

Source: Port of Barcelona (2018), Aena (2017)

Opportunities in the automotive industry



Internationalization opportunities for Catalan companies



FRANCE

New car sales are on the rise and manufacturers are continuing to accelerate the launch of new models to stimulate demand and win market share. These good results reinforce the needs of French TIER 1 and TIER 2 subcontractors.

GERMANY

Germany is the European leader in the manufacture of cars and is at the forefront in the race for the electric, autonomous car of the future. German manufacturers are investing large sums to keep ahead of competitors from other continents and new players from other sectors, especially in technology.

FINLAND

In Finland passenger vehicles and heavy trucks are produced, as well as some buses, taxis, trailers and special vehicles. Digitization within the automobile industry has opened up a whole new field for the country's companies, which have a command of technology and design.

SERBIA

The automobile industry is one of the largest in Serbia, with a high production capacity and with highly skilled employees at all levels. Serbia supplies the majority of European vehicle manufacturers, as well as some in Asia.

AMERICA

EUROPE

ASIA AND OCEANIA

AFRICA

UNITED STATES

The car accounts for 86% of private transport in the U.S. Digitization is opening trends that are revolutionizing the transport system and decongesting roadways. The future of mobility is evolving towards a more environmentally friendly, efficient and safe system. Priority is being given to investments in the transport network, the inclusion of smart and sustainable mobility solutions.

MOROCCO

After the arrival of the Renault group in Tangier, the PSA-OPEL group is landing in Kenitra where will begin to assemble cars in January 2019 and where it has established its OPEN LAB headquarters to conceive the vehicle of the future for the African market. The major TIER 1 linked to these groups are or will also be established in Morocco.

CHINA

The Chinese Government is planning to put an end to fossil fuel cars. The production and sale of electric and hybrid vehicles are thus gaining unprecedented momentum which has generated a new industrial chain with new stakeholders and technologies.

SOUTH KOREA

The country's companies Hyundai-Kia, Samsung and LG implement global strategies for the launch of its own vehicle of the future, creating opportunities for suppliers of solutions and specialized services. There is a broad spectrum of potential local partners.

ISRAEL

Israel has advanced solutions and new technologies applicable to electric, autonomous and smart mobility, and to automotive technology. There are opportunities for suppliers of OEM and software to acquire technology and to search for partners.

JAPAN

Japan is one of the world's leading producers of vehicles and there are opportunities for subsectors related to the vehicle of the future, such as automatic control technology, the connected vehicle, fuel cells and electric vehicles.

INDIA

India is one of the most important manufacturers and users of vehicles in the world and it aims to convert 40% of its vehicles to electric by 2030. Great opportunities for manufacturers and for the auxiliary mobility industries, recharging systems and centres.

Source: Global trade mapping, 2018 by EIC (DGI – ACCIÓ)

Technological opportunities in Catalonia



Technology trends

The evolutionary trend of innovative technologies is to create new business models and change the way the traditional sectors operate. ACCIÓ has identified a number of **new technologies as being the main drivers of evolution and innovation in the future**. The **automotive industry** is a sector in which **many of these technologies are expected to be applied, which involve drastic changes**.

New technologies applicable to the automotive industry

			
Photonics	5G	Artificial intelligence	Internet of things
			
Nanotechnology and materials	Augmented and virtual reality	3D printing	Robotics

Source: EIC (DGI – ACCIÓ)

Business investment opportunities in Catalonia



SUSTAINABLE AND ENERGY-EFFICIENT VEHICLES

- Catalonia is **encouraging the use of vehicles run on sustainable alternative fuels**, as it is one of the recipient regions of the financial incentives for electric automobile purchase.
- **Specializing in the automotive industry**, both as regards manufacturing and R&D, Catalonia is a perfect location to manufacture alternative fuel vehicles and develop new breakthroughs.



MANUFACTURE OF COMPONENTS AND PARTS

- The needs of Catalan OEMs for companies and manufacturers of moulds and dies, new materials, components and plastic injection will give rise to opportunities for companies engaged in these areas.
- OEM manufacturers and aftermarket companies ensure an **industrial and commercial outlet for vehicle components and parts**.



ENGINEERINGS

- **R&D, innovation and new technologies** for the automotive industry increase the **opportunities to expand for engineerings already established in Catalonia, and for new incoming engineerings**.



MOBILITY AS A SERVICE

- Catalonia is an attractive location for shared economy businesses and startups. It hosts accelerators, international technology events, co-working spaces, etc. And it **attracts entrepreneurs, human talent and new opportunities from all over the world**. Some shared economy startups are already established in Catalonia, such as SocialCar, Airbnb, Badi, etc.



CONNECTED VEHICLE AND AUTONOMOUS DRIVING

- Catalonia has a **unique ecosystem to promote connectivity**, hosting some of the sector's most important trade fairs and congresses and promoting the use of technology and digital information. It also offers a perfect setting for the needs of development and validation of connected and autonomous test drives.

Source: EIC (DGI – ACCIÓ)

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Take a look at the full report:

<http://catalonia.com/.content/documents/automotive-industry-in-catalonia.pdf>

More information about the sector and related news:

<http://catalonia.com/trade-with-catalonia/automotive.jsp>

