



Produced by French manufacturers are sold abroad

# €5.8 BILLION

French automotive industry research and development budget in 2014

# €45

BILLION

Automotive products sold abroad

# **79**%

Share of domestic travel in France using passenger cars

# 85%

Share of domestic freight transport in France by road

# THE FRENCH AUTOMOTIVE INDUSTRY

→ ANALYSIS & STATISTICS 2017

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#### A WORD FROM THE PRESIDENT



From 2014 to 2016, the market for private cars, light commercial vehicles and commercial vehicles grew in France. This recovery continued in 2017, with an increase in registrations of private cars at a sustained high level (+3%) during the first half year. After years of crisis where the market fell to very low levels (1.8 million private cars in 2013), it has returned to average long-term figures, even going over the 2 million unit threshold.

This trend is also in evidence on the European markets, which had been severely impacted by the crisis. For the light vehicle segment, more than 4 million units had been lost. In 2016 and 2017, the market for light vehicles has been in the upper part of the cycle with an annual rhythm of 15 million units compared to 11 million 3 years earlier.

In the rest of the world, generally, the buoyancy of the automotive industry continues; regional situations can differ, but global production increased 5%

In this favourable context, French automakers have grown their businesses, producing 6.4 million vehicles in 2016, an all-time record. Numerous industrial sites outside Europe have increased their volumes. New partnership agreements are also emerging for the construction of new sites. In 2017, new brands will widen the scope of

French groups. French automotive construction is consolidating its global position as part of an ongoing dynamic. In France, production of light vehicles has progressed regularly since 2013, now exceeding 2 million units, nearly 300,000 more than in 2013. This growth has benefited numerous industrial sectors: first-tier equipment manufacturer suppliers of course, but also foundries (the automotive industry accounted for 49% of their business in 2016), mechanical activities (10%), industrial rubber (70%) and plastics (18%).

In this output, the share of higher added value cars is increasing (LCVs, high-end ranges, 'crossovers', electric cars, top-of-the-range versions). This strategy, supported by corporate agreements entered into by French manufacturers, plus government measures, has closed part of the competitiveness gap that opened with Germany post-2000. However, this palliative approach does have its limits. French automotive construction, like the rest of French industry, needs new measures to reduce social charges and taxation on production to be able to fight on equal terms with its European and global competitors.

French automakers must protect their operational margins because they have three costly challenges ahead in terms of research and development: competition, environment and digital.

Automakers must invest massively to build attractive models which allow them to retain and gain market share, meet environmental expectations, reduce the environmental footprint of vehicles, and finally on-board digital both in their products and in their use.

Projects such as the 2 litres per 100 km vehicle, the driverless vehicle, and others, symbolise this orientation of the automotive sector in line with current and future trends. Electrification of vehicles is a key technology to reduce CO. emissions to which the automotive industry is committed globally. French automakers' R&D is now very much focused on the development of driverless and connected vehicles. This ongoing revolution, beyond the implementation of technologies allowing the vehicle to guide itself, means that international road traffic regulations will have to be overhauled. With this resolutely new user experience, many challenges lie ahead: improving safety, making traffic more fluid, promoting economic driving and making mobility accessible to all. Furthermore, the driverless car will allow users to change the way they spend their driving time, converting it into pleasant, productive

moments, and freeing them up for professional and leisure pursuits.

In 2016, road traffic increased 2% in France. The car remains the main form of passenger (79%) and merchandise (85%) transport. To facilitate this increased mobility, the French vehicle stock has grown more rapidly. This return to growth foretells a renewal of the vehicle stock over the coming years. The cycle becomes more virtuous... Since 1990, the improved energy efficiency per kilometre driven per car user (+15%) or per tonne of merchandise over one kilometre (+29%) clearly illustrates this progress. In a household consumer survey published by INSEE, the moderate price of fuel over the past two years has allowed households to refocus their expenditure on the purchase of new vehicles, further supporting this development.

The automobile also offers new uses that have grown out of emerging connectivity technologies, mutualising costs and bringing better fill rates for vehicles. Automakers are key players in these new mobilities; they invest heavily, create dedicated pathways and propose original mobility services.

Enjoy the read!
Christian PEUGEOT

#### THE FRENCH AUTOMOBILE MANUFACTURERS' ASSOCIATION

The Comité des Constructeurs Français d'Automobiles (CCFA) is the French automobile manufacturers' trade association. Its members are: Alpine, PSA (Automobiles Citroën - Automobiles Peugeot), Renault and Renault Trucks. Its mission is to study and defend the business and industrial interests of all French automobile manufacturers on both national and international levels (excluding labor issues which are the remit of the UIMM - the union of specialties and metallurgical industries).

CCFA's activities encompass information, analysis and communication for its members as well as for government agencies, public officials, members of parliament, the manufacturing sector, the automotive and road industry, research bodies, the media and the general public.

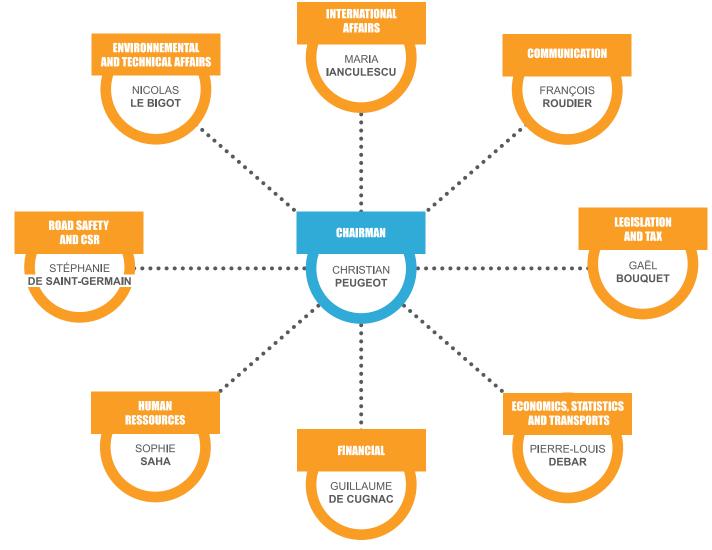
Other sectors of the automotive industry (parts and equipment manufacturers, dealers, body manufacturers) have their own trade associations (FIEV, Fédération des Industries des Équipements pour Véhicules - French Automotive Equipment Industries Association, CNPA, Conseil National des Professions de l'Automobile - National Council of Automotive Professions, FFC, Fédération Française de Carrosserie - French Bodybuilding Federation, FIEEC, Fédération des Industries

Electriques, Electroniques et Communication - Electrical, Electronic and Communications Industry Federation, FIM, Fédération des Industries Mécaniques - Mechanical Industry Federation, FFF, Fédération Forge Fonderie -Forging Foundry Federation, GPA, Groupement Plasturgie Automobile - Automotive Plastics Group, SNCP, Syndicat National du Caoutchouc et des Polymères - National Union of Polymers and Rubber Industries, etc.). In 2009, during the crisis, French automobile manufacturers and their suppliers came together within the Liaison Committee of Automotive Suppliers (CLIFA - Comité de Liaison des Fournisseurs de l'Automobile) to establish the PFA, French Automotive & Mobility Cluster, which has the task of contributing to reinforcing the French automotive industry. Among the various committees making it up (including strategy and competitiveness, industrial performance, trades and skills), in 2012 the Comité Technique Automobile (CTA -Automotive Technical Committee) was added, along with its two boards, the Conseil de Standardisation Technique Automobile (CSTA -Automotive Technical Standardisation Council) and the Conseil de Recherche Automobile (CRA - Automotive Research Council), their role being to guide research and development.

Foreign brands are represented by the Chambre Syndicale Internationale de l'Automobile et du Motocycle (CSIAM - International Association of the Automobile and the Motorcycle). CCFA is associated with Brussels-based ACEA, the European Automobile Manufacturers' Association.

It is also a member of the OICA, Organisation Internationale des constructeurs de l'automobile (OICA - International Organisation of Motor Véhicle Manufacturers, which brings together national associations representing the industry from around the world.





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#### THE CCFA AND ITS PARTNERS



#### ► INTERNATIONAL, EUROPEAN AND **NATIONAL MANUFACTURERS ASSOCIATIONS**

**OICA:** International Organisation of Motor Vehicle Manufacturers

ACEA: European Automobile Manufacturers' Association

VDA: Verband der Automobilindustrie

#### **► INDUSTRY PARTNERS**

PFA: French Automotive & Mobility Cluster GALIA: Groupement pour l'Amélioration des Liaisons dans l'Automobile

UTAC: Union Technique de l'Automobile, du Motocycle et du Cycle

GARAC: Ecole Nationale des Professions de l'Automobile

**URF:** Union Routière de France

**AUTF:** Association des Utilisateurs de Transport de Fret

#### **► SPECIALIST BODIES** & RESEARCH INSTITUTIONS

CEPII: Centre d'Etudes Prospectives et d'Informations Internationales

SIA: Société des Ingénieurs de l'Automobile AIRPARIF: Association de surveillance de la qualité de l'air en Ile-de-France

**GERPISA:** Groupe d'Etudes et de Recherches Permanents sur l'Industrie et les Salariés de l'Automobile

**UNIFAB:** Union des Fabricants pour la protection internationale de la propriété intellectuelle

ADEME: Agence de l'Environnement et de la Maîtrise de l'Energie

**CITEPA:** Centre Interprofessionnel Technique d'Etudes de la Pollution Atmosphérique

#### **► AUTO CLUBS**

**ACF:** Automobile Club de France ACA: Automobile Club Association 40M: 40 millions d'Automobilistes

#### ► GOVERNMENTAL AUTHORITIES, **PARLIAMENT**

CNI: Conseil National de l'Industrie **CSF:** Comité Stratégique de Filière **CCTN:** French National Transport Accounting Commission

#### **▶ PROFESSIONAL ECONOMIC CIRCLES**

MEDEF: Mouvement des Entreprises de France (Employers' association)

GFI: Groupe des Fédérations Industrielles (Industrial employers' association)

UIMM: Union des Industries et Métiers de la Métallurgie (Mettalurgy employers' association) GIM: Groupe des Industries Métallurgiques de la Région Parisienne (Paris region metallurgical industries group)

#### **▶ PROFESSIONAL AUTOMOBILE ASSOCIATED ORGANISATIONS**

CSIAM: Chambre Syndicale Internationale de l'Automobile et du Motocycle

FFC: Fédération Française de la Carrosserie

FIEV: Fédération des Industries d'Equipements pour Véhicules (French Automotive Equipment Industries Association)

FIM: Fédération des Industries Mécaniques (Federation of Mechanical Industries)

FFF: Fédération Forge Fonderie

**SNCP:** Syndicat National du Caoutchouc et des Polymères (National Union of Rubber and Polymer

**GPA:** Groupement Plasturgie Automobile (Automotive Plastic Converters Association)

CNPA: Conseil National des Professions de l'Automobile (National Council of Automotive Professions)

UFIP: Conseil National des Professions de l'Automobile (National Council of Automotive Professions)

# A GLOBAL AUTOMOTIVE MARKET IN GROWTH, RENEWED BUOYANCY BUT STILL WITH CONTRASTING LOCAL TRENDS

The European markets, which had fallen to very low levels post-2009, have continued their recovery, with French automakers reporting substantial additional volumes. A diversification

of markets outside Europe has presented French manufacturers with new opportunities (China, India, Turkey), helping to limit the impact of severe crises in other emerging countries (Brazil, Russia, etc.). Since 2014, French groups' turnover growth across the world has been robust and their share in global auto production has increased.

#### ► KEY DATA (IN THOUSANDS)

	1997	2007	2016	Change 2016/2015	Change 2016/2007
World production of French manufacturers	4,046	6,188	N/A	N/A	N/A
Passenger cars	3,472	5,301	5,782	11.6%	9.1%
Light commercial vehicles	507	830	881	5.9%	6.2%
All light vehicles	3,979	6,131	6,664	10.8%	8.7%
Heavy trucks (at constant scope)	36	58	N/A	N/A	N/A
Production of French manufacturers in France	2,525	2,573	1,753	5.9%	-31.9%
Passenger cars	2,235	2,165	1,300	4.7%	-40.0%
Light commercial vehicles	258	352	453	9.3%	28.7%
All light vehicles	2,493	2,518	1,753	5.9%	-30.4%
Heavy trucks	30	55	N/A	N/A	N/A
Vehicle exports outside France	2,822	4,697	5,353	13.4%	14.0%
Passenger cars	2,526	4,110	4,735	13.8%	15.2%
Light commercial vehicles	276	549	598	10.2%	8.9%
All light vehicles	2,802	4,659	5,333	13.4%	14.5%
Heavy trucks	20	38	20	-2.0%	-46.5%
Automotive exports outside europe (17 countries)	659	2,110	3,257	18.6%	54.3%
Passenger cars	563	1,914	3,036	19.2%	58.6%
Light commercial vehicles	88	178	210	11.5%	17.8%
All light vehicles	651	2,092	3,246	18.6%	55.1%
Heavy trucks	8	18	11	4.0%	-39.0%
Vehicle registrations in France	2,068	2,629	2,478	5.7%	-5.7%
Passenger cars	1,713	2,110	2,015	5.1%	-4.5%
Light commercial vehicles	313	461	410	8.1%	-11.1%
All light vehicles	2,026	2,571	2,425	5.6%	-5.7%
Heavy trucks	39.3	52.5	47.1	13.0%	-10.3%
Coaches and buses	3.1	5.5	6.1	-9.9%	10.3%
Registrations in Europe (17 countries) of vehicles from French groups	3,300	3,906	3,450	5.4%	-11.7%
Passenger cars	2,841	3,181	2,777	4.8%	-12.7%
Light commercial vehicles	432	690	651	8.2%	-5.6%
All light vehicles	3,273	3,871	3,429	5.4%	-11.4%
Heavy trucks	27	35	22	3.8%	-37.8%

In 2016, global production of light vehicles by French manufacturers reached a new high, up around 8% in 2016 compared to 2007, in a global economic context marked by persistently strong growth in emerging countries until 2013 and the recovery of European markets since 2014. The US has substantially exceeded its pre-crisis levels, which is not yet the case in developed countries and the euro zone. Trends in emerging countries are contrasted, with continued growth in China, but a dip in Brazil and Russia since 2013. French group sales outside Western Europe have increased by more than 1.1 million units since 2007, to 3.3 million in 2016. These areas, where generally car use rates are much lower than in Western Europe (22 vehicles per 1,000 habitants in India, 118 in China compared to 582 in the European Union), represent major potential markets, and cyclical fluctuations apart, investments must be continued and increased.

Sales in the mature automotive area of Western Europe continue to be the foundation for French automakers. They fell by over one million units over the period 2007-2013 to 2.8 million, further in particular to the collapse of the South European and French markets. Since, registrations in Western Europe have recovered to 3.5 million units, i.e. an increase of 647,000 units. To meet the challenges of the competitiveness of their factories, globalisation, the environment and the onset of digital, manufacturers have substantially increased investment (+46% between 2014 and 2016).



### A GLOBAL AUTOMOTIVE MARKET IN GROWTH, RENEWED BUOYANCY **BUT STILL WITH CONTRASTING LOCAL TRENDS**

	Units	2015	2016	Change 2016/2015
Market share of French groups (new light vehicles)				
In France	(%)	56.0%	55.2%	-0.7 point
In Europe (17 countries) excluding France	(%)	15.7%	15.6%	-0.1 point
In Europe (17 countries)	(%)	21.9%	21.7%	-0.2 point
Market share of French brands (new heavy trucks)				
In Europe (17 countries)	(%)	7.8%	8.1%	-0.3 points
French manufacturers' position in world production (PSA and Renat	ult Groups)			
Passenger cars	(%)	7.6%	8.0%	0.4 point
Commercial vehicles	(%)	3.7%	3.8%	0.1 point
Total	(%)	6.6%	7.0%	0.4 point
French automobile international trade				
Exports	(€ billions)	44.5	46.2	+3.8%
Imports	(€ billions)	51.0	55.6	+9.1%
Balance	(€ billions)	-6.5	-9.5	+45.5%
Automotive industry contribution to foreign trade goods balance				
Exports	(%)	10.0%	10.4%	0.4 point
Imports	(%)	10.0%	10.9%	0.9 point
Worldkeyfiguresforfrenchmanufacturers(PSAandRenaultGroups)				
Sales	(€ billions)	100.0	105.3	+5.3%
Capital expenditure	(€ billions)	3.5	4.1	+19.6%
Number of employees	(thousands of people)	302	295	-2.4%
Jobs related to the automotive industry in France				
Automotive industry	(thousands of people)	224	216	
As a share of industry (including food industries, etc.)	(%)	7%	7%	
Total jobs (directly and indirectly related)	(thousands of people)	2,273	2,182	
As a % of the employed working population	(%)	9%	8%	

In France, road traffic has grown since 2012 at a more sustained pace (+1% on average), with a marked acceleration in 2016 (+1.6%). The key factors have been more dynamic economic growth and lower fuel prices. Consumers have to arbitrate between different consumption items. Automotive expenditure now represents less than 9% of household expenditure compared to almost 11% in 1990. However, the vehicle purchase item is recovering because of buoyant sales in the new car market featuring advanced technologies to adhere to new environmental standards. These factors contribute to the renewal of the vehicle stock. Both for private cars and commercial vehicles, renewal trends are more marked and more beneficial to the market. In 2016, consumption of fuel in France was close to that observed at the beginning of the century, whilst total traffic has increased by 16%.

In 2016, in Western Europe, markets for new vehicles once again grew thanks in particular to the dynamic UK market and the recovery of the Italian and Spanish markets. In a context which nevertheless remains highly competitive, this has led to a recovery of market penetration of French automakers (a share of 15.6% in 2016 compared to 14.7% in 2013) in that zone (excluding France).

The share of European sales as a proportion of all French groups' sales will not last, because of auto-density variations between this mature zone and the emerging countries. Indeed, they produced around 60% in their zone of origin in 2016, compared to 80% in 2006.

In Eastern Europe, the markets progressed in the member countries of the European Union, but fell in Russia. The robustness of the growth of sales in China, which became the biggest automotive market in the world in 2009, explains the overall growth of the Asian market.

The Iranian market, where French automakers are well represented, has grown 80% since the low point in 2013, in a context of economic recovery and openness to the outside world. Sales of French groups - 1.4 million vehicles in 2016 progressed substantially in Asia (+33%).

In Latin America, the markets once again fell as French automakers' sales show. Private car deliveries have fallen 39% since 2013. However, they rebounded by 45% in Argentina, but fell 12% in Brazil in 2016 compared to 2015.

Finally, French automakers' sales have fallen

sharply in Africa to 221,000 vehicles, in a declining market. In the North African markets, where they are well represented, including with production plants, Algeria (-59%) suffered a major reversal unlike Morocco (+24%).

In the emerging countries, where sales should grow longer term, French automakers continued to develop both commercially and industrially, with or without partnerships, so as to satisfy growing vehicle needs. They have decided on new investments and to renew and adapt their vehicle ranges. In particular they continue their efforts in Asia (PSA, with its two partners in China, and Renault in India and in China) and in different countries of Africa.

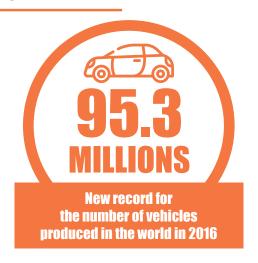
#### **WORLD MOTOR VEHICLE PRODUCTION**

In 2016, global production of vehicles progressed 4.7% to 95.3 million (after a moderate growth in 2015), continuing uninterrupted growth since the 2009 collapse. This increase represented 4,300,000 vehicles in volume. The results show substantial variations. Asia and Africa grew by 8%, European Union 3% and NAFTA 1%. Whereas Eastern Europe (-1%) and, even more so, South America (-11%), suffered losses. Global growth outside China was only 1%.

Global production of vehicles was around 50 million units in 1990, and nearly 60 million in 2000. It passed the 70 million threshold pre-crisis, before collapsing in 2009. Since 2000, the annual average growth rate has been 3%.

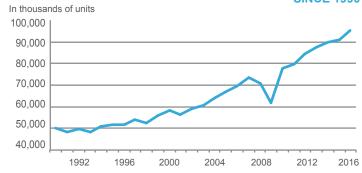
In developed zones, production trends compared to 2007 levels are divergent; decline in Western Europe (-11%) and Japan (-21%), but 18% growth in NAFTA (Canada, US, Mexico) and 3% in South Korea

In emerging zones and countries - today's automotive expansion segment - production is far higher than before the crisis. In 2016, compared to 2007, it was 217% higher than in 2007 in China, +186% in Indonesia, +96% in the Philippines and +51% in Thailand.



In thousands	2015	2016	Change in %
EUROPE	21,167	21,697	2.5
WESTERN EUROPE	14,416	14,892	3.3
Germany	6,033	6,063	0.5
Belgium	409	399	-2.4
Spain	2,733	2,886	5.6
France	1,972	2,090	6.0
Italy	1,014	1,104	8.8
The Netherlands	44	44	0.7
The United Kingdom	1,682	1,817	8.0
Sweden	189	205	8.7
CENTRAL AND EASTERN EUROPE	5,392	5,319	-1.3
Turkey	1,359	1,486	9.4
NORTH AND SOUTH AMERICA	20,962	20,857	-0.5
NAFTA	17,955	18,166	1.2
South America	3,008	2,691	-11
ASIA-PACIFIC	47,989	51,815	8.0
ASEAN	3,896	4,020	3.2
China	24,567	28,119	14.5
South Korea	4,556	4,229	-7.2
India	4,161	4,489	7.9
Japan	9,278	9,205	-0.8
AFRICA	836	904	8.0
TOTAL	90,955	95,273	4.7

# CHANGES IN WORLD MOTOR VEHICLE PRODUCTION SINCE 1990





(1) ALENA: Canada, USA, Mexico

(2) ASEAN: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines,

Singapore, Thailand, Vietnam

Source: OICA, CCFA estimates for June 2017.

In Western Europe, production increased 3% in 2016 compared to the previous year with contrasting results. Countries like Italy (+9%), Sweden (+9%), Spain and France (+6%) progressed, whilst others such as Portugal (-9%) declined. In Germany, production remained steady

at a higher level. In Eastern Europe, Russia's decline continued (-5%).

On the American continent, NAFTA production increased slightly (+1%) but once again fell in South America (-11%).

In Asia-Oceania, which accounts for more than half of global production, output increased in Iran (+31%), the Philippines (+18%) and China (+14%). It fell back slightly in Japan (-0.8%) and more sharply in South Korea (-7%).

#### **WORLD MOTOR VEHICLE PRODUCTION**

Between 2010 and 2016, global production of vehicles (95.3 million) increased 22% i.e. by 18 million units. Since 2010, the global automotive industry has remained dynamic overall, except in South America.

In developed zones and countries, production increased by almost 6.6 million vehicles to 46.5 million units (+17%). They represented half of global production in 2016, the same proportion as in 2010. Within those zones, production in North America increased by 6 million units (+49%) thanks to Mexico, in particular, whilst in Western Europe, it increased by 1,100,000 (+8%). Production in Japan fell by around 420,000 units

in 2016 (i.e. 4% down on 2010). However, South Korea, having benefitted in particular from more favourable exchange rate movements, was relatively stable (in was in progress in 2015).

In emerging countries and zones, production increased by 9 million vehicles, based on the five following areas:

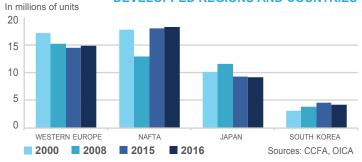
- China (+9.9 million), which represented 30% of global production in 2016, compared to 24% in 2010 :
- Central and Eastern Europe and Turkey (+740,000 units and a share of 7%, i.e. the same level as in 2010);
- Indonesia, Iran, Malaysia and Thailand (+435,000

units and a share of 5%, compared to 6% in 2010);

- South America (-1.5 million and a share of 3%, compared to 6% in 2010);
- India (+930,000 and a share of 5%, i.e. the same level as 2010).

In Central and Eastern Europe, the vigour demonstrated by the new member states of the European Union contrasts with the severe decline in production in Russia, with 1.3 million vehicles in 2016 (-42% compared to it's highest level in 2012).

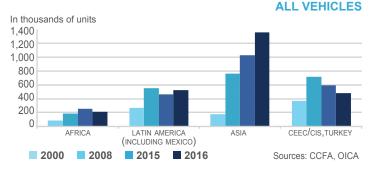
#### **DEVELOPPED REGIONS AND COUNTRIES**



#### **EMERGING REGIONS AND COUNTRIES** In millions of units $30^{\circ}$ 25 20 15 10 5 CENTRAL AND EASTERN EUROPE, TURKEY INDONESIA, IRAN, MALAISIA AND THAÏLAND CHINA INDIA SOUTH AMERICA 2000 2008 2015 2016 Sources: CCFA, OICA



## MARKETS OF FRENCH MANUFACTURERS OUTSIDE EU-17:



#### WORLD MARKETS OF FRENCH MANUFACTURERS: EVOLUTION COMPARED WITH 1997

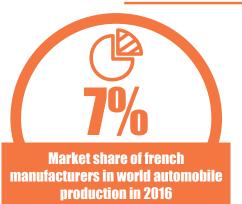


In this context of dynamic growth of global production, French automakers have substantially bolstered their deliveries to emerging areas. After a growth between 2000 and 2008, deliveries outside the 17 countries of the European Union had dipped in 2009 and then recovered substantially over the following years. In 2016, they increased compared to 2010, except in Latin America, including Mexico (-92,000 units), where the markets keep

on declining. Hence, deliveries were up in Asia (+224,000 units), in the countries of Central and Eastern Europe and Turkey (+119,000 units), and in Africa (+22,000 units). In Europe, deliveries to Spain and Italy continued to recover (+58,000 units to each country) after downturn caused by the global crisis.



#### **WORLD RANKINGS OF AUTOMOBILE MANUFACTURERS**



The 10 biggest manufacturers, including French groups PSA and Renault, represented around 70% of global production. Each produced over three million vehicles.

In 2016, French manufacturers benefitted in volume terms from the recovery in Europe; they occupied the ninth and tenth global ranking respectively. French automakers accounted for 7% of global production, substantially lower than the 2001 record of 10%. However, their share should grow in the coming years, because of their organic growth and the inclusion of new brands by their manufacturers

Car manufacturers have become substantially internationalised since 2000 and continue to develop industrial facilities outside their home countries. European, America, Japanese and Korean manufacturers produced between 60 and 70% of their vehicles in their own areas in 2000, compared to 30-50% in 2016. Japanese manufacturers were the most internationalised (they only made 33% of their vehicles in Japan), followed by the Koreans (45% in Korea). Even emerging countries manufacturers, Geely and Tata, made a large part of their production outside their home countries (33 and 50% respectively).

# ► WORLD MOTOR VEHICLE PRODUCTION IN 2016 (IN THOUSANDS)

Rank	GROUPS	Year 2015	Year 2016	Change %
1	VOLKSWAGEN	10,053	10,312	2.6
2	TOYOTA	10,084	10,213	1.3
3	GM	9,490	9,941	4.8
4	HYUNDAI	7,988	7,890	-1.2
5	FORD	6,393	6,429	0.6
6	NISSAN	5,170	5,556	7.5
7	HONDA	4,544	4,999	10.0
8	FIAT	4,865	4,681	-3.8
9	RENAULT	3,033	3,511	15.8
10	PSA	2,982	3,153	5.7
11	DAIMLER AG	2,670	2,964	11.0
12	SUZUKI	3,034	2,945	-2.9
13	SAIC	2,261	2,567	13.5
14	BMW	2,280	2,360	3.5
15	CHANGAN	1,540	1,716	11.4
16	MAZDA	1,541	1,586	2.9
17	BAIC	1,170	1,392	19.0
18	DONGFENG MOTOR	1,211	1,315	8.6
19	GEELY	1,000	1,266	26.7
20	GREAT WALL	870	1,094	25.8
21	MITSUBISHI	1,219	1,092	-10.4
22	TATA	1,010	1,085	7.4
23	SUBARU	939	1,025	9.2
24	CHERY	526	696	32.3
25	ISUZU	669	669	
26	IRAN KHODRO	509	662	30.0
27	ANHUI JAC AUTOMOTIVE	584	651	11.5
28	MAHINDRA	572	604	5.7
29	FAW	497	557	12.2
30	SAIPA	369	553	50.0
31	BYD	447	511	14.3
35	AVTOVAZ	308	278	-9.8
36	VOLVO-UD TRUCKS- RENAULT TRUCKS-MACK	216	200	-7.5
39	ASHOK LEYLAND	135	145	8.1
40	PACCAR	147	139	-5.2

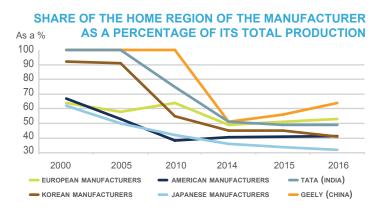
Note: The production of Chinese manufacturers does not include joint-ventures.

(1) The vehicles include passenger cars, light commercial vehicles, heavy industrial vehicles, and coaches and buses. There may be double accounts between manufacturers.

(2) The output of GM and Ford include their activities in China.

(2) The output of GM and Ford include their Sources: OICA, CCFA estimates July 2017





In a context of dynamic growth, global production however increased by 5% with contrasting results from one group to another.

Toyota group, a chart-topper since 2006, saw its production increase (+1%). GM also progressed (+5%) whilst Ford stabilized (+0.6%). Volkswagen group (+3%), which is very present in emerging countries, held on to second place in 2016.

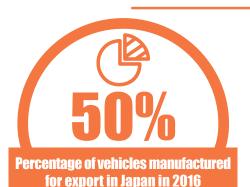
Amongst the Asian manufacturers, the situation was globally positive, with Hyundai-Kia (-1%/4<sup>th</sup> ranking) and Nissan (+8%/6<sup>th</sup> ranking) not moving in the rankings. Honda (+10%/7<sup>th</sup> rank) moved up, Suzuki-Maruti down (-3%/11<sup>th</sup> rank).

The European groups increased production: generalists PSA (+6%), Renault (+16%) and the high-end German specialists: BMW (+4%),

Daimler (+11%). Fiat's production declined (-4%).

Manufacturers in emerging countries (China, India and Russia) also reported highly contrasted growth rates. Production at SAIC, the biggest Chinese group, increased (+14%) as did Tata's (+7%); whilst production in the Dongfeng Motor group (+9%) rebounded, and that of Avtovaz decreased but at a lesser rate than the previous year (-10%).

#### TRENDS IN PRODUCTION AND TRADE AMONG THE WORLD'S LEADING AUTOMOTIVE REGIONS



China, which became the largest manufacturer in the world in 2010, manufactured primarily to satisfy its domestic market: imports (-2% at 1 million vehicles) and exports (+7% at 0.8 million vehicles), each represented less than 5% of production.

The European Union (now 28 countries) became the second world's leading production area thanks to the net growth in the domestic market and buoyant exports (1/3 of production).

In North America, including Mexico, production slightly decreased, but remains at a high level.

Production is primarily for the local market, with exports only accounting for 10%.

In Japan, exports represent 50% of production, which decreased 4% since 2010. Imports still account for around 5% of total vehicle registrations.

		European Union (1)	USA, C	anada and Mexico (3)		Japai
PASSENGER CARS	5					
PRODUCTION	In thousands	Index (100=2000)	In thousands	Index (100=2000)	In thousands	Index (100=2000
1990	12,726	86	7,150	101	9,753	11
2000	14,779	100	7,092	100	8,359	10
2010	15,260	103	5,084	72	8,310	9
2016	16,783	114	6,730	95	7,874	9
IMPORTS (2)	In thousands	Share of production	In thousands	Share of production	In thousands	Share of productio
1990	1,495	12%	3,029	42%	186	20
2000	2,629	18%	2,225	31%	268	30
2010	1,900	12%	2,310	45%	186	20
2016	2,786	17%	2,372	35%	294	4%
EXPORTS (2)	In thousands	Share of production	In thousands	Share of production	In thousands	Share of production
1990	1,732	14%	288	4%	4,482	46%
2000	2,715	18%	1,130	16%	3,796	459
2010	3,400	22%	857	17%	4,275	519
2016	6,205	37%	1,574	23%	4,118	529
LIGHT COMMERCI	AL VEHICLES					
PRODUCTION	In thousands	Index (100=2000)	In thousands	Index (100=2000)	In thousands	Index (100=2000
1990	1,598	69	4,553	53	3,539	19
2000	2,327	100	8,669	100	1,782	10
2010	1,819	78	7,089	82	1,319	7
2016	2,482	107	11,146	129	1,374	7
IMPORTS (2)	In thousands	Share of production	In thousands	Share of production	In thousands	Share of productio
1990	258	16%	399	9%	1	0%
2000	242	10%	915	11%	8	0%
2010	310	17%	1,136	16%	2	0%
2016	406	16%	2,615	23%	1	00
EXPORTS (2)	In thousands	Share of production	In thousands	Share of production	In thousands	Share of productio
1990	179	11%	32	1%	1,349	380
2000	248	11%	339	4%	659	379
2010	330	18%	177	2%	566	43'
2016	529	21%	244	2%	516	389

<sup>(1)</sup> The number of countries included in the 'European Union' corresponds to the number of member states in the year in question.

- (2) EU community trade is not included.
- (3) Mexico is included from 2009.

Sources: OICA, Eurostat, CCFA since 1991, Ward's Automotive Reports as of 1999, JAMA

#### ► CHINA - ALL VEHICLES (IN THOUSANDS)

	Production	Exports	Imports
2010	18,265	499	
2015	24,567	728	991
2016	28,119	810	1,077

Sources: OICA, CAAM

Since 2000, the trends in the three major automotive industry zones have been contrasted.

In the European Union (now 28 countries), growth of vehicle production was 13% (compared to +15% in 2007) and trade – already buoyant – more than doubled

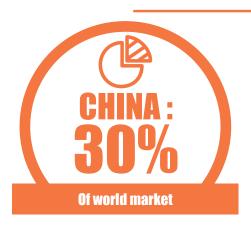
In North America, including Mexico, since 2009, production exceeded 2000 output by 13%. Imports, already very high in 2000, and sustained since,

exceeded 2000 levels by 59%. Exports only represented 10% of production (1/3 for the EU and 1/2 for Japan).

Finally in Japan, vehicle output remained stable because of the decline in the domestic market and slow export growth, initially boosted in line with the depreciation of the yen, to a level 51% above 2000 figures by 2008. In 2015, exports were only 4% higher, primarily because Japanese manufacturers are manufacturing outside Japan.

In China, production and exports have increased substantially since 2010, with respective gains of 54% and 62%.

#### **WORLD VEHICLES MARKETS**



In 2016, the global automotive market accelerated its growth (+4.6% to 93.9 million vehicles), thus establishing a new record for the seventh consecutive year. Registrations progressed except for North and South America due to Brasilian market collapse, Japan, South Korea and Africa.

The world's five leading markets (China, US, Japan, Germany, India) accounted for 62% of global sales. In 2005, China and India ranked third and twelfth respectively. In 2016, sales in China out-paced those in all other continents taken separately (Asia outside China).

Automotive markets are highly correlated to the economic situation with cyclical phenomena mostly reflecting those trends. They are also characterised

by substantial short-term fluctuations, both for renewals and first purchases.

The share of the global market of the main industrialised zones, where car ownership rates have arrived at maturity, was 47% in 2016, compared to 69% in 2005.

In emerging areas, market trends have generally been downward compared to previously higher levels. Since 2012, sales in Russia and Brazil have fallen respectively by 55% and 46%. The Algerian market lost almost 2/3 compared to its high point in 2013.

		Passen	ger cars		L	ight comme	rcial vehicle	s	То	tal	Change
	201	15	20	16	20	15	20	16	2015	2016	2016/2015
	thousands	%	thousands	%	thousands	%	thousands	%	thousands	thousands	%
EUROPE	16,411	24.7	17,292	24.9	2,625	11.2	2,843	11.7	19,036	20,135	+5.8
Western Europe	13,247	20.0	13,953	20.1	1,961	8.4	2,171	8.9	15,208	16,124	+6.0
Central and Eastern Europe	3,149	4.7	3,320	4.8	663	2.8	669	2.7	3,812	3,990	+4.7
NORTH AND SOUTH AMERICA	12,664	19.1	11,748	16.9	13,024	55.7	13,804	56.6	25,688	25,552	-0.5
NAFTA (1)	9,121	13.8	8,600	12.4	12,053	51.6	12,898	52.9	21,175	21,497	+1.5
USA	7,517	11.3	6,873	9.9	10,329	44.2	10,993	45.1	17,846	17,866	+0.1
Central and South America	3,543	5.3	3,148	4.5	970	4.2	907	3.7	4,514	4,055	-10.2
ASIA-PACIFIC	36,110	54.4	39,441	56.8	7,296	31.2	7,416	30.4	43,406	46,856	+7.9
China	21,210	32.0	24,377	35.1	3,451	14.8	3,651	15.0	24,662	28,028	+13.7
South Korea	1,534	2.3	1,534	2.2	300	1.3	289	1.2	1,834	1,823	-0.6
Japan	4,216	6.4	4,146	6.0	831	3.6	824	3.4	5,047	4,970	-1.5
ASEAN (2)	2,020	3.0	2,081	3.0	1,091	4.7	1,091	4.5	3,111	3,172	+2.0
Other Asia-Pacific	7,130	10.8	7,303	10.5	1,623	6.9	1,560	6.4	8,753	8,863	+1.3
AFRICA	1,141	1.7	978	1.4	435	1.9	336	1.4	1,576	1,314	-16.7
TOTAL	66,326	100.0	69,458	100.0	23,380	100.0	24,399	100.0	89,706	93,857	+4.6
CHANGE 2016/2015		4.	7%		4.4%			4.0	4.6%		

(1) NAFTA: Canada, USA, Mexico.

(2) ASEAN: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam.

Source: OICA.

In the US, the market progressed wealkly at around 17.9 million vehicles in 2016, breaking a new sales record. The market grew by 8 million units compared to its trough level of 2009 (10.6 million units). The Mexican market progressed 19% to 1.6 million units.

Western Europe continues its recovery observed last year, after six consecutive years of decline, to settle at 16.1 million vehicles, i.e. the same level as 2008, compared to its record level in 2007 (17.3 million units). In 2013, the lowest point of the cycle, they reported 13.1 million units. There were wide variations per country, symbolising the diversity of cycles observed in national European markets. Variations per country were disparate, from -10% in Netherlands to +19% in Italy, +5% in Germany and +2% in the UK.

Central and Eastern Europe finally returned to growth (+5%), for the first time since 2012. However, their growth remained contrasted. Growth rates in the markets of the new Member States of the European Union progressed 2 percentage points at +16%. The Russian market, up from -42% in 2015 to -1% in 2016, and the Ukrainian market, up from -51% in 2015 to +44% in 2016, showed a return to more dynamic trends.

In China, in spite of the limitations on the number of new vehicles in major cities, the market grew by 14% to 28 million vehicles. After becoming the leading market in 2009, China continues to be the engine room of global growth, with 30% of vehicles sold.

In Japan, the sharp fall in sales (-9%) observed the previous year, after three years of growth, was a temporary situation. The market only fell 2%, to 5 million vehicles. New registrations in South Korea, on the increase since 2012, stagnated in 2016 (-1%).

In the Asia-Oceania (excluding China, Japan and South Korea), the market stagnated at 12 million vehicles. Trends were highly contrasted: up 30% in Vietnam and 19% in Iran, but down 23% in United Arab Emirates and 21% in Saudi Arabia.

In South America, the market accelerated its decline (-10%), typified by the continent's leading market, Brazil (-20% vs -27% in 2015) and Argentina recovered (+10%).

In Africa, the markets fell sharply (-17%): the tangential market growth trend observed last year between Algeria and Morocco was even starker, at -59% and +24% respectively.

#### THE WORLD'S VEHICLE FLEET

In 2015, the global vehicle stock (passenger and commercial vehicles) was 1.3 billion units (of which over 75% passenger cars), i.e. a growth of 4% compared to the previous year. The average rate of growth since 2011 is 4%, i.e. a faster pace of growth than before the crisis.

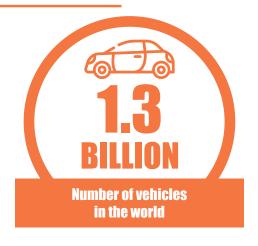
Stocks were practically stable in the mature markets of developed countries (increases generally between 0 and 2%) and showed strong growth in emerging countries (between 3% and 12%).

The US stock is the biggest in the world with almost 264 million vehicles, ahead of China and Japan (163 and 77 million units respectively). France is in eighth position worldwide (39 million vehicles), behind Italy.

	To	tal	Change
	2014	2015	2015/2014
	thousands	thousands	%
EUROPE	380,136	387,519	+1.9
Western Europe	246,641	250,037	+1.4
Central and Eastern Europe	133,496	137,482	+3.0
NORTH AND SOUTH AMERICA	403,022	413,725	+2.7
NAFTA	316,631	324,763	+2.6
USA	258,027	264,194	+2.4
Central and South America (1)	86,390	88,962	+3.0
ASIA-PACIFIC	409,362	436,222	+6.6
China	145,981	162,845	+11.6
South Korea	20,118	20,990	+4.3
Japan	77,188	77,404	+0.3
ASEAN (2)	55,415	58,419	+5.4
Other Asia-Pacific	166,075	174,983	+5.4
AFRICA	42,366	44,803	+5.8
TOTAL	1,234,887	1,282,270	+3.8

(1) NAFTA Canada, USA and Mexico (2) ASEAN: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thaïland, Vietnam Source: OICA. Automobile density across the world was on average 182 vehicles per 1000 inhabitants (+27% compared to 2005). However, the gap is large between 42 vehicles in Africa and 670 in the NAFTA zone (US, Canada, Mexico) via 85 in Asia (excluding Japan and South Korea), 176 in Central and South America and over 500 for the EU and Japan/South Korea. Density in Europe overall is slightly above 470.

North Africa (Algeria, Egypt, Libya, Morocco and Tunisia), which is close to Europe, has shown strong vehicle stock growth with an average rate of 6% per year since 2005, from 10 to 19 million units.





# VEHICLE DENSITY BY REGION (NUMBER OF CARS AND VEHICLES PER 1,000 INHABITANTS)



2005 2015

(1) EFTA: European Free Trade Association. Source: OICA

In 2015, the mature zones represented more than 50% of the global vehicle stock and 15% of global production. They have lost around 15 percentage points to the emerging areas since 2005.

Within the European zone, accounting for almost one third of the global stock, the increase was quicker in the east than in the west (see page 19). The rate of car ownership is also contrasted, ranging from 166 in Albania to 796 in Iceland, via 308 in Romania, and 550-600 in the main countries of Western Europe. The number of vehicles in the zone has grown by almost 65 million units since 2005, of which 73% outside Western Europe (+20 million additional units in Russia).

In the Americas, NAFTA, with 25% of the global stock, is a mature market with a high level of car ownership, especially in the US (821). Mexico has the highest progression in terms of number of vehicles is in Mexico (+4% between 2010 and 2015). However, Central and South America is an emerging zone which accounted for 7% of the global car market in 2015, with a density ratio of 176. The number of vehicles in America has swelled by 86 million units since 2005, almost at the same pace as NAFTA and Central and South America. The three countries with the highest progression in terms of number of vehicles are the US, Brazil and Mexico with 26, 20 and 16 million units respectively.

In Asia, the mature markets of Japan and Korea (8% of the global stock), which are mature markets, have car ownership levels of 609 and 417 respectively. However, emerging countries with bigger populations have lower automobile density: 22 in India, 87 in Indonesia and 118 in China. Since 2005, almost all of the vehicle stock growth has come from Asia – excluding Japan and South Korea. China (131 million additional units) is way ahead of India (+19 million) and Indonesia (+13 million).

#### **WORLD TRADE IN AUTOMOTIVE PRODUCTS**

According to the WTO, in 2015, global trading in automotive industry products decreased by 5%, to \$1,334 billion, 8% above the 2008 level.

Between 2005 and 2015, the trading balances of automotive industry products were very different between countries and zones. South Korea's surplus increased from \$34 to \$56 billion, Japan's from \$110 to \$117 billion, and the European Union from \$80 to \$158 billion. With a slightly higher automotive market level than the record year in 2005, the deficit in the US increased further (-\$164 billion).

Conversely, Canada's +\$9 billion balance in 2005 has been reversed (-\$6 billion), due to the role taken by Mexico in trade relations within NAFTA. Mexico reported an excess of \$52 billion compared to \$2 in 2007. Brazil's excess of \$7 billion has turned into a \$4 billion deficit. China, which in the meantime has become the leading global

automotive market, grew from \$4 to \$24 billion.

India's balance of trade surplus increased from \$1 to over \$6 billion further to a sharp increase in export from \$3 billion to more than \$11 billion.

Excluding intra-zone trade, imports from the European Union were just bettered by imports from China (\$72 vs \$73bn in 2015, i.e. a negligible difference, unlike previous years). These imports however were much lower than those from NAFTA, which achieved a new record (\$182bn). The other major automotive product importing countries in 2015 were Australia and Saudi Arabia (around \$24bn). Russian imports halved compared to 2015, at \$16 bn.



#### ► EXPORTS (FAB)/IMPORTS (CAF) TO/FROM THE MAJOR REGIONS (IN US\$ BILLIONS)

Areas		World			nd Canad th Americ		Euro	pean Unio	on (2)		Japan		Othe	r countrie	es (4)
Countries	EXP.	IMP.	Balance	EXP.	IMP.	Balance	EXP.	IMP.	Balance	EXP.	IMP.	Balance	EXP.	IMP.	Balance
USA															
2010	99.7	189.8	-90.0	60.2	91.7	-31.5	9.7	33.6	-23.9	1.2	42.9	-41.7	28.6	21.5	7.1
2014	138.1	274.3	-136.2	78.3	n/a	n/a	13.3	n/a	n/a	1.4	n/a	n/a	45.1	n/a	n/a
2015	128.2	292.3	-164.1	74.6	n/a	n/a	14.1	n/a	n/a	1.3	n/a	n/a	38.1	n/a	n/a
CANADA															
2010	50.1	59.6	-9.5	49.1	46.2	3.0	0.3	4.5	-4.2	0.0	5.7	-5.6	0.7	3.3	-2.6
2014	61.0	70.6	-9.6	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2015	61.8	68.0	-6.2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
EUR. UNION (2)															
2010	546.4	426.9	119.4	42.9	10.0	32.9	369.2	369.2	0.0	7.0	18.9	-11.9	127.3	28.9	98.4
2014	698.0	512.5	185.4	67.9	n/a	n/a	443.1	443.1	0.0	10.9	n/a	n/a	176.0	n/a	n/a
2015	653.7	496.0	157.7	72.4	n/a	n/a	424.4	424.4	0.0	9.8	n/a	n/a	147.1	n/a	n/a
JAPAN															
2010	149.5	14.2	135.4	50.9	1.3	49.6	18.2	7.3	10.9				80.5	5.6	74.9
2014	145.0	21.4	123.5	53.1	n/a	n/a	15.0	n/a	n/a				76.9	n/a	n/a
2015	136.7	19.4	117.2	53.9	n/a	n/a	15.2	n/a	n/a				67.6	n/a	n/a
SOUTH KOREA															
2010	54.5	8.0	46.5	13.6	0.8	12.7	6.6	3.5	3.1	0.6	2.2	-1.6	33.8	1.5	32.3
2014	75.4	13.3	62.1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2015	71.0	15.1	55.9	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CHINA (EXCL. HO	NG-KONG	)													
2010	28.0	53.0	-25.0	7.0	5.4	1.6	4.2	25.7	-21.6	2.3	16.7	-14.4	14.6	5.2	9.4
2014	50.9	93.5	-42.6	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2015	49.3	73.0	-23.6	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
BRAZIL															
2010	12.6	17.0	-4.4	1.6	2.3	-0.7	1.0	3.5	-2.6	0.0	1.2	-1.2	10.0	10.0	0.0
2014	10.0	20.3	-10.3	1.2	n/a	n/a	0.3	n/a	n/a	0.0	n/a	n/a	8.5	n/a	n/a
2015	9.9	14.2	-4.4	1.4	n/a	n/a	0.2	n/a	n/a	0.0	n/a	n/a	8.2	n/a	n/a

#### ► TRADE OF THE MAIN EUROPEAN UNION COUNTRIES (3)

	Germany		Germany France			Spain		Italy			United Kingdom				
2010	195.7	79.3	116.4	54.1	58.7	-4.7	47.5	31.4	16.1	29.1	39.7	-10.6	30.9	45.5	-14.6
2014	256.2	104.7	151.5	54.0	60.7	-6.7	56.9	40.5	16.4	36.1	33.7	2.4	45.0	64.9	-19.9
2015	286.9	118.3	168.7	59.4	68.0	-8.6	66.0	48.2	17.8	43.7	40.4	3.3	50.8	78.5	-27.7

- (1) Since 2005, exports to North America mainly target the USA, Canada and Mexico.
- (2) For the comparisons, 15 EU countries have been included since 1993, 25 since 2004, 27 since 2006 and 28 since 2014.
- (3) Since 2001, CCFA has based its estimates of imports and exports for European Union countries on local Customs statistics.
- (4) The "other countries" total contains countries not included in the three major divisions.

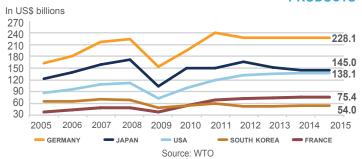
Source: WTO.

#### **WORLD TRADE IN AUTOMOTIVE PRODUCTS**

# IMPORTS FROM THE MAIN REGIONS FOR AUTOMOTIVE PRODUCTS (NOT INCLUDING INTRA-REGIONAL TRADE)



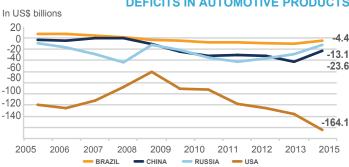
# MAJOR EXPORTING COUNTRIES OF AUTOMOTIVE PRODUCTS



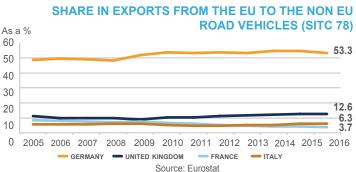
#### **SURPLUSES IN AUTOMOTIVE PRODUCTS**



#### **DEFICITS IN AUTOMOTIVE PRODUCTS**



Source: WTO





France's share of global automotive industry product trading in 2015

(2) For the comparisons, 15 EU countries have been included since 1993, 25 since 2004, 27 since 2006 and 28 since 2014.

World trade in automotive products represented 8% of global freight exports and 12% of manufactured products in 2015. 2015 was marked by the euro's fall against the dollar, whilst the yen-dollar exchange rate fell 12%.

Given the growing markets in NAFTA and the European Union, the share of intra-regional trade as a proportion of global trade stabilised at around 60% in 2011 after a number of years' decline (66% in 2009). In NAFTA, Europe (excluding CIS) and South America, this share stood at around 70-75% (after several years above 80% in the latter region). But it was only just 30% for Asia-Oceania, a continent with a strong leaning towards countries outside its geographical area, but with national markets that are not so open (Korea, Japan, etc.).

In 2015, Germany, at \$287 bn, remained the biggest automotive industry exporting country with a market share of 22% compared to 18% in 2008.

Second globally, Japan exported \$137 bn, \$54 bn of which to North America (i.e. 39% of their total exports, compared to more than 50% at the beginning of the 2000s). Its exports to China fell between 2011 and 2015 to \$10.6 bn, because of the geopolitical context. This can usefully be compared to the \$15 bn of exports to EU28.

Exports from the 28 countries of the European Union reached \$654 bn, 65% of which in intracommunity trade (73% in 2009). EU-to-China exports totalled  $\in$ 32 bn. They reached \$8 bn to Russia, \$17 bn to Africa and \$15 bn to the Middle East.

According to Eurostat data, more than half of exports from the EU to outside the EU were from Germany (53% in 2016), ahead of the UK (13%), Italy, Spain and France (around 5% each for those three countries). The share of the six new entrants (Hungary, Poland, Romania, Slovakia and Slovenia) was cumulatively 9%.

France represented 4% of global exports with \$59 bn (including intra-EU trade), compared to almost 8% in 2004.

The US were still the biggest global importer of automotive products, at \$292 bn; due in particular to the buoyancy of its domestic market, its deficit in automotive products hit a new high of \$164 billion dollars, i.e. higher than the \$120 bn observed between 2004 and 2006.

Chinese imports fell sharply in 2015 (-22% to \$73 bn). Since 2005, they had increased 23% per year. In 2012, the origins of those imports were the

EU28 (56% compared to 42% in 2009), ahead of Japan (22% compared to 36% in 2009), NAFTA (13%) and South Korea (7%).

Reflecting oil resources trends, imports have grown substantially since 2005 in Russia, Saudi Arabia and the United Arab Emirates. They progressed at an annual average of 3% (compared to 12% for the previous year), 10% and 13% respectively.

The depressed domestic Italian market was characterised by a drop in imports, and their automotive balance was once again positive.

#### **NEW PASSENGER CAR REGISTRATIONS PER COUNTRY**

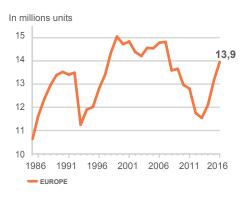


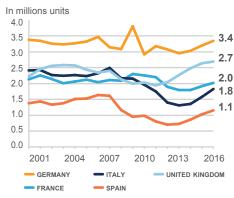
**Europe since 2007** 

The West European market, i.e. 90% of the European market, grew for the third year running (+5.8% to 13.9 million units). It has grown by 2.4 million units since 2013. This increase partially made up for the decline during the years of the crisis (-3.3 million cars between 2007 and 2013). The current level is 6% down on 2007.

All the West European countries, with the exception of Holland and Switzerland, saw an increase in their markets in 2016. The scale of growth was, however, contrasted from one geographical area to another. The UK market (19% of West European registrations, i.e. 3 percentage points more than in 2007), Sweden and Denmark reported record levels. The long-term trend was met in France and slightly exceeded in Germany.

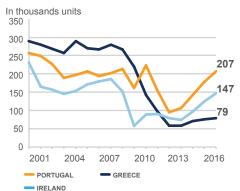
The countries of Southern Europe (Spain, Italy, Portugal and Greece) continued the growth that began in 2014 (+14%). These markets were still 14% below their 2007 levels.













The West European market comprises 17 countries (15 pre-2004 EU members, plus Switzerland and Norway). These countries have similar environments and obey similar economic rules. Since 1990, reunified Germany is taken into account in these figures.

The market went through two major crises: in 1993, i.e. -16% to 2.2 million units, and from the end of 2008. The latter resulted in a decline of 22% between 2007 and 2013, i.e. 3.3 million units with considerable variations from one geographical zone to another. Northern Europe (cf. definition of the graph above, plus Germany and the UK)

suffered a fall of 5% during the crisis compared to >50% for Southern Europe (Spain, Italy, Portugal and Greece).

#### NEW PASSENGER CAR REGISTRATIONS PER GROUP

In 2016, penetration of French groups in West European markets declined, once again, by 0.2 percentage points, at 20%. In spite of a recovery in the countries of the South of Europe (Spain, Italy, Portugal and Greece), where French groups are well-represented, the current product cycle, the search for selective sales and the trend of the European market towards higher-end vehicles meant that French automakers failed to gain market share overall.

French automakers rely on the complementary nature of their brand ranges. The Renault group have Renault (7% of market share) and Dacia (2%); the latter accounted for only 0.5% of the market in 2007. The PSA group now has three brands: Peugeot (6%), Citroen (4%) and, since 2009, DS (0.5%).

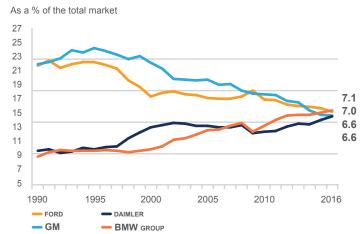
Six major 'generalist' European groups, producing a complete range of vehicles, each held around 6% of the market or more. The market trend towards higher-end vehicles did not help them.

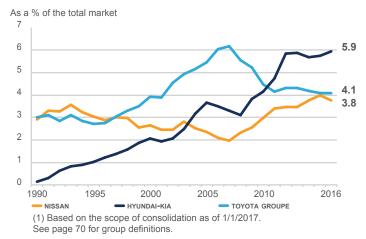
Volkswagen's market share is in decline for the second time since 2007.



#### ► MARKET SHARES OF GROUPS (1) IN EUROPE









Since 1999, the Volkswagen group (VW), with its four main brands, had consolidated its position well above 20%, but lost 1.6 percentage points to 23% compared to 2014.

Penetration of the French groups Renault and PSA (20% in total) fell slightly, below 2007 levels. They exceeded 25% between 2001 and 2003, a more favourable period where the French and Southern European markets accounted for 45% of the West European markets, compared to 38% in 2016. Dacia's share progressed and DS's share is emerging.

The penetration of the General Motors (GM) group, now without the Chevrolet brand which is no longer distributed in Europe, was 6.6%, i.e. a

decline of 0.1 percentage points. In 2016, Ford's market share was 7%. In the middle of the 1990s, the two American groups each enjoyed a market share of around 12%.

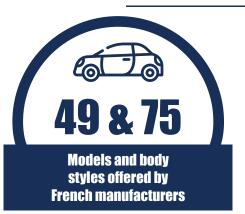
The Fiat group now includes Chrysler group brands. Its penetration was up at 6.9% compared to almost 13% in 1997 and 15% in 1989. In 2016, Fiat's market share was 5.1%.

The German groups Daimler and BMW, specialists of high-end vehicles and sales to companies and in the throes of implementing a strategy to broaden their ranges, achieved again record market shares in 2016. Daimler (Mercedes and smart) consolidated the growth begun in 1997 with the effect of the diversification of its vehicle range, to 6.6%. BMW, which also includes Mini, also continued its consolidation (7.1%).

Toyota group's share, in continuous growth from 1995 (3%) to 2007 (6%), then fell back one third over a period of four years, before stabilising at around 4%

The penetration of Hyundai-Kia, from being almost non-existent in 1990, and 2.1% in 2000, enjoyed strong progression during the crisis (+3 percentage points). Its share was 5.9% in 2016.

### **RANGE RANKING IN 2016**



The French manufacturers expanded their vehicle ranges by proposing 50 or so models compared to 27 in 2000. Over recent years, they have developed their ranges on different product segments (people carriers, all-terrain, all-road sedan). They regularly renew existing models 3008 and Mégane (Scenic) in 2016).

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Groups	Brands	Economy and low ranges	Low-mid range	High-mid range	Premium range
PSA	CITROËN	C-Zéro, C1, C3 (Picasso), C4-Cactus, Nemo, Berlingo, E-Mehari	C4 (Picasso), C4 Air Cross, Jumpy, SpaceTourer, Jumper	C5, C-Elysée	
GROUP	DS	DS3	DS4	DS5	
	PEUGEOT	i0n, 108, 208, 2008, Bipper, Partner	308, RCZ, 3008, 4008, 5008, Expert, Traveller, Boxer	508, 301	
RENAULT	RENAULT	Twingo, Clio, Captur, Kangoo, ZOE	Mégane (Scénic), Fluence, Master	Trafic, Kadjar, Koleos	Espace, Talisman
GROUP	DACIA	Logan, Sandero, Duster, Dokker	Lodgy		
BMW	BMW	i3	1, 2 Series	4, X1 Series	3, 5, 6, 7, X3, X4, X5, X6, Z4, I8 Series
	MINI	Mini			
DAIMLER	MERCEDES	Citan	A, B, CLA Classes, Vito	GLA	C, E, S, GL, SL, CLS, SLK, GLC, GLE Classes
	SMART	fortwo, forfour			
	ALFA ROMEO	Mito	Guiletta		Giulia, 4C
FIAT	FIAT	Panda, 500, Punto, Fiorino, Doblo, Qubo	Ducato, Tipo	Freemont, Talento	
FIAT	JEEP	Renegade		Wrangler, Compass, Cherokee	Grand Cherokee
	LANCIA	Ypsilon	Delta		Thema, Voyager
FORD EUROPE	FORD	Ka, Fiesta, B-Max, T. Courier, T. Connect, Ecosport	Focus, (Grand) C-Max, Kuga, Transit, T. Custom	Mondeo	Mustang, Galaxy, S-Max, Edge
GEELY	VOLVO			V40	S60, S80, V60, V70, C70, XC60, XC70, XC90
GM EUROPE	OPEL	Agila, Corsa, Adam, Meriva, Combo, Mokka	Astra, Ampera, Zafira, Movano	Cascada, Insignia, Antara, Vivaro	
HONDA	HONDA	Jazz	Civic, HR-V	Accord, CR-V	
HYUNDAI	HYUNDAI	I10, I20, IX20	I30, Veloster, Elantra	IX 35, I40, Santa Fe, Tucson, Ioniq	Genesis
	KIA	Picanto, Soul, Venga	Rio, Cee'd, Carens, Niro	Optima, Sportage	Sorento
MAZDA	MAZDA	2	3, 5, MX5, CX-5	6	
MITSUBISHI	MITSUBISHI	i-MiEV	Lancer, Spacestar, ASX	Outlander	Pajero
NISSAN	NISSAN	Micra, Note, Juke	Leaf, Pulsar, Primastar, NV200	Qashqai, X-Trail	370Z, Pathfinder, GT-R, NV400
SUBARU	SUBARU	Trezia		Impreza, Legacy, Forester, Outback, Levorg	BRZ
SUZUKI	SUZUKI	Celerio, Swift, SX4, Jimny, Vitara	Baleno	Grand Vitara	
TATA	JAGUAR				XE, XF, XJ, XK, F-TYPE
GROUP	LAND ROVER			Freelander, RR Evoque	Discovery, Range Rover
ТОУОТА	LEXUS		СТ		GS, IS, LS, RX, NX
TOTOTA	TOYOTA	IQ, Aygo, Yaris, Verso-S	Verso, Auris, Corolla	Avensis, Prius, CH-R, RAV4	GT86, Land Cruiser
	AUDI	A1, S1	A3, S3	A4, A5, TT, Q3	A6, A7, A8, Q5, Q7
	PORSCHE				911, Boxster, Cayman, Macan, Cayenne, Panamera
VOLKSWAGEN GROUP	SEAT	Mii, Ibiza	Leon, Altea	Toledo, Exeo	Alhambra
GROOF	SKODA	Citigo, Roomster, Yeti	Fabia, Rapid	Octavia	Superb
	VOLKSWAGEN	Up!, Polo, Caddy	Golf, Jetta, New Beetle, Tou- ran, Eos, Crafter	Passat, Scirocco, Tiguan, Transporter	Sharan, Phaeton, Touareg

Source: CCFA.

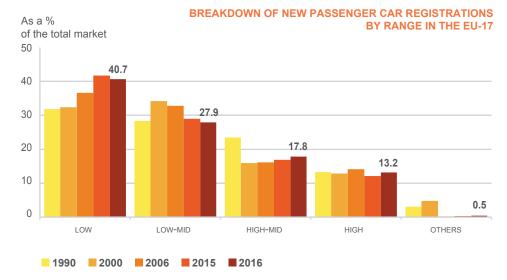
#### BREAKDOWN AND RANKING BY MODEL

Of the 15 best-selling models in Europe in 2016, five are made by Renault, Peugeot or Citroën.

#### ► RANGES AND BODY STYLES IN 2016 (as a % of new registrations by country)

	Small	Lower medium	Upper medium	Executive	Others	Sedans	Station wagon	Coupés	Conver- tibles	MPVs	Others
GERMANY	28	33	19	18	1	39	18	1	2	13	26
AUSTRIA	34	30	21	15	0	35	17	1	1	16	30
BELGIUM	37	28	20	15	0	40	14	1	1	15	28
DENMARK	50	28	15	7	0	59	17	0	0	8	15
SPAIN	39	34	19	8	0	52	6	1	0	10	31
FINLAND	22	34	29	15	1	42	28	0	0	6	24
FRANCE	52	28	13	7	0	51	6	1	1	13	29
GREECE	59	24	13	3	0	74	2	0	0	3	20
IRELAND	27	30	32	10	0	57	5	1	0	6	31
ITALY	62	19	12	6	0	54	7	0	0	10	27
LUXEMBOURG	30	28	21	22	0	39	13	2	2	12	32
THE NETHER- LANDS	49	25	15	11	0	55	16	0	1	7	21
PORTUGAL	46	32	12	9	0	53	19	1	1	7	19
UNITED KINGDOM	39	25	19	16	0	54	6	2	1	7	29
SWEDEN	18	26	25	29	1	37	27	1	1	6	28
EUR. UNION 15 COUNTRIES	41	28	18	13	0	48	11	1	1	11	28
NORWAY	21	31	30	18	0	38	19	0	0	7	35
SWITZERLAND	29	27	22	21	1	35	15	2	2	11	35
ALL 17 COUNTRIES	41	28	18	13	0	48	11	1	1	11	28

Source: CCFA



In 2016, there was great product diversity on the auto market: market share of the 15 best-selling vehicles in Europe was 28% compared to 30% the previous year and 40% in 2000. At the lower end, French manufacturers, who previously had eight models, now have over forty.

The share of higher-end models was 31% in 2016 in Western Europe, i.e. an increase of 2 percentage points compared to 2015. Growth overall was identical in France, but this ratio was 20%

The market share of sedans, which have always been dominant, has fallen back over recent years in favour of estates, people carriers, softtops, MPVs and all-road and all-terrain vehicles. However, from 2006 onwards, a dynamic lowerend range with more sedans had reversed this trend up until 2009. In 2016, the 'Others' category continues to benefit from the development of all-terrain, all-road vehicles in the lower range (Peugeot 2008, Renault Captur, etc.): it progressed

by three percentage points and now accounts for 28% of the market (13% in 2010).

Each European country model profile was stable until 2008, with Southern Europe preferring preferring lower and lower-middle ranges, whilst Northern Europe continued to prefer higher-end vehicles and estates. But, in 2009, the success of lower-end ranges and sedans, particularly in Germany and in the UK, made this contrast between the two regions les stark. This trend continued until 2010 with the exception of Germany, where higher-end vehicles returned to slightly higher market shares (37%) than the long-term position (36%). Spain and Italy has also seen an increase in the market share of economy and lower-end vehicles of around 10 percentage points since 2000.



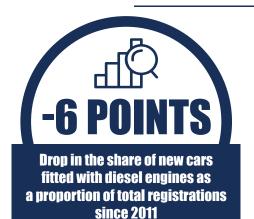
**Best-selling models** in Western Europe in 2016 were in the lower ranges

#### ► RANKING OF THE FIFTEEN **LEADING MODELS IN 2016**

Models	Rank	Market share
Volkswagen Golf	1	3.9%
Fiat 500	2	2.5%
Volkswagen Polo	3	2.1%
Renault Clio	4	2.1%
Ford Fiesta	5	2.0%
Ford Focus	6	1.9%
Opel Corsa	7	1.8%
Peugeot 208	8	1.7%
Opel Astra	9	1.6%
Nissan Qashqai	10	1.5%
Renault Mégane	11	1.5%
Renault Captur	12	1.5%
Mini Mini	13	1.5%
Volkswagen Passat	14	1.4%
Peugeot 308	15	1.3%
Peugeot 2008		1.2%
Citroën C3		1.2%
Dacia Sandero		1.1%
Citroën C4		1.1%
Renault Kadjar		0.9%
Dacia Duster		0.8%
Renault Twingo		0.6%
Peugeot 3008		0.5%
Citroën C4 Cactus		0.5%
Peugeot 108		0.5%
Citroën C1		0.4%

Source: CCFA

#### TECHNICAL CHARACTERISTICS OF NEW PASSENGER CARS



Having grown significantly from 1997 to 2007, the share of new cars equipped with diesel engines in Western Europe as a proportion of total registrations is still around 50%. In 2016, it fell by more than two percentage points to 49.5%, 6 points adrift of the 2011 record. In Western Europe, outside France, it was 49%, 3.2 percentage points down compared to the same reference year.

On this market of only 6.9 million units, French manufacturers had a market share of 21% in 2016 (28% in 2010), i.e. around 1.4 million new diesel cars, compared to around 19% for all other fuel types. Diesel cars represented 52% of total sales of new passenger cars made by French manufacturers in Europe's 17 countries, i.e. a

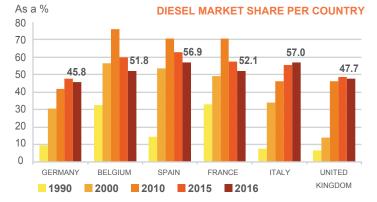
decrease of 13 percentage points since 2012. To counterbalance this, there has been an increase of more than 60% in registrations of petrol or other energy vehicles, i.e. 511,000 additional units.

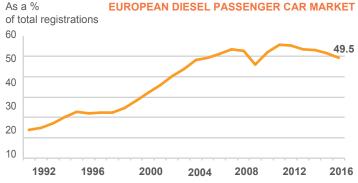
Like France, the four other main Western European countries (Germany, Spain, Italy, UK) saw companies purchasing more diesel cars (around 60% of their registrations) than households (around 40% of their purchases).

#### ▶ TECHNICAL CHARACTERISTICS OF NEW PASSENGER CARS IN 2016

	Average cylinder capacity	Average power	4WD	Diesel
	СС	kW	%	%
GERMANY	1,715	108	18.2	45.8
AUSTRIA	1,630	93	22.7	57.3
BELGIUM	1,566	91	8.7	52.1
DENMARK	1,419	82	3.3	36.0
SPAIN	1,552	88	8.3	56.9
FINLAND	1,577	98	17.6	33.3
FRANCE	1,486	86	7.6	52.1
GREECE	1,390		3.9	55.1
IRELAND	1,575	85	4.8	70.0
ITALY	1,486	79	10.8	57.0
LUXEMBOURG	1,850	118	26.1	65.0
THE NETHERLANDS	1,385	86	5.5	19.0
PORTUGAL	1,468	82	2.7	65.1
UNITED KINGDOM	1,651	102	14.5	47.7
SWEDEN	1,776	111	30.5	51.5
EUR. UNION 15 COUNTRIES	1,594	95	13.0	49.9
NORWAY	1,759	106	36.8	30.8
SWITZERLAND	1,806	122	42.1	39.6
ALL 17 COUNTRIES	1,600	96	14.0	49.5

Source: CCFA.





In Europe, average engine sizes and power ratings of cars differ considerably from one country to another. They depend largely on economic, tax and geographical conditions in each national market. Because of the minimisation of engines (downsizing, identical engine power with a lower engine capacity), the average capacity of new private cars in Europe fell 140 cm3 between 2007 and 2016. On the other hand, the average power rating has increased 6kW since 2013, to 96kW. These indicators tend to be higher in Northern Europe.

The share of 4x4s increased for the second consecutive year (+1 percentage point) to 14% of the European market, i.e. 1.9 million units, compared to 8% in 2009. The level of equipment varies substantially depending on national characteristics. In Switzerland, Norway and Austria this share is higher to meet the demands of mountainous topography. In Germany, it was 18%, i.e. an increase of almost eight percentage points compared to 2007.

The share of diesel is substantially influenced by regulations and tax arrangements in each country. In Europe in 2016, in a growing market, the share of diesel cars fell to 49.5%. Nevertheless, volumes increased 1% because of the high level of demand. In Greece, Ireland and Portugal more than two-thirds of new cars registered are still diesels. The share of diesel increased slightly in Italy (+1.8 percentage points to 57%) and fell sharply in Spain (-5.8 percentage points to 57%).

#### PASSENGER CARS IN USE IN EUROPE

In Western Europe, an area of high auto density (from 494 in Ireland to 706 in Italy), the vehicles in use increased 1.4% to January 1, 2016. The marked contrast between a dynamic Northern Europe and the South of Europe affected by the financial crisis since 2013 has petered out.

In the new entrant countries and Turkey, where car ownership is lower (from 195 for Turkey to 628 for Poland), the economic and financial crisis

substantially slowed the rate of vehicles in use growth: just under 4% compared to 5-7% between 2005 and 2009. Demand for smaller price-tag cars remained primarily satisfied by imports of secondhand vehicles. In 2016, this zone accounted for 20% of the European vehicle stock compared to 15% in 2005

Having settled at around one third between 2000 and 2009, the share of cars of more than 10

millions of units

55

50

45

40

35

years of age in Western Europe has constantly increased to reach 43% in 2016. The low number of registrations of new private cars, particularly in Southern Europe, is one of the reasons for this high percentage. Western Europe has become a renewal market. With new entrant countries and Turkey, this share can be estimated at a little over

IN THE 12 NEW EU MEMBERS STATES AND TURKEY

Fn %

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7

6

5

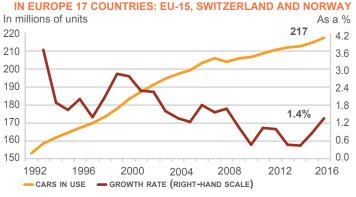
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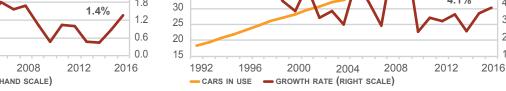
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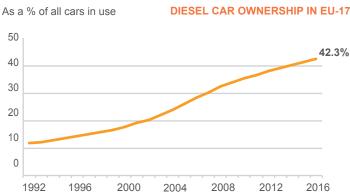
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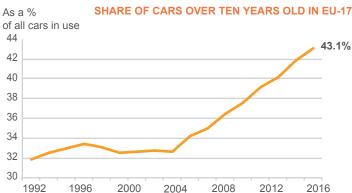
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#### **PASSENGER CARS IN USE ON JANUARY 1 EACH YEAR**







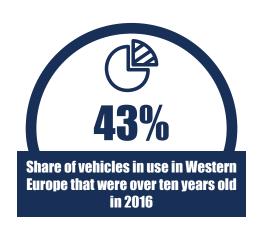


(1) The change was calculated on a like-for-like basis. National sources: statistics organisations, French Transport and Interior Ministries, professional sources.

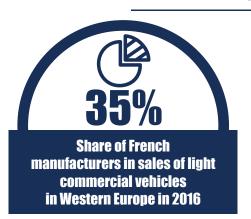
On January 1, 2016, the number of passenger cars in use in Western Europe (EU-15, Switzerland and Norway) was 217 million cars. High levels of ownership and the crisis affected growth, and the pace is now more in line with population growth. Whilst the vehicles in use decreased in certain countries of Southern Europe, it did increase in the countries of Western Europe overall in 2015. In 2016, Italy (+0.7%), Spain (+1.5%) and Portugal (+2.2%) returned to substantial growth rates close to those recorded for the UK (+2.2%) and Germany (+1.5%). In France (+0.6%), growth was lower than in the main West European countries.

Having increased 2 percentage points per year between 2002 and 2009, the share of diesel cars in Western Europe increased by more than 1 percentage point per year since, and stood at 42% on January 1, 2016. In five countries, this engine type is in the majority: Austria, Belgium, Spain, France and Luxembourg. However, although in progress, the share is lower in Germany (31%) and almost equivalent to the overall average in the UK (40%) and in Italy (42%).

In the new entrant countries and Turkey, growth in the vehicles in use was contrasted. The vehicle stocks of Slovenia and Hungary increased 1.9% and 6.1% respectively between 2010 and 2016. Over the same period, vehicles in use in Romania (+21%), Poland (+26%) and Slovakia (+28%) continued to grow at a high rate. The Czech Republic recorded moderate growth (+14%), but this figure applies to what is an already large vehicles in use. The growth of Turkey's vehicles in use remained extremely high (+49%). Within these new entrant countries and Turkey, the share of diesel engines is 33%, up around one and a half percentage points annually over recent years.



#### **NEW LIGHT COMMERCIAL VEHICLES IN EUROPE**



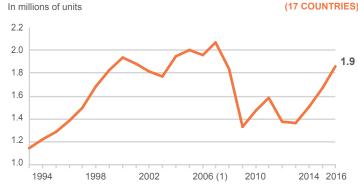
The West European market for light commercial vehicles, which was highly impacted by the 2009 crisis, stabilised at around 1.5 million units before growing to 1.9 million units in 2016 with an average growth of 11% over two years.

Between 2007 and 2016, the UK and German markets were slightly up (around +35,000 per country). In the other three major markets, volumes fell from -35,000 in Italy (+50% in 2016) to -104,000 for Spain, with in between, -51,000 for France. Southern Europe, including France, accounted for 44% of the European market, compared to 52% in 2007.

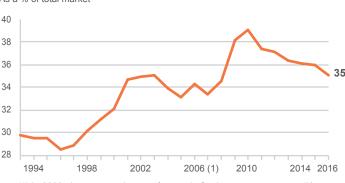
In 2016, French automakers saw sales up 8% to 651,000 units and 35% of the market. Present on every segment and despite decreasing market share in some countries (-2 percentage points in Italy), they were able to maintain their market share at a high level, more than 2 percentage points up on 2007.

FRENCH MARKET SHARE

## LIGHT COMMERCIAL VEHICLE REGISTRATIONS IN EUROPE (17 COUNTRIES)



#### As a % of total market

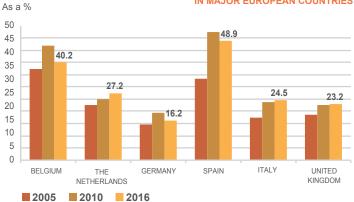


(1) In 2006, there was a change of scope in Spain: see note on page 70

#### SHARE OF LIGHT COMMERCIAL VEHICLES IN LIGHT VEHICLE REGISTRATIONS (PASSENGER CARS AND LIGHT COMMERCIAL VEHICLES) IN 2016



# MARKET SHARE OF FRENCH MANUFACTURERS IN MAJOR EUROPEAN COUNTRIES



Light commercial vehicles are defined here as vehicles with a GVW under 5 tonnes, used to transport merchandise. In numerous sectors (agriculture, building, services, etc.), they are also used for ferrying people to and from worksites, transferring between sites and transporting equipment. In France, light commercial vehicles covered around 16,000 km/year compared to 13,000 for cars. Some sectors which use these vehicles very intensively (around 20,000 km/year or even more): transport, delivery, warehousing and other specialist activities (scientific and technical and administrative and support activities), and the manufacturing industry. They are broken down into different categories: light commercial vehicles derived from passenger cars, light vans, light trucks, vans, pick-ups and FWDs. Since tax rules are not the same in all European countries, the number of light commercial vehicles as a percentage of all light vehicles goes from 7% in Germany to 19% in Norway. Overall, the 2016 average was 12%.

For many years, the renewal of products and the adapted answer they bring to today's economy in terms of transportation, services and mobility have improved sales of these vehicles. The 2009 crisis had a substantial impact on the market, which had returned to its 1996 levels.

In the van segment, French manufacturers' market shares were protected by the success of Renault Master, Peugeot Boxer and Citroen Jumper. In the small van segment, competition is cut-throat, but French manufacturers can rely on a wide range (Citroën Berlingo and Nemo, Peugeot Partner and Bipper and Renault Kangoo). In 2016, five of the ten highest-selling models were French (Kangoo, Berlingo, Partner, Trafic, Master).

In Spain and Belgium, French automakers' market share easily exceeded 40% in 2016. In Germany and in Italy, who have their own domestic manufacturers, their market share

was 16% and 24% respectively, higher than in 2005. In numerous countries such as Portugal, Denmark, Ireland, Croatia and Slovakia, gains in market share since 2010 have exceeded eight percentage points.

France became again the first biggest European market (410,000 units), ahead of the UK (383,000 units), Germany (263,000 units), Italy (202,000 units) and Spain (173,000 units).

#### HEAVY TRUCK MARKET AND PRODUCTION IN EUROPE

The European market for commercial vehicles over 5 tonnes strongly progressed in 2016 (+10%) at 291,000 units, but still 17% down on 2008, i.e. 60,000 units fewer. Contrary to the 1993 crisis, where the market recovered its high sales levels five years later, the 2009 crisis is different and seems to be settling at a new equilibrium, lower

European production increased substantially to 490,000 units, up 14% on the previous year. Having suffered the serious crisis of 2009, production is now twice as much as during the lowest point in 2009, thus emphasising the scale of fluctuations linked to economic conditions in this sector and the importance of extra-European demand

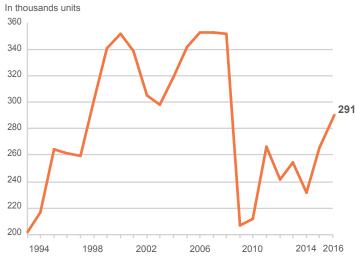


# ► HEAVY TRUCK MARKET AND PRODUCTION IN WESTERN EUROPE (IN THOUSANDS OF UNITS)

	2005	2014	2015	2016	Change 2016/2015			
NEW HEAVY TRUCK REGISTRATIONS								
5.1t to 15,9t	87	45	48	47	-2.0%			
16t and over	254	187	217	219	1.0%			
TOTAL	342	232	265	266	0.4%			
HEAVY TRUCKS PR	RODUCTIO	ON						
5.1t to 15,9t	113							
16t and over	339							
TOTAL	453	400	430	490	14%			

#### RENAULT TRUCKS' MARKET SHARE IN THE MAIN EUROPEAN COUNTRIES As a % 20 15 13 10 3 0 BELGIUM GERMANY ITAI Y UNITED NETHERLANDS 2005 2009 2016

#### NEW HEAVY TRUCK REGISTRATIONS IN EUROPE



#### RENAULT TRUCKS' MARKET SHARE IN EUROPE



In Europe, the commercial vehicle market reached a record level in 2008; the return to investment and the recovery of world trade since the second half of 2003 had boosted that recovery, before the 2009 financial and economic crisis really took its toll.

Heavy truck investment cycles are very long: the high points of 2000, 2006-2008 represent 75% more than the lowest point in 1993, i.e. nearly 150,000 additional vehicles. Compared to the two dark years for commercial vehicles (1993 and 2009), the market is finding it more difficult to recover after the most recent crisis than in the

nineties. In 2016 – seven years on – the market is 30% up compared to 74% up in 2000.

The favourable trend for heavy commercial vehicles is slow and regular. Since 2003, the share of vehicles of 16 tonnes and more (rigid trucks or road tractors) which was 73%, has progressed by almost 10 percentage points.

Renault Trucks' international development was affected by the collapse of Southern European markets (Spain and Italy). The weight of this zone in Western Europe, outside France, fell from 27%

to 14% between 2007 and 2014 before bouncing back to 21% in 2016. Renault Trucks' European penetration outside France (4%) has also fallen compared to that observed in 2008 (6%). Overall, its registrations were more or less stable in 2016 and its penetration in Europe was at 7%. Outside Europe, Renault Trucks has substantial volumes in Africa (Maghreb) and the Middle East.

#### FRENCH MANUFACTURERS IN THE NEW EU MEMBER STATES



In 2016, vehicle production increased (+2% to 3.9 million vehicles), settling at a record level, beating the previous records of the four previous years. The sales of new vehicles increased 12% to 1.3 million units. The difference between production and sales of new vehicles was therefore 2.6 million vehicles. The local market for new vehicles is way below 2007 level (-13%), in spite of those three years of growth.

French manufacturers are commercially present in this zone and have been for a number of years, and also have industrial sites: PSA in Slovakia and Czech Republic (with Toyota in Czech Republic);

Renault in Slovenia and in Romania. All these sites made around 900,000 units in 2016. Registrations of new vehicles still represent small volumes for French manufacturers with 170,000 light vehicles and fewer than 2,000 units for heavy vehicles. These volumes should increase given the very low automotive densities observed when compared to Western Europe.

FRENCH MANUFACTURERS MARKET SHARE:

FRENCH MANUFACTURER MARKET SHARE:

NEW HEAVY TRUCKS



# REGISTRATIONS OF NEW LIGHT VEHICLES (UP TO 5T GVWR) 500 450 400 350 300 250 200 100 50 0 LETUR HUMBUR ESTONIA LICARUR CONTINA CONTINA

# As a % of total market NEW LIGHT COMMERCIAL VEHICLES AND ADDRESS OF THE SECOND SECOND

#### ► THE MARKET AND VEHICLE PRODUCTION IN THE MAIN COUNTRIES OF CENTRAL AND EASTERN EUROPE – NEW EUROPEAN UNION MEMBER STATES (1) AND CROATIA (IN THOUSAND UNITS)

	2015	2016	Change					
VEHICLE PRODUCTION								
Passenger cars	3,703	3,778	2.0%					
Light commercial vehicles	125	127	1.1%					
Heavy trucks	125	121	1.170					
NEW VEHICLE REGISTRA	ATIONS							
Passenger cars	991	1,148	15.8%					
Light commercial vehicles	139	151	9.1%					
Heavy trucks	59.6	69.6	16.8%					

(1) excl. Malta et Cyprius Sources: CCFA, OICA

20
15
10
5
0
Refull Goden Column Water Her. Och and Original Market.

2015 2016

2008

Whilst the EU-15 automotive market is now dominated by replacement demand, the same does not apply to new and future member states of an extended European Union and neighbouring countries, where the potential for access to vehicle ownership is much higher.

Central and Eastern European Countries (CEEC) produced 3.9 million vehicles in 2016. Their activity

progressed just like that of Western Europe after the recovery of the European market.

As a % of total market

In 2016, production was higher to domestic demand in the region, when new vehicle registrations and second hand vehicle imports are taken into account. This imbalance has been in evidence since the 2009 crisis.

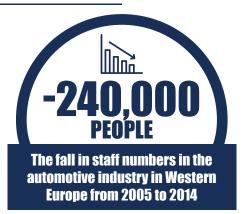
In 2016, new vehicle sales progressed sharply for the third consecutive year. Sales have substantially increased over all countries (with the exception of Slovenia), and more particularly in Poland (+17%), Romania (+17%) and Czech Republic (+12%).

#### THE AUTOMOTIVE INDUSTRY IN THE EUROPEAN UNION

In 2014, the European automotive industry employed 2.3 million people, 45% of whom in vehicle manufacture. Since 2005, on a comparable business scope, employment levels have changed in divergent ways, with a fall of around 240,000 people in Western Europe, compared to an increase of 160,000 in Eastern Europe. Western Europe saw a rebound compared to the previous year thanks Germany (+23,000 people), Spain (+4,000 people) and United Kingdom (+7,000 people), with their numbers increasing 16% since 2011. The automotive sector also generates indirect jobs (around one third of the number of direct jobs, according to ACEA).

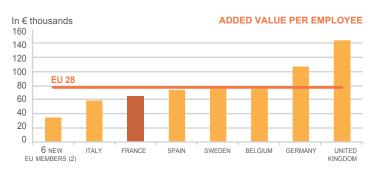
The added value per person in work has increased in France since 2012 but remains lower than the European average and the level of expenditure on headcount per person in work is still higher than the European Union average.

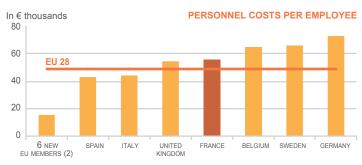
The share of employers' social contributions as a proportion of staff cost was 28% in France compared to 17% in Germany, with the European average at 21%.



#### ▶ THE AUTOMOTIVE INDUSTRY IN THE EU 28 IN 2014 (1)

	Units	Eur. union (28 countries)	Germany	France	6 new EU members (2)	United Kingdom	Spain	Italy	Sweden	Belgium
People employed	thousands	2,370	838	230	627	150	136	159	67	35
of which automobile assembly	thousands	1,061	519	123	143	78	64	65	45	20
of which body and trailer manufacturers	thousands	155	43	23	-	18	8	10	4	5
of which automotive equipment manufacturing	thousands	1,153	276	84	484	53	64	83	19	11
Sales	€ millions	925,431	396,946	101,507	124,759	78,858	57,483	58,522	33,207	17,358
Production	€ millions	781,975	344,321	71,670	119,784	69,519	54,015	50,000	23,952	16,637
Production/Sales	%	84.5	86.7	70.6	96.0	88.2	94.0	85.4	72.1	95.8
Added value (to factor costs)	€ millions	181,530	89,379	14,975	21,192	21,661	9,882	9,278	5,089	2,684
Added value/production	%	23.2	26.0	20.9	17.7	31.2	18.3	18.6	21.2	16.1
	€ thousands	76.6	106.7	65.0	33.8	144.5	72.9	58.4	75.5	76.4
Added value per employee	base 100: 6 new EU members states	227	316	192	100	427	216	173	223	226
Purchases of goods and services	€ millions	750,400	331,263	85,676	105,390	57,797	49,709	51,025	27,643	14,683
Purchases as a % of production	%	96.0	96.2	119.5	88.0	83.1	92.0	102.1	115.4	88.3
Personnel costs	€ millions	116,142	61,323	12,976	9,624	8,110	5,889	6,969	4,453	2,281
	€ thousands	49.0	73.2	56.3	15.4	54.1	43.5	43.9	66.1	64.9
Personnel costs per employee	base 100: 6 new EU members states	319	477	367	100	352	283	286	430	423
Gross operating surplus (GOS)	€ millions	65,388	28,056	1,999	11,622	13,551	3,993	2,309	636	402
GOS/VA	%	36.0	31.4	13.3	54.8	62.6	40.4	24.9	12.5	15.0





(1) Since 2008, data has been published in a classification of new economic activity involving in particular a change to the scope of the automotive industry (inclusion of manufacture of electrical and electronic equipment)

(2) 6 main new EU member states: Hungary, Poland, Czech Republic, Romania, Slovakia and Slovenia: body and trailer manufacturing employees are included in the figures for vehicle manufacturers.

Sources: Eurostat and CCFA estimates

The automotive industry, one of the essential sectors of the European economy, comprises:

- · vehicle manufacture;
- · body and trailer manufacture;
- · automotive equipment manufacture.

The data collated in this table come from national company surveys, harmonised by Eurostat. The difficulties encountered, nationally and Europewide, both for the collection and homogenisation of data explain the lack of reliable figures post-2014.

Germany accounted for 35% of all employees in the automotive industry. France had 10%, compared to an average of around 6% for Spain, Italy and the UK. The six new EU member states' share (Hungary, Poland, Czech Republic, Romania, Slovakia and Slovenia) was 26%.

The automotive industry continued vary greatly from one country to another in terms of structure and salary costs.

In Germany and Sweden, more than 60% of workers of the automotive industry were employed in vehicle production, 53% in France, compared to around 23% in the six new member states and 41-52% in Italy, Spain and the UK.

The gap in per-employee cost between Western and Eastern Europe has fallen since 2004. It was respectively 7 and 5 times higher compared to the 6 new members in Germany and respectively 5 and 4 times higher in France in 2014.

#### FRENCH AUTOMOBILE MANUFACTURERS IN 2016

#### **PSA Group: www.psa.fr**

In 2016, in a growing global market and strong recovery on the base market from a low footing, PSA Group sales increased 5.8%. Growth is also dynamic in Europe (+3.6%) where the group still ranks second (passenger cars and light commercial vehicles). Outside this area, manufacturers' sales have substantially increased in South America but have fallen sharply in South East Asia (618,000 units) compared to previous high levels.

The international development strategy is based largely on long-term targeted cooperation ventures with other manufacturers. In China, the group is cooperating with Dongfeng Motor, with which it has developed a strategic partnership, and with China Changan Automobile Group. PSA and General Motors cooperated in Europe for the development of two vehicles on shared chassis and a new LCV model using chassis made by the French group. At the beginning of 2017, the two manufacturers announced that Opel Vauxhall was joining PSA Group. Furthermore, the group has several projects for setting up production or assembly plants in markets with development potential (India, Iran, Morocco, Kenya, Uzbekistan, etc.).

PSA Group has a headcount of around 170,000 people throughout the world, 73,000 of whom are in France on some twenty sites (assembly, engine production and mechanics; R&D centres, head office, etc.). Apart from assembly factories (cf. adjoining page), the group has a number of large sites in France, such as Vélizy (R&D), Douvrin and Trémery (engines), Vesoul (spare parts warehouse) and Valenciennes (gear boxes), employing several thousand people.

In the technology area, the group has three key objectives: developing technologies to reduce fuel consumption and polluting emissions (the 2L to 100 km car, hybridation), the connected autonomous vehicle (introduction of delegated driving) and to serve the brand's appeal.

In 2014, it launched the 'Back in the race' plan with four objectives: 3 globally recognised brands, Peugeot, Citroen and DS, a concentrated global product plan, profitable growth internationally and modernisation to serve competitiveness, in particular in Europe. At the beginning of 2016, the company went further by implementing a

performance and profitable organic growth plan entitled 'Push to pass' for the 2016-2021 period. Objectives to increase operational margin and turnover. Development of products, the internationalisation of the group, and broadening of the business scope, in particular in after-sales and used vehicles, also emerge as priorities of this plan.

#### Renault Group: www.renault.com

Renault's global sales increased 13.3% thanks to sturdy European market sales growth. The Renault brand ranks second on the market for light vehicles in Europe. Outside Europe, the group has growth over all geographical zones and more particularly in Africa and Asia.

The venture with Nissan within the Alliance which begun in 1999 has been optimised and enlarged over time. New synergies (industrially, on electric vehicles, support functions, etc.) and new projects are being set up. In 2010, the group signed an agreement with Daimler AG; in 2016 there were 13 major projects in progress. The strategic partnership with AvtoVAZ, with the objective of accelerating their growth and strengthening their presence in Russia, achieved a new level with the inclusion of the Russian manufacturer in the Renault group in the final days of 2016. During the same year, Mitsubishi joined the Alliance when it was acquired by Nissan.

Renault has four development themes for tomorrow's vehicle: safety, onboard wellbeing (delegated driving), reduced environmental impact (2L to 100 km car, autonomous car, the zero emissions range) and mobility available for all. It is also developing car-sharing services.

Renault group employs 125,000 people throughout the world, 46,000 of whom are in France on 15 sites: assembly, manufacturing of engines and mechanics (Cleon, Ruitz); R&D centres (Guyancourt); head office, etc.

In 2011, Renault launched a new strategic plan entitled 'Renault 2016 – Drive the change' to meet two objectives: growth for the group and generation of free cash-flow by 2016. In 2013, the group also reorganised to keep its sites in France and develop their workloads. The main actions over the period 2014-2016 concerned model renewals, international expansion, a renewed ambition for Europe, greater

competitiveness, greater synergies within the Alliance and controlling investments. The next strategic plan runs through to 2022 and features turnover and operating margin growth objectives in particular.

#### Renault Trucks: www.renault-trucks.com

Renault Trucks progressed slightly in 2016 in a practically stable West European market. Its market penetration was 8%.

Renault Trucks assembles its trucks in France at its Bourg-en-Bresse (Ain) and Blainville-sur-Orne (Calvados) plants. The truck maker relies on partners for local assembly outside Western Europe, in Morocco and in Iraq. Its subsidiary, Renault Trucks Defense, the protected mobility vehicle specialist for defence and safety makes and assembles its vehicles in France (cf. adjoining page).

As a member of Volvo Group which employs almost 100,000 people throughout the world, Renault Trucks has over 8,000 employees in France. Apart from the complete assembly of vehicles, Renault Trucks has engine assembly and die-stamping operations in Venissieux, design and research in Saint-Priest, in the suburbs of Lyon, and parts reconditioning in Limoges. In 2013, Renault Trucks entirely renewed its truck range (T, C, K, D and D Wide), designed for sturdiness and lower operating costs, in particular through better energy efficiency. The truck maker is developing a range of alternative energy vehicles (gas, biodiesel) and a range of services (fleet management, repair and maintenance, financing and insurance, etc.) including even greater fuel-saving solutions (Optifuel Solutions), one of the main cost items for hauliers

	Units	PSA Group	Renault Group
Sales	€ millions	54,030	51,243
Capital expenditures	€ millions	2,107	2,039
Net income	€ millions	2,149	3,543
<b>Employees worldwide (1)</b>	no. of people	170,156	124,849
of which France	no, of people	72.745	46.240



				PSA Group	PSA Group			Renault Group		
	Units	Automotive activity: Peugeot and Citroën	Automotive	-inancina:	Others	Eliminations	Automotive sector		Eliminations	
Sales	€ millions	37,065	16,819	146			48,565	2,712	-34	
Operating income	€ millions	2,225	970	1	39		2,327	896	59	
Capital expenditure (2)	€ millions	2,106		1			2,037	2		
Employees worldwide (1)	no. of people	89,927	79,818		411		121,728	3,121		

<sup>(1)</sup> On December 31.

<sup>(2)</sup> The capital expenditure given for automotive activities are those for all industrial and commercial activities, excluding financing. Sources: PSA and Renault Groups annual reports

#### FRENCH AUTOMOBILE MANUFACTURERS IN 2016

# **EUROPE**

#### **France**

- 01 Batilly
- 02 Blainville
- 03 Bourg-en-Bresse
- 04 Dieppe
- 05 Douai
- 06 Flins
- 07 Hordain
- 08 Limoges
- 09 Limoges
- 10 Marolles-en-Hurepoix

PSA GROUP

- 11 Maubeuge
- 12 Mulhouse
- 13 Poissy
- 14 Rennes
- 15 Saint-Nazaire
- 16 Sandouville
- 17 Sochaux

#### **Belarus**

18 Minsk

#### Spain

- 19 Palencia
- 20 Valladolid 21 Vigo
- 22 Villaverde

#### Italy

23 Val di Sangro

#### **Portugal**

24 Mangualde

#### **Czech Republic**

25 Kolín (Toyota)

#### Romania

26 Pitesti (Dacia)

RENAULT TRUCKS

#### Russia

- 27 Kaluga (PSA-Mitsubishi)
- 28 Kaluga (Volvo Trucks)
- 29 Moscow
- 30 Togliatti (AvtoVAZ)

#### Slovakia

31 Trnava

#### **Slovenia**

32 Novo Mesto

#### **Turkey**

- 33 Bursa (Tofas)
- 34 Bursa



Number of production and manufacturers worldwide,



# **AMERICA**

#### **Argentina**

- 35 Buenos Aires
- 36 Santa Isabel

#### **Brazil**

- 37 Curitiba
- 38 Porto Real
- 39 Sete Lagoas (Fiat)

#### **Colombia**

40 Medellin

#### Uruguay

41 Montevideo (Nordex) (project)

- 42 Oued Tlelat
- 43 Meftah (BSF) (project)

#### **Ethiopia**

44 Wukro

#### Kenya

45 (URYSIA) (project)

#### **Morocco**

- 46 Kenitra (project)
- 47 Casablanca
- 48 Tanger

49 Kaduna (PAN Nigéria Ltd)

#### **Tunisia**

50 Tunis (STAFIM) (project)

- 51 Chengđu
- 52 Shenzhen
- 53 Wuhan 54 Wuhan
- 55 Wuhan 56 Wuhan

#### **South Korea**

57 Busan (Renault Samsung Motors)

#### India

58 Tamil Nadu (CK Birla) (project) 59 Chennai (Renault- Nissan)

#### Indonesia

60 (Indomobil)

#### Iran

- 61 Kashan (SAIPA) (project) 62 Teheran (Iran Khodro) (project)
- 63 Teheran (Iran Khodro)
- 64 Teheran (Pars Khodro)

#### Japan

65 Mizushima (Mitsubishi) 66 Okazaki (Mitsubishi)

## Kazakhstan

67 Koustanaï

#### Malaysia

68 Gurun **69 Tan Chong Motors** (projet)

#### Uzbekistan

70 Jizzakh (SC Uzavtosanoat) (project)

#### **Vietnam**

71 Chulai (Thaco)

#### **WORLD PRODUCTION OF FRENCH MANUFACTURERS**



worldwide since 1898

In 2016, global production of French manufacturers continued to grow (+11% at 6.7 million vehicles), taking it to a new record level. It finally exceeded its 2007 level (+8%). Since 1996, production has increased by 76%, i.e. an annual average growth of 3%, thanks primarily to the increase in opportunities in Europe outside France and subsequently, outside Europe. Manufacturers have developed their production capacities in the latter zone, which in 2016 accounted for around 30% of overall production.

5.8 million private cars were built, exceeding the previous record years of 2010 and 2011; 881,000 LCVs came off the products lines, a record level and higher than 2008 when 847,000 vehicles were produced. Compared to 2007, production increased 9% for private vehicles (i.e. +482,000 units), and also progressed 6% for light commercial vehicles (i.e. +51,000 units).

#### ▶ PRODUCTION OR ASSEMBLY SITES/TOTAL PRODUCTION PER MODEL

Group/Brand	Model	Launch rate	Production or assembly sites in 2016	Production (In units) Total at the end of 2016
PSA GROUP			51.00 III 2010	10141 41 110 0114 01 2010
Peugeot, Citroën	i0n, C-ZERO	2010	Japan (Mitsubishi)	10,830 / 9,759
Peugeot, Citroën	108, C1	2014	Kolin (Czech Rep.)	179,707 / 954,916
Peugeot	208	2012	Poissy, Trnava (Slovakia), Porto Real (Br)	1,534,280
Citroën, DS	C3, DS3	2008/2016/2009	Poissy, Porto Real (Br), Trnava (Slovakia)	4,368,514 / 428,914
Citroën	C3-XR	2014	China	141,767
Peugeot, Citroën	301 / C-Elysée	2012	Vigo (E), China	396,076 / 434,566
Peugeot	308	2007	Sochaux, China, Argentina	2,537,707
Peugeot	2008	2013	Mulhouse, Porto Real (Br), China	768,423
Peugeot	3008	2009/2016	Sochaux, China	1,007,367
Peugeot	5008	2009	Sochaux	355,407
Citroën, DS	C4. DS4	2010/2011	Mulhouse, Vigo (E), China, Russia, Argentina	4,175,276 / 156,553
Citroën	C4 Cactus	2014	Madrid	214,779
Peugeot, Citroën	4008 / C4 Air Cross	2012	China / Japan (Mitsubishi)	45,536 / 70,118
Citroën, DS	C5, DS5	2008/2011	Rennes-la-Janais, Sochaux, China	1,360,195 / 122,737
DS DS	DS6	2014	China	32,415
Peugeot	405	1987	Iran	4,768,829
Peugeot	408	2010	Russia, China, Argentina	585,122
Peugeot	508	2010	Rennes-la-Janais, China	533,230
Peugeot, Citroën	Bipper, Nemo	2008	Turkey (Tofas)	234,425 / 245,427
Peugeot, Citroën	Partner, Berlingo	2008	Vigo (E), Mangualde (P), Argentina	
Peugeot, Citroën		2016	Hordain	2,680,943 / 3,169,452 632,804 / 582,442
	Expert, Jumpy Traveller, Spacetourer			
Peugeot, Citroën		2016	Hordain	4,516 / 5,166
Peugeot, Citroën	Boxer, Jumper	2006	Val di Sangro (I)	1,066,609 / 925,394
RENAULT GROUP				
Renault	Twingo	2014	Novo Mesto (SI)	225,410
Renault	Pulse	2011	India	16,893
Renault	Clio	1998/2012	Flins, Turkey, Novo Mesto (SI), Dieppe, Argentina, Colombia	5,849,059 / 1,655,869
Renault	ZOE	2012	Flins	67,744
Renault	Captur	2013	Valladolid	767,395
Renault	Logan	2005/2013	Russia, Brazil, Colombia, Morocco, Algeria, Iran	1,547,479 / 456,676
Renault	Kadjar	2015	Spain, China	223,116
Renault	Koleos	2008/2016	South Korea	336,057
Renault	Sandero	2007 / 2012	Brazil, Colombia, Morocco, South Africa (Rosslyn), Russia	1,034,542 / 406,703
Renault	Duster	2010	Russia, Brazil, Colombia, India	1,027,875
Renault	Fluence	2009	Turkey, Argentina, Russia	580,298
Renault	Mégane	2008/2009/2015/2016	Douai, Palencia (E), Turkey	2,506,065 / 125,910 / 206,972 / 15,731
Renault	Scala	2012	India	13,876
Renault	Espace	2014	Sandouville	60,121
Renault	Talisman	2015	Douai	47,355
Renault	Kangoo / Kangoo ZE	1997/2007/2011	Maubeuge, Argentina	2,719,613 / 1,140,600 / 26,770
Renault	Master	2010	Batilly, Brazil	647,214
Renault	Trafic	2014	Sandouville	223,229
Dacia	Logan	2012	Pitesti (Romania)	343,984
Dacia	Sandero	2012	Pitesti (Romania)	727,264
Dacia	Duster	2010	Pitesti (Romania)	963,791
Dacia/Renault	Lodgy	2012	Tanger (Morocco)	168,898
Dacia/Renault	Dokker	2012	Tanger (Morocco)	261,144
RSM	SM3 / Fluence	2009/2013	Busan (South Korea)	215,079
RSM	SM 5 / Latitude	2010	Busan (South Korea)	239,712
RSM	QM/QM6 / Koleos I and II	2007/2016	Busan (South Korea)	63,395 / 15,041
RSM	SM7 / Talisman	2007/2010	Busan (South Korea)	37,764
			, ,	
RSM	Rogue	2014	Busan (South Korea)	281,072

Sources: CCFA, PSA Group, Renault Group.

#### **MARKETS FOR NEW FRENCH VEHICLES**

In 2016, manufacturers' sales outside France progressed more sharply (+13%) than domestically (+4%).

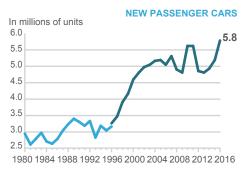
French manufacturers' share of sales in France was 20% overall: 18% for passenger cars, 32% for light commercial vehicles and 39% for heavy vehicles. These ratios are down for light vehicles because of increases in deliveries to the rest of Europe and to South America.

Foreign markets accounted for 80% of French manufacturers' sales, compared to two thirds around the year 2000 and short of 60% in 1990.

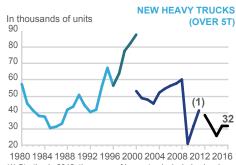
Deliveries outside the European Union were around 52% of total sales in 2016 for French manufacturers i.e. a lower level than 2010 and 2013. The continued partial recovery of the markets of Southern Europe and the decline in the share of those of emerging countries left this ratio practically stable compared to 2015. It was under 30% in 2000.



#### **▶ WORLD PRODUCTION OF FRENCH MANUFACTURERS**

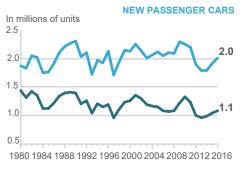


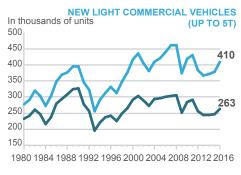




(1) Starting in 2012, the scope of heavy trucks includes invoices for 7 tons and greater (see note page 81).

#### ► VEHICLE REGISTRATIONS IN FRANCE



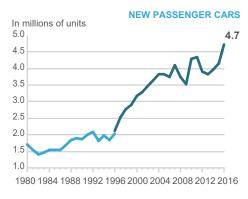


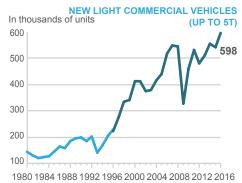
FRENCH GROUPS

TOTAL



#### **▶ FRENCH EXPORTS**







French manufacturers developed their activities in the world as a whole further to the opening up and development of emerging national markets. In 1980, the French market for new private cars was 1.9 million units compared to 2.9 million units of global production by the PSA and Renault groups

and 2.3 and 3.3 million cars respectively in 1990. In 2016, registrations in France totalled 2 million units, whilst those 2 groups built 5.8 million units.

From 2009 to 2015, the impact of the economic and financial crisis in the countries where French

manufacturers are highly represented did impact their deliveries of private cars outside France. In 2016, private car sales progressed (+14% to 4.7 million units) as did those of light commercial vehicles (+10% to 598,000 units). On the other hand, sales of commercial vehicles fell (-5%).

#### **ECONOMIC RATIOS OF THE AUTOMOTIVE INDUSTRY IN FRANCE**

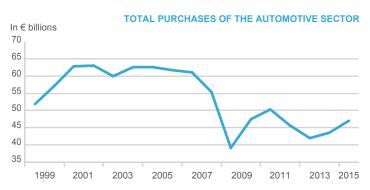
Average of the share of sales devote to investment into automotive construction

At the crossroads of numerous techniques, automanufacturing requires major investments: since the 2009 crisis, almost 2.6% of turnover. In a newly-defined perimeter (now including extraction industries, agro-foods), the automotive industry accounted for 4% of tangible investments in 2011 (7% in 2009).

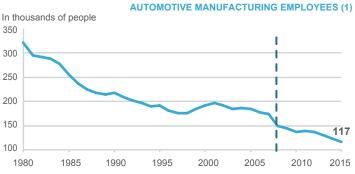
Given the growth in societal demands (environment, road safety, new mobilities, etc.) and economic development, the automotive industry is investing more in intangibles and R&D (cf. following pages) to which the automotive

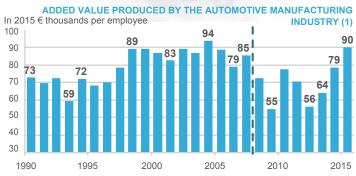
competitiveness clusters are particularly well suited.

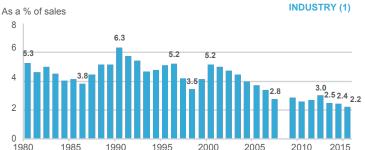
Added value per employee (in 2015 euro) was 90 euros in 2015, i.e. close to the average of the beginning of the century, thanks to the recovery in the European market, which is increasing sales, and automakers' internal efforts.





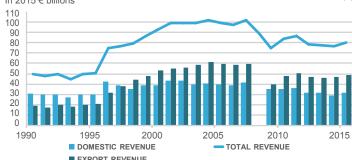






CAPITAL EXPENDITURE BY THE AUTOMOTIVE MANUFACTURING

DOMESTIC AND EXPORT SALES BY THE AUTOMOTIVE MANUFACTURING In 2015 € billions INDUSTRY (1)



(1) CCFA estimates for 2013: see also pages 84 et 85 (in particular for concept changes) Source: INSEE, National accounts base 2010 (see also page 62)

Each year, INSEE produces annual company surveys, one of the main aids to reading French industry trends. The report was previously compiled by SESSI. A major revamp of these surveys has been undertaken with the ESANE information system. Also, a new economic activity nomenclature was introduced at the beginning of 2008 (see pages 80 and 81).

The automotive industry includes the construction of automobiles, bodywork, caravans and leisure vehicles, but also upstream, the manufacture of automotive equipment. However, the statistics do not cover the whole scope of suppliers to the automotive industry, since certain products like tyres, plastics, equipment supplies and glass

feature in other business nomenclature categories (see also page 63).

#### Automotive construction

After 2004, in line with booming vehicle production, the added value (before tax) in automotive construction, at constant value and per employee, fell under the impact of different factors: costs linked to new environmental standards, stagnation and decline of the West European market for new vehicles. Since 2012, it has progressed regularly. In 2015 the increase was 61% up on 3 years earlier. So as to develop new models and optimise production capacities, automobile manufacturing has dedicated almost 2.6% of its turnover to

investment, i.e. almost €2 billion. Research and development costs (see page 34) are not included in these figures. The share of turnover made from exports has increased uninterrupted since 1990, when it reached 38%, and is now around the 60% mark, compared to around 33% for the manufacturing industry as a whole.

#### THE AUTOMOTIVE INDUSTRY IN FRANCE'S REGIONS



All told, including direct jobs (automakers' production and research sites), indirect jobs (suppliers' sites) and trickle-down jobs (generated by suppliers' workload), the automotive industry often represents an essential pillar of local economies.

#### ► AUTOMOBILE CONNECTED JOBS IN THE REGIONS

	Direct	indirect	Induced	Reference	_
Regions	jobs	jobs	jobs		Sources
Haute-Normandie	8,070	18,900	n/a	2010	Insee Haute-Normandie, Aval nb 122, September 2012
Nord-Pas-de-Calais	18,928	17,692	n/a	2011	Insee NPDC, La filière automobile en Nord-Pas-de-Calais, February 2014, October 2012, September 2010
Sud Alsace (Mulhouse) and Nord Franche-Comté	9,400	3,500	2,345	2007	Insee Alsace, Chiffres pour l'Alsace nb 2, march 2009
Nord Franche-Comté (Sochaux)	11,800	2,400	6,200	2007	Insee Franche-Comté - L'essentiel nb 113 - may 2009
Lorraine	almost 20,	000 people		2006	Insee Lorraine, Economie Lorraine nb 148, L'industrie automobile en Lorraine : des positions à consolider, November 2008
Seine-Aval	11,200	3,300	3,600	2006	Insee Ile de France - A la page nb
Val d'Oise and Yvelines	75,000	75,000	between 50,000 and 100,000	2006-2007	RAVY (Réseau automobile Val-d'Oise Yvelines) – Press kit – 2008 Edition

#### ► ADDED VALUE MULTIPLIERS BY SECTOR (EXCLUDING COKING-REFINING)

Sectors	Agriculture	Agri-food products	Capital goods	Automotive	Aeronautics and space	Other transport equipment (excl. aviation)	Other industrial products	Power, water, waste	Construction	Trade, services
Multipliers	2.3	2.8	2.3	4.1	4.8	3.0	2.3	2.1	2.0	1.5

Source: INSEE - Outlook report - March 2012

#### ▶ THE INDUSTRIAL PORTION OF THE AUTOMOTIVE INDUSTRY ACCORDING TO THE DIRECTION GÉNÉRALE **DES ENTREPRISES - DGE (2015)**

(AS A NUMBER OF 'FULL-TIME EQUIVALENT' EMPLOYEES)

Core	Periphery	Total
211,000	230,000	441,000



INSEE's March 2012 economic report shows that one unit of added value in the automotive sector generates 4.1 units of added value in the national economy. The automotive industry boasts the biggest added value multiplier after the aeronautics and space industry. Also, an industrial site creates local business beyond its direct employees. INSEE's regional divisions have produced surveys which describe some of the indirect jobs generated by suppliers, sub-contractors and service providers, plus trickle-down jobs, i.e. those needed to satisfy employees' (direct and indirect) and their families' consumption. The Direction Générale des Entreprises (2015) has produced a study on the automotive industry (cf. page 58) which describes the sector in terms of a 'core' and its 'periphery'. The core activities (manufacturers, equipment manufacturers and body builders) depend on the manufacture of industrial products and services, hence the multiplier effect described by INSEE.

The 2012 INSEE Haute-Normandie survey showed that the automotive sector employed 27,000 people in the region in 2010, 8,000 of whom in vehicle production and 19,000 in the rest of the segment, 48% with equipment manufacturers, 30% in intermediary goods and 9% in design and analysis. The February 2014 INSEE Nord-Pas-de-Calais survey indicated that the automobile industry in 2011 employed more than 36,000 people, 19,000 of whom in vehicle production. Also, in this region, over 40% of employees in the plastics sector and

almost 25% of those in metallurgy were working for the automotive industry. The 2009 study on the South of Alsace and the North of Franche-Comte found that in 2008, 45,000 people in all (spouses and children) were dependent on the jobs of the 13,000 people directly or indirectly employed by the automotive industry. And 2008 studies on the Seine-Aval region showed that one job out of six was dependent on the activity of the local PSA and Renault factories, the Poissy and Flins sites respectively. Sites in the auto sector also employ temps. According to DARES, the automotive industry employed 24,200 temps (FTE), of which 3,800 in the Ile de France area, 3,100 in Nord-Pas-De-Calais and 2,300 in Franche-Comté.

The research and development sites of the automotive industry as a whole are located in lle de France (eg: PSA in Vélizy and Renault in Guyancourt), but also in other regions. For Nord-Pas-de-Calais-Picardie statistics agency (INSEE) estimated that 12% (13% on average in France, cf page 34) of domestic research and development expenditure (DIRDE) for the region was accounted for by the automotive industry in 2013 ("Research expenditure in progression", May 2016). In its regional profile, the Bourgogne-Franche-Comté statistics agency (according to an April 2016 survey) observed that the automotive industry accounted for 70% of research and development expenditure in midcap companies and large enterprises present locally.

The automotive industry's regional associations (ARIA), a regional relay point for PFA, French Automotive & Mobility Cluster, includes companies (manufacturers, equipment manufacturers and other suppliers) from the automotive sector in the regions, with the public authorities and training and research establishments. The 11 members end 2016 have a wide range of remits: increasing competitiveness, improving industrial performance, access to new opportunities (customers and markets), emergence of new projects, promotion of the sector's image in the region. They also cooperate with automotive competitiveness clusters. Also, each ARIA runs the regional automotive operational committee (Comité opérationnel régional automobile) which brings together the public authorities (DIRECCTE and the automobile reference agent, the credit mediator, OSEO and the Caisse des Dépôts et Consignations - The government bank), the UIMM and other professional organisations, and competitiveness clusters.

#### COMPETITIVE FACTORS IN THE FRENCH AUTOMOTIVE INDUST

In a highly competitive global market, French automakers must be competitive whilst addressing factors affecting the whole industry. The latter includes the scale of compulsory charges on the factors of production, exchange rates, and other, more automotive-sector-specific elements like the opening up of the base market to competition, etc. All these factors affect profit margins (difference between gross operating profit and added value). This ratio has an impact on companies' capacity to invest in production (modernisation of sites), in developing products to challenge the competition, in research and development particularly to meet environmental standards, digital for the autonomous and connected car, and so forth.

In 2012, as part of a competitiveness drive, the government introduced the competitiveness and employment tax credit (CICE), calculated according to the total wage bill, but excluding salaries more than 2.5 times the minimum wage (SMIC). The tax reduction rate has increased from

4% of the gross wage bill in 2013 to 7% in 2017. According to the CICE monitoring committee's 2016 report, CICE eligibility in 2015 stood at 47% for the transport equipment sector (including the automotive industry) compared to 63% for the economy as a whole. The highest rates, above 75%, were enjoyed by non-industrial sectors.

Manufacturers have activated all the internal levers to develop business and keep industrial and research sites in France.

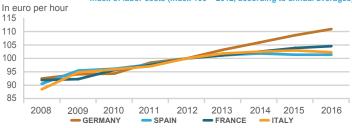
Since 2012, the cost of labour in manufacturing has increased six percentage points less than in Germany, whilst between 2000 and 2010 it was 15 percentage points more. According, in particular, to two publications from the economic analysis council (note n° 25 of October 2015 and 'Ideas for...' n° 06 of February 2017), production costs could also be decreased by reducing taxation on production.







#### LABOR COSTS IN THE MANUFACTURING INDUSTRY our-yearly ECMOSS survey and extrapolation using the quarterly of labor costs (Index 100 = 2012, according to annual averages) Results of the four-



# MARGIN RATE (GOS/VA) AND INVESTMENT RATE (GFCF/GOS)



The margin rate is the ratio of the gross operating surplus to the added value before tax, and the investment rate is the ratio of gross fixed capital formation to added value, before tax. Source: INSEE (national account, base 2010)

Competitiveness reflects the industry's ability to cope with competition and develop its sales. It is a relative notion, in this sense that reflects their position in respect of other actors on their markets.

Generalist European automakers started to recover from 2014 onwards, further to the bounce-back of 3.4 million additional units registered since the lowest point. So, to continue its development, the French automotive industry has to ensure comparable performance to that of its European, American, Japanese, Korean and, in future, Chinese and even Indian competitors. Operating margin (operational profit/turnover) is one of the tools used to measure automotive group performance. Between 2009 and 2013, it was 1% on average for French manufacturers compared to a range of 5 to 8% for German groups. By 2016, that average had reached 6% for French groups, and was at a high level, and close to German manufacturers at the top end thanks to so-called 'premium' brand margins. This levelling is necessary to be able to invest substantially to face the many challenges ahead. Beyond problems of global competitiveness of the economy or of industry (salary, social and fiscal costs), some competitiveness factors are specific to the French automotive industry, derived both from the characteristics of the car as a good and those of the global automotive industry.

Of the competitiveness factors affecting French industry, social charges weighs heavily on the employment factor. France has one of the highest in the European Union, including the euro zone. It is higher than in the UK, Italy and Spain, ... and much higher than in the countries of Eastern Europe. Nevertheless, compulsory charges on production impact automobile manufacturing directly and indirectly right through the supply chain. According to the CICE monitoring committee, the sectors the least exposed to international competition benefit the most from this tax credit.

Furthermore, exchange rate fluctuations can have a non-negligible impact on terms of trade because of the substantial and growing share of production outside the euro zone.

Since the beginning of 2002, the recovery of the euro has affected the competitiveness of French exports and companies have had to multiply their efforts commercially and industrially to continue to develop opportunities outside the euro zone (62% of total sales in 2016, compared to 47% in 2002). In 2016, the euro was at a lower level than between 2009 and 2014 against the world's leading currencies.

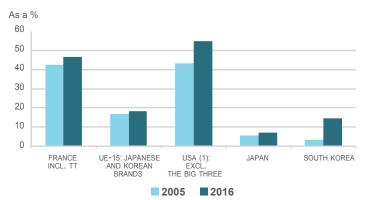
There are also factors linked to the opening up of the market, domestically and abroad. In general, domestic sales, referred to as the 'base market', are a solid pillar to feed growth on external markets via international development and innovation. For the French automotive industry, the French market and particularly the European market can be considered like their base market; it is open to competition and non-European automakers enjoy a significant and constantly growing share. In other automaking countries like Japan, access to the market is more difficult and local manufacturers therefore have a broader base market upon which they can build their international development.

#### COMPETITIVE FACTORS IN THE FRENCH AUTOMOTIVE INDUSTRY



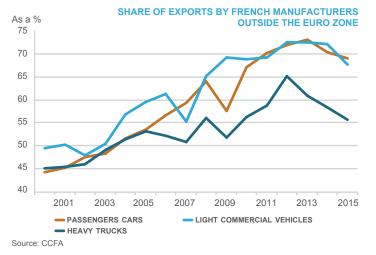
Raw material prices expressed in euros grew strongly between 2001 and 2012. Passing on those prices in final sales prices was difficult in a context of cut-throat competition and households having to arbitrate on spending. In 2014-2015, the rate kept low, before increasing substantially in 2016, although not reaching the high levels observed post-crisis.

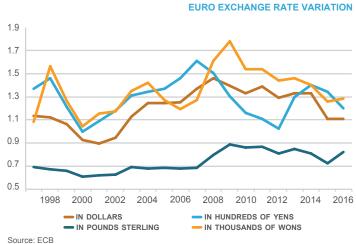
#### SHARE OF FOREIGN MAKES IN PASSENGER CAR MARKETS

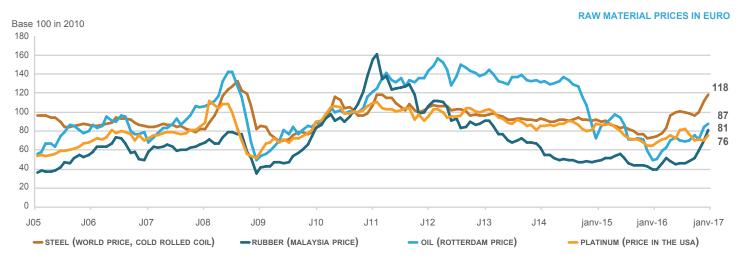


(1) USA: market share based on light vehicles. The Big Three are General Motors, Ford and Chrysler (excluding European makes). Source: CCFA









#### CONSOLIDATION OF THE AUTOMOTIVE INDUSTRY

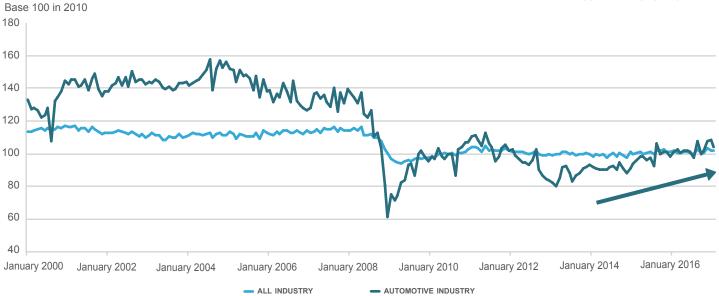


With major fluctuations on the European automotive market, the automotive industrial production index in France measured by INSEE (base 100 in 2010) has gone through two distinct phases. The first started at the beginning of the crisis, when the index fell sharply from almost 140 at the beginning of 2008 to 61 at the end of that same year. And then it climbed again, in particular thanks to systems introduced to boost demand, at a level between 80 and 113, the high point in the spring of 2011. The second phase then began, and the index fell to 80 at the beginning of 2013, before progressing towards a new point of equilibrium, at somewhere between 83 and 108 (against an average of 130 before the crisis). Between 2013 and 2017, the index progressed up 17%.

To address a crisis on such a collapse, the automotive sector had to structure itself. Thus, the Plateforme de la Filière Automobile (PFA) was introduced in 2009 by French manufacturers and their suppliers within the automotive suppliers' liaison committee (CLIFA) to improve the efficiency of their sector. It is now called PFA, Filière Automobile et Mobilités - French Automotive & Mobility Cluster.

As part of the industry's national council (CNI), the automotive sector strategic committee (CSF) was set up. The automotive CSF includes all members of the segment, upstream and downstream, including trade unions.

#### **INDUSTRIAL PRODUCTION INDEX**



Sources: Seasonal adjusted - working day-adjusted data by INSEE

The financial and economic crisis had major repercussions for the automotive sector, upstream with suppliers and downstream through to vehicle sales/maintenance, via transport and merchandise, equipment manufacture and service to companies, including research and development. Because of reduced business levels, degraded competitiveness and cut-throat competition, the fabric fragmented and the PFA had to fix new priorities to address the situation: lean manufacturing, skills and professions of the future, better management of communication, and medium- and long-term competitiveness strategies for automakers and their suppliers.

Since 2010, this has relied at a regional level on the regional automotive industry associations (ARIA). After an initial phase of activity, it consolidated in 2012, in particular around the automotive technical committee (CTA) and its two councils, the automotive technical standardisation council (CSTA) and the automotive research council (CRA). Five programmes were defined: the car consuming 2L per 100 km, the ecosystem of the autonomous vehicle, VALdriv PLM (structuring and federating the digital transformation of the segment), FORCE (lightening and reducing the carbon footprint by accompanying development of low-cost carbon fibre) and Plant of the Future. The first two programmes were integrated into

the 'ecological mobility' solution of the second phase of the 'New Industrial France' project launched in 2015. The first stage began in 2013 with industrial recovery plans. Works designed to minimise environmental impact, taking into account the whole vehicle life cycle will continue to be developed in 2017. The PFA works in partnership with competitiveness clusters and is a stakeholder in automotive CSF.

The purpose of the PFA is to build a clear vision of the major challenges faced by the segment. Its priorities are as follows: initiate impetus in innovation by piloting priority programmes and facilitating collaboration between different actors; being active in the fields of regulations and standards to give companies the best possible opportunities to develop; supporting and developing SMEs and mid-tier firms by accompanying them on strategy and operational choices; building lasting, trusting relationships and improving the quality of customer/supplier relationships so as to make each actor more efficient and therefore profitable; promoting the appeal of the segment and anticipating the skills that will be required for the jobs of today and the future; improving the match between needs and training and thereby giving real opportunities to the men and women working in the sector now and in the future

The automotive CSF was created in 2010 within the existing CNI, further to the industry conference signed up the same year, which now includes 13 other committees. It includes automakers and commercial vehicle manufacturers present in France, 'first tier' equipment manufacturers and a large number of SMEs and mid-tier firms who supply the automotive industry and come from different sectors (mechanical, plastics, diestamping, foundry, etc.). The heavy trucks industry, including body builders, is also included through the steering comittee of the transport industrial sector (COFIT). The downstream activities of the segment (distribution and repairs) are also present, as are R&D companies, in particular competitiveness clusters and the major public research organisations (IFPEN, IFSTTAR). The trade unions of the industrial branch are also represented. In October 2012, a sector contract was signed defining four major working themes: a shared vision for the segment to anticipate economic changes, innovation and R&D, solidarity of the sector and internationalisation of actors. In 2016, different CSF initiatives were implemented (CSR common policy) or at advanced stages (attractiveness, skills and employment programme - ACE).

#### INTERVENTION FUNDS, RESEARCH TAX CREDITS, FUTURE INVESTMENTS

The automotive industry requires major physical investment (production site, etc.) that are written down over very long periods. Furthermore, during design and before sale, vehicles require several years' work in research centres, onboarding continuous improvements, so as to be able in particular to meet societal demands, whether they are linked to safety or the environment, within the energy transition. Manufacturers must also meet new digital challenges (autonomous and connected car). The automotive industry is a capitalistic industry that relies on substantial financing.

During the financial crisis, this particularity was debilitating for the automotive industry

and the public authorities introduced structural instruments to finance them over the long term. Created in 2009 under the banner 'fund for the modernisation of automotive equipment suppliers', which became the 'automotive future fund' (FAA) in 2015, its mission is to contribute to the development and consolidation of equipment manufacturers that are strategic to the automotive sector, so as to foster larger, more profitable equipment manufacturers able to sign up to long-term partnerships with the automakers. The organisation continues to be based on two levels of funding: first and second tier (see table below).



#### **► INVESTMENT FUNDS**

FSI and FMEA	Objectives and attributions			
The strategic investment fund (FSI) (created in November 2008) became 'Bpifrance Participations' in 2013 when Bpifrance was created.	Originally a sovereign fund initiated by the public authorities to meet the funding requirements of companies with potential for growth and competitiveness to help the economy. Capital exceeded €15 billion at the end of 2014			
Fund for the modernisation of automotive equipment manufacturers (FMEA) (created in January 2009 and which in January 2015 became the 'automotive future fund').	Taking minority shareholdings in companies from the automotive sector with value-creating industrial projects and bringing competitiveness to the economy. The scale of investment is €5-€60 m.' 'Initial allocation of €600 m equally shared between PSA, Renault SA and FSI (now Bpirfrance Participations).			

Automotive future fund (FAA) (since January 2015)	Objectives and attributions
Automotive future fund (FAA)	€600 m distributed equally between three subscribers (Bpifrance, Renault, PSA) to accompany Tier 1 supplier projects, investing amounts between €5 m and €60 m.
Automotive future fund (FAA) Tier 2	€50 m comprising five reference automotive equipment manufacturers (Bosch, Faurecia, Valeo, Hutchinson and Plastic Omnium) and FAA Tier 1, specifically dedicated to Tier 2 automotive suppliers, investing amounts between €1 m and €5 m.

Source: Bpifrance

As part of the long-term financing, the strategic investment fund (FSI), which subsequently became Bpifrance Participations with the creation of the public investment bank Bpifrance, had, when it was set up, invested in three automotive companies. The fund for the modernisation of automotive equipment manufacturers Tier 1 (FMEA Tier 1), into which French automakers had injected €400 m and the FSI over €200 m, invested €330 m in 19 equipment manufacturers. The fund for the modernisation of automotive equipment manufacturers Tier 2 (FMEA Tier 2) provided €23 m to 11 companies. In 2016, all the funds that make up the FAA invested €37 million in 3 companies.

Investments for the future were launched at the end of 2009, further to the Juppé-Rocard report recommending the relaunch of innovation in France. The remit of this €47 billion investment programme (€35 billion in 2010, plus an additional €12 billion in 2013) is to bolster French companies' productivity and competitiveness. A budget of €1.1 billion is dedicated to the 'vehicle of the future' programme aimed at developing a more economical, more environmentally efficient vehicle; €750 m had already been committed by the end of 2016.

The automotive industry also has access to other 'investment for the future' programmes, including a worldwide project to create an 'institute of excellence in decarbonated energies' called 'the communicating decarbonated vehicle and

its mobility' (VEDECOM). VEDECOM is based on three Paris area sites and will become the reference of the new eco-mobility sector. It supports three research themes: the electrified vehicle, delegated driving and connectivity, mobility and shared energy. It includes over 40 members: major industrial groups, including PSA and Renault, SMEs, research centres and laboratories, schools and training centres, and local authorities. The 10-year budget is around €300 m, one third of which is financed by the industrialists themselves. VEDECOM is also working with PFA on the autonomous vehicle. The Institute grew in 2016 when the City on the Move Institute (IVM) joined. Their field is research and action in urban mobility.

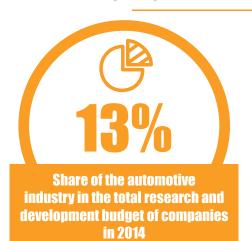
French automakers are also stakeholders in the Jules Verne Technological Research Institute (IRT), on a single site in Nantes. It focuses on the transport equipment sectors, including automotive, and energies. The budget commitment is €110 m divided between 73 projects. Its work in connection with the automotive sector concerns the development of processes for manufacturing multi-material parts (composites-metallic).

The public authorities are also supporting R&D development of companies via the 'research tax credit' (CIR), a tax measure created in 1983, amended and improved in 2004, but more importantly simplified and amplified by the 2008 Finance law. Manufacturing industry in 2013 benefited from 61% of all CIR relief, i.e. €3.4

billion. The automotive industry was the third biggest beneficiary of CIR with 6%, i.e. €332 m.

European Investment Bank loans (EIB) and the European Union's Framework Programme for Research and Development (plan 'horizon 2020' for the current one) also provide an effective stimulant to R&D financing. Furthermore, the major traditional automotive countries and BRIC countries also strongly support the automotive sector, in particular in the R&D field.

#### RESEARCH AND DEVELOPMENT EXPENDITURE IN THE AUTOMOTIVE SECTOR



In 2014, the automotive industry was the second branch in terms of budget for Research and Development (R&D) within companies in France. Their expenditure totalled €5.8 billion, i.e. 13% of all companies' R&D expenditure.

The crisis substantially reduced financial resources but domestic R&D spending fell only 2% in 2009 and 2010, emphasising the vital importance of the long-term view. It recovered markedly (+11%) in 2011 and reached a new record level before dropping to 16% (€4 billion) over the following two years. It represents 42% of the gross added value of the branch.

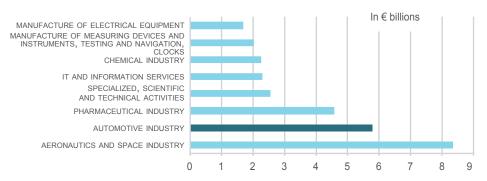
The manufacturers must now invest not only to satisfy their customers and respect regulatory standards, but also to face up to the growth of digital applications.

Cumulative over the past 5 financial years, the sector has invested almost €29 billion. Spending has a pull effect on suppliers, such as those from the plastics, electronics industries, for example. In investment terms, the automotive industry ranks higher than both aeronautics and space, and pharmaceuticals industries. It is also the first filer of patents.

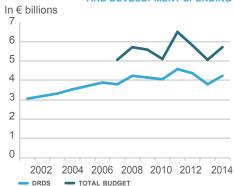
## ▶ GROSS DOMESTIC EXPENDITURE ON RESEARCH AND DEVELOPMENT IN THE MAIN CORPORATE RESEARCH SEGMENTS IN FRANCE IN 2014

	DRDS (1)	ERDS (2)	Total budget		Of which public financing (3)	
	in € millions	in € millions	in € millions	As a % of total	in € millions	As a % of total
Aeronautics and space	3,503	4,837	8,341	19.2%	797	33.6%
Automotive industry	4,390	1,391	5,781	13.3%	38	1.6%
Pharmaceutical industry	3,027	1,559	4,586	10.6%	49	2.1%
Other specialized, scientific and technical activities	2,067	487	2,554	5.9%	239	10.1%
IT and information services	2,103	199	2,302	5.3%	117	5.0%
Chemical industry	1,788	470	2,257	5.2%	145	6.1%
Manufacture of measuring devices and instruments, testing and navigation, clocks	1,627	389	2,016	4.6%	314	13.2%
Manufacture of electrical equipment	1,027	659	1,686	3.9%	26	1.1%
Components, electronic cards, computers, peripheral equipment	1,405	211	1,616	3.7%	139	5.9%
Publishing, audiovisual, and broadcasting	1,086	212	1,297	3.0%	54	2.3%
Manufacture of machinery and equipment not included elsewhere	1,081	202	1,282	3.0%	43	1.8%
Manufacturer of metallic products except machine and equipment	732	395	1,128	2.6%	s	s
Other branches	7,296	1,234	8,530	19.7%	409	17.3%
TOTAL	31,133	12,246	43,378	100.0%	2,371	100.0%

# TOTAL CORPORATE RESEARCH AND DEVELOPMENT EXPENDITURE IN FRANCE IN 2014 IN THE MAIN RESEARCH SEGMENTS



## AUTOMOTIVE INDUSTRY RESEARCH AND DEVELOPMENT SPENDING



- (1) DRDS: Domestic Research and Development Spending.
- (2) ERDS: External Research and Development Spending.
- (3) Excluding research tax credits.

s: statistics secret

Source: Ministry of Higher Education and Research (MESR DGESIP-DGRI SIES).

The research statistics study office (Ministry of Higher Education and Research) performs surveys on R&D expenditure by companies and the wider public sphere. Since 2008, data has been disseminated under a new nomenclature of economic activity. The total R&D spend can be broken down into domestic expenditure (DRDS), for work carried out in France, whatever the origin of the funds, and foreign expenditure (ERDS), for R&D work entrusted to other companies or public research bodies; some of the latter expenditures can be performed abroad. ERDS are much more volatile than DRDS. The latter fell

slightly during the economic crisis but were close to their high point in 2014.

In 2014, 23% of DRDS in the automotive sector was triggered by subsidiaries of companies under foreign control (owning over 50% of their capital).

In 2014, 30,000 full-time equivalent people, of whom 17,000 researchers, were included in the R&D headcount of the automotive sector. These numbers were down 8% compared to 2003 (in spite of an increase in 26% for researchers).

According to the national industrial property institute (INPI), in 2015 the PSA (including Faurecia) and Renault groups occupied the top positions as major filers of patents; it is important to emphasise that three major automotive suppliers were also amongst the top 20.

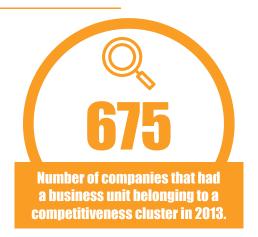
#### **AUTOMOTIVE COMPETITIVENESS CLUSTERS IN FRANCE**

Initiated by the State and the territorial authorities in 2005, competitiveness clusters federate companies (major groups and SMEs/ intermediate-sized companies), research units and training centres in collaborative project mode. They also offer a number of services: economic intelligence, aid to the filing of patents, networking, etc. Their role is to provide a competiveness springboard to the French economy by putting the emphasis on its capacities for innovation and encouraging the anchoring and structuring of the different regions of the country.

The 'national pact for growth, competiveness and employment' drawn up by the government in November 2012 was intended to focus the

action of the competitiveness clusters on products and services that could be industrialised, for greater economic impact in terms of growth of companies and job creation. This new phase was implemented with 'performance contracts' for the period 2013-2018. Automotive units have developed their work programmes accordingly, focusing on innovation, skills, networking and launching new solutions.

The automotive competitiveness clusters are associate members of the automotive sector body, the PFA, French Automotive & Mobility Cluster



#### ► AUTOMOTIVE COMPETITIVENESS CLUSTERS IN FRANCE IN 2013

	Mov'eo	Vehicle of the future	LUTB	iDforCAR
With a	world-wide implication	domestic implication	domestic implication	domestic implication
Number of companies with a business unit in a competitiveness cluster	265	173	139	98
Of which SMEs (under 250 employees)	187	98	70	59
Employees of business units involved in the cluster (number of people) (1)	77,091	59,810	32,178	27,105
Collaborative R&D project funding for the major public funding institutions (2) (in thousand €)	26,885	13,416	15,087	14,293
Number of projects linked to the major public funding bodies	20	6	7	15

(1) Information concerning employees is calculated on the basis of 2012 data.

(2) Major public funding bodies: Fonds unique interministériel (FUI), Local authorities (FUI financing only), Bpifrance Financement, Structuring research and development projects for competitiveness (PSPC) and the National Research Agency (ANR)

Sources: DGCIS survey, INSEE, DIACT, competitiveness clusters

In 2016, the automotive industry continued its research and development efforts through those clusters. Through them, the automotive industry is mobilised to meet the challenges of industrial excellence and durable mobility. Their action is transversal and includes automakers, equipment manufacturers, innovative SMEs/intermediatesized companies, research laboratories and training organisations, including universities.

The global Mov'eo cluster (www.pole-moveo. org) covers the Ile-de-France and Normandie regions. Mov'eo is dedicated to mobility of the future. Its research and development themes are: safety of road users, intelligent mobility solutions, innovative vehicles and energy storage, materials and systems, drivetrains and energy management. The cluster is also involved in one of the nine solutions of the second New Industrial France project launched by the government in May 2015, as an extension to that launched in September 2013. Mov'eo is therefore involved in the ecological mobility solution, with cars consuming less than 2 litres per 100 kilometres driven, for example, and the connected vehicle. The cluster also stepped up its cooperation with the PFA, French Automotive & Mobility Cluster, in 2016 on 'jobs and skills'.

The 'vehicle of the Future' cluster (www. vehiculedufutur.com) mobilises historical automotive areas such as Alsace and Franche-Comte, interacting with Germany and Switzerland. Its mission revolves around three

themes: innovation, industrial excellence serving companies (piloted by the PerfoEST cluster Association, which is the ARIA of Alsace and Franche-Comte) and accompanying companies' growth. In terms of innovation, Mov'eo is concerned with automotive components, electric vehicles, hydrogen vehicles, recycling and mobility services. One of the industrial performance programmes in 2016 was the factory of the future.

The ambition of the LUTB, Transport and Mobility Systems cluster (www.lutb.fr) is to provide solutions to the challenges raised by the increasing needs for mobility of individuals and merchandise in towns. It coordinates structuring activities for the region: automakers, transport operators and research centres. Research projects revolve around five key themes: engines and drivetrains, safety and security, vehicle architecture, intelligent transport systems, modelisation and mobility management. Also, it has been involved in the New Industrial France programme (Nouvelle France Industrielle) since 2014. The unit is also associated with the Rhône-Alpes Automotive Cluster ARIA (ex-Rhône-Alpes region), one of whose development themes is industrial performance. In 2016, the Automac association, from ARIA Auvergne joined its ranks.

The iDforCAR cluster (www.id4car.org), set up in the West of France (Brittany, Pays de la Loire, Poitou-Charentes), focuses on special vehicles and sustainable mobility. The

four strategic areas of activity are: materials, intelligence of on-board systems, applications and industrialisation, and information and communication technologies serving mobility. A new strategic plan was introduced for the 2016-2020 period. The unit also increased its size at the end of 2016 after merging with Institut Automobile du Mans

Other clusters, not specifically dedicated to the automotive industry, have applications which are of interest to the sector. Elastopôle, a national cluster, including the regions of Val de Loire, Auvergne-Rhône-Alpes, Pays de la Loire and Ile-de-France, is dedicated to rubber and polymers, and three quarters of its applications concern the automotive sector. It also works in collaboration with the automotive clusters. I-Trans, a global cluster in Hauts-de-France which specialises in sustainable terrestrial transport solutions, operates on the principles of transversality between road and rail.

#### THE AUTONOMOUS AND CONNECTED CAR

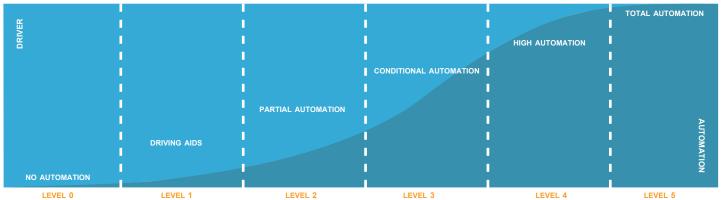


The challenges encompassing the development of the autonomous vehicle are many: improving road safety, making traffic more fluid, and promoting economic driving. Connectivity and autonomy will also facilitate mobility with the development of new mobility services to accompany the ecological transition.

Numerous technical, digital, legislative and regulatory issues remain. Nevertheless, the digital transition is in progress in the automotive sector and will be a major theme of its development over the coming years.

On the graduated scale of automation from 1 to 5, 1 and 2 level vehicles are already available on the market. Total automation (level 5) is being tested experimentally on shuttles in towns or trucks on closed sites. Experiments with driverless cars are also underway in increasingly complex environments, ranging from dedicated roads to the open road. There will be more and more of them to validate all the procedures involved.

#### LEVELS OF DRIVING AUTOMATION



Automation levels were defined by SAE J3016

Level 0: The driver performs all driving tasks (steering, acceleration/braking, monitoring the driving environment).

Level 1: The driver maintains overall control of the vehicle but a driving aid system takes charge of vehicle steering or acceleration/braking.

Level 2: The driver must permanently monitor the vehicle's behaviour and the driving environment. Driving aids take charge of vehicle steering and acceleration/braking under predefined conditions.

Level 3: The driver doesn't need to permanently monitor the behaviour of vehicle and the driving environment, but it must be able to quickly take over control of the vehicle if the system requires it.

Level 4: Under predefined conditions, the driver is no longer irreplaceable. The system in this case can fulfil all the driving functions of the vehicle.

Level 5: The system performs all driving functions in all situations encountered on a journey. Driver involvement is no longer required.

**Definition:** An autonomous vehicle is one equipped with on-board intelligence systems that relieve driving tasks under certain conditions and which, once fully developed, will be able move around on the public highway automatically without the user intervening. The notion of autonomous vehicle covers different degrees of autonomy. Several degrees of autonomy are identified by the International Organisation of Motor Vehicle Manufacturers (OICA), ranging from level 0, in which the driver has no autonomy, to assisted driving, when the drive maintains the handling of the vehicle, whilst benefiting from various aids (speed controller and cruise control, guiding, geolocalisation, etc.), right through to total automation where the vehicle can drive without human presence on board. We also talk about the total or partial driving delegation vehicle where some or all driving tasks are transferred to the driver during the trip. 'Connected vehicle' refers to a vehicle equipped with technologies allowing it to exchange data with its environment on a continuous basis.

**Functioning:** the development of electronics and IT has led to an increasing integration of multiple functionalities as driving aids - such as assisted braking, cruise control or parking aids required for vehicle connectivity, during an initial stage towards the driverless vehicle. To achieve total autonomy (level 5) and to be able to use the roads in a reliable and secure manner, the vehicle is equipped with detectors and cameras to collect information about the environment, processing systems to decide on the appropriate manoeuvre to execute, and communication tools to execute it. The autonomous vehicle communicates with its environment via the road infrastructure, but also with other users and other vehicles. Accordingly, numerous partnerships are forming with various market segments (equipment manufacturers, telecommunications, digital) to follow through on these developments.

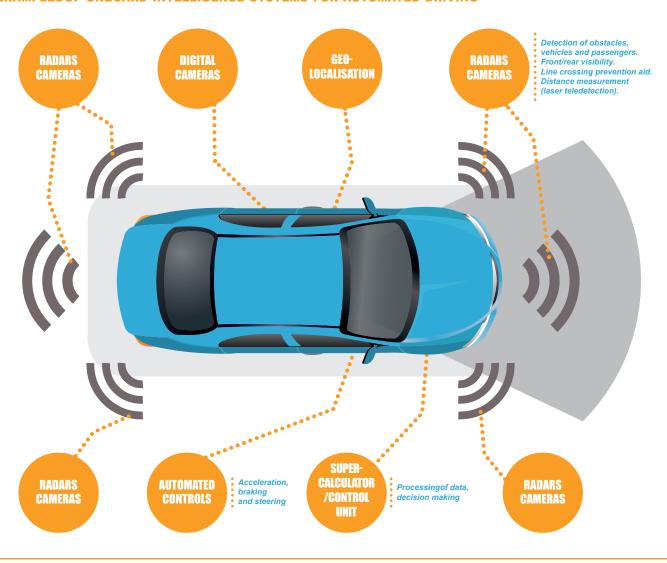
**Benefits:** connected to the infrastructure and to other vehicles, the driverless vehicle must optimise

travel time, fuel consumption, improve road safety by anticipating road events that present a risk and provide more comfort for users, freeing them up for other tasks than driving. The automation of vehicles, a process already under way through driving aids, enhances driver comfort, road safety and vehicle maintenance.

**Use:** the prospects for driverless vehicles are multiple, and concern different types of vehicles in different situations: cars, trucks, buses, shuttles; driving on a fluid motorway or at low speed in congested traffic, automatic valet services, small collective vehicles, flow management vehicles in logistics centres or areas, pelotons of urban shuttles (balancing out car-share parks). For long distance road transport of merchandise, convoys of heavy vehicles could see driverless trucks following a lead vehicle driven by a guide driver.

#### THE AUTONOMOUS AND CONNECTED CAR

#### ▶ EXAMPLES OF ONBOARD INTELLIGENCE SYSTEMS FOR AUTOMATED DRIVING



**Experiments:** to date, the most advanced experiments have been on shuttles (Navya, Easymile), trucks in areas closed to public traffic (e.g. mines in Sweden) and military equipment. Rapid progress has been made on low-speed public transport shuttles.

The driverless car is the subject of major programmes in the US, Europe and Asia. In France, the government is supporting the development of connected and driverless vehicles with the 'Nouvelle France Industrielle' initiative, federating public and private players around research themes such as on-board intelligence, connectivity and safety. French automakers are also working within the VEDECOM institute (advanced research) and IRT SystemX (electronic architecture and cyber security). Experiments on open roads are increasingly prevalent in the US. In France, they started in 2015 and are gathering pace. Since that time, more than 120,000 km has been covered on French and European motorways with various driverless car prototypes (C4 Picasso, Renault Espace).

Applicable rules and the data issue: the development and use of connected, driverless vehicles is subject to a complex set of progressively evolving rules. In this context, data generated by the driverless vehicle, able to share information with its environment, is a major

challenge and personal privacy is a key issue.

Hence the notion of 'Extended Vehicle' developed by automakers, responsible for the vehicle throughout its service life, in coordination with equipment manufacturers and dealers, so as to introduce a recognised standard internationally to ensure a very high level of security surrounding access and applications linked to connected vehicles.

To address the different legal constraints, numerous initiatives have been implemented:

- The automakers, responsible for the processing of vehicle data, are subject to obligations relating to the management of data having an impact on the safety of property and people. Access to these data must therefore meet the requirements of the existing law on data privacy (law of January 6, 1978 and from the end of May 2018, regulation of April 27, 2016).
- The driverless vehicle heralds changes to the share of responsibilities between drivers, manufactures and infrastructure managers. The Vienna convention on road safety of 1968, signed in particular by France, stipulates that 'drivers must constantly have control of their vehicle and refrain from any other activity than driving'. But, since March 23, 2016, amendments to that convention

are opening the way to autonomous driving explicitly authorising automated driving systems on public roads, on condition that they comply with United Nations vehicle regulations and can be controlled or even deactivated by the driver. This is a first major step forward to the deployment of automated driving technologies.

- Finally the legal framework for experimenting with driving-delegated vehicles on public roads is provided for in the order of August 3, 2016 which will be completed by a decree and a ruling. However, the Highway Code will have to be amended to allow the use of such vehicles outside of the experimental context over the longer term.

Other issues will also have to be resolved to allow autonomous vehicles to use the roads (training of drivers, cyber security rules, road equipment, etc.). And finally, the social acceptability of these new vehicles linked to price and psychological factors, is crucial to development, but remains difficult to forecast.

#### FRENCH AUTOMOTIVE FOREIGN TRADE

2016 was marked by growth in global trade (+1.3%), but also a more dynamic European market. In this environment, exports of automotive products from French sites totalled €45 bn, i.e. €6 bn more compared to 2013. The automotive industry remains one of the biggest export sectors next to aeronautics, agri-foods, etc. It accounts for 10% of total exports. In 2015, in customs rankings, two of the sector's companies were among the five biggest exporters.

Accelerated growth on the European market resulted in a strong increase in exports (+4%); imports progressed 9% with an ever greater proportion of flows of new vehicles from Germany

( $\in$ 8.6 bn). The balance of the automotive industry branch was  $\in$ -9.7 bn.

The positive balance of the 'parts and engines' item fell again (-30% to €3.4 bn), but exports grew 2% to €22 bn. The surplus can be explained in particular by the production of non-French sites of French manufacturers, which source from France, for example for drivetrain units (more than €3 bn in exports).



#### ► FRENCH AUTOMOTIVE FOREIGN TRADE (IN € BILIONS)

	New cars	New light commercial vehicles	New heavy trucks	Parts and engines	Automotive industry sector	Used vehicles	Automotive sector	All products (1)	Share of the automotive
EXPORTS (FOB)									
2015	15.0	4.2	2.9	21.1	43.1	1.4	44.5	446.5	10.0%
2016	15.6	4.4	3.1	21.6	44.7	1.5	46.2	443.2	10.4%
Change 2016/2015 in %	+4.1	+5.0	+9.0	+2.4	+3.7	+6.5	+3.8	-0.7	
IMPORTS (CIF)									
2015	25.2	3.2	3.5	18.0	49.8	1.2	51.0	509.7	10.0%
2016	27.7	3.6	4.0	19.2	54.4	1.2	55.6	509.2	10.9%
Change 2016/2015 in %	+9.9	+13.5	+14.5	+6.8	+9.3	-1.3	+9.1	-0.1	
BALANCES									
2015	-10.2	+1.0	-0.6	+3.1	-6.6	+0.1	-6.5	-63.2	
2016	-12.1	+0.8	-0.8	+2.4	-9.7	+0.2	-9.5	-65.9	
COVERAGE RATE (2)									
2015	60	132	83	117	87	111	87	88	
2016	56	122	79	112	82	120	83	87	

<sup>(1)</sup> Not including military equipment.

#### **EXPORTER RANKINGS - YEAR 2015**

Rank	Company (1)
3	Peugeot Citroën Automobile SA
4	Renault SAS
16	Renault Trucks
20	Automobiles Peugeot

(1) In these rankings, Customs uses the company, rather than the group. Source: Customs.



In 2016, the share of exports from the automotive branch as a proportion of all exports of goods represented 10%, 11% for imports. This ratio was 12% and 9% respectively in 1997, the year of the crisis in the French market for new vehicles.

Exports from the automotive industry totalled more than €50 bn in the mid-2000s, before falling back to €34 bn in 2009 with the crisis. Since, they have fluctuated between €39 bn and 45 bn but are still growing since 2014.

Exports of passenger cars valued more than €25 bn in 2004-2005 before a very sharp drop to €13.7 in 2009. Subsequently, they fluctuated between €13 bn and 16 bn further in particular to the weak Southern European markets where French manufacturers are well represented.

After a sharp decline in 2009, light commercial vehicle exports have grown continually. They now stand at €4.4 bn. Exports of trucks reported further years of decline in 2012 and 2013. Their total value in 2016 was €3.1 bn. Imports of light commercial

vehicles and trucks increased. The balance of LCVs, which was structurally negative, has since turned positive (€+0.8bn), and the coverage rate was 122 in 2016 compared to 58 in 2010.

Exports of parts and engines increased 2.4% whilst imports increased 6.8%. The balance therefore worsened for the third consecutive year (€2.4 bn).

<sup>(2)</sup> Exports / imports x 100.

FOB: Free-on-board: transaction value including freight and insurance up to the border of the exporting country.

CIF: Cost, insurance, freight: transaction value including freight and insurance up to the border of the importing country.

Sources: Customs data processed by CCFA.

#### FRENCH AUTOMOTIVE FOREIGN TRADE

The main customers of the French automotive industry are generally in Europe but do include emerging from Eastern Europe and North Africa.

The top five destinations for new passenger cars from France are primarily in Europe, with three of the four other main markets of the European Union. In 2016, Belgium (€2.9 bn) came top, ahead of Germany (€2.5 bn) and Italy (€2.2 bn). Algeria ranked seventeenth with €144 m turnover.

Germany was the biggest importer of light commercial vehicles with €957 m, ahead of

Belgium with €678 m. From 2005 to 2010, the value of exports to the top five importing countries tripled to €2.7 bn. In 2016, the total value of light commercial vehicle sales reached a record level of €4.4 bn.

The recovery of the South European markets and growth in Germany and the UK led to further strong increase in the export of commercial vehicles over 5 tonnes, thus reaching a new record level. Since 2010, exports to Germany have progressed 29% and more than doubled to Spain and the UK.

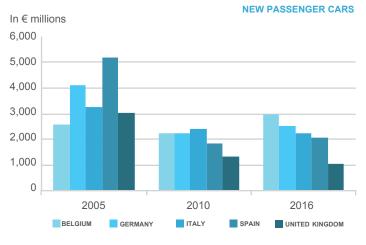
Exports of parts and engines recovered compared to 2010. The top five destinations were in Europe, with Belgium replacing Slovakia when compared to 2015. Germany ranked first (€4.7 bn). China (€477 m) and Brazil (€349 m) were respectively eleventh and fourteenth. Brazil's total was again in sharp decline.

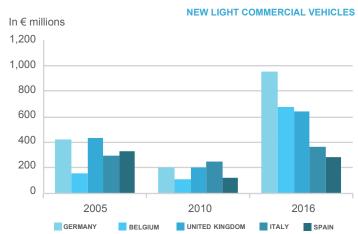
Imports of new passenger cars from Germany (€8.1 bn), UK (€2.2 bn) and Japan (€1.4 bn) are high. For commercial vehicles, imports from Germany totalled €1.5 bn.

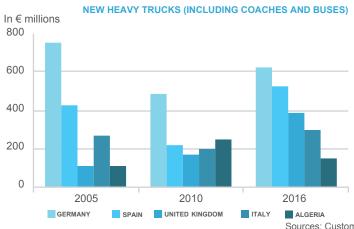


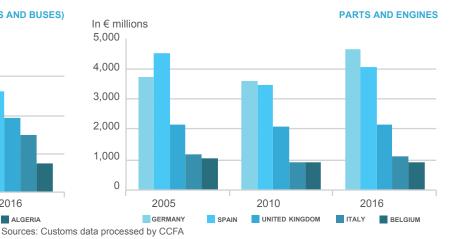


#### ▶ LEADING DESTINATIONS OF AUTOMOTIVE EXPORTS FROM FRANCE









# PASSENGER CARS BY ENERGY (DIESEL, HYBRID AND ELECTRIC, ETC.)

Since 2001, registrations of new private cars equipped with diesel engines in France have been higher than those of other engine types. In 2016, their market share continued to decline (-2 percentage points) to 55%. This drop came on the back of three years of sharp decline: -6 percentage points in 2013, -3 percentage points in 2014 and -7 percentage points in 2015. This broad trend can be explained by objective elements: less favourable tax arrangements for diesel, the added cost of diesel engines because of changing standards, development of three-cylinder petrol engine ranges and also more subjective factors (the VW issue in the United States, municipal authority decisions in France, etc.).

In Western Europe outside France, 2011 saw the high point (52%) of the diesel engine share, and it hovered around 51% for 4 years before dropping two percentage points in 2016 to 49%.

Hybrid and electric engines are emerging in France with respective market shares of 2.9% and 1.1%. In Western Europe, development is slower, with only 2.8% and 0.6% of the market respectively. Registrations of hybrid and electric cars in France, boosted by a bonus system, accounted for 17% of the Western European market for such vehicles, whilst France's market share overall was 14%.



#### **▶ DIESEL PASSENGER CARS**

	1990	2000	2005	2010	2015	2016	% change 2016/2015
PRODUCTION							
In units	804,007	1,648,448	2,328,108	2,178,408	2,066,449	1,979,607	-4.2
As a % of total production	24.4%	35.8%	45.0%	38.8%	39.9%	34.2%	-4.2
EXPORTS							
In units	292,061	975,038	1,500,989	1,346,022	1,452,186	1,492,686	.00
As a % of total exports	15.5%	33.7%	39.1%	31.3%	34.9%	32.4%	+2.8
REGISTRATIONS							
In units	762,054	1,046,485	1,466,296	1,593,173	1,097,124	1,050,418	4.0
As a % of total registrations	33.0%	49.0%	69.2%	70.8%	57.2%	54.8%	-4.3
CARS IN USE							
In units	3,775,000	9,980,000	14,348,000	18,165,000	19,900,000	19,938,000	10.2
As a % of all cars in use	16.0%	35.6%	47.7%	58.0%	62.2%	61.6%	+0.2

Source: CCFA.

#### **▶ ELECTRIC AND HYBRID PASSENGER CAR REGISTRATIONS**

	20	09	20	10	20	11	20	12	20	13	20	14	20	15	20	16
	Units	Market share	Units	Market share	Units	Market share	Units	Market share	Units	Market share	Units	Market share	Units	Market share	Units	Market share
Electric	12	0.0%	184	0.0%	2,630	0.1%	5,663	0.3%	8,779	0.5%	10,561	0.6%	17,268	0.9%	21,751	1.1%
Hybrids	9,876	0.4%	9,655	0.4%	13,641	0.6%	27,889	1.5%	46,745	2.6%	43,143	2.4%	61,619	3.2%	58,385	2.9%

# ► MAIN NEW DIESEL PASSENGER CAR RANKINGS IN 2016 (WITH TEMPORARY TRANSIT)

Rank	Brands	Models	% market
1	RENAULT	Mégane	6.5
2	RENAULT	Clio	5.7
3	PEUGEOT	308	4.8
4	CITROEN	C4	4.2
5	PEUGEOT	Captur	3.4
6	CITROEN	208	3.4
7	RENAULT	Kadjar	2.9
8	PEUGEOT	3008	2.8
9	DACIA	Duster	2.5
10	PEUGEOT	2008	2.3

ZOE

Source: CCFA

In 2016, France remained third on the European market for diesel engines for new passenger cars with 1.1 million registrations, behind Germany and the UK, 1.1 and 1.3 m units respectively for that engine type. It is just ahead of the Italian market (1 million units), which progressed sharply in 2016 (+20%).

In terms of the number of cars on the road in France, 62% of cars on the road on January 1, 2017 were equipped with a diesel engine. This ratio has been stable since 2013.

In Western Europe, diesel's market share in new cars fell (-2 percentage points to 49%) i.e. 6.9 m units. On this market, the share of French automakers was 21%. Outside Europe, the market share of diesel cars is higher than 40% in India, and it increased by twenty percentage points in South Korea since 2011 to over 39% in 2016.

In 2016, 2 m diesel cars were produced by French automakers, i.e. a decrease of 4% compared to 2015 (-18% compared to the record level of 2004). The production of petrol cars progressed around 20% whereas that of diesel cars fell 4%. French

groups also supplied diesel engines to other makes according through cooperation agreements.

In 2016, registrations of new hybrid passenger cars totalled 58,400 units. That of new electric passenger cars increased 26% to 21,800 units. The sharp increase in the sales is boosted by the government's Automobile Plan started in July 2012. French automakers have developed a range of products (Renault Zoé, Citroën C-Zéro, Peugeot iOn). The French market is the second Western European market, behind Norway, for electric cars.

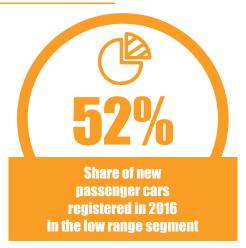
### **NEW PASSENGER CAR REGISTRATIONS BY MODEL. RANGE AND BODY STYLE**

The economy and low range, which dominates in France, peaked in 2010 thanks to the bonus/malus system and the scrap incentive scheme, before a slight drop back. Subsequently the renewal of cars from the economy range (108, C1, Twingo, Zoé), the success of models from the existing low range (208, C3, Clio Sandero) and the development of the 4WD range (C4-Cactus, 2008, Captur, Duster) stimulated the segment, which share decreases but remains over 50% (41% as an average in Western Europe in 2016).

All-terrain, all-road vehicles continue their sharp growth (+19 percentage points since 2010 to 28%).

On the other hand, over the same period, sedans (-10 percentage points at 51%) and multipurpose vehicles - MPVs (-6 percentage points at 13%) seemed to lose their appeal. Demand is less volatile for estates, and they continue to take around 6% of the market.

The share of higher-end models was 20% in 2016 compared to 15% in 2010. They have benefitted in particular from the demand from companies, and French manufacturers can rely on proven models (508, Espace) and new launches (Talisman).



#### ► RANKINGS OF MAIN NEW **PASSENGER MODELS IN 2016**







#### **NEW PASSENGER CAR REGISTRATIONS BY RANGE**

Range	1990		20	2000		2010		15	2016	
Range	units	%								
Low	986,532	42.7	855,161	40.1	1,283,902	57.0	1,031,441	53.8	1,052,155	52.2
Low-mid	477,631	20.7	695,146	32.6	627,694	27.9	545,819	28.5	558,923	27.7
High-mid	555,053	24.0	303,028	14.2	234,664	10.4	235,633	12.3	264,265	13.1
Premium	256,381	11.1	163,293	7.7	105,313	4.7	104,333	5.4	139,834	6.9
Others	33,533	1.5	117,256	5.5	96	0.0	0	0.0	0	0.0
TOTAL	2,309,130	100.0	2,133,884	100.0	2,251,669	100.0	1,917,226	100.0	2,015,177	100.0

#### **▶ NEW PASSENGER CAR REGISTRATIONS BY BODY STYLE**

Bodies	19	1990		2000		2010		2015		2016	
boules	units	%	units		units	%	units	%	units	%	
Sedan	2,155,724	93.4	1,527,676	71.6	1,377,498	61.2	979,415	51.1	1,029,845	51.1	
Station wagon	61,418	2.7	119,739	5.6	153,476	6.8	134,934	7.0	124,860	6.2	
Coupe-convertible	36,269	1.6	50,527	2.4	70,353	3.1	24,836	1.3	26,411	1.3	
All MPVs	28,682	1.2	369,434	17.3	430,857	19.1	269,015	14.0	258,144	12.8	
of which compact MPVs			241,190	11.3	233,363	10.4	163,826	8.5	157,785	7.8	
4WD	17,129	0.7	57,116	2.7	205,106	9.1	494,728	25.8	560,639	27.8	
Others	9,908	0.4	9,392	0.4	14,379	0.6	14,298	0.7	15,278	0.8	
TOTAL	2,309,130	100.0	2,133,884	100.0	2,251,669	100.0	1,917,226	100.0	2,015,177	100.0	

Source: CCFA

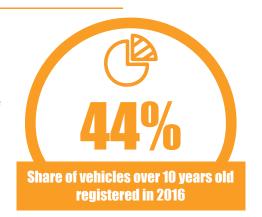
#### **USED PASSENGER CARS**

In 2016, registrations of second-hand private cars achieved a new record at 5.6 million units (+1.5%). Sales have surpassed the 5 m threshold since 2000.

Each year, two or three second-hand cars are sold for every new car sold (closer to 3 since 2012): as a percentage of all passengers cars in use, around 17% of vehicles change hands each year. Households kept their vehicles almost five and a half years on average in 2015 (compared to five years in 2010 and four in 1995).

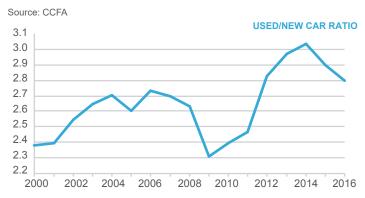
The second-hand/new car ratio is practically stable at a very high level of 2.9, well beyond levels observed during previous periods of contraction of the new car market in 1993 and 1997 (2.5).

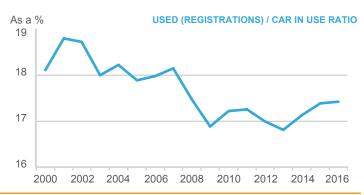
The share of vehicles over 10 years old was 44% in 2016 compared to 37% in 2010 because of longer cycle life.



#### ► USED PASSENGER CARS

	Units	1990	2000	2005	2010	2015	2016
REGISTRATIONS							
New cars	thousands	2,309	2,134	2,118	2,252	1,917	2,015
Used cars	thousands	4,759	5,082	5,383	5,386	5,562	5,643
Used/new ratio		2.1	2.4	2.5	2.4	2.9	2.8
Cars less than 5 years old	% used	52	40	40	37	33	32
- Cars less than 1 year old	% used	12	12	10	8	8	8
- Cars less than 1 year old	% new	25	29	25	19	23	23
Cars 5 to 9 years old	% used			25	26	24	24
Cars 10 to 14 years old	% used			22	21	24	24
Cars more than 15 years old	% used			13	15	19	20
Used diesel cars	thousands			2,996	3,558	3,745	3,759
Osed dieser cars	% used			55.7	66.1	67.3	66.6
CARS IN USE (ON 12/31)	thousands	23,550	28,060	30,100	31,300	32,000	32,390
USED (REGISTRATIONS) / CARS IN USE RATIO	%	20.2%	18.1%	17.9%	17.2%	17.4%	17.4%





The passenger car is a long-term purchase that households buy, use, maintain and possibly re-sell on the second-hand market.

Second-hand cars can be sold via car dealers or directly between private individuals. Professionals generally concentrate on 'newer' second-hand cars, i.e. under 5 years of age, around 60% of the total market.

Between 5 and 6 m second-hand cars are traded per year. This market is subject to longer cycles than the new car market. In 2016, demand for new cars increased by 5% to reach again the 2 m units threshold, and for second-hand cars +1.5% to 5.6 m units. The second-hand/new ratio is therefore practically stable at 2.9. Demand for second-hand cars is generally closer to the trends on the overall number of cars in use, and is less influenced by economic factors than the demand for new cars. It is, however, sensitive to measures introduced to stimulate the new car market (bonus/malus system, scrap incentive scheme, etc.).

The ageing of the vehicle stock and the growth of multi-car households has resulted in an increase in the share of cars aged 5 years and older in second-hand transactions (68% in 2016 vs 48% in 1990). Furthermore, the share of cars over 15 years old has more than doubled since the beginning of the 2000s and increased 5 percentage points compared to the pre-crisis period to level, at 20% in 2016.

Second-hand cars less than one year old can be considered part of the new car market. Indeed, they are often initially been registered by a dealer (demonstration car or rental car), and then sold on to private individuals. They accounted for 472,000 registrations, i.e. 23% of the new car market, and that level has been practically stable since 2012 but more significantly, higher than during the years when the scrap incentive scheme was in progress, and new car prices were more competitive. Since 2001, the share of cars under one year old as a proportion of all registrations of second-hand passenger cars has reduced constantly and represented only 8% in 2014 (12% in 2001).

The share of diesel in second-hand cars was less than 67% in 2016, slightly decreasing compared to 2015, getting closer to 2010 level, and 11 percentage points up compared to 2005.

In 2015, 58% of cars owned by or available to households were purchased second hand, compared to 51% in 1991. 64% of vehicles were purchased. At the time of purchase, the average mileage was around 69,000 kilometres and more than one quarter of vehicles purchased second hand by households had more than 100,000 kilometres on the clock.

#### **NEW VEHICLE REGISTRATIONS IN FRENCH OVERSEAS DEPARTMENTS (DOM)**

Their growth being more recent than in metropolitan France, the annual markets for new vehicles in the five overseas departments (Guadeloupe, Guyane, Martinique, Mayotte and Reunion Island) have recovered substantially over the past two years (+15%) to 70,000 units. They hovered around 60,000 vehicles in 2014, i.e. a fall-back of 20% compared to 2007.

The share of commercial vehicles over 5 tonnes as a proportion of all registrations was lower in those territories (1.3%) than in Metropolitan France (2.1%), given the geographical context. However, the share of light commercial vehicles was practically the same (16.0% compared to 16.5% in Metropolitan France).

French automakers have to deal with intense competition on the market for passenger cars in

those territories. Their market share was below 50% between 2006 and 2013, but following a 3 percentage points rise in 2014, it is now over 50%. They occupy 57% of the light commercial vehicle market (3 points up compared to 2014), which remains much lower than in Metropolitan France (around two thirds of the market). On the narrow market of heavy commercial vehicles, Renault Trucks' market share is now close to the one observed in Metropolitan France.

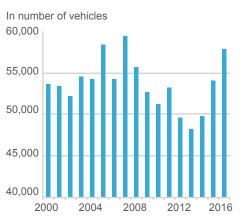
The registration of second-hand passenger cars totalled 129,000 units in 2016, 34% up on 2009 (96,000 units). The second-hand/new ratio was under 2 during the 2000s, before growing during the 2010-2012 period. Since, it has settled around an upper limit of 2.3%.



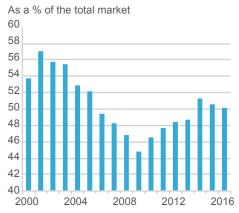
New passenger cars	2000	2005	2010	2015	2016	Change 2016/2000	Change 2016/2015
GUADELOUPE	13,691	14,359	13,438	13,409	14,160	3.4%	5.6%
FRENCH GUIANA	4,031	4,085	4,382	4,414	4,671	15.9%	5.8%
MARTINIQUE	14,424	14,749	13,147	12,931	14,197	-1.6%	9.8%
MAYOTTE (1)				1,083	1,064		-1.8%
REUNION ISLAND	21,463	25,142	20,295	22,288	23,701	10.4%	6.3%
TOTAL FRENCH OVERSEAS DEPARTMENTS (DOM)	53,609	58,335	51,262	54,125	57,793	7.8%	6.8%
TOTAL DOM USED PASSENGER CARS	ND	98,024	104,381	125,457	129,117	N/A	2.9%
New light commercial vehicles (up to 5t)	2000	2005	2010	2015	2015	Change 2016/2000	Change 2016/2015
GUADELOUPE	2,685	2,772	2,394	2,214	2,283	-15.0%	3.1%
FRENCH GUIANA	1,143	1,169	1,239	1,159	1,138	-0.4%	-1.8%
MARTINIQUE	2,368	2,732	2,016	2,156	2,133	-9.9%	-1.1%
MAYOTTE (1)				230	272		18.3%
REUNION ISLAND	5,200	6,021	4,166	4,975	5,390	3.7%	8.3%
TOTAL FRENCH OVERSEAS DEPARTMENTS (DOM)	11,396	12,694	9,815	10,734	11,216	-1.6%	4.5%
New commercial vehicles including coaches and buses (over 5t)	2000	2005	2010	2015	2015	Change 2016/2000	Change 2016/2015
GUADELOUPE	146	196	135	97	128	-12.3%	32.0%
FRENCH GUIANA	66	99	85	50	76	15.2%	52.0%
MARTINIQUE	187	183	84	128	165	-11.8%	28.9%
MAYOTTE (1)				48	94		95.8%
REUNION ISLAND	362	464	293	434	456	26.0%	5.1%
TOTAL FRENCH OVERSEAS DEPARTMENTS (DOM)	761	942	597	757	919	20.8%	21.4%

(1) From April 1, 2011. Source: CCFA

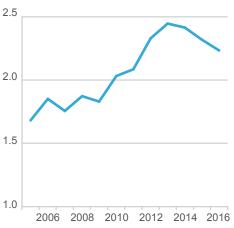
# NEW PASSENGER CAR REGISTRATIONS IN FRENCH OVERSEAS DEPARTMENTS



# FRENCH MANUFACTURER MARKET SHARE IN FRENCH OVERSEAS DEPARTMENTS (NEW PASSENGER CARS)







#### **HOUSEHOLD CAR OWNERSHIP**



In 2015, multi-car households represented 35% of all households compared to 26% in 1990 and 16% in 1980; this share has been practically stable since 2010.

93% of households in rural or peri-urban areas (rural areas near to cities) have a vehicle.

60% of households in the Paris area have cars (i.e. equivalent to the year 2000). In other French urban agglomerations, the rate is closer to 80%.

60% of modest households (less than €15,000 income per year) are equipped with at least one car.

79% of more elderly households have cars, compared to 69% in 2000. Possession of a driving licence and the proportion of drivers in this age category continues to grow.

74% of under 25s have cars, compared to 65% in 2010 and 49% in 2000.

#### ► CAR OWNERSHIP RATE (HOUSEHOLDS WITH AT LEAST ONE CAR) (AS A %)

	1990	1995	2000	2005	2010	2015
BY SOCIO-PROFESSIONAL CATEGORY						
Farmers	95.9%	98.9%	91.1%	100.0%	92.1%	88.0%
Farm workers	74.7%					
Tradesmen, craftsmen, business owners	95.2%	89.4%	90.6%	91.2%	91.1%	90.9%
Self-employed professionals, executives	94.4%	85.5%	84.6%	83.7%	84.1%	83.2%
Middle management	93.3%	88.7%	90.8%	87.6%	89.8%	88.0%
White collar workers	78.3%	75.9%	77.5%	80.9%	82.5%	80.1%
Blue collar workers	87.2%	89.7%	88.7%	89.1%	91.2%	90.9%
Non-working population	54.6%	65.8%	70.9%	72.8%	77.1%	77.6%
of which retired persons	59.4%	70.9%	76.0%	76.2%	80.1%	80.6%
BY AREA OF RESIDENCE						
Rural areas	82.1%	88.6%	91.1%	92.4%	92.7%	92.9%
Towns with fewer than 20,000 inhabitants	76.6%	84.7%	86.1%	88.4%	90.2%	91.1%
Towns with 20,000 to 100,000 inhabitants	77.3%	80.0%	84.2%	83.7%	87.1%	87.8%
Towns with over 100,000 inhabitants	74.2%	75.1%	76.6%	78.5%	80.8%	81.4%
Greater Paris	77.0%	60.8%	60.4%	61.5%	63.6%	59.7%
Inner Paris	47.3%	00.070	00.470	01.570	03.0 /0	33.1 /0
BY LOCATION OF RESIDENCE						
Town center		67.6%	69.4%	69.2%	73.0%	71.6%
Suburb		79.3%	80.5%	80.9%	83.2%	82.1%
Peri-urban area		88.5%	89.8%	91.2%	91.6%	92.5%
Rural area		85.3%	90.4%	92.6%	94.8%	94.4%
BY AGE OF HEAD OF HOUSEHOLD						
Under 25		51.2%	49.3%	63.3%	64.9%	74.0%
25 to 34		85.1%	82.4%	82.3%	83.9%	82.5%
35 to 44		86.7%	86.3%	87.5%	88.0%	87.3%
45 to 54		87.5%	87.4%	86.1%	88.1%	84.7%
55 to 64		84.9%	87.0%	86.7%	86.9%	85.1%
Over 65		61.9%	69.0%	70.8%	76.2%	78.6%
ALL	76.5%	78.4%	80.3%	81.2%	83.5%	82.9%
VEHICLES WITH A WOMAN AS THEIR MAIN DRIVER			40.4%	40.7%	41.5%	41.9%

Sources: INSEE until 1993, PARCAUTO TNS-Sofres since 1994.

The rate of car ownership can be measured by the percentage of households having at least one car.

It is largely linked to income, the age of the head of the household, socio-professional category, geographical area and the number of people in the household.

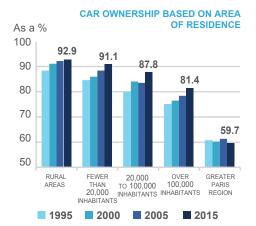
- 20% of the hightest-income households had a car ownership rate above 90% in 2015. Regarding the 20 % of the lowest-income ones, 60 % had at least one car.
- The rate of car ownership in cities with over 100,000 inhabitants remains firm: 81% had cars in 2015 compared to 75% in 1995. This ratio has grown since 2007 in the Marseille (85%) and Lyon areas (79%); but has fallen slightly in the Paris (60%) and Lille (76%) areas.
- Rural households, large families and workers are those recording the highest levels of car

ownership. Their rate of car ownership is as an average at more than 90%.

• The category of office workers and non-workers (including retired) are relatively less well equipped, but since 2000 their rate of ownership has grown substantially (+2.6 and +6.7 percentage points respectively).

Each year, 2-3% of households divest. A change in family situation (death, divorce, etc.), the cost of maintenance, health problems, the option of public transport and parking problems are the main reasons. Amongst households with no cars, 13% are considering buying again in the next two years.

In 2015, 66% of the 18-21 age group held a driving licence compared to 83% for 22-25 year-olds.



#### **HOUSEHOLD VEHICLES IN USE**

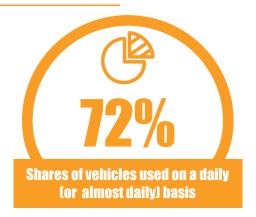
Daily use of the car has fallen regularly over recent years: the share of vehicles on the road used daily or almost daily was 72% in 2015 compared to 79% in 2000.

The share of vehicles used for the home-to-work run continues to exceed 50%. In 2015, business travel other than the home-to-work run stood at 16%. For travel linked to the school and babyminding run, the share was 23%.

Cars on the road are ageing slowly and regularly, except during periods when market levels are high, like at the beginning of the 2000s or when the scrap incentive scheme was introduced.

Households keep their vehicles longer and longer; the average period of ownership was 5.5 years in 2015 compared to 5 years in 2004 and 4 years in 1995.

The average mileage per car on the road was around 106,000 km, i.e. 13,000 km more than in 2000 and 37,000 km more than in 1990. Average mileage for diesel cars, which are used more and more each year, has increased to 118,800 km; petrol cars are used less intensely and are down to 84,700 km.



#### ▶ VEHICLES IN USE (OWNED, LEASED OR LOANED) BY HOUSEHOLDS

	units	1980	1990	1995	2000	2005	2010	2015
Total	millions	16.7	23.0	25.1	27.4	31.0	33.6	34.1
Average age	year	5.8	5.8	6.6	7.3	7.7	8.0	8.9
Average ownership period	year		3.7	4.1	4.4	4.7	5.0	5.5
BREAKDOWN BY AUTOMOTIVE GROUP								
Renault Group	%	36.2	33.3	33.3	33.3	30.2	28.6	27.7
PSA Group	%	47.1	38.3	36.2	35.2	36.4	38.2	36.5
Foreign brands	%	16.7	28.4	30.5	31.4	33.2	33.2	35.8
<b>BREAKDOWN BY POWER CATEGORY FOR TAX PU</b>	RPOSES							
2 and 3 HP	%	12.3	3.4	1.6	0.7	43.3	44.4	49.2
4 and 5 HP	%	23.2	38.4	38.9	40.5	43.3	44.4	49.2
6 and 7 HP	%	47.0	47.1	48.6	50.0	46.6	42.5	39.0
8 HP and above	%	17.5	12.8	10.9	8.8	10.1	13.1	11.8
BREAKDOWN BY VEHICLE RANGE								
Low range	%		39.4	43.4	45.1	44.5	46.8	49.3
Low-mid	%		20.8	24.3	27.3	32.2	30.9	29.2
High-mid	%		26.0	22.2	19.9	16.2	11.5	7.9
Premium range	%		8.7	7.0	7.0	5.7	5.0	3.0
Others	%		5.1	3.2	0.8	1.4	5.7	10.6
Percentage of vehicles purchased new	%	55.7	50.4	45.2	43.9	40.1	41.1	41.5
BREAKDOWN BY TYPE OF FUEL USED								
Premium unleaded – Gasoline	%		16.2	38.4	49.1	51.1	40.1	38.8
Premium leaded - AVSR	%		65.6	28.8	11.9	51.1	40.1	30.0
Diesel	%		18.2	30.9	38.1	48.9	59.9	61.2
Average kilometres on odometer	Km		69,500	84,080	93,140	99,460	103,470	105,590
Percentage of vehicles used on daily or near daily basis	%		75.1	77.4	78.7	75.7	71.8	71.9
Percentage of vehicles used for travel to and from work	%		55.4	54.3	55.1	55.2	53.7	52.2

Note: Years after 2007 cannot be compared directly with previous years; the scope of light commercial vehicles has been enlarged. Source: PARCAUTO TNS-SOFRES survey processed by CCFA and IFSTTAR.

A SOFRES survey every year provides a detailed description of vehicles on the road, which are owned or available to households.

The total number of vehicles on the road is made up primarily of passenger cars, but also light commercial vehicles which represent around 5% of the total number.

The share of vehicles over 5 years of age was 68% in 2015 and over a period of 10 years has stabilised at a record level (31%). The average age of the vehicle stock according to energy type is 10 years for petrol and 8 years for diesel.

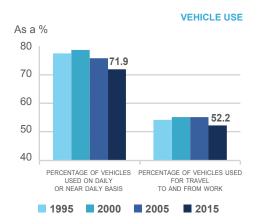
The share of multi-car households equipped exclusively with cars aged 5 years and over was 49% in 2015 compared to 43% in 2010.

The most popular fiscal power ratings are between 2 and 5 HP. Cars from the low and mid-low range categories have been in favour for several years

and their share of the total stock has remained high compared to high-end vehicles: they represented 49% and 29% respectively of the vehicle stock as against 8% for cars from the mid-high range.

Comfort features are increasingly present; in 2015, 75% of cars had an air-conditioning system. For safety equipment, rates have also increased; 48% have a speed limiter and 38% a central balancing system (ESP) compared to 18% each in 2008. Onboard connectivity and 'Stop&Start' equipment is emerging and represented 23% and 14% of the vehicle stock respectively. The rate for all these elements is much higher for the main cars of multicar households.

Concerning driving frequency, more than 80% of rurals and inhabitants of small towns use their vehicle regularly. In large towns, including Paris, regular use is only 50%, with occasional use standing at 18%.



#### DOMESTIC PASSENGER TRANSPORT



Increase in 2016 in domestic passenger transport in all mode, expressed in passenger kilometres

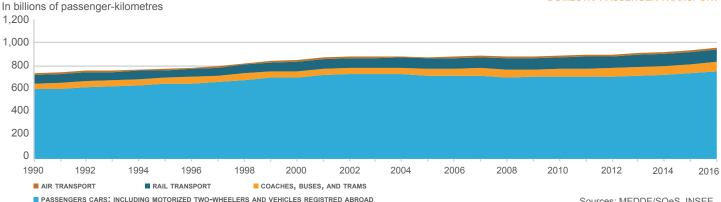
Personal mobility is a social and economic necessity which allows exchanges between individuals, as is a source of wealth and job creation.

Expressed in passenger-kilometres and limited to domestic transport, the road is the primary means of transport of individuals and its share remains stable in 2016: 79% for the passenger car and 8.6% for buses, coaches and trams.

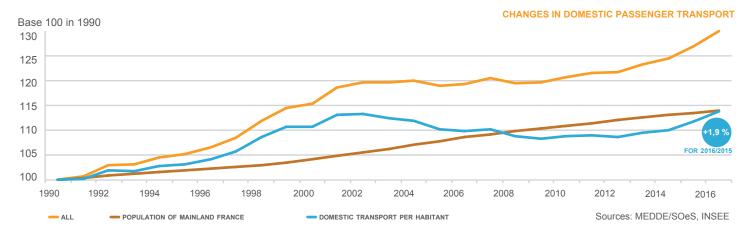
The private car but also the light commercial vehicle, is used for door-to-door mobility. They cater to a large number of individual constraints (the elderly, children, disabled, transport of heavy or bulky objects) and provide a suitable solution in low-density housing areas or where flows are not sufficient (shift work) for public transport to be a good solution from an economic or societal point of view.

In 2016, domestic passenger transport grew 2.4%, i.e. at a rhythm twice higher than the annual average observed since 2011 (+1.2%). This sharp growth in mobility is linked primarily to the increase in passenger car traffic, which accelerated again compared in 2016 (+2.7% in passenger-kilometres, following +2.2% in 2015). Public transport use has increased more moderately (+1.2% in 2016 after an increase of 1% in 2015), but in contrasting ways depending on transport type. Road transport and air transport were up, whilst rail transport was down

#### **DOMESTIC PASSENGER TRANSPORT**



Sources: MEDDE/SOeS, INSEE



Individual mobility is of course linked to the economy, as is freight transport, but also comprises a social dimension, i.e. bringing people together, which remains a crucial element.

Whilst freight transport is more of a productive industrial, artisanal or agricultural function, individual mobility clearly covers a much broader economic scope.

Whilst home-to-work travel is the foundation of it, the development of the economy – including the tertiary sector – relies on individual mobility. This situation is accentuated in the case of services to individuals in the areas of health, tourism, etc.

The determining factors in the choice of type of transport, for the transport of merchandise, include origin-destination, distance, time and

quantities/volumes of merchandise transported. These choices now being impacted by the digital economy that has given rise to the development of new individual transport services.

Individual transport for each mode of transport requires major investments which are generally written down over a long period for the construction and maintenance of infrastructures.

When mobility is expressed in passenger-kilometres, light vehicles come out dominant in domestic passenger transport. When expressed in terms of the number of daily trips, and in particular in dense urban areas, where public transport and other modes of transport (bicycles, motorcycles, etc.) may play a major role, or in passenger-kilometres for long-distance international travel, each mode of transport appears pertinent and complementary.

Domestic passenger transport expressed in passenger-kilometres, related to the number of inhabitants, progressed steadily between 1990 and 2002 (+1.1% per year). Subsequently, primarily because of the increase in the price of fuel, a ceiling seems to have been reached and an average dip of -0.4% per year was recorded between 2002 and 2013. In 2016, for the second year running, the use of domestic passenger transport per inhabitant increased (+1.9%), primarily linked to the increase in individual mobility.

#### **DOMESTIC FREIGHT TRANSPORT**

Freight transport is the drive-belt of the economy: it physically links together merchandise production sites, and those sites to the point of consumption, and then those points of consumption to reprocessing and recycling sites. As well as these geographical dimensions linked to territorial planning, there is also the notion of time.

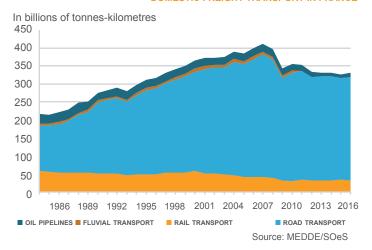
Road freight transport ticks a number of boxes in favour of modal transport. Its share in the freight transport remains stable (around 85% of tonnes per kilometre covered) and distances under 300 kilometres stand out, making the transfer to modal transport more difficult: 53% of tonnes loaded under the French flag are delivered fewer than 50 kilometres away in 2016.

Between 2015 and 2015, road transport of merchandise fell 1.3% on average annually, in line with the decline in the activity of French operators (-2.6%/year), whilst foreign operators increased 0.8% each year. In 2016, it bounced back with +2.2% growth thanks to the increase in the foreign operators (+3.3%), but also the recovery of the French operators (+1.5%).

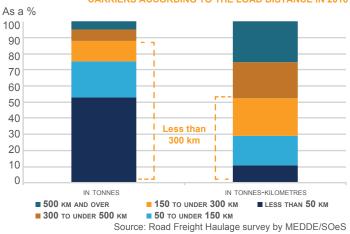
After two years of growth, rail transport fell again in 2016 (-5.1%). Since 2011, road transport of merchandise has fallen 1% per year on average and its market share is now only 9.6%. Similarly, river transport fell 7.5% in 2016, i.e. an average decline of 2.6% per year since 2011.



#### DOMESTIC FREIGHT TRANSPORT IN FRANCE



BREAKDOWN OF FREIGHT TRANSPORT USING FRENCH CARRIERS ACCORDING TO THE LOAD DISTANCE IN 2016



Demand for freight transport is closely linked to the country's economy and its interactions with other nations; on the one hand it corresponds to domestic demand from the different economic actors involved and on the other, exports of companies producing in the country. Also, some countries, like Germany and France, because of their geographical position, are key areas for the transit of freight. In road freight transport, this translates into a phenomenon of cabotage but also, over recent years, the arrival of foreign players who are taking increasing market share from the French.

Physical transfer of freight and goods exported by a country is one of the routes to competitiveness of an economy. Amongst other things, the cost must not be too high, compared to other countries, so as to facilitate export activities.

The destination and type of freight or goods exchanged are criteria which are often decisive in the choice of modes of transport. Liquids can be transported by road, thus avoiding unloading and reloading, and ports are used, amongst other things, for trade with distant lands.

Domestic demand from the different economic actors concerns a wide variety of freight and goods. It is satisfied by national (auto) production or by

imports, and transport allows the production sites to be linked up physically between them, and then with sites of consumption, and finally with reprocessing and recycling sites: in France in particular, spatial planning policies play a major role.

Because of the great variety of freight and goods, numerous factors come into play and shape the choice of modes of transport. Such is the case for:
• the weight of freight: automakers transport their spools of steel by rail or river;

- the value of freight and goods transported;
- delivery time: perishable goods such as fresh products must be transported quickly, and are therefore primarily transported by road;
- the departure and arrival point of freight; as much during the production phase linked with spatial planning as during the consumption phase. The latter is primarily in urban areas, because that is where people mostly live.

Also, different modes of transport require the efficient use of infrastructure, which means substantial investment, generally written off over long periods. Intensive use, i.e. massification of flows, becomes all the more pertinent in this respect. The same applies if, during the transport chain, several modes of transport are used because in particular of unloading and reloading between different modes of transport.

Because of its ability to use the convenient routing facilities of the road network, its flexibility, its capacity for adaption and quality of service, road freight transport meets all these criteria, which show that transport is not a homogenous ensemble but a multitude of sub-markets, which in most cases is difficult to replace. Thus, modal transfer is not possible for most freight flows, in particular over the final miles, or because it extends transport distances too much. Good intermodality is based on an acceptable economic cost and efficient transfers between the different modes of transport.

Apart from the geographical position of the departure and arrival points, two main factors are used to measure the freight transport: per tonne at the time of loading and tonne-kilometres. The road remains dominant in freight transport with an 84% share of tonne-kilometres completed. The road freight transport survey carried out by the Transport Ministry shows the predominance of distances under 300 kilometres: 53% of tonnes are transported by French hauliers over distances under 50 kilometres and 52% of ton-kilometres under 300 kilometres.

#### **ROAD TRAFFIC**



Decline in the share of diesel engines in France's private car market in 2016 Having increased by 2% on average between 1990 and 2004, traffic remained practically stable until 2012 (+0.2% per year). Since then, however, it has grown sharply (+1.2% on average), with a big jump in 2015 (+2.2%) and 2016 (+2.5%).

The continued fall in the price of fuel and the development of new mobility services (car-sharing) have undoubtedly led to greater use of passenger cars, up 2.8% in 2016. Bus and coach traffic also increased in 2015 by 1.5%. The presence of buses and coaches also increased in 2016 (+2.3%), stimulated by the increase in coach transport in a market liberalised by the growth and business law of August 6, 2015.

In merchandise transport, heavy-duty traffic increased once again in 2016 (+3.2%) after 4 successive years of decline. This was a result of recovery in the traffic of commercial vehicles registered in France (+3.1%) and continued growth of foreign heavy goods traffic (+3.4%).

At the end of 2016, over 30% of the passenger cars on the road met Euro 5 or Euro 6 standards. For heavy goods vehicles, the percentage of trucks respecting Euro V and Euro VI standards was already 50%. Their presence in traffic is all the more virtuous as these newer vehicles are used more than older ones.

#### **▶ OVERVIEW OF ROAD TRAFFIC**

	Date:	4000	0000	2045	0040	Average	annual change	as a %
	Units	1990	2000	2015	2016	05/90	16/05	16/15
<b>TOTAL VEHICLES (ANNUAL AVERAGES)</b>	thousands of vehicles	28,106	33,464	38,562	38,888	+1.7	+0.7	+0.8
New passenger cars		23,280	27,770	31,900	32,170	+1.7	+0.6	+0.8
Gasoline (and others)		19,760	18,150	12,032	12,269	-1.4	-2.4	+2.0
Diesel		3,520	9,621	19,868	19,900	+9.6	+3.3	+0.2
Light commercial vehicles (LCV)		4,223	5,062	6,019	6,081	+1.8	+0.8	+1.0
Gasoline		2,279	1,302	312	278	-5.3	-11.0	-10.8
Diesel		1,944	3,761	5,707	5,802	+5.8	+2.2	+1.7
Heavy trucks (> 5t)		535	551	550	544	+0.4	-0.4	-1.1
Coaches and buses		68	81	93	93	+1.5	+0.9	+0.4
KILOMETRES (ANNUAL AVERAGES)	thousands of km							
New passenger cars		13.4	13.5	13.0	13.3	-0.1	+0.1	+2.1
Gasoline (and others)		11.9	10.7	8.5	8.6	-1.3	-1.2	+2.0
Diesel		21.3	18.8	15.7	16.1	-1.5	-0.4	+2.5
Light commercial vehicles (LCV)		14.6	15.5	16.2	16.3	+0.5	+0.3	+0.4
Gasoline		9.9	8.3	7.6	7.7	-1.4	-0.3	+2.0
Diesel		20.2	18.0	16.7	16.7	-1.0	-0.4	+0.0
Heavy trucks (> 5t)		36.1	41.2	30.8	31.9	+0.8	-2.2	+3.7
Coaches and buses		31.0	30.2	36.8	37.6	+0.2	+1.5	+2.3
CONSUMPTION PER VEHICLE	litres/100 km							
Passenger cars: gasoline		8.68	8.12	7.42	7.27	-0.7	-0.6	-2.0
Passenger cars: diesel		6.73	6.74	6.16	6.06	-0.1	-0.8	-1.7
LCV: gasoline		9.39	9.29	8.03	7.87	-0.6	-0.8	-2.0
LCV: diesel		9.77	9.67	8.93	8.78	-0.3	-0.6	-1.7
Heavy trucks: diesel		36.23	36.62	33.90	33.87	-0.0	-0.6	-0.1
Buses and coaches: diesel		32.00	32.99	30.20	31.22	+0.1	-0.4	+3.4
FUEL CONSUMPTION	millions of litres							
(ALL ROAD TRANSPORTATION)								
Gasoline		24,110	18,729	9,773	10,416	-3.1	-3.3	+6.6
Diesel		17,977	30,779	38,622	39,274	+4.7	+0.8	+1.7
Total		42,086	49,508	48,395	49,690	+1.3	-0.2	+2.7
TOTAL TRAFFIC	billions of vehicle-km	420	518	585	600	+1.9	+0.7	+2.5
Light vehicles (excl. motorcycles)		389	476	541	555	+1.8	+0.8	+2.5
Heavy goods trucks		22.4	29.5	26.5	27.3	+2.4	-1.5	+3.2
ROAD TRAFFIC								
Passengers in passenger cars (1)	billions of passenger-km	598.7	697.6	736.5	756.4	+1.2	+0.5	+2.7
Passengers in coaches and buses	billions of passenger-km	52.3	55.9	79.5	82.0	+0.5	+3.4	+3.1
Freight	billions of tonnes-km	197.0	276.9	281.4	287.7	+3.2	-0.8	+2.2

(1) Including vehicles registered abroad and motorcycles

Sources: The accounts of the Nation's transportation, MEDDE/SOeS, INSEE.

Road traffic is estimated by cross referencing information from vehicle accounting on the different road networks (national, county, local and urban) with annual average kilometre distances covered by vehicles on the road and fuel consumption data, including vehicles registered abroad.

In 2016, the number of cars registered in France grew 0.6%, i.e. almost the same as previous years, but a lot lower than that observed during the 1990s.

For the first time since the emergence of the diesel engine, its share in the private vehicle and light

commercial vehicle market fell in 2016 (-0.4 and -0.3 percentage points respectively). The share of diesel was 79% of light vehicle traffic registered in France, compared to 55% in 2000. For petrol cars, four out of five are now compatible with lead-free 95-E10 which represents 36% of total petrol supplies.

Average unitary consumption of passenger cars has continued to decline with improved technical performance. Over the past ten years, average unitary consumption of diesel cars fell 7.6% and petrol cars, 6%.

The heavy truck sector grew 0.9% per year between 1990 and 2002 but has declined since 0.6% per year on average. The recovery of registrations in 2015 meant that the Euro VI standard became more prevalent in the market and now applies to almost 25% of trucks on the road.

# **ROAD TRAFFIC AND CO, EMISSIONS**

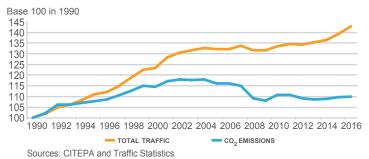
Drop in average unitary consumption of passenger cars on the road since 1990

Since 1990, traffic of French and foreign vehicles in France has increased by 43%; the associated  ${\rm CO_2}$  emissions, net of renewable energies, have only increased by 10%.

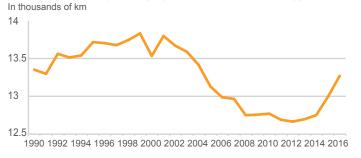
Different factors explain this improved energy efficiency. The drop in unitary average consumption of passenger cars registered and in use in France (including the effects of over-consumption linked to biofuels) was more than 22% over the period 1990 to 2016 (dieselisation of cars on the road, automakers and drivers' efforts and the impact of the bonus/malus scheme introduced in 2008).

Also, the quantity of CO<sub>2</sub> emitted net of renewable energies required to move one tonne of merchandise over one kilometre by a commercial vehicle in France fell 29% between 1990 and 2016, in spite of the impact of the economic and financial crisis.

#### TRAFFIC IN FRANCE AND CORRESPONDING CO. EMISSIONS NET OF RENEWABLE ENERGY SOURCES

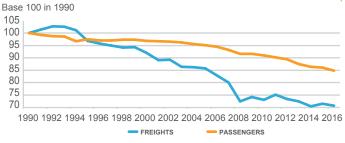


#### AVERAGE KILOMETRES COVERED PER YEAR BY A PASSENGER CAR



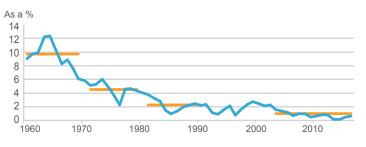
Source: Traffic Statistics

#### CHANGE IN TRANSPORT ENERGY EFFICIENCY (2)



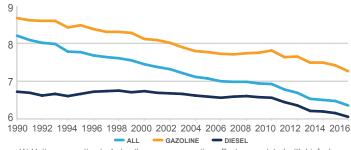
Sources: MEDDE/SOeS, CCFA calculations

#### ANNUAL GROWTH RATE OF PASSENGER CARS ON THE ROAD IN FRANCE



Source: CCFA

# AVERAGE CONSUMPTION OF A PASSENGER CAR ON THE ROAD (1) Litres per 100 km



(1) Unit consumption includes the overconsumption effects associated with biofuels. Source: Traffic Statistics



(2) Energy efficiency relates to the change in the amount of CO<sub>2</sub> emitted in order to transport one ton of goods (or a passenger) one kilometre by heavy truck (or passenger car) driving on French roads. The reduction of CO<sub>2</sub> emissions due to the use of biofuels is not considered.

Numbers of private cars on the road result from two components: vehicle stock and annual average mileage. Over the long term, the growth rate of the vehicle stock has fallen sharply after the access-to-vehicle mobility phase. The development of multimotorisation and then substantial increases in fuel prices are the major factors behind the drop in annual average mileage between 2000 and 2012.

Since, there has been an increase in the growth rate of the vehicle stock and in annual average mileage, in a context characterised by lower fuel prices in spite of an increasing tax burden on fuel

(66% on petrol and 63% on diesel).

In 2016, new estimates provided by the Centre Interprofessionnel d'Etudes de la Pollution Atmosphérique (CITEPA) for road transport reported net  $\mathrm{CO}_2$  emissions from renewable energies at 122 million tonnes. After the ceiling reached in the first decade of the 21st century, around 130 million tonnes, a net fall was recorded between 2004 and 2009, linked amongst other things to the effects of the economic crisis. Since,  $\mathrm{CO}_2$  emissions have stabilised at around 120 million tonnes, thanks to energy efficiency improvements.

In 2015, CITEPA estimates net  ${\rm CO}_2$  emissions from renewable energies used in road transport were broken down as follows: 56.4% for cars, 20.3% for light commercial vehicles, 22.1% for commercial vehicles including coaches and buses, and 1.2% for two-wheelers.

#### **NEW USES FOR THE AUTOMOBILE**

Changing technologies, economic constraints and peoples' understanding of environmental challenges have, in several sectors, promoted the development of new consumption trends and lifestyles which privilege the use, to the detriment of ownership, of goods.

In transport, this trend has materialised in the development of new uses for the car, promoting sharing and mutualisation leveraging information and communication technologies. These new practices include car-sharing, car-pooling, as well as rental between private individuals.

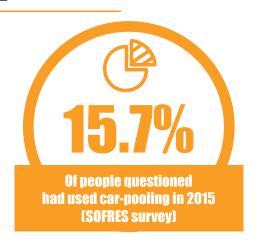
As surveys show, the main motivation for sharing car is cost. Sharing a personal vehicle reduces usage and maintenance costs and meets the demands of household buying power.

A shared car in a densely populated area is also a useful complement to public transport

(for transporting heavy or bulky loads, or for shift-workers), whilst improving the fill rate of cars, with inherent positive effects on the environment and fuel consumption.

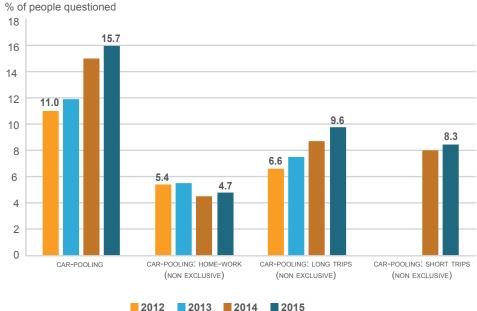
In rural and peri-urban areas, car-sharing and car-pooling also increase transport possibilities at a lesser cost to the authorities because it requires almost no new infrastructure

Automotive manufacturers now include these new forms of mobility in their development strategies through industrial cooperation projects, investments in companies linked to mobility and development of car-sharing services.

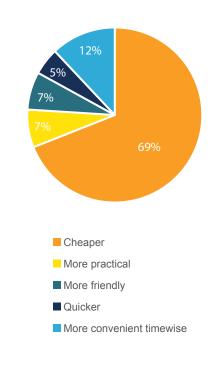


#### MAIN REASONS FOR CAR-POOLING

# SURVEY ON CAR-POOLING OVER THE PAST 12 MONTHS







Source: 6t survey for ADEME, 2015

#### **CAR-POOLING**

Car-pooling is defined in the energy transition law for green growth as 'the shared use of a terrestrial motorised vehicle by a driver and one or more passengers, without a fee but on a cost-sharing basis, on a journey the driver would have made anyway. Connecting these people up, to this end, can be a service for which there may be a fee.' (Art. L. 3132-1).

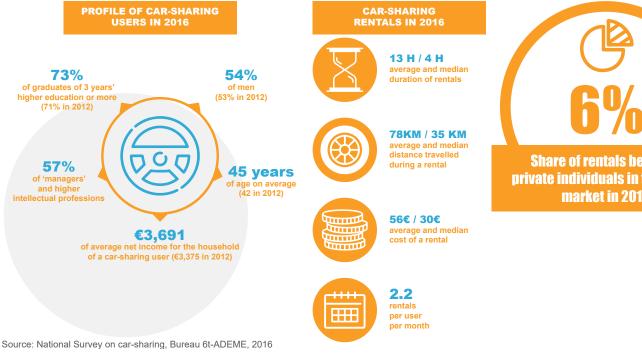
There are several car-pooling practices, differentiated by the way people get in touch, the frequency of journeys or the distances covered. Car-pooling crews can gather informally or via a third party using a website or telephone service. Car-pooling is called 'dynamic' when it is done in real time using information and communication technologies.

The dissemination and development of car-pooling is difficult to measure. According to different surveys, 5-10% of the French population carshares regularly, but the figure is rising rapidly. The 2016 SOFRES Parc Auto survey indicates that 4.7% of people questioned had already used car-pooling for home-to-work trips over the past 12 months, 9.6% for long journeys (>150 km) and 8.5% for short journeys. In all, 15.7% of people questioned had used car-pooling during 2015.

The last survey performed for the ADEME in 2015 shows that car-pooling is progressively becoming a transport solution in its own right, with the average age of the car sharer (33 years) increasing, and no longer exclusively used by young urban-dwellers, but also in rural areas and by older people. For 69% of carpoolers, the main motivation is still cost.

Occasional car sharing - generally over long distances (364 km on average) - is now more structured. Link-up platforms enable transactions between drivers and passengers. Thus, according to a SOFRES survey, the percentage of long journeys organised with a hook-up structure increased from 25% in 2012 to 58% in 2015. On the other hand, 91% of home-to-work trips and 72% of short trips were organised without any structured platform. Indeed, regular car sharing mostly over shorter distances – in particular for commuting, is more difficult to organise. However, companies are more and more involved through their company travel plans (PEE) to facilitate networking between their employees. Mobility operators and local authorities are also involved by providing information or setting up car-sharing car parks.

#### **NEW USES FOR THE AUTOMOBILE**



# **Share of rentals between** private individuals in the rental market in 2016

#### ▶ RANKING OF THE 10 MOST-MENTIONED ADJECTIVES BY USERS TO DESCRIBE CAR SHARING

2012			2016				
Rank	Adjective	% users answering	Rank	Adjective	% users answering		
1	Practical	69%	1	Practical	68%		
2	Economical	54%	2	Economical	52%		
3	Ecological	38%	3	Ecological	30%		
4	Easy	15%	4	Easy	14%		
5	Flexible	14%	5	Flexible	13%		
6	Useful	10%	6	Useful	9%		
7	Fast	8%	7	Makes autonomous/Freedom	8%		
8	Makes autonomous/Freedom	7%	8	Available	8%		
9	Available	7%	9	Fast	7%		
10	Expensive	6%	10	Expensive	7%		

Source: National Survey on car-sharing, Bureau 6t-ADEME, 2012 & 2016

#### **CAR-SHARING**

Car-sharing is defined in the Grenelle II law (article 54) as 'the sharing of a vehicle or a fleet of vehicles for terrestrial motorised transport for users subscribed to or accredited by an organisation fleet manager. Each subscriber or accredited user can access a vehicle without driver for a trip of his choice and for a limited period of time.

In the case of commercial car-sharing, the vehicles belong to the company providing the service. Each subscriber can have access to a fleet vehicle by reserving it via an app on the internet or by telephone. The vehicle rented is equipped with an onboard computer and a satnav system, and the doors are opened using an RFID card or the user's smartphone.

'Looped' services where having reserved, the customer takes the vehicle from a station and then returns it to the same place afterwards, are differentiated from 'direct route' systems where the customer drops the vehicle off at the place of his choice. The two systems cater to different periods of use and different needs.

So-called 'free-floating' services also exist, whereby vehicles are made available within a limited area of a conurbation, more generally in a dense urban area, without the pick-up and drop-off points being limited to specific stations.

In France, an increasing number of cities have self-service car systems. The latest national car-sharing survey (6t-Ademe) identified 26 carsharing services either in round trips or direct routes in 2016. The Autolib' service, developed in Paris and in more than 90 communes of the greater Paris area, is the largest to date. In January 2017, it had 108,114 active subscribers (one-year subscription), with 3,946 electric vehicles in service at 1,097 electric vehicle stations.

According to the national car-sharing survey (2016), users tend to be older (45 on average), better qualified (73% have a 3 years higher education or more) and financially better off than the general population of the large towns in which they reside.

Car-sharing between private individuals refers

to the sharing of one or more vehicles used by friends, neighbours or family. The vehicle belongs to one of the joint owners or is jointly-owned by all.

#### **RENTAL BETWEEN PRIVATE INDIVIDUALS**

More recently, sharing vehicles outside the private sphere has also developed via a car rental service between private individuals. Rental is secured on specialised websites which connect up people who do not know each other. It allows private individuals to pool their vehicle against payment and thereby optimise vehicle ownership and maintenance when it is not being used.

According to an annual CNPA report, this activity represented 6% of total rentals (in number of days) in 2016, compared to 3% the year before, and 5% of licence holders have already used it. Users tend to be young (44% are under 35 years of age), and less often in work than customers of traditional agencies (70% compared to 83%), and less welloff: 47% are from the upper socio-professional categories, i.e. 10 percentage points fewer than those using more conventional rentals.

#### PASSENGER TRANSPORT PRICE INDICES

For the third consecutive year, the price index for private vehicles (purchase and use) fell in 2016 but at a lower rate (-0.9%). Since 2012, the price index has fallen 2.3%, but this does not make up for the price hike that occurred between 2009 and 2012 (+13%). Over the period 2009-2016, prices have therefore increased at +11%.

For road passenger transport, where prices started to climb in 2011, 2016 saw a slowdown in inflation with a +1.2% price increase compared to +1.8% in 2015. The changing product offering in road passenger transport (self-employed taxi drivers in a deregulated market, regular coach services thanks to the Macron law) and a high level of competition in the sector may reduce prices as market forces come into play. Finally, air travel prices fell sharply in 2016, probably linked to the development of low-cost long-haul flights and their downward pressure on prices.

Over the past ten years, real price indices for the different forms of passenger transport have shown very differentiated trends: from -10% for road passenger transport (excluding taxis) to +3% for personal vehicles, via a 3% drop for air travel and a 12% rise for rail transport.



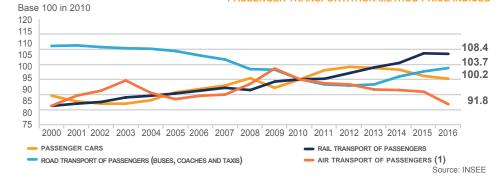
#### ▶ ANNUAL VARIATION IN PRICE INDICES FOR DIFFERENT PASSENGER TRANSPORT MODES (AS A %)

	Passenger cars	Passenger rail transport	road transport	Including passenger transport by buses and coaches	Including passenger transport by taxi or rental car with driver	Passenger air transport (1)
2005	4.6%	2.8%	1.3%	0.4%	3.5%	-0.5%
2006	3.0%	2.5%	0.1%	-1.2%	3.4%	2.8%
2007	2.5%	2.4%	0.4%	-0.4%	2.2%	2.0%
2008	5.4%	2.1%	-0.4%	-1.6%	2.6%	6.6%
2009	-3.0%	3.1%	-0.1%	-1.7%	3.7%	5.2%
2010	4.3%	2.1%	-1.7%	-3.0%	1.4%	-2.1%
2011	5.2%	2.3%	0.5%	-0.3%	2.0%	0.8%
2012	3.0%	4.0%	1.5%	0.5%	3.8%	1.5%
2013	0.5%	2.6%	1.4%	0.8%	2.6%	-0.7%
2014	0.0%	2.0%	3.1%	2.7%	3.8%	0.2%
2015	-2.0%	3.1%	1.8%	2.2%	1.0%	-0.6%
2016	-0.9%	-0.04%	1.2%	1.6%	0.2%	-4.0%

(1) The methodology for calculating the price index for air transport services changed in January 2012. The variation between 2011 and 2012 cannot be considered to be significant.

Source: INSEE.

#### PASSENGER TRANSPORTATION METHOD PRICE INDICES





The price indices of the different forms of passenger transport reflect price trends including VAT. Thus, for air travel, they include airport taxes; the same applies to other means of transport, taking account of infrastructure charges up to a level that can be incorporated in the sale price. Also, only the part directly paid by the household is monitored. For example, if a region or local authority decides to subsidise some of the cost linked to transport as part of a spatial planning exercise or social policy, a drop will be recorded

in household expenditures. Surcharges for fuel are incorporated into the monitoring of the index for air passenger transport.

Rail and road passenger transport indices primarily concern inter-urban connections. The index for personal vehicles was created taking into account both the cost of purchase, but also their use. To identify actual price changes in these main means of transport, the different indices are corrected using the general consumer price index as illustrated in the graph above.

Having stayed close to the 1995 level, the real price indices of the different forms of passenger transport have seen a variety of trends since 2003: between 2003 and 2016, the real index for personal vehicles (purchase and use) increased 9%, exceeding by far its 2000 level. That of rail transport increased 15%, continuing its progression begun in 2000, whilst passenger transport by road (excluding taxis) fell 14%; it is important to remember that only the portion that is paid directly by households is taken into account.

#### FREIGHT TRANSPORT PRICE INDICES

In 2016, the cost of freight transport fell in all sectors, compared to the average levels observed in 2015, but more markedly in air freight (-5.2%) and maritime freight (-6.6%), although sea freight did show an upward price trend during the year. River freight prices also fell in 2016 (-2.4%), for the third consecutive year. Rail freight prices fell 1.1% with a 1.6% nationally and stagnation internationally (+0.1%). Prices have dropped 8.6% in the space of 3 years. Finally, in the road merchandise transport sector, prices were down on 2015 (-0.4%), with a combination of stagnation of local freight transport prices (-0.1%) and a fall in intercity (-0.4%) and international (-0.9%) freight transport prices. Over 2 years, the decline stands at -2%.

Since 2006, the road transport freight price index has risen on average +1.1% per year, ranging from +1.5% for local transport to 1% for interurban

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transport. Over the same period, the river transport price index rose more timidly (+0.1% per year), ranging from -0.2% for international to +0.7% for domestic. For rail transport, the price index has only been available since 2014 using data going back to the first quarter of 2012. Over the period observed, there was a fall of 1.7% primarily due to lower national rail prices (-2.2%), whilst international rail prices increased 1.1%. According to an ARAFER survey, companies not linked to the historic operator reported 60.7% growth (expressed in tonnes-km) between 2010 and 2014, with 26.3% of market share in 2014.



#### FREIGHT TRANSPORT INDICES IN FRANCE Base 100 in 2010 120 108.6 110 108.3 104.6 100 96.4 90 80 74.0 70 2016 T1 2006 T1 2009 T1 2012 T1 ROAD AIR RAIL



#### FREIGHT TRANSPORT INDICES IN FRANCE: ROAD Base 100 in 2010 110 108 106.6 106 106.6 104 104.3 102 100 98 96 94 92 90 2006 T1 2009 T1 2012 T1 2016 T1 - ROAD TRANSPORT: INTERCITY ROAD TRANSPORT: INTERNATIONAL - ROAD TRANSPORT: LOCAL

- SEE (1)



(1) 2006-2009: very high volatility of maritime freight price indices. The index increased from 110.1 in Q2 2006 to 195.5 in Q2 2008, before falling back to 79.1 in Q1 2009 Source: MEDDE/SOeS

Freight transport price indices are calculated by the transport ministry's SOeS statistics department. For road, river and rail transport, these indices are drawn up using the so-called 'representative services methodology', defined according to loading and unloading site, type of merchandise and characteristics of the contract linking the shipper to the haulier. Prices are recorded on a quarterly basis. In road and river transport, only activities performed on behalf of third parties by companies domiciled in France, for whom freight is the main business, are monitored.

For rail transport, the price index, which has

been monitored since the first quarter of 2012, is calculated on the basis of representative transport services entrusted by a sample of 22 shippers to rail transport operators.

Air freight the price index is calculated according to freight services departing from France by air waybill. The service is defined by the point of unloading and the airline responsible for shipment. The index is drawn up using so-called 'unitary value methodology' which includes the excess charges for fuel and security, paid to the airline doing the shipping. It is in line with highly volatile fuel prices.

The maritime transport price index comprises transport services for third parties, performed by companies registered in France whose activity is maritime freight (bulk and ferry). Calculations are based on international price indices, unitary prices and tariffs. It is very volatile, in line with bulk price trends.

Concerning road freight, infra-annual variations are less substantial, compared to river or air, even though fuel does represent between 20 and 30% of total road freight transport as the CNR survey shows (see page 55).

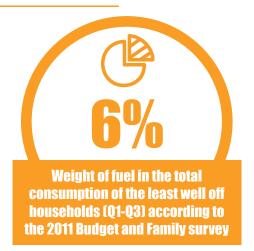
#### **HOUSEHOLD MOTORING COSTS**

According to the most recent family budget survey of 2011, households dedicate on average 18% of their budget to cars (acquisition and use). The fuel item represents the largest car budget item accounting for 5.2% of the total. Cutting up income brackets by quintiles (fifths) shows that the least well-off households (Q1-Q3) dedicate a bigger portion of their budget (6%) than wealthier ones (4.3%). Conversely, new vehicle purchases seem to be the first item of expenditure for the lowest quintile (5.6% of total budget).

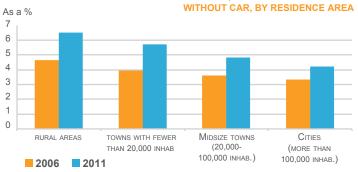
Pressure on the fuel budget was less, with the drop in the price of oil, and therefore the situation was closer to that of 2006. Yet, figures from the 2006 survey show that households from the three first quintiles already dedicated 4.4% of their budget to fuel compared to 3.2% for the last quintile. And thus, whatever the price situation, the expenditure item remains a key one for the most economically-vulnerable households.

Between 2006 and 2011, there were also changes to distribution patterns concerning the purchase item for new cars (NV), which increased +0.7 percentage points, and second-hand cars, which fell by 0.2 percentage points, which could be explained in part by purchases being made under the scrap incentive scheme in 2010-2011. For Q1-Q3 households, the increase in the share of the NV item (+0.5 points) was almost balanced by the dip in the used car item (-0.4 points).

Finally, the share of the maintenance and repair, spare parts and accessories item (ER&PA) remains stable for all households, but dropped 0.5 percentage points for households in the last auintile.

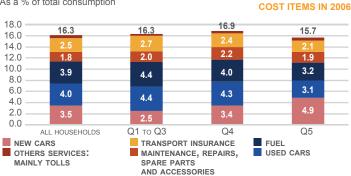


#### SHARE OF FUEL IN HOUSEHOLD CONSUMPTION, INCLUDING HOUSEHOLDS



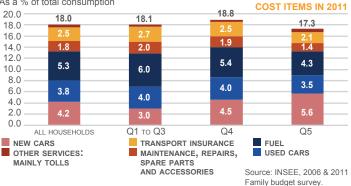


#### As a % of total consumption



SHARE OF THE DIFFERENT AUTOMOTIVE

As a % of total consumption



The 'Budget and Family' surveys carried out every five years by INSEE give an idea of the share of the major consumption items in household budgets and provides data according to their characteristics: socio-professional category, age, income, category of commune of residence, etc.

In terms of automobile-related items, there are two major differences compared to national accounting. For the processing of vehicle insurance expenses, the whole amount is taken into account in surveys, whereas only the service (spending that is the least reimbursed) is accounted for at a macroeconomic level. For second-hand car expenditure, the whole amount is accounted for in the surveys, whilst at a macroeconomic level, the amount taken is more or less the margins of professionals involved at the time of a transaction, without taking trading between private individuals into consideration.

Some graphs show the distribution of the different automobile items as a percentage

of total consumption, equivalent to individual consumption excluding rents levied according to revenue, ventilated by population tranche of 20%: Q5 corresponds to the 5th quintile, i.e. 20% of households with the highest revenues, ahead of Q4 and the Q1-Q3 grouping.

In 2010-2011, the automobile budget for all households with cars represented 18% of their total consumption. The new car purchase item and second-hand car purchase item represent a little under half of that, varying from 7% for 60% of households with the lowest revenues to 9% for the 5<sup>th</sup> quintile. For Q1-Q3 households, almost 60% of purchases are second-hand cars (almost two thirds in the period 2005-2006), whilst almost two thirds are new cars for the Q5 group.

Whilst over 5% of total consumption is dedicated to fuel, the richest quintile dedicates a much smaller proportion to this item. The same phenomenon occurs for vehicle insurance. As these two items

are the most exposed to taxation, it therefore appears that households with cars belonging to the Q1-Q3 segment pay more tax for the privilege of using their vehicles, proportionate to their consumption, than households belonging to the top quintile.

SHARE OF THE DIFFERENT AUTOMOTIVE

When ventilated by category of commune of residence and for all households (with or without cars), the fuel item seems to get higher as the commune gets smaller. Thus, households in the Paris conurbation dedicate almost 3% of their consumption to this, compared to more than 6% in rural communes.

#### **ROAD FREIGHT COST PRICE**

Share of equipment ownership in the CNR index for long-haul road merchandise transport costs in 2016.

According to the national haulage committee (CNR), long-haul and regional road merchandise transport costs remained relatively stable in 2016 (-0.8% and +0.1% respectively). For long-haul, costs returned to their pre-crisis levels of 2008. For regional transport, costs increased 4.6% compared to 2008, in spite of a decline since 2013. The cost structure and trends for changes to the two CNR indices studied here explain these contrasting trends.

The fall in the professional diesel index since 2013 – which has a greater impact on long-haul running costs than on regional transport – contributed to the decline in the CNR 'long-haul, 40 tonnes' index from then onwards. Conversely, the increase in the index linked to the equipment ownership (tractor and semitrailer) had a greater

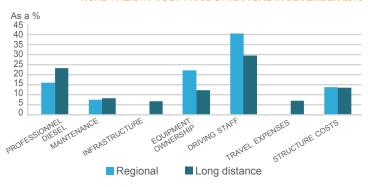
influence on regional transport costs than on those of long-haul.

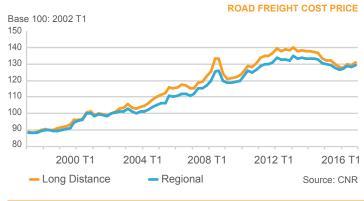
In 2016, the share of professional diesel in the product cost of long-haul road merchandise transport began to rise again (+2.4 points) having dropped 2 percentage points in 2015, and stands at 23.1%. The share of equipment ownership in long distance merchandise transport fell (-0.5 point), having increased in 2015 because of increased equipment costs with the onset of the EURO VI standard.

#### ROAD FREIGHT COST PRICE STRUCTURE FOR LONG DISTANCE

#### As a % 35 30 25 20 15 10 5 0 INFRASTRUCTURE DRIVING STAFF TRAVEL EXPENSES STRUCTURE COSTS MAINTENANCE dec-01 dec-13 dec-16

#### **ROAD FREIGHT COST PRICE STRUCTURE IN DECEMBER 2016**







The national road committee (CNR) publishes, amongst other things, two indices reflecting changes to the cost of long-distance and regional road freight transport.

Long-distance corresponds to national or international transport performed by a maxi-code articulated unit whose operating constraints mean that the driver's return home every night is either impossible or very difficult to plan.

Regional transport, which is performed using rigid trucks with a total weight between 3.5 and 19 tonnes, applies to transport within a region and across into neighbouring regions whereby the driver is able to return home every night.

For long-distance road freight transport, the first item of expenditure is personnel, and their share in the cost has been stable since 2001, at around 30%. The second item, professional diesel, initially accounted for a growing portion of the cost price to level out at 29% in 2011. From 2012 onwards, it fell on a regular basis to 20.7% in 2015. In 2016,

it increased to 23.1%, in line with the diesel price increases in May and October.

The share of equipment ownership (tractor and semi-trailer) returned to its December 2006 level (12.2%) having fallen over the period 2007-2012 (11% in December 2011). Between 2014 and 2016, it rose again with the added cost of new vehicles linked to the implementation of EURO VI (environmental standard) on January 1, 2014 (around 10%) and the corresponding compulsory new safety equipment. In 2016, the impact of these increases was diluted in the calculation of ownership costs by the progressive renewal of vehicles (around one-sixth of the vehicle stock per year) and historically low interest rates. Thus, the share of the cost of ownership fell back slightly at the end of 2016, to 12.2% of total cost (compared to 12.7% at the end of 2015).

Maintenance, which includes tyres and vehicle repair and servicing, was relatively stable in 2016, at 8.2% of total cost, after a 0.9 percentage point drop over a decade. Finally, over the same period,

the share of infrastructure costs increased 1.8 percent to 6.7% in 2016.

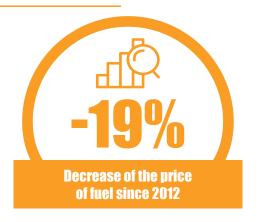
In regional transport, the share of driving personnel in the cost price of road freight transport fell to 41% in 2016. The cost of ownership of equipment is the second item of expenditure accounting for 22% of the total cost, up 2 percentage points since 2006, but fell compared to 2015, following an increase in 2014 and 2015. The share of professional diesel ranked third in the cost price of regional transport. Having fallen between 2011 and 2015 (-5 points), it went up 1.8 percentage points in 2016 to 16.1%. Finally, repair and service costs fell back in 2016 to 7.5% of the total.

#### **AUTOMOTIVE PRICE INDICES**

In 2016, the new automobile price index fell 0.3% compared to inflation at +0.2%, i.e. a fall in the real price index of 0.4%. Tougher ecological bonus/malus scales, the introduction of new standards making depollution devices more expensive and the introduction of new elements designed to improve road safety have contributed to this increase observed over recent years.

In 2016, the fuel price index continued to fall but to a lesser degree than in 2015 (down 4.5% compared to 9.8% in 2015). Since 2012, the fuel price index has fallen 19% and the real price index (i.e. minus the general consumer price index) by 21%.

The price index for vehicle spare parts, accessories and maintenance and repairs slightly increased (+0.4%). In this list, the hourly cost of labour for car repairs progressed more than average (+2.5%) as in 2015, whereas the price index for tyres and accessories fell respectively -1.9% and -1.1%.



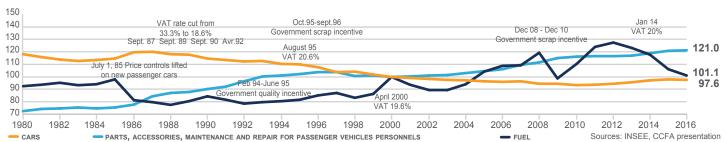
#### **▶ YEAR ON YEAR AUTOMOTIVE PRICE CHANGES**

	Consumer prices	New car prices	Prices of car parts, accessories, repair and maintenance	
2014	0.5%	2.1%	2.5%	-4.0%
2015	0.0%	1.1%	1.5%	-9.8%
2016	0.2%	-0.3%	0.4%	-4.5%

Source: INSEE, CCFA calculations

#### Base 100 in 2000

#### NEW PASSENGER CAR, FUEL, PARTS, ACCESSORIES, MAINTENANCE AND REPAIR PRICE INDICES



#### RETAIL PRICE OF DIESEL IN FRANCE AND THAT FOR JANUARY 1999,

# INDEXED FOR CONSUMER PRICES 1.5 1.4 1.3 1.2 1.1 1.0 0.9 0.8 0.7 0.6 0.5 J 90 J 95 J 00 J 05 J 10 J 15 RETAIL PRICE OF FUEL INDEXED PRICE Sources: SOeS, INSEE, CCFA

#### HARMONIZED PRICE INDICES FOR THE EUROZONE (17 COUNTRIES)



The price index for new cars compares the price of cars with similar technical characteristics so as not to take into account price increases resulting from improved quality or equipment. It factors in promotional offers made occasionally (i.e. outside the private sales market), as well as the bonus/malus system.

To identify real price trends for the main items linked to cars, these indices have been corrected by the general consumer price index in the above graph.

Since 1992, the real price of new cars has declined on a regular basis under the continuous effect of competition and the occasional effect of measures to boost sales (bonus/malus system and scrap incentive since 2008). Nevertheless, the increase in the ecological malus and the reduction of the number of vehicles qualifying for the bonus, several times between

As for the real price index of repairs and maintenance, it started to climb again from 2003 onwards for various reasons linked to labour (the cost of work, development of skills, etc.) and parts (improved reparability, price of raw materials, improved service quality, greater diversity of models demanded by consumers).

In the euro zone (19 countries), Eurostat calculates a price index for the purchase of new and second-hand cars; the data from the different countries are then collated. Since 1996, the index trend

compared to that of the general price index shows a high pressure phenomenon on prices linked to intense competition and limitations on households' buying power, as is the case for France. In 2016, the general price index was up 32% compared to 2000, whilst the price index for the purchase of new and second-hand cars was only up 15%.

#### CONSUMER SPENDING ON PRIVATE VEHICLES

Share of vehicle purchases as a percentag of total household spending for 2016

In 2016, households' gross disposable income increased 1.7% in value (after a 1.1% increase in 2015). At the same time, the price of final consumer spending was stable (-0.1% compared to +0.3% in 2015). The buying power of disposable income therefore increased slightly more quickly than disposable income itself (+1.8% following 0.8% in 2015). Household consumer spending accelerated in 2016 (+2%).

Purchases of new and second-hand cars continue to strongly increase in 2016 (+7.1%). Purchases of new vehicles increased +6.4% to €26 bn, compared to €23 bn in 2014 (+12.6% in 2 years). Purchases of second-hand cars grow up 8.5% to €13.7 bn, compared to €11.8 bn in 2014 (+15.7% in 2 years).

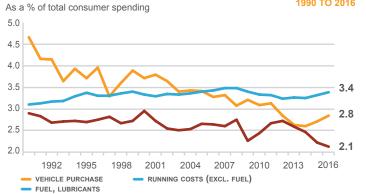
The share of vehicle purchases in household consumption rose slightly (2.8% in 2016 compared to 2.6% in 2014), but remained below the 1990 level (4.5%). This substantial erosion negatively impacted new vehicles whilst the share of second-hand vehicles progressed slightly.

In 2016, households' fuel expenditure contracted for the second year running, to €33.5 bn, i.e. a drop of almost €4 bn compared to 2014.

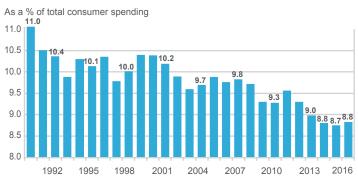
#### ► HOUSEHOLD CONSUMER SPENDING ON TRANSPORT (AMOUNT AND % OF TOTAL CONSUMER SPENDING)

	Units	1990		2000		2015 (1)		2016 (1)		Change 2016/2015
VEHICLE PURCHASES	€ billions	33.6	4.7%	37.5	3.7%	41.8	2.7%	44.9	2.8%	+7.4%
New and second-hand cars (including tax on registration certificates)		31.0	4.3%	33.7	3.3%	37.0	2.4%	39.7	2.5%	+7.1%
of which new cars		25.6	3.5%	24.5	2.4%	24.4	1.6%	26.0	1.6%	+6.4%
of which used cars		5.4	0.8%	9.2	0.9%	12.6	0.8%	13.7	0.9%	+8.5%
Caravans, motorcycles, bicycles		2.6	0.4%	3.8	0.4%	4.8	0.3%	5.2	0.3%	+9.3%
RUNNING COSTS	€ billions	43.3	6.0%	63.5	6.3%	85.7	5.5%	86.8	5.5%	+1.3%
Maintenance, repairs, spare parts and accessories		17.3	2.4%	24.3	2.4%	35.8	2.3%	37.2	2.4%	+3.9%
of which automotive equipment manufacturing		7.2	1.0%	11.1	1.1%	18.2	1.2%	19.0	1.2%	+4.8%
of which automotive service		7.1	1.0%	9.2	0.9%	12.4	0.8%	12.9	0.8%	+4.0%
Fuel and lubricants		20.9	2.9%	29.9	3.0%	34.4	2.2%	33.5	2.1%	-2.6%
Tolls, parking fees, rental, driving lessons		5.0	0.7%	9.3	0.9%	15.4	1.0%	16.0	1.0%	+3.9%
INSURANCE	€ billions	2.9	0.4%	3.9	0.4%	7.7	0.5%	7.5	0.5%	-3.0%
TOTAL CONSUMER SPENDING ON CARS AND MOTORCYCLES	€ billions	79.7	11.1%	105.0	10.4%	135.2	8.7%	139.2	8.8%	+2.9%
Public transport	€ billions	10.4	1.4%	15.3	1.5%	27.5	1.8%	28.1	1.8%	+2.1%
CONSUMER SPENDING	€ billions	721	100%	1,010	100%	1,546	100%	1,577	100%	+2.0%
Number of households (mainland France)	Thousands 21,634		634	24,140		28,245		28,410		+0.6%
Spending on passenger cars per household	euros	3,6	85	4,3	48	4,788 4,899		99	+2.3%	
Spending on passenger cars per vehicle-owning household	euros	4,8	18	5,4	14	5,7	76	5,9	09	+2.3%

# PERCENTAGE OF HOUSEHOLD BIDGET ALLOCATED TO OWNING A CAR,



#### TOTAL VEHICLE RELATED EXPENDITURE



(1) These are provisional data and can be readjusted for three years. Source: INSEE - Household consumer spending, 2016 - base 2010

According to national statistics – based on different fundamentals than those used for the family budget survey (cf. page 50) – households in 2016 spent €139 bn (+2.9%) on personal transport. This sum represented 83% of all household expenditure dedicated to transport (individual and public).

The share of automobile consumption as a share of real national consumption is called the 'automotive budgetary coefficient'. This coefficient varied between 9% and 11% at the beginning of the 1990s until the 2009 crisis. Since, it has vacillated around the 9% mark and was only 8.8% in 2016.

As part of this consumption group, the 'vehicle purchase item', which now includes the tax on registration certificates, is now in second place behind spending on vehicle upkeep (excluding fuel), whereas pre-2003 it was the biggest item of expenditure. The downward trend in vehicle purchases is affecting this budgetary coefficient, which was only 2.8% in 2016 compared to 4.6% in 1990. This drop is to the detriment of the purchase of new passenger cars, which now only represent 65% of overall vehicle purchases compared to 82% in 1990.

The budgetary coefficient linked to maintenance and repairs of private vehicles, which had increased over the 1990s in line with the development of car ownership and the increase in the average age of vehicles on the road, has since 2008 decreased and is now stabilising at around 2.4% compared to 2.5% in the past.

Expenditure on tolls, parking, rental and driving schools was up 3.9% to €16 bn in 2016.

#### AUTOMOBILE FINANCING

In 2016, the fall in interest rates and the recovery of automobile purchasing trends continued and new consumer credit used by private individuals increased 15%. More than 60% of new cars purchased by households are paid for on credit and 25% financed by rental.

Having reached a peak in 2012, the share of conventional credit (or specific car loans) then fell sharply for 3 years, whilst over the same period the share of rental with option to buy grew. In 2016, credits for new vehicle purchases fell 11% whereas rent-to-buy increased 35%.

Thus, in vehicle credit, rental has become the dominant form of financing (48% of credit) ahead of specific car loans (37%) and personal loans (15% of cases financed). Within the rental bracket, rent-to-buy is highly dominant (94% of rental financing) whilst rent without option to buy remained marginal.

For second-hand cars purchased by households, the cash purchase remained the main form of financing (almost 60%). The older the car and the younger the driver, the more it was used. However, the use of conventional credit for second-hand car purchases rose (+5% in 2016).

A buoyant market in 2016 saw an increase in the number of cases of financing for new vehicles (cars, LCVs and commercial vehicles) by companies (+8%, to 590,000), and most of that growth wend to rental without option to buy (+10%) and, in particular, long-term rental which represented 93% of rentals without purchase.



with or without option to buy for cars bought new by households in France in 2016

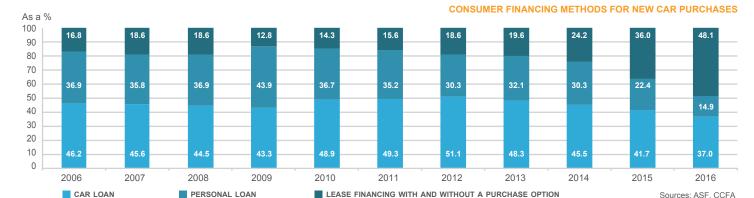
#### INTEREST RATES OF NEW CONSUMER LOANS TO INDIVIDUALS (NOT INCLUDING OVERDRAFTS) As a % ANNUAL INTEREST RATE)



TOTAL AMOUNTS OVER TWELVE MONTHS OF NEW CONSUMER LOANS TO INDIVIDUALS







New and second-hand car purchases use loan facilities if they cannot or do not wish to buy in cash.

There are three financing possibilities:

- · conventional automobile credit: these loans are provided by financial companies, subsidiaries of automakers and importers, or by independent finance companies belonging to automakers and finance or banking subsidiaries or groups;
- · rentals with or without option of purchase (LOA or LSOA): the user of this formula has a car and pays a rent during a lease period, which can be as long as eighty-four months, i.e. seven years. He or she can then choose to take up the option for purchase or not during the lease or at the end of the lease:

· personal or bank loans.

Results from various sources (professional associations, statistics on registrations, surveys) allow calculations to be made on credit used for the purchase of new cars by households.

Having fallen between 2008 and 2014, the total number of new loans for private household consumption continued to progress with the steady decline in interest rates. After a 15% rise in 2015, it rose another 12% in 2016 to reach a record level.

Using these forms of lending, the financing of new passenger cars by private individuals was particularly buoyant in 2016. The number of credit applications for the purchase of a new vehicle increased +10%. The increase in the number of LOA and LSOA applications increased still further

(respectively +35% and +37% compared to 2015) to the detriment of conventional loans, which fell

The renewal of vehicle stocks and fleet managers' recent interest in SUVs contributed to companies' high demand for vehicles. Companies vehicle purchases were particularly buoyant in 2016 and the long-term rental market saw notable progression. The registration of LCVs under longterm rental arrangements progressed 11% in 2016 to a historic level of 494,219 vehicles according to figures published by the Syndicat National des Loueurs de Voitures en Longue Durée (the national syndicate of long-term rental companies - SNLVLD).

#### CAR AND MOTORCYCLE SALES AND REPAIRS

Trade in automotive vehicles in 2016 generated €83 bn turnover, up more than 7.5%, having increased 4.7% in 2015. With the recovery of new private car registrations over the past 3 years, and buoyant higher-end sales in 2016, the business improved on its pre-crisis levels.

The vehicle maintenance and repair business, constantly in decline since 2009 (-2.2% per year between 2009 and 2014), recovered in 2015 and accelerated in 2016 (+4%), reporting turnover of €21 bn. The sector reaped the benefits of an aging automobile stock (8.9 years in 2016 compared to 8.2 years in 2010), linked to the downward trend in kilometres driven and the increasing reliability of cars.

Retail sales of automobile equipment also benefited from this trend, growing 3.8% compared

According to INSEE-Esane, between 2012 and 2014, margins (gross operating margin/ value added at factor cost) on motor vehicles were 7% on average and 17% for motor vehicle maintenance and servicing. The investment rate (tangible investment / value added excluding tax) was 10% for each of these sectors over the same

This concentration of companies can be found in automobile distribution groups' new vehicle (NV)

sales statistics. Between 2001 and 2012, each distribution group from the top 10 each year sold on average more than 1,000 additional NVs. The 100 biggest each saw their sales increase by 300 NV per year. This trend is linked to improved geographical coverage and the development of multi-badge retail.

In 2015, the 10 biggest groups sold more than 320,000 NV, i.e. 17% of sales of NVs, for a turnover of €10.9 bn excluding VAT. The 100 biggest groups accounted for 49% of total sales, i.e. more than 945,000 NVs for a turnover of €31.9 bn ex-VAT.

#### **▶ LIGHT VEHICLE SALES NETWORKS IN FRANCE ON JANUARY 1, 2015**

Brands	Primary dealership
Renault	683
Peugeot	421
Citroën	428
French brands	1,532
Ford	291
Opel	250
Fiat	186
Volkswagen	320
BMW	153
Mercedes-Benz	170
Japanese Brands	1,133
Korean brands	457
Other brands	1,518
TOTAL	6,010

Sources: CNPA, CCFA

# ► REVENUE FROM CARS AND MOTORCYCLES SALES AND REPAIRS (IN CURRENT € BILLIONS, INCLUDING VAT)

Activity	2009	2010	2011	2012	2013	2014	2015	2016	Change 2016-2015
Motor vehicle sales	71.7	74.3	78.0	73.2	71.2	72.9	77.0	82.8	7.6%
Automotive maintenance and repairs	21.8	19.9	19.9	19.7	19.6	19.5	20.1	20.9	4.0%
Retail sales of automotive equipment	6.9	6.7	7.4	7.9	8.1	8.0	8.3	8.6	3.8%
Motorcycle sales and repairs	2.9	3.0	3.1	2.9	2.8	2.8	2.8	2.9	5.2%
Retail fuel sales	11.0	13.1	14.7	16.4	15.8	15.0	13.8	13.2	-4.3%
TOTAL	114.4	117.1	123.1	120.0	117.4	118.3	121.9	128.4	5.3%

SHAPE OF THE LARGE RETAIL CROLLES IN THE SALE OF NEW CARS

Source: INSEE - Trade Accounts, base 2010 of national accounts: provisional results

As a	% SHARE OF THE LARGE RETAIL GROUPS IN THE SALE OF NEW CARS
45	
40	
35	
30	
25	
20	
15	
10	
5	
0	2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
	■ SHARE OF TOP 10 ■ SHARE OF TOP 100
	— SHARE OF TOP TO

Sources: Argus, Journal de l'Automobile, CCFA

Cars require a very specific type of service: throughout its service life, and to maintain its initial characteristics, the vehicle requires attention at all times and in all locations to be serviced and repaired under the best possible conditions.

Cooperation between manufacturers, distributors and approved repairers is therefore very tight to provide warranty service, user safety, protection of the environment, availability of spare parts and information on technical changes.

To guarantee a high level of quality at the point of sale and through after-sales, auto-distribution

networks rely on a selection procedure for distributors and repairers able to apply the exigencies of the brand and the level of customer service required. In terms of automobile repairs, there are also independent networks (in 2015: 14,400 automotive repair mechanics, 1,250 autocentres and 870 quick-repair centres).

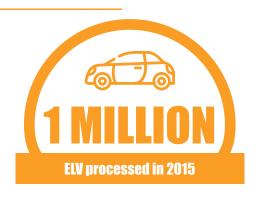


#### **CIRCULAR ECONOMY**

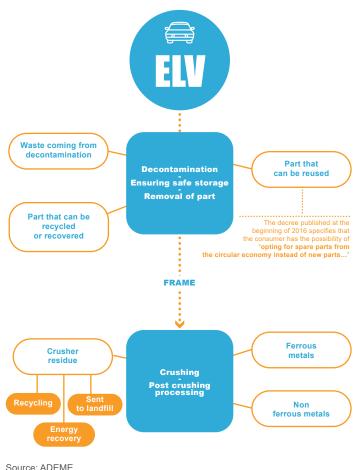
According to Ademe, the circular economy is defined as an economic system of trade and production which, at every stage of the product cycle life (goods and services), seeks to increase the efficiency of the use of resources and reduce environmental impact.

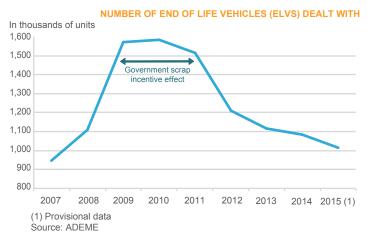
The circular economy in the automotive market concerns vehicles (private vehicles and vans in particular) and consumables (tyres, oils, batteries, etc.).

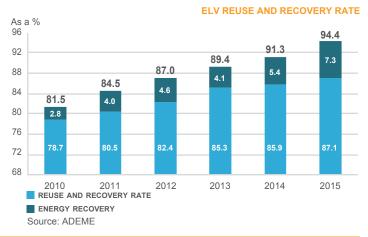
An End-of Life Vehicle (ELV) is transferred by the last owner to a third party for destruction. Around 1 million ELVs were processed by the accredited channels in 2015, compared to 1.5 million between 2009 and 2011 (the scrappage bonus scheme) and less than 1 million in 2007. Ademe measures the re-use and recycling rate of ELVs which has progressed by around 13 percentage points since 2010. This ratio is the sum of re-use and recycling and energy recovery.



#### ► SIMPLIFIED CHART OF PROCESSING OF AN ELV







In France, around 1 million vehicles were processed by the end-of-life vehicle channel in 2015 in around 1,600 approved centres, called 'ELV centres'. Their average age was 18 years in 2015.

The resale of second-hand spare parts maintains recycling ratios and contributes to ELV centres' financial performance.

The level of collection and processing of automobile components by the ELV centres varies according to the new vehicle market, the economic context, the use of schemes to promote the withdrawal of old vehicles and technical progress that reduces the frequency of vehicle component renewal

The processing of end-of-life vehicles must respect predefined performance levels according to September 18th 2000 directive: 95% re-use, of which 85% recycling and re-injection, since 2015. Some sites already exceed this objective.

In 2014, the materials breakdown of ELV centres was: 75% metal (ferrous metals: 70%; non-ferrous metals: 4%; and electrical harnesses: 1%), 12% plastics, 3% tyres and 1% batteries. The average weight of a passenger car is around one tonne (source: ADEME).

Some vehicle consumables (oils, batteries, etc.) are also recycled during the service life of the vehicle.

In 2015, the collection of accumulators (batteries designed to power the starter motor, lighting or the ignition system) reached the lowest level since 2009, i.e. 182,000 tonnes (-4% compared to 2014). The recyclability of lead accumulators is 82%.

Collection of car tyres (light vehicles and heavy goods vehicles) totalled 392,000 tonnes in 2015, up 3%. The collection rate remains stable (92%), following an increase of 4 percentage points in 2014. The re-use rate of tyres is now 100%. Around 53% of tyres were used for energy in 2015, 22% for granulation (for sports pitches, urban

furniture) and 15% re-injected (12% for second hand sale and 3% for remoulding). The last 5% went to public works.

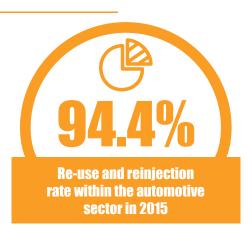
Keeping cars on the roads generates 200,000 tonnes of used engine oil each year. These used oils, which are collected free of charge by approved collectors are then recycled, only if they have never been mixed with other liquids (water, cooling liquids, solvents, etc.). The oils are then regenerated where possible (75% of volume), i.e. used for energy.

#### **CIRCULAR ECONOMY**

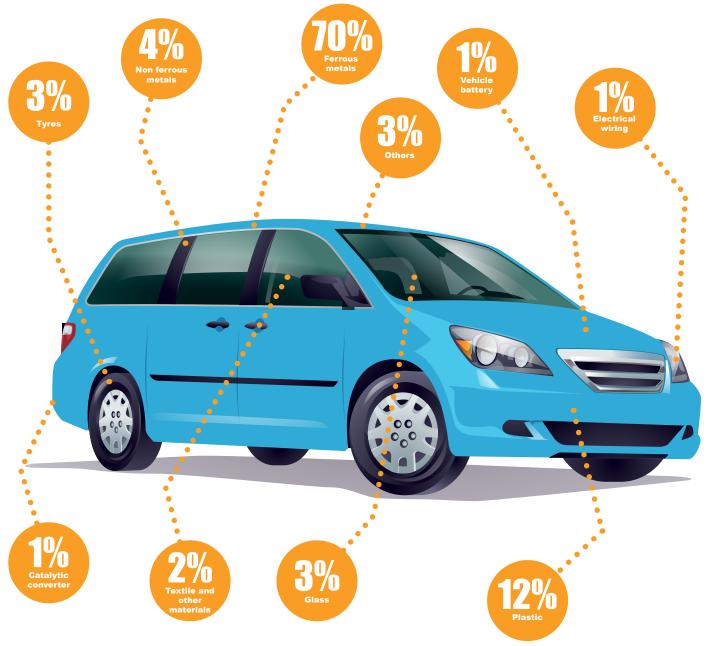
The energy transition law in favour of green growth of August 17, 2015 seeks to promote the market for parts from the circular economy by requiring maintenance and repair professionals to inform consumers of the possibility of opting for spare parts from the circular economy instead of new parts, in certain categories.

The 30 May, 2016 decree specifies that parts from the circular economy are components and elements sold by approved ELV centres and components and elements reconditioned by the manufacturer (the automaker, for example), according to a precise specification, either in the manufacturer's factories or in a controlled workshop, branded with the 'reconditioned' label (decree of October 4, 1978).

Vehicles are launched by producers (automakers and importers) via a dealership network. At the end of the vehicle's service life, it has to be handed over to an approved ELV centre to be processed according to a precise specification, according to health and environment regulations. The centre is responsible for depolluting parts (removal of fluids - fuel oil, brake fluid, air conditioning, etc. -, batteries and securing pyrotechnic devices), dismantling them for second-hand sale or recycling, and sending the stripped vehicle to one of the 59 car crushers (2015 data, Ademe), responsible for separating the remaining components from the body for reuse. If the components can neither be re-used nor recycled, they can be used for energy purposes (heating and cogeneration).



#### Composition of an end of life vehicle in 2014



#### PRODUCTION OF THE AUTOMOTIVE INDUSTRY AND ITS ECONOMIC IMPACT



Production in the automotive field was €57 bn in 2015, i.e. a rise of 8% compared to the previous year. It is 19% above its 2009 level, which is when the financial crisis hit. It was between €70 and €77 bn between 2000 and 2007.

According to the new 2010 base, when research and development expenditure was included in the gross fixed capital formation (GFCF), total purchases (or intermediary consumption), including the branch itself, represents more than four times its added value (AV). In 2015, this was €47 bn, which benefitted numerous sectors of the economy because of its stability.

Since 2009, AV has settled at around €10 bn, at a level well below the €13 bn recorded between 2000 and 2005. 2015: in excess of 10% growth after three years of quasi-stability.

As a guarantee of future production in a highly capitalistic industry, the investment rate (the GPFC/AV ratio) has been maintained at a high level over a sustained period during which European markets have been lower than their pre-crisis level, whilst the margin rate (the ratio between the gross operating margin and AV) has remained low (cf. graph on page 28).

#### ► ANALYSIS OF AUTOMOTIVE INDUSTRY PRODUCTION (AS A % OF TOTAL PURCHASES)

		2000	2005	2010	2013 (1)	2014 (1)	2015 (1)
PURCHASES FROM OTHER INDUSTRIES	%	71.7	76.3	75.6	76.9	75.2	73.4
Electrical, electronic and IT equipment; machines	%	20.6	21.0	20.1	19.8	19.5	18.9
manufacture of IT, electronic and optical products	%	4.8	4.8	4.5	3.7	3.7	3.6
manufacture of electrical equipment	%	3.1	3.4	3.5	3.6	3.6	3.6
manufacture of machinery and equipment not included elsewhere	%	12.8	12.8	12.1	12.4	12.3	11.7
Other industries (including coking and refining)	%	35.8	39.8	39.7	40.4	39.0	37.7
metallurgy and metalworking	%	16.0	16.7	17.5	17.8	17.2	16.4
manufacture of rubber, plastic and mineral products	%	9.1	10.8	10.1	10.1	9.6	9.6
other manufacturing industries (including repairs and installations)	%	3.7	4.7	4.5	4.3	4.3	4.2
chemical industry	%	2.6	2.8	3.0	3.2	3.1	2.9
manufacture of textiles, clothing industries, leather and shoes	%	1.6	1.9	1.8	1.9	1.9	1.8
wood, paper and printing industries	%	1.4	1.4	1.6	1.5	1.5	1.4
Extraction, energy and water industries	%	1.6	1.5	2.0	2.3	2.1	2.1
electricity, gas, steam and air conditioning	%	0.9	0.8	1.2	1.4	1.3	1.2
water, sanitation, waste management and decontamination	%	0.7	0.7	0.8	0.8	0.8	0.8
Construction	%	0.3	0.4	0.3	0.3	0.3	0.3
Motorcycle and car sales and repairs	%	0.7	1.1	1.0	1.3	1.2	1.2
Transport and storage	%	1.2	1.3	1.5	1.6	1.6	1.6
Information and communication	%	0.4	0.4	0.5	0.4	0.4	0.4
Financial and insurance services	%	0.8	0.7	0.9	1.0	1.0	1.0
Real estate activities	%	0.2	0.2	0.2	0.2	0.2	0.2
Corporate services	%	7.7	7.7	7.3	7.4	7.5	7.7
legal, accounting, control and technical analysis, etc.	%	1.6	1.9	2.1	2.3	2.3	2.3
other specialized, scientific and technical activities	%	2.8	2.7	2.6	2.5	2.5	2.5
administrative and support services	%	3.4	3.1	2.7	2.6	2.8	3.0
Other commercial sector industries	%	2.3	2.1	2.1	2.3	2.3	2.3
All commercial sector purchases	%	13.4	13.6	13.4	14.2	14.3	14.4
PURCHASES WITHIN THE INDUSTRY	%	28.3	23.7	24.4	23.1	24.8	26.6
Total industry production at base prices	Current € billion	70.3	75.6	58.3	51.4	52.9	57.4
As a % of production at base prices	%	100.0	100.0	100.0	100.0	100.0	100.0
Total purchases (2)	Current € billion	57.1	62.6	47.5	42.0	43.5	46.9
As a % of production at base prices	%	81.2	82.7	81.5	81.7	82.3	81.8
Value added by the industry	Current € billion	13.2	13.0	10.8	9.4	9.4	10.5
As a % of production at base prices	%	18.8	17.3	18.5	18.3	17.7	18.2
Gross operating surplus (gos)	Current € billion			2.6	1.6	1.7	3.0
As a % of value added (margin rate)	%			24.6	16.7	18.4	28.3

<sup>(1)</sup> These data are provisional

Total purchases by the automotive branch, representing more than 80% of production, can be broken down as follows: a little under 25% for the branch itself and the remaining three quarters for other branches.

'Other industries' purchases accounted for 38% of all purchases, amongst which metallurgy and

metal product manufacturing, which remain the leading suppliers (16% of total purchases).

Purchases from machine and equipment manufacturers (excluding electrical, electronic and IT products) accounted for 12% of the automotive industry's total purchases.

From a 2010 base, when research and development expenditure was first accounted for in the GFCF, the automotive industry dedicated 14% of its spending to the tertiary sector, compared to 13% in 2010. Some of these purchases were destined in particular to business support suppliers (with a relatively stable ratio at around 7.5%).

<sup>(2)</sup> Total purchases (intermediate consumption) refers to the value of goods and services transformed or consumed fully during the production process. The distribution of purchases by industry is expressed by volume. In the new 2010 the research and development costs are no longer included in intermediate consumption, but in GFCF. It does not include the depreciation of fixed production assets, which is recorded in uses of capital employed.

Source: INSEE – National accounts (base 2010)

#### **AUTOMOTIVE OEMS AND SUPPLIERS**



The French automotive industry is one of the three biggest industrial clients of numerous economic sectors such as plastics, industrial rubber and the mechanical industry.

Vehicle manufacturing is a structuring industry for its suppliers and for the French economy.

The development of French automaking has a pull effect on equipment manufacturers and other suppliers from sectors such as plastics, industrial rubber, foundry, industrial metal services.

A Direction Générale des Entreprises study, published in 2015, found that the automotive industry (excl. Research & development) employed 441,000 employees in 'full time equivalent' positions, of which 211,000 in the 'core' (automakers, equipment manufacturers and body builders) and 230,000 in the periphery. The latter group includes eleven activities, such as metal, rubber plastic and glass products, and textile. The turnover of the whole sector is assessed at more than €140 bn and its added value at more

than €20 bn. Also, the export rate of the sector is greater than that of the manufacturing industry (43% compared to 34%). Within the automotive sector, this ratio is greater for the core (56%) than for the periphery (35%).

According to Eurostat, vehicle manufacturing and the French equipment manufacturing industry ranked second in Europe in terms of turnover.

# ► WORKFORCE OF THE AUTOMOTIVE INDUSTRY BY

Activity	Employees (1)
Assemblers or engine makers	126
OEMs	66
Metal products	50
Manufacture of rubber and plastic products	48
Metallurgy	38
Manufacture of IT, electronic and optical products	26
Production of mechanical parts	26
Production of electrical equipment	18
Body builders or developers	19
Chemicals	16
Production of glass products	5
Textiles	2
Refined oil products	1
Production leather items	0



(1) In Full Time Equivalent positions

Sources: DGE, survey in 2012 of companies in the automotive industry; INSEE Clap 2011. DGE calculations.

#### ► SALES, ADDED VALUE AND EXPORT RATE OF THE AUTOMOTIVE INDUSTRY

	Sales before tax (in € billions)	Added value (in € billions)	Export rate (%)
Core (1)	91	12	56
Periphery (2)	52	12	35
Automotive branch	143	24	43
Ratio (branch/core)	1.6	2	
Manufacturing industry	900	215	34
Weight of the automotive branch in the manufacturing industry	16%	11%	

(1) automakers, equipment manufacturers and bodybuilders

(2) Metal products, rubber products, metallurgy, IT products, mechanical parts, glass products, textiles, etc. Sources: DGE, 2012 survey of companies in the automotive industry; Insee Esane 2011. DGE calculations.

According to FIEV (vehicle equipment manufacturers' federation), headcount of equipment manufacturers in 2016 was 70,000 for €17.6 bn turnover. Equipment manufacturers have two types of market: initial assembly, whereby equipment is delivered to the assembly line, and secondary assembly or replacement parts. The initial assembly turnover represents more than 80% for the total.

Over recent years, externalisation has resulted in an increasing use of suppliers, whose services represent a high and growing proportion of the overall cost of manufacturing a vehicle (around 80% according to FIEV).

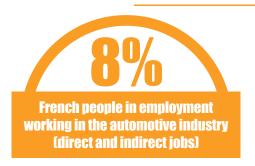
In 2016, amongst the other automotive suppliers, members of the automotive suppliers' liaison committee – CLIFA (cf. page 2), nearly one fifth

of work in the plastics and electronic equipment sectors were for the automotive industry. Also, 10% of mechanical industries' domestic market was for the automotive industry. For forges and foundries, the total was 50% and 70% in the polymer and rubber sectors.

The French automotive industry continues to rely on its French industrial base. It accounts for a substantial share of plastic technical parts, industrial rubber, foundry, industrial metal services businesses, which are made up in particular by cutting, die stamping, industrial mechanics, bar turning, stamping, forging and metal surfacing. According to GIST (a group of mechanical subcontractors), the automotive sector represented almost 40% of its turnover over recent years. To express the total industrial value of the automotive sector, as well as all these suppliers that are

members of CLIFA, we would have to add the purchases the French automotive industry's purchases from other sectors such as steel (the automotive sector represents 25% of the tonnage), chemicals (10% for all transport materials) and energy (cf. page 62).

#### **EMPLOYMENT**



In broader terms, 2.2 million people worked in activities linked to the automotive industry in 2016, i.e. 8% of the working population.

In the strictest sense, the automotive industry employed 216,000 people, i.e. around 7% of salaried jobs across industry (including extractive industries, agrofoods and industrial companies).

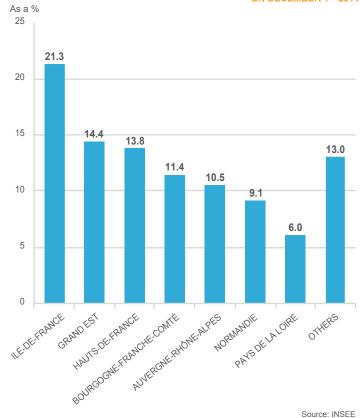
The impact of the crisis and the lack of competition severely affected industrial automotive activities, including upstream. Concerning use, activities are by nature less sensitive because of their links with the automobile stock. The number of jobs has fallen in particular for structural reasons (self-employed status, changes to fuel distribution rules, etc.).

# ► JOBS DIRECTLY OR INDIRECTLY RELATED TO THE AUTOMOTIVE INDUSTRY IN 2016 (IN THOUSANDS OF PEOPLE)

ACTORICTIVE INDOCTRET IN 2010 (IN THOUSANDS OF PEOPLE)	
	2016
Production operations	520
Raw materials and services	304
Manufacturing and energy sector	164
Services	140
Automotive industry	216
Automotive manufacturing	112
Equipements, accessories	81
Bodywork, trailers, caravans	23
Use automobiles	535
Sales, repairs, automotive equipment sales, vehicle inspections, short-term rentals, breakers and recycling (1)	400
Insurance, experts and financing, etc. (1)	95
Others (fuel retailing, self-employed, etc.)	30
Motor sport, media, publishing, other	10
Transports	1127
Road transport (passengers and freight, outsourced and in-house), related services	977
Police, health, education, non-commercial administration	34
Road building and maintenance	116
Total jobs related to the automotive industry	2,182

GEOGRAPHIC BREAKDOWN OF AUTOMOTIVE INDUSTRY EMPLOYEES

ON DECEMBER 1<sup>ST</sup> 2014



(1) These series have been revised. Sources: CCFA, CNPA, INSEE, SOeS, FNTP, URF

The automotive industry, one of the main contributors to industrial production in France. generated 520,000 jobs through its production and its purchases from other branches. It is important to remember that the number of jobs linked to the automotive industry now excludes temporary workers, since they are now part of 'services'. The number of temps employed – in full time equivalent (FTE) – averaged over 21,000 people between 2010 and 2015. Also, further to the change in nomenclature (cf. pages 84 and 85), staff from automotive equipment manufacturers included those coming from manufacturers of vehicle seats and electrical materials for engines and vehicles, which previously figured in manufacturing and energy industries' purchases.

Vehicle use accounted for 535,000 jobs connected in particular to services linked to vehicles (sales, repair, automobile equipment centres, rental, etc.), fuel and recycling (oils, demolishers, etc.). These figures include employees, but also individual entrepreneurs (or non-salaried employees).

Finally, road transport (passenger and merchandise) and the associated infrastructure employed over one million people; this figure includes those working for a third party and the self-employed.

Transport's has returned to pre-crisis levels, and headcount has remained fairly stable. Finally, for infrastructure, budgetary constraints on public authorities have affected the activity, but with a time-lag.

According to INSEE data, on December 31, 2014, Ile de France accounted for 21% of jobs in the automotive industry (automakers, equipment manufacturers and body builders). The other leading automotive industry regions were Grand Est and Hauts-de-France (14% each), Bourgogne-Franche-Comté and Auvergne-Rhône-Alpes (11% each), Normandie (9%) andPays de la Loire (6 %).



6.7
MILLION VEHICLES

Produced by French manufacturers worldwide

80% VEHICLES

Produced by French manufacturers are sold abroad

€5.8
BILLION

French automotive industry research and development budget in 2014

€45
BILLION

Automotive products sold abroad

**79%** 

Share of domestic travel in France using passenger cars

**85%** 

Share of domestic freight transport in France by road

THE FRENCH AUTOMOTIVE INDUSTRY

→ ANALYSIS & STATISTICS 2017

# **WORLD PRODUCTION**

The production of each country corresponds to national declarations. Double counts are eliminated in the totals of the geographical areas.

#### ► PASSENGER CARS (IN UNITS)

	1980	1990	2000 (2)	2010	2013	2014	2015	2016
EUROPE	11,983,548	15,231,409	17,407,047	17,330,380	17,460,101	18,048,939	18,494,369	18,947,885
WESTERN EUROPE	10,401,320	13,061,853	14,778,879	12,110,446	11,441,467	11,895,047	12,621,431	13,004,829
Germany	3,520,934	4,660,657	5,131,918	5,552,409	5,439,904	5,604,026	5,708,138	5,746,808
Belgium	882,001	1,160,412	912,233	528,996	465,504	481,636	369,172	354,003
Spain	1,028,813	1,679,301	2,366,359	1,913,513	1,754,668	1,898,342	2,218,980	2,354,117
France (1)	2,938,581	3,294,815	2,879,810	1,924,171	1,458,220	1,499,464	1,555,000	1,636,917
Italy	1,445,221	1,874,672	1,422,284	573,169	388,465	401,317	663,139	713,182
The Netherlands	80,779	121,300	215,085	48,025	0	29,196	41,870	42,150
Portugal	61,000	60,221	178,509	114,563	109,698	117,744	115,468	99,200
United Kingdom	923,744	1,295,611	1,641,452	1,270,444	1,509,762	1,528,148	1,587,677	1,722,698
Sweden	235,320	335,853	259,959	177,084	161,080	154,174	188,987	205,374
CENTRAL AND EASTERN EUROPE	1,582,228	2,002,000	2,330,692	4,616,540	5,385,030	5,420,453	5,081,911	4,992,168
Turkey	31,529	167,556	297,476	603,394	633,604	733,439	791,027	950,888
AMERICA	8,663,060	8,450,862	10,022,089	8,228,067	10,394,353	9,986,532	9,394,539	8,815,986
NAFTA	7,526,658	7,747,823	8,371,806	5,084,330	7,106,013	7,082,340	7,019,427	6,729,582
Canada	846,777	1,072,281	1,550,500	967,077	965,191	913,533	888,565	802,057
USA	6,376,825	6,077,449	5,542,217	2,731,105	4,368,835	4,253,098	4,162,808	3,934,357
Maxico	303,056	598,093	1,279,089	1,386,148	1,771,987	1,915,709	1,968,054	1,993,168
SOUTH AMERICA	1,136,402	703,039	1,650,283	3,143,737	3,288,340	2,904,192	2,375,112	2,086,404
Argentina	218,516	81,107	238,921	508,401	506,539	363,711	308,756	241,315
Brazil (3)	977,697	663,097	1,351,998	2,584,690	2,722,979	2,502,293	2,017,639	1,778,464
ASIA-PACIFIC	8,796,971	11,910,333	13,573,073	32,408,358	37,192,510	39,246,258	40,125,960	43,854,191
China	-	-	605,000	13,897,083	18,084,169	19,928,505	21,143,351	24,420,744
South Korea	55,000	986,751	2,602,008	3,866,206	4,122,604	4,124,116	4,135,108	3,859,991
India	30,538	176,015	517,957	2,831,542	3,155,694	3,162,372	3,408,849	3,677,605
Japan	7,038,108	9,947,972	8,359,434	8,310,362	8,189,323	8,277,070	7,830,722	7,873,886
AFRICA	277,058	209,603	213,444	356,872	403,821	483,206	604,130	673,685
South Africa	277,058	209,603	230,577	295,394	265,257	277,491	341,025	335,539
TOTAL	29,720,637	35,802,207	41,215,653	58,323,677	65,450,785	67,764,935	68,618,998	72,291,747

#### ► COMMERCIAL VEHICLES (IN UNITS)

	1980	1990	2000 (2)	2010	2013	2014	2015	2016
EUROPE	2,563,596	2,688,509	2,783,468	2,529,925	2,411,036	2,380,686	2,672,648	2,749,083
WESTERN EUROPE	1,663,080	1,671,915	2,326,653	1,686,875	1,498,118	1,588,914	1,794,888	1,886,774
Germany since 2011: LCV	357,619	315,895	394,697	353,576	278,318	303,522	325,226	315,754
Belgium	47,029	91,784	121,061	26,306	38,000	35,195	40,081	45,424
Spain	152,846	374,049	666,515	474,387	408,670	504,636	514,221	531,805
France (1) since 2011: LCV	439,852	474,178	468,551	305,250	282,000	322,000	417,000	453,362
Italy	166,635	246,178	316,031	265,017	269,741	296,547	351,084	390,334
The Netherlands (4)	32,102	29,832	52,234	46,107	29,183	2,232	2,252	2,280
Portugal	58,000	77,466	68,215	44,166	44,318	43,765	41,158	43,896
United Kingdom	389,170	270,133	172,442	123,019	88,110	70,731	94,479	93,924
Sweden	63,080	74,415	41,384	40,000	45,897	nd	nd	nd
CENTRAL AND EASTERN EUROPE	900,516	975,000	323,203	351,887	420,988	354,766	309,991	327,270
Turkey	19,352	41,594	133,471	491,163	491,930	437,006	567,769	535,039
AMERICA	2,599,948	5,032,605	9,761,798	8,119,880	10,687,053	11,235,931	11,567,600	12,040,852
NAFTA	2,349,318	4,775,818	9,325,214	7,069,234	9,395,102	10,340,526	10,935,086	11,436,288
Canada	527,522	850,566	1,411,136	1,101,112	1,414,643	1,480,621	1,394,742	1,568,214
USA	1,634,846	3,702,787	7,257,640	5,011,988	6,697,597	7,407,604	7,943,180	8,263,780
Mexico	186,950	222,465	656,438	956,134	1,282,862	1,452,301	1,597,164	1,604,294
SOUTH AMERICA	250,630	256,787	436,584	1,050,646	1,291,951	895,405	632,514	604,564
Argentina since 2015: VUL	63,153	5,337	100,711	208,139	284,468	253,618	217,901	231,461
Brazil (3)	187,477	251,450	329,519	797,038	989,401	644,093	411,782	377,892
ASIA-PACIFIC	4,344,363	4,492,406	4,497,938	8,600,629	8,654,614	8,212,631	7,863,313	7,961,232
China	-	-	1,464,000	4,367,678	4,032,656	3,803,095	3,423,899	3,698,050
South Korea	65,012	334,879	512,990	405,535	398,825	400,816	420,849	368,518
India	83,379	186,640	283,403	725,531	742,731	682,485	751,736	811,360
Japan	4,004,776	3,538,824	1,781,362	1,318,558	1,440,858	1,497,595	1,447,516	1,330,704
AFRICA	127,698	125,174	115,305	158,204	221,834	236,402	232,291	229,883
South Africa	127,698	125,174	126,787	176,655	280,656	288,592	274,633	263,465
TOTAL	9,675,970	12,399,000	17,158,509	19,408,638	21,974,537	22,065,650	22,335,852	22,981,050

<sup>(1)</sup> As of 1996, figures are based on the number of vehicles assembled in France
(2) As of 2001, some passenger cars were reclassified as commercial vehicles
(3) Since 2010, Brazilian production does not include CKDs.
(4) Production in the Netherlands did not include DAF in 2012 and did not include Ginaf and Scania since 2014.
Sources: OICA, CCFA

# **WORLD MOTOR VEHICLE PRODUCTION BY MANUFACTURER AND REGION IN 2016**

#### ► IN THOUSANDS

Manufacturers/areas	North America NAFTA	South America	European union 28 countries	Other European countries and Turkey	Japan	South Korea	China	Other Asian, Pacific and African countries	TOTAL
European manufacturers	3,792	1,262	13,465	1,445	17	245	5,279	1,333	26,839
BMW	442	0	1,548	0	0	0	306	64	2,360
FCA	2,512	424	1,299	350	0	0	89	8	4,681
DAIMLER AG (light vehicles)	318	2	1,739	3	0	0	349	115	2,526
PSA	0	145	2,131	21	17	0	606	233	3,153
RENAULT	1	349	1,774	474	0	245	33	635	3,511
VOLKSWAGEN (light vehicles)	519	344	4,944	145	0	0	3,896	278	10,126
American manufacturers	6,873	677	2,182	383		583	5,022	840	16,559
FORD	3,105	286	1,111	349	0	0	1,001	576	6,429
GM	3,637	390	1,013	34	0	583	4,021	264	9,941
NAVISTAR	48	0	0	0	0	0	0	0	48
PACCAR	82	1	57	0	0	0	0	0	139
Japanese manufacturers	6,395	471	1,482	311	9,104	137	3,989	6,196	28,086
HONDA	1,956	148	134	15	820	0	1,209	716	4,999
ISUZU	0	0	0	5	244	0	0	420	669
MAZDA	149	0	0	0	977	0	238	221	1,586
MITSUBISHI	0	0	0	30	555	0	0	506	1,092
NISSAN	1,855	45	629	70	950	137	1,321	549	5,556
SUBARU	297	0	0	0	728	0	0	0	1,025
SUZUKI	0	0	211	0	794	0	144	1,796	2,945
TOYOTA	2,138	277	509	190	4,035	0	1,077	1,988	10,213
Korean manufacturers	857	162	702	437		3,237	1,830	665	7,890
Hyundai-Kia	857	162	702	437	0	3,237	1,830	665	7,890
Chinese manufacturers	0		454				14,120		14,576
GEELY	0	0	454	0	0	0	811	1	1,266
SAIC	0	0	0	0	0	0	2,567	0	2,567
Indian manufacturers	0		546			165		1,208	1,919
TATA	0	0	546	0	0	9	0	529	1,085
ALL MANUFACTURERS QUOTED ABOVE	17,917	2,572	18,831	2,576	9,121	4,229	28,096	10,317	93,659

#### ► AS A % OF TOTAL PRODUCTION

Manufacturers/areas	North America NAFTA	South America	European union 28 countries	Other European countries and Turkey	Japan	South Korea	China	Other Asian, Pacific and African countries	TOTAL
European manufacturers	14%	5%	50%	5%	0%	1%	20%	5%	100%
BMW	19%		66%				13%	3%	100%
FCA	54%	9%	28%	7%			2%	0%	100%
DAIMLER AG	13%		69%				14%	5%	100%
PSA		5%	68%	1%	1%		19%	7%	100%
RENAULT		10%	51%	13%		7%		18%	100%
VOLKSWAGEN	5%	3%	49%	1%			38%	3%	100%
American manufacturers	42%	4%	13%	2%	0%	4%	30%	5%	100%
FORD	48%	4%	17%	5%			16%	9%	100%
GM	37%	4%	10%	0%		6%	40%	3%	100%
NAVISTAR	100%								100%
PACCAR	59%		41%						100%
Japanese manufacturers	23%	2%	5%	1%	32%	0%	14%	22%	100%
FUJI	29%				71%				100%
HONDA	39%	3%	3%	0%	16%		24%	14%	100%
ISUZU					37%		0%	63%	100%
MAZDA	9%	0%			62%		15%	14%	100%
MITSUBISHI	0%	0%			51%			46%	100%
NISSAN	33%	1%	11%	1%	17%		24%	10%	100%
SUZUKI		0%	7%		27%		5%	61%	100%
TOYOTA	21%	3%	5%	2%	40%		11%	19%	100%
Korean manufacturers	11%	2%	9%	6%		41%	23%	8%	100%
Hyundai-Kia	11%	2%	9%	6%		41%	23%	8%	100%
Chinese manufacturers	0%	0%	3%	0%	0%	0%	97%	0%	100%
GEELY			36%				64%	0%	100%
SAIC							100%		100%
Indian manufacturers	0%	0%	28%	0%	0%	9%	0%	63%	100%
TATA			50%			1%		49%	100%
ALL MANUFACTURERS QUOTED ABOVE	19%	3%	20%	3%	10%	5%	30%	11%	100%

Sources: OICA, CCFA estimates July 2017

# **REGISTRATIONS**

#### ► NEW PASSENGER CAR REGISTRATIONS BY COUNTRY (IN UNITS)

	1980	1990	2000	2010	2013	2014	2015	2016
Germany	2,426,187	3,349,788	3,378,343	2,916,259	2,952,431	3,036,773	3,206,042	3,351,607
Belgium	399,240	473,506	515,204	547,340	486,065	482,939	501,066	539,519
Spain	504,051	988,270	1,381,515	982,015	722,689	890,125	1,094,077	1,147,007
France	1,873,202	2,309,130	2,133,884	2,251,669	1,790,456	1,795,885	1,917,226	2,015,177
Italy	1,717,432	2,307,055	2,415,600	1,961,580	1,304,648	1,360,578	1,575,737	1,824,968
The Netherlands	450,076	502,732	597,640	482,531	417,036	387,553	449,350	382,825
Poland				315,855	289,913	327,709	354,975	416,123
United Kingdom	1,513,761	2,008,934	2,221,670	2,030,846	2,264,737	2,476,435	2,633,503	2,692,786
Europe (15 countries)	9,690,146	13,125,133	14,312,087	12,559,450	11,097,843	11,692,967	12,772,785	13,481,105
Europe (17 countries)	10,065,460	13,516,933	14,725,982	12,981,443	11,547,879	12,139,111	13,247,254	13,953,026
Central and Eastern Europe	1,900,000	1,600,474	2,551,000	3,515,830	4,387,120	4,005,631	3,149,305	3,320,351
Russia				1,912,794	2,649,181	2,333,067	1,282,740	1,239,680
Turkey	31,000	215,000	456,696	509,784	664,655	587,331	725,596	756,938
Canada	948,967	886,217	849,132	694,349	7,585,341	7,689,110	7,516,826	6,872,729
USA	8,760,937	9,300,678	8,846,625	5,635,432	7,585,341	7,689,110	7,516,826	6,872,729
Mexico	286,000	353,000	603,010	503,748	698,217	745,250	892,194	1,065,912
Argentina	215,177	77,306	224,950	489,304	684,379	432,696	480,952	525,757
Brazil	793,028	532,791	1,188,818	2,856,540	3,040,783	2,794,687	2,123,009	1,676,722
China				13,757,794	17,927,730	19,707,677	21,210,339	24,376,902
South Korea	45,972	626,126	1,057,620	1,237,482	1,243,868	1,359,834	1,533,670	1,533,813
India				2,387,197	2,553,979	2,570,736	2,772,270	2,966,637
Indonesia				541,475	880,032	863,268	755,566	834,920
Iran				1,410,403	691,709	1,106,700	1,055,400	1,320,300
Japan	2,854,185	5,102,659	4,259,771	4,203,181	4,562,282	4,699,591	4,215,889	4,146,459
Malaysia				543,594	576,657	588,348	591,275	514,545
Thailand				346,644	663,746	411,402	356,063	328,053
Australia				592,122	899,965	883,949	924,154	927,274
South Africa				337,130	450,561	439,264	412,670	361,289
World	28,500,000	34,825,967	38,689,767	55,602,157	63,421,088	65,698,868	66,325,833	69,458,136

#### ► NEW COMMERCIAL VEHICLE REGISTRATIONS BY COUNTRY (IN UNITS)

	1980	1990	2000	2010	2013	2014	2015	2016
Germany	175,687	203,389	314,804	282,157	305,287	319,945	333,783	357,260
Belgium	34,478	46,670	66,125	60,157	61,074	62,316	70,458	78,335
Spain	105,934	249,185	335,684	132,104	100,261	139,657	182,982	200,337
France	323,291	446,983	477,204	457,215	416,917	415,042	427,866	463,295
Italy	122,293	159,322	268,057	202,573	116,166	132,430	150,342	225,324
The Netherlands	47,926	68,791	114,354	59,781	64,399	62,777	71,828	86,585
Poland				49,356	63,284	64,767	77,464	88,427
United Kingdom	274,143	293,473	301,523	262,730	330,976	366,590	427,903	430,969
Europe (15 countries)	1,276,097	1,718,369	2,245,881	1,646,742	1,561,706	1,690,915	1,882,620	2,089,507
Europe (17 countries)	1,313,650	1,769,569	2,310,844	1,711,882	1,635,430	1,763,448	1,960,907	2,171,459
Central and Eastern Europe	850,000	874,072	579,060	595,752	764,958	668,830	662,918	669,258
Russia				194,341	349,469	259,329	158,183	164,784
Turkey	19,000	43,015	199,825	251,129	228,469	220,155	285,598	250,919
Canada	335,827	416,041	736,951	889,039	1,024,908	1,129,938	1,227,195	1,322,657
USA	2,476,777	4,845,360	8,965,048	6,136,787	8,298,102	9,154,354	10,328,798	10,993,044
Mexico	166,000	198,000	302,944	344,606	402,325	431,055	497,280	581,811
Argentina	59,881	17,481	81,995	163,098	279,538	181,152	163,069	183,725
Brazil	187,233	180,000	302,288	658,524	726,587	703,325	445,967	373,599
China				4,304,142	4,056,349	3,791,324	3,451,263	3,651,273
South Korea	58,502	328,151	372,840	273,891	299,696	302,034	300,116	289,228
India				653,193	687,323	606,269	652,566	702,640
Indonesia				223,235	349,779	332,141	275,856	213,215
Iran				232,440	113,041	180,900	166,600	128,200
Japan	2,161,305	2,674,834	1,703,114	752,967	813,231	863,297	830,621	823,801
Malaysia				61,562	79,136	78,139	75,402	65,579
Thailand				453,713	666,926	470,430	443,569	440,735
Australia				443,452	236,262	229,281	231,254	250,859
South Africa				155,777	200,184	205,240	205,079	186,117
World	9,150,000	13,410,615	18,723,143	19,392,043	22,171,600	22,625,420	23,380,189	24,398,752

Sources: CCFA, OICA from 2009, which uses data from its members and thus local definitions of vehicle types

# **PRODUCTION PER ENERGY TYPE**

#### ▶ DIESEL PASSENGER CAR PRODUCTION BY BRAND AND COUNTRY (IN UNITS)

	1980	1990	2000	2010	2013	2014	2015	2016		
FRENCH MANUFACTURERS										
Citroën+DS	33,996	213,010	453,604	586,769						
Peugeot	133,332	334,469	593,349	622,644						
PSA Group (1)	167,328	547,479	1,046,953	1,209,413	932,595	936,425	1,012,098	940,081		
Renault	69,335	256,528	601,495	812,306						
Dacia				132,548						
Renault Samsung Motors				24,141						
Renault Group	69,335	256,528	601,495	968,995	915,527	898,864	1,054,351	1,039,526		
Total (2)	236,663	804,007	1,648,448	2,178,408	1,848,122	1,835,289	2,066,449	1,979,607		
Total gasoline + diesel + others	2,938,581	3,294,815	4,598,617	5,610,340	4,794,079	4,920,471	5,182,320	5,782,453		
Diesel share	8.1%	24.4%	35.8%	38.8%	38.6%	37.3%	39.9%	34.2%		
GERMANY										
Mercedes	216,053	141,547	278,772	363,443	400,324	412,462	420,050			
Opel	32,742	76,441	288,651	236,982	143,919	157,576	114,241			
Volkswagen-Audi-Seat	211,199	325,767	847,652	1,095,790	1,210,951	1,289,215	1,344,161			
Ford	5,344	90,117	179,130	347,553	206,654	216,980	272,502			
BMW	33,520	28,135	194,794	448,604	522,549	519,080	547,713			
Total diesel	465,788	662,007	1,788,999	2,502,419	2,514,363	2,635,285	2,744,586	2,681,647		
Total gasoline + diesel + others	3,520,934	4,660,657	5,131,918	5,552,330	5,439,904	5,604,026	5,708,138	5,746,808		
Diesel share	13.2%	14.2%	34.9%	45.1%	46.2%	47.0%	48.1%	46.7%		
SPAIN										
Total diesel	N/A	150,221	681,262	1,000,000	885,850	1,004,877	1,217,898	1,171,691		
Total gasoline + diesel	N/A	1,679,301	2,445,421	1,913,513	1,719,700	1,871,985	2,202,348	2,313,409		
Diesel share	N/A	8.9%	27.9%	52.3%	51.5%	53.7%	55.3%	50.6%		
ITALY										
Alfa Romeo	3,851	11,176	77,532	60,095	39,249	32,493	30,437	50,692		
Fiat	76,513	87,985	223,889	138,598	60,206	69,632	115,418	113,226		
Lancia		17,679	40,891	40,759	6,339	1,745				
Jeep						18,593	49,767	63,927		
Others	0	297	0	1,449			5,410	9,300		
Total diesel	80,364	117,137	342,312	240,901	105,794	122,463	201,032	237,145		
Total gasoline + diesel + others	1,445,221	1,874,672	1,422,243	573,169	388,465	401,317	663,139	713,182		
Diesel share	5.6%	6.2%	24.1%	42.0%	27.2%	30.5%	30.3%	33.3%		
UNITED KINGDOM										
Honda	0	0	596	35,908	54,800	51,728	62,773			
Jaguar-Land Rover	0	25,374	69,775	137,824	212,041	213,349	246,542			
Mini	0	0	0	34,752	29,529	31,280	39,437			
Nissan	0	3,200	54,396	173,050	201,379	233,884	254,800			
Opel	0	7,695	125,880	35,206	42908	25205	9008			
Peugeot	0	50,942	37,432	0	0	0	0			
Toyota	0	0	38,931	55,599	49,468	44,879	49,624			
Others	774	34,740	57,413	1,814	924	1,376	1,171			
Total diesel	774	121,951	384,423	474,153	591,049	601,701	663,355			
Total gasoline + diesel	923,744	1,295,611	1,641,317	1,274,070	1,439,290	1,439,258	1,489,372			
Diesel share	0.1%	9.4%	23.4%	37.2%	41.1%	41.8%	44.5%			

<sup>(1)</sup> Including Talbot up to 1985(2) Including others.Source: CCFA.

#### REGISTRATIONS

#### ▶ NEW PASSENGER CAR REGISTRATIONS IN THE EUROPEAN UNION, SWITZERLAND AND NORWAY (1) (IN THOUSANDS OF UNITS AND AS A % OF TOTAL REGISTRATIONS)

	2005 (2)	2010	2011	2012	2013	2014	2015	2016
PSA GROUP	2,111	1,849	1,689	1,471	1,345	1,395	1,479	1,471
PSA GROUP	13.6%	13.4%	12.4%	11.7%	10.9%	10.7%	10.4%	9.7%
RENAULT GROUP	1,635	1,416	1,303	1,057	1,092	1,234	1,349	1,509
NEWAGET GROOF	10.5%	10.2%	9.6%	8.4%	8.9%	9.5%	9.5%	10.0%
FCA Group	1,085	1,080	950	801	741	766	871	993
r CA Group	7.0%	7.8%	7.0%	6.4%	6.0%	5.9%	6.1%	6.6%
Ford Group	1,269	1,128	1,092	949	919	960	1,031	1,047
ord Group	8.2%	8.2%	8.0%	7.6%	7.5%	7.4%	7.3%	6.9%
General Motors	1,590	1,196	1,173	1,011	968	923	943	994
Scholar Motors	10.2%	8.6%	8.6%	8.1%	7.9%	7.1%	6.6%	6.6%
Volkswagen Group	3,041	2,984	3,216	3,114	3,090	3,307	3,514	3,635
	19.5%	21.6%	23.6%	24.8%	25.1%	25.5%	24.8%	24.1%
Daimler	830	676	673	667	689	714	839	952
	5.3%	4.9%	4.9%	5.3%	5.6%	5.5%	5.9%	6.3%
BMW Group	772	753	812	801	795	833	936	1,031
	5.0%	5.4%	6.0%	6.4%	6.5%	6.4%	6.6%	6.8%
Nissan	361	407	464	436	424	481	559	560
Missair	2.3%	2.9%	3.4%	3.5%	3.4%	3.7%	3.9%	3.7%
Toyota-Lexus-Daihatsu	852	629	572	548	543	563	601	646
Toyota-Lexus-Damatsu	5.5%	4.5%	4.2%	4.4%	4.4%	4.3%	4.2%	4.3%
Other Japanese brands	911	718	619	537	558	604	693	751
Other Japanese brands	5.8%	5.2%	4.5%	4.3%	4.5%	4.7%	4.9%	5.0%
Hyundai-Kia	569	614	686	773	767	773	852	934
nyunuai-Nia	3.7%	4.4%	5.0%	6.2%	6.2%	6.0%	6.0%	6.2%
Volvo	249	231	256	231	231	255	285	289
VOIVO	1.6%	1.7%	1.9%	1.8%	1.9%	2.0%	2.0%	1.9%
Tata Group	128	100	97	128	139	146	179	232
Tata Group	0.8%	0.7%	0.7%	1.0%	1.1%	1.1%	1.3%	1.5%
Other brands (including MG-Rover, Saab)	168	53	42	23	20	32	46	54
other brailes (including MG-Rover, Sadb)	1.1%	0.4%	0.3%	0.2%	0.2%	0.2%	0.3%	0.4%
TOTAL EU + SWITZERLAND + NORWAY	15,572	13,832	13,644	12,546	12,322	12,987	14,175	15,097
TOTAL EU + SWITZERLAND + NORWAY	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Year-on-year change		-5.0%	-1.4%	-8.0%	-1.8%	5.4%	9.2%	6.5%

#### ▶ NEW LIGHT COMMERCIAL VEHICLES REGISTRATIONS IN THE EUROPEAN UNION, SWITZERLAND AND NORWAY (1) **BY GROUP** (IN THOUSANDS OF UNITS AND AS A % OF TOTAL REGISTRATIONS)

	2005 (2)	2010	2011	2012	2013	2014	2015	2016
PSA GROUP	389	344	354	307	303	330	354	380
PSA GROUP	18.1%	21.9%	21.0%	20.8%	20.7%	20.3%	19.5%	18.9%
RENAULT GROUP	331	266	279	240	233	258	299	328
RENAULI GROUP	15.4%	17.0%	16.5%	16.3%	15.9%	15.9%	16.5%	16.3%
FCA Group	284	233	246	197	195	207	229	272
rea Group	13.2%	14.9%	14.5%	13.4%	13.3%	12.8%	12.7%	13.5%
Ford Group	235	171	187	164	171	215	268	318
Ford Group	10.9%	10.9%	11.1%	11.1%	11.7%	13.2%	14.8%	15.8%
General Motors	153	78	93	76	75	84	104	105
	7.1%	5.0%	5.5%	5.2%	5.1%	5.2%	5.7%	5.2%
/olkswagen Group	212	185	215	213	208	225	218	242
	9.9%	11.8%	12.8%	14.4%	14.2%	13.9%	12.0%	12.1%
Daimler	166	140	147	140	148	159	172	186
Daimler	7.7%	8.9%	8.7%	9.5%	10.1%	9.8%	9.5%	9.2%
Nissan	103	43	54	48	45	47	50	66
NISSAII	4.8%	2.7%	3.2%	3.3%	3.1%	2.9%	2.7%	3.3%
Toyota-Lexus-Daihatsu	65	39	42	34	31	38	41	39
Toyota-Lexus-Damatsu	3.0%	2.5%	2.5%	2.3%	2.1%	2.3%	2.3%	2.0%
Other Jananese brands	81	38	35	25	27	30	37	42
Other Japanese brands	3.8%	2.4%	2.1%	1.7%	1.9%	1.9%	2.0%	2.1%
Hyundai-Kia	52	6	5	4	4	3	4	7
nyullual-Kia	2.4%	0.4%	0.3%	0.3%	0.2%	0.2%	0.2%	0.3%
Other brands (including MC Bayer Sech)	78	27	31	29	27	30	35	26
Other brands (including MG-Rover. Saab)	3.6%	1.7%	1.8%	1.9%	1.8%	1.9%	1.9%	1.3%
TOTAL EU + SWITZERLAND + NORWAY	2,149	1,569	1,688	1,476	1,467	1,627	1,812	2,011
TOTAL EU + SWITZERLAND + NORWAT	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Year-on-year change		8.8%	7.6%	-12.6%	-0.6%	10.9%	11.3%	11.0%

<sup>(1)</sup> For the scope of the new EU member states, see page 73.

Automobile manufacturers include the following brands:

PSA Group = Peugeot + Citroën + DS + Talbot

Renault Group = Renault + Dacia

Fiat Chrysler Automobiles = Alfa Romeo + Fiat + Iveco + Lancia + Maseratti + Ferrari + Chrysler + Jeep + Dodge Ford Group = Ford Europe + Ford Etats-Unis + divers Ford General Motors = Opel + Vauxhall + GM Daewoo+ Chevrolet + Pontiac + others

Volkswagen Group = Volkswagen + Audi + Porsche + Seat + Skoda + Bentley + Lamborghini + Bugatti + MAN + Scania Daimler = Mercedes-Benz + Smart + FUSO + others

BMW Group = BMW + Mini + Rolls-Royce

Other Japanese brands: Mazda, Mitsubishi, Subaru, Suzuki, ...

Tata Group = Jaguar + Land-Rover + Tata

The scope of consolidation of the Groups as of 1/1/2017.

<sup>(2)</sup> Not including Bulgaria in 2005.

▶ NEW PASSENGER CAR REGISTRATIONS IN THE EUROPEAN UNION, SWITZERLAND AND NORWAY BY COUNTRY AND BY GROUP IN 2016 (SEE NOTE PAGE 70) (IN THOUSANDS OF UNITS AND AS A % OF TOTAL REGISTRATIONS)

	Total	PSA Group	Citroën and DS (1)	Peugeot	Renault Group	Fiat Group (including Chrysler)	Volkswagen Group	Ford Group	General Motors	BMW-Mini	Daimler	Japanese brands	Korean brands
Germany	3,352	110	53	57	175	100	1,261	240	245	309	350	313	171
-	100% 330	3.3% 18	1.6% 8	1.7% 10	5.2% 27	3.0% 19	37.6% 114	7.2% 19	7.3% 23	9.2%	10.4% 17	9.3%	5.1% 26
Austria	100%	5.4%	2.3%	3.1%	8.2%	5.9%	34.5%	5.8%	6.8%	6.7%	5.3%	11.1%	8.0%
Belgium -	540	65	28	38	74	20	115	25	39	48	35	56	35
	100% 223	12.1% 35	5.2% 13	7.0% 22	13.6% 18	3.6%	21.3% 54	4.7% 14	7.1% 14	8.8%	6.5% 9	10.4% 44	6.4%
Denmark	100%	15.8%	5.9%	9.9%	8.2%	1.5%	24.2%	6.4%	6.4%	2.8%	4.0%	19.5%	9.5%
Spain	1,147	149	65	84	135	60	245	60	89	56	53	165	108
	100% 119	13.0%	5.7% 2	7.3%	11.8%	5.2% 1	21.3% 33	5.2% 10	7.8%	4.9%	4.6%	14.3% 29	9.4%
Finland -	100%	3.6%	1.5%	2.1%	4.8%	1.1%	27.4%	8.0%	5.9%	4.2%	5.0%	24.7%	8.5%
France -	2,015	559	223	336	518	81	259	79	68	86	71	199	63
riance	100%	27.7%	11.1%	16.7%	25.7%	4.0%	12.8%	3.9%	3.4%	4.3%	3.5%	9.9%	3.1%
Greece	79 100%	9 11.9%	4.8%	7.1%	4.6%	8.1%	12 15.6%	4.7%	7 9.1%	5 6.9%	5 6.7%	22 27.9%	2.6%
	147	6	4.0 /	4	13	1	34	15	8	6.576	4	35	2.0 %
Ireland -	100%	3.8%	1.0%	2.8%	8.7%	0.6%	23.0%	10.0%	5.4%	4.3%	2.6%	23.9%	15.3%
Italy	1,824	158	64	94	166	530	243	124	95	84	93	184	104
,	100%	8.7%	3.5%	5.2%	9.1%	29.1%	13.3%	6.8%	5.2%	4.6%	5.1%	10.1%	5.7%
Luxembourg -	51 100%	8.4%	3.6%	4.8%	5 10.3%	4.7%	14 26.8%	4.8%	4.7%	6 12.3%	9.6%	8.0%	5.2%
	383	42	14	28	39	14	83	21	33	25	17	57	31
The Netherlands -	100%	11.1%	3.7%	7.3%	10.3%	3.6%	21.8%	5.6%	8.5%	6.4%	4.4%	15.0%	8.2%
Portugal -	207	30	11	20	31	11	38	8	12	17	18	28	7
	100% 2,693	14.7% 177	5.1% 79	9.6%	15.1% 112	5.4% 86	18.3% 528	3.9% 318	5.8% 251	8.1% 252	8.8% 182	13.4% 432	3.6% 186
United Kingdom -	100%	6.6%	2.9%	3.7%	4.1%	3.2%	19.6%	11.8%	9.3%	9.4%	6.8%	16.0%	6.9%
0	372	16	5	11	20	8	104	13	8	25	17	56	32
Sweden	100%	4.2%	1.3%	2.8%	5.2%	2.3%	27.9%	3.4%	2.2%	6.7%	4.6%	15.2%	8.5%
Eur. union.	13,479	1,383	572	812	1,343	944	3,135	953	901	952	882	1,660	822
(15 countries)	100% 155	10.3%	4.2%	6.0%	10.0%	7.0%	23.3% 42	7.1% 8	6.7%	7.1% 13	6.5% 9	12.3% 48	6.1%
Norway	100%	4.4%	1.3%	3.1%	2.1%	0.2%	27.4%	5.4%	2.4%	8.4%	5.9%	30.7%	4.6%
Switzerland -	315	19	9	10	22	15	97	13	14	30	26	49	15
	100%	6.2%	2.9%	3.3%	6.9%	4.7%	30.6%	4.1%	4.3%	9.5%	8.4%	15.7%	4.9%
Europe (17 countries)	13,949 100%	1,410 10.1%	583 4.2%	5.9%	1,368 9.8%	959 6.9%	3,274 23.5%	974 7.0%	919 6.6%	995 7.1%	918 6.6%	1,757 12.6%	845 6.1%
,	28	2	1	2	6	0.570	6	2	1	1	0.070	5	2
Bulgaria	100%	8.0%	2.1%	5.8%	22.1%	0.9%	22.1%	7.3%	4.6%	3.6%	1.6%	19.3%	6.7%
Croatia -	44	4	2	2	6	1	13	3	4	2	1	7	4
	100%	8.5%	3.8%	4.7%	12.9%	2.5%	28.7% 5	6.4%	9.4%	3.4%	3.4%	15.5% 8	8.3%
Estonia -	100%	7.4%	3.3%	4.2%	12.0%	1.9%	22.3%	2.6%	3.6%	2.5%	1.8%	34.8%	7.6%
Hungary	97	3	1	2	10	4	20	10	9	3	3	26	7
nungary	100%	2.6%	1.0%	1.6%	10.4%	3.8%	20.7%	9.9%	9.7%	2.6%	2.9%	27.1%	7.4%
Latvia	16	9.00/	2 59/	1	1 5.0%	1	24.59/	6.79/	5.0%	0	0	20.00/	0.20/
	100%	8.0%	3.5% 0	4.5% 0	5.6% 1	4.1% 4	24.5% 5	6.7% 1	5.9% 1	3.0%	2.3%	26.8%	8.2% 1
Lithuania -	100%	2.9%	1.2%	1.7%	6.9%	18.3%	24.3%	3.1%	3.7%	4.1%	1.8%	26.3%	6.3%
Poland	418	19	8	11	41	13	117	29	34	14	13	91	38
T Olarid	100%	4.5%	1.8%	2.7%	9.7%	3.1%	28.0%	7.0%	8.2%	3.4%	3.1%	21.8%	9.1%
Czech Rep.	260 100%	14 5.2%	5 2.1%	3 10/	23 8.7%	5 1.8%	122 47.1%	15 5.8%	3.3%	2.7%	2.9%	23 8.9%	30 11 5%
	95	5.2%	2.1%	3.1%	35	1.8%	47.1%	5.8%	3.3% 5	2.7%	2.9%	8.9%	11.5%
Romania	100%	3.5%	0.8%	2.6%	36.4%	1.7%	20.9%	7.2%	5.4%	3.2%	4.0%	10.3%	5.8%
Slovakia	88	8	3	5	8	2	29	3	5	3	3	14	13
	100%	8.7%	3.3%	5.4%	9.0%	1.9%	32.5%	2.8%	5.6%	3.8%	3.7%	15.6%	14.9%
Slovenia	59 100%	9.7%	4.5%	5.2%	9 14.9%	5.0%	20 33.9%	4.0%	5 8.1%	4.0%	2.1%	6 10.3%	7.5%
11 new EU	1,148	61	24	3.2 /6	14.9 /6	3.0 %	361	73	75	37	34	200	108
members	100%	5.3%	2.1%	3.2%	12.3%	3.0%	31.4%	6.3%	6.5%	3.2%	3.0%	17.4%	9.4%
Europe _	15,097	1,471	607	864	1,509	993	3,635	1,047	994	1,031	952	1,957	953
(28 countries)	100%	9.7%	4.0%	5.7%	10.0%	6.6%	24.1%	6.9%	6.6%	6.8%	6.3%	13.0%	6.3%

(1) i.e. respectively 541,232 and 65,650 units for Citroën and DS in EU-28.

# ▶ NEW PASSENGER CAR REGISTRATIONS BY GROUP IN WESTERN EUROPE (IN THOUSANDS OF UNITS AND AS A % OF TOTAL REGISTRATIONS)

The special French Temporary Transit series was included in the new passenger car registrations as of 2004.

	1990	2000	2010 (1)	2012	2013	2014	2015	2016
PSA GROUP	1,719	1,930	1,776	1,407	1,282	1,332	1,422	1,410
F5A GROUP	12.7%	13.1%	13.7%	12.0%	11.1%	11.0%	10.8%	10.1%
RENAULT GROUP	1,315	1,559	1,305	967	1,005	1,128	1,229	1,368
RENAULI GROUP	9.7%	10.6%	10.1%	8.2%	8.7%	9.3%	9.3%	9.8%
FCA	1,890	1,575	1,035	770	716	740	841	959
rca	14.0%	10.7%	8.0%	6.5%	6.2%	6.1%	6.4%	6.9%
Ford Group	1,540	1,248	1,063	901	873	902	965	974
Ford Group	11.4%	8.5%	8.2%	7.7%	7.6%	7.5%	7.3%	7.0%
General Motors	1,560	1,720	1,119	944	906	860	878	919
General Motors	11.5%	11.7%	8.6%	8.0%	7.9%	7.1%	6.7%	6.6%
Volkswagen Group	2,138	2,776	2,757	2,887	2,862	3,032	3,199	3,274
voikswagen Group	15.8%	18.8%	21.3%	24.5%	24.8%	25.1%	24.3%	23.5%
Daimler	438	811	662	653	672	694	815	918
Daimier	3.2%	5.5%	5.1%	5.6%	5.8%	5.7%	6.2%	6.6%
MW Group	364	499	735	780	775	808	906	995
Bivivy Group	2.7%	3.4%	5.7%	6.6%	6.7%	6.7%	6.9%	7.1%
Nissan	395	392	384	408	400	453	523	526
NISSAII	2.9%	2.7%	3.0%	3.5%	3.5%	3.7%	4.0%	3.8%
Toyota-Lexus-Daihatsu	406	576	582	507	497	506	536	569
Toyota-Lexus-Damatsu	3.0%	3.9%	4.5%	4.3%	4.3%	4.2%	4.1%	4.1%
Other Japanese brands	789	701	651	487	504	542	622	663
Other Japanese brands	5.8%	4.8%	5.0%	4.1%	4.4%	4.5%	4.7%	4.7%
Urundai Kia	18	303	539	687	679	686	758	826
Hyundai-Kia	0.1%	2.1%	4.2%	5.8%	5.9%	5.7%	5.7%	5.9%
Volvo	235	230	222	222	221	245	273	276
VOIVO	1.7%	1.6%	1.7%	1.9%	1.9%	2.0%	2.1%	2.0%
Tata Group	44	112	97	124	135	142	174	226
Tata Group	0.3%	0.8%	0.7%	1.1%	1.2%	1.2%	1.3%	1.6%
Other brands (Including MG-Rover, Saab)	666	304	47	19	18	32	42	49
other brailes (including MG-Rover, Saab)	4.9%	2.1%	0.4%	0.2%	0.2%	0.3%	0.3%	0.3%
TOTAL FURORE (47 COUNTRIES)	13,517	14,738	12,975	11,763	11,545	12,102	13,184	13,949
TOTAL EUROPE (17 COUNTRIES)	100%	100%	100%	100%	100%	100%	100%	100%
Year-on-year change	0.9%	-2.1%	-5.0%	-8.1%	-1.9%	4.8%	8.9%	5.8%

# $\blacktriangleright$ NEW LIGHT COMMERCIAL VEHICLE REGISTRATIONS BY GROUP IN WESTERN EUROPE (IN THOUSANDS OF UNITS AND AS A % OF TOTAL REGISTRATIONS)

	1990	2000	2010	2012	2013	2014	2015	2016
PSA GROUP	251	349	326	286	281	307	328	352
PSA GROUP	16.5%	18.1%	22.1%	20.8%	20.6%	20.4%	19.6%	18.9%
RENAULT GROUP	278	272	251	224	215	237	273	299
RENAULI GROUP	18.3%	14.1%	17.0%	16.3%	15.8%	15.7%	16.3%	16.1%
FCA	163	275	214	178	174	184	201	240
TOA	10.7%	14.2%	14.5%	12.9%	12.8%	12.2%	12.0%	12.9%
Ford Group	195	180	161	154	161	200	250	298
Ford Group	12.9%	9.3%	10.9%	11.2%	11.8%	13.3%	15.0%	16.0%
General Motors	81	92	75	73	72	79	96	98
General Motors	5.3%	4.8%	5.1%	5.3%	5.3%	5.2%	5.7%	5.3%
Volkswagen Group	134	202	170	197	194	210	202	227
voikswagen Group	8.9%	10.5%	11.6%	14.3%	14.2%	13.9%	12.1%	12.2%
Daimler	74	178	133	133	140	150	163	176
Daimlei	4.9%	9.2%	9.0%	9.7%	10.3%	9.9%	9.8%	9.5%
Nissan	105	100	41	46	43	45	48	63
NISSAII	6.9%	5.2%	2.8%	3.3%	3.2%	3.0%	2.9%	3.4%
Toyota-Lexus-Daihatsu	81	69	37	31	28	35	38	35
Toyota-Lexus-Damatsu	5.3%	3.6%	2.5%	2.3%	2.1%	2.3%	2.3%	1.9%
Other Japanese brands	69	102	36	23	25	28	35	38
Other Japanese brands	4.6%	5.3%	2.4%	1.7%	1.9%	1.9%	2.1%	2.1%
Humadai Kia	0	44	5	3	3	3	4	6
Hyundai-Kia	0.0%	2.3%	0.4%	0.3%	0.2%	0.2%	0.2%	0.3%
Other brands	85	69	26	28	26	29	34	26
Other brailus	5.6%	3.6%	1.8%	2.0%	1.9%	1.9%	2.0%	1.4%
TOTAL EUROPE (47 COUNTRIES)	1,516	1,931	1,475	1,376	1,364	1,506	1,673	1,859
TOTAL EUROPE (17 COUNTRIES)	100%	100%	100%	100%	100%	100%	100%	100%
Year-on-year change	-2.6%	5.6%	11.1%	-12.9%	-0.8%	10.4%	11.1%	11.1%

The scope of the groups reflects their situation as at 01/01/2017 (see page 70).

# ▶ NEW PASSENGER CAR REGISTRATIONS IN NEW EU MEMBER STATES (1) (IN THOUSANDS OF UNITS AND AS A % OF TOTAL REGISTRATIONS)

	2005 (2)	2010	2011	2012	2013	2014	2015	2016
PSA GROUP	99	73	69	64	63	63	57	61
F3A GROOF	9.5%	8.5%	8.2%	8.2%	8.1%	7.1%	5.7%	5.3%
RENAULT GROUP	193	112	108	90	87	106	120	141
RENAULI GROUP	18.7%	13.0%	12.9%	11.5%	11.3%	11.9%	12.1%	12.3%
FCA Group	50	45	34	30	25	26	30	34
roa Group	4.8%	5.3%	4.0%	3.9%	3.2%	3.0%	3.0%	3.0%
Ford Group	59	65	59	48	46	58	65	73
rold Gloup	5.7%	7.5%	7.0%	6.2%	6.0%	6.6%	6.6%	6.3%
General Motors	132	76	74	67	61	63	64	75
General Motors	12.7%	8.9%	8.8%	8.5%	7.9%	7.2%	6.5%	6.5%
Volkswagen Group	257	226	238	227	228	273	314	361
Volkswagen Group	24.8%	26.4%	28.2%	28.9%	29.4%	30.9%	31.7%	31.4%
Daimler	11	13	14	14	17	20	24	34
Daimler	1.1%	1.6%	1.7%	1.8%	2.2%	2.2%	2.5%	3.0%
BMW Group	11	17	20	21	21	24	30	37
Billivi Group	1.0%	2.0%	2.4%	2.7%	2.7%	2.7%	3.0%	3.2%
Nissan	19	23	28	28	24	28	36	34
Nissaii	1.8%	2.6%	3.3%	3.6%	3.1%	3.1%	3.6%	3.0%
Toyota-Lexus-Daihatsu	60	47	41	41	47	57	65	77
Toyota-Lexus-Damatsu	5.8%	5.5%	4.8%	5.2%	6.0%	6.5%	6.5%	6.7%
Other Japanese brands	91	67	56	50	53	61	71	89
Other Japanese brands	8.7%	7.9%	6.6%	6.4%	6.9%	6.9%	7.2%	7.7%
Humadai Kia	39	75	81	86	89	88	95	107
Hyundai-Kia	3.8%	8.7%	9.7%	10.9%	11.4%	9.9%	9.6%	9.4%
Volvo	7	9	10	9	9	10	12	14
VOIVO	0.6%	1.1%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%
Tota Group	2	3	3	3	4	4	4	6
Tata Group	0.2%	0.3%	0.4%	0.4%	0.5%	0.4%	0.5%	0.5%
Other brands (including MG-Rover, Saab)	7	6	5	5	1	3	2	5
Other brands (including MG-Rover, Saab)	0.7%	0.7%	0.6%	0.6%	0.2%	0.3%	0.2%	0.4%
TOTAL NEW ELLMEMPERS STATES	1,035	857	841	783	777	885	990	1,148
TOTAL NEW EU MEMBERS STATES	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Year-on-year change		-4.8%	-1.8%	-6.9%	-0.8%	13.9%	11.9%	15.9%

# $\blacktriangleright$ NEW LIGHT COMMERCIAL VEHICLES REGISTRATIONS IN NEW EU MEMBER STATES (1) (IN THOUSANDS OF UNITS AND AS A % OF TOTAL REGISTRATIONS)

	2005 (2)	2010	2011	2012	2013	2014	2015	2016
PSA GROUP	20	18	25	20	22	23	26	27
PSA GROUP	13.6%	19.5%	22.9%	20.0%	21.2%	19.3%	18.4%	18.1%
RENAULT GROUP	35	15	18	16	18	21	26	29
RENAULI GROUP	24.4%	16.3%	16.2%	16.3%	17.1%	17.8%	18.5%	19.0%
FCA Group	21	19	21	20	21	23	28	32
1 OA Gloup	14.7%	19.8%	19.0%	19.6%	20.1%	19.6%	20.4%	21.1%
Ford Group	14	10	11	10	10	14	18	20
Tota Group	9.8%	10.1%	10.2%	10.1%	10.2%	11.5%	12.8%	13.2%
General Motors	8	3	4	3	3	5	8	7
General Motors	5.2%	3.2%	3.6%	3.3%	3.4%	4.5%	5.8%	4.6%
Volkswagen Group	21	14	15	16	14	15	16	15
voikswagen Group	14.7%	14.9%	13.7%	15.5%	13.6%	13.1%	11.5%	10.1%
Daimler	10	7	6	7	7	8	9	9
Daimiei	6.8%	7.9%	5.9%	7.1%	7.2%	6.7%	6.3%	6.2%
Nissan	2	2	3	2	2	2	2	3
Nissaii	1.4%	2.5%	2.9%	2.2%	1.9%	1.5%	1.2%	2.0%
Toyota-Lexus-Daihatsu	2	2	3	3	3	3	3	4
Toyota-Lexus-Damatsu	1.6%	2.2%	2.5%	3.0%	2.8%	2.8%	2.2%	2.7%
Other Japanese brands	3	2	3	2	2	2	2	3
Other Japanese brands	2.3%	2.1%	2.4%	1.7%	1.7%	1.8%	1.8%	2.1%
Hyundai-Kia	5	1	0	0	0	1	1	1
Tryunuai-Kia	3.2%	0.7%	0.3%	0.2%	0.1%	0.4%	0.4%	0.5%
Other brands (including MG-Rover, Saab)	4	1	1	1	1	1	1	1
Other brands (including MG-Rover, Saab)	2.5%	0.8%	0.5%	1.0%	0.8%	0.9%	0.8%	0.6%
TOTAL NEW EU MEMBERS STATES	145	95	108	100	103	118	139	151
TOTAL NEW ED WIEWIDERS STATES	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Year-on-year change		-17.5%	14.2%	-7.3%	2.5%	14.8%	17.3%	9.1%

<sup>(1)</sup> New EU member states not including Cyprus and Malta, including Croatia. (2) Not including Bulgaria in 2005.

The scope of the groups reflects their situation as at 01/01/2017 (see page 70).

### ► NEW PASSENGER CAR REGISTRATIONS BY COUNTRY IN WESTERN EUROPE (IN UNITS)

	1980	1990	2000	2010	2013	2014	2015	2016
Germany	2,426,187	3,349,788	3,378,343	2,916,259	2,952,431	3,036,835	3,206,042	3,351,607
Austria	227,548	288,618	309,427	328,563	319,035	303,318	308,555	329,604
Belgium	399,240	473,506	515,204	547,340	486,065	482,939	501,066	539,519
Denmark	73,774	80,654	112,688	153,583	181,896	188,612	206,999	222,895
Spain (1)	504,051	988,270	1,381,515	982,015	722,689	855,308	1,034,232	1,147,009
Finland	103,167	139,095	134,646	107,346	103,314	106,259	108,844	118,912
France	1,873,202	2,309,130	2,133,884	2,251,669	1,790,456	1,795,885	1,917,226	2,015,177
Greece	35,700	115,480	290,222	141,501	58,696	71,222	75,804	78,873
Ireland	93,563	82,584	230,989	88,445	74,364	96,284	124,804	146,600
Italy	1,717,432	2,307,055	2,415,600	1,961,578	1,304,573	1,360,452	1,575,614	1,823,640
Luxembourg	21,500	38,422	41,896	49,726	46,624	49,793	46,473	50,561
Norway	95,550	61,901	97,376	127,754	142,151	144,202	150,686	154,603
The Netherlands	450,076	502,732	597,640	482,527	416,733	387,571	448,925	382,557
Portugal	58,357	210,924	257,834	223,464	105,921	142,826	178,503	207,330
United Kingdom	1,513,761	2,008,934	2,221,670	2,030,846	2,264,737	2,476,435	2,633,503	2,692,786
Sweden	192,588	229,941	290,529	289,684	269,558	303,948	345,108	372,318
Switzerland	279,764	329,899	316,519	292,453	305,928	300,110	321,669	315,295
Eur. union (2)	8,568,735	12,467,479	14,312,087	12,554,546	11,097,092	11,657,687	12,711,698	13,479,388
Europe (17 countries)	10,065,460	13,516,933	14,725,982	12,974,753	11,545,171	12,101,999	13,184,053	13,949,286

<sup>(1)</sup> In 2006, 135,500 light commercial vehicles were reclassified as passenger cars in Spain. (2) European Union: 9 countries in 1980, 10 in 1985, 12 from 1990 to 1994, 15 from 1995.

# ▶ NEW DIESEL PASSENGER CAR REGISTRATIONS BY COUNTRY IN WESTERN EUROPE (IN UNITS AND AS A % OF TOTAL REGISTRATIONS)

	1980	1990	2000	2010	2013	2014	2015	2016
0	193,841	327,046	1,023,997	1,220,675	1,400,556	1,449,919	1,534,990	1,535,525
Germany	8.0%	9.8%	30.3%	41.9%	47.4%	47.8%	47.9%	45.8%
	7,425	74,197	191,402	167,106	180,847	172,382	179,821	188,819
Austria	3.3%	25.7%	61.9%	50.9%	56.7%	56.8%	58.3%	57.3%
	54,897	154,804	290,301	415,728	314,844	299,149	299,357	279,528
Belgium	13.8%	32.7%	56.3%	76.0%	64.8%	61.9%	59.7%	51.8%
	2,352	3,305	14,898	72,670	58,119	59,524	64,095	80,325
Denmark	3.2%	4.1%	13.2%	47.3%	32.0%	31.7%	31.0%	36.0%
		140,740	734,256	693,905	479,318	565,409	648,212	652,097
Spain		14.2%	53.1%	70.7%	66.3%	66.1%	62.7%	56.9%
		7,215		44,574	38,372	41,299	38,882	39,647
Finland		5.2%		41.5%	37.1%	38.9%	35.7%	33.3%
_	186,050	762,054	1,046,485	1,593,173	1,199,729	1,146,658	1,097,124	1,050,418
France	9.9%	33.0%	49.0%	70.8%	67.0%	63.8%	57.2%	52.1%
_		60	2,006	5,661	33,993	45,383	47,875	43,428
Greece		0.1%	0.7%	4.0%	57.9%	63.7%	63.2%	55.1%
		12,413	23,259	55,016	53,838	70,463	88,618	102,611
Ireland		15.0%	10.1%	62.2%	72.4%	73.2%	71.0%	70.0%
	138,562	179,779	812,203	901,310	703,122	747,024	872,493	1,038,879
Italy	8.1%	7.8%	33.6%	45.9%	53.9%	54.9%	55.4%	57.0%
		8,206	21,110	37,403	34,230	35,825	32,694	32,661
Luxembourg		21.4%	50.4%	75.2%	73.4%	71.9%	70.4%	64.6%
		1,581	8,761	95,733	74,693	70,190	61,482	47,622
Norway		2.6%	9.0%	74.9%	52.5%	48.7%	40.8%	30.8%
	30,450	54,738	134,426	98,477	103,518	105,013	129,803	72,527
The Netherlands	6.8%	10.9%	22.5%	20.4%	24.8%	27.1%	28.9%	19.0%
		10,426	62,417	149,046	76,575	102,044	121,650	135,180
Portugal		4.9%	24.2%	66.7%	72.3%	71.2%	68.2%	65.2%
	5,850	128,160	313,149	936,448	1,127,758	1,240,858	1,275,411	1,285,383
United Kingdom	0.4%	6.4%	14.1%	46.1%	49.8%	50.1%	48.4%	47.7%
		1,335	18,325	147,802	165,717	179,090	198,956	191,510
Sweden		0.6%	6.3%	51.0%	61.5%	58.9%	57.7%	51.4%
		9,998	29,466	88,760	113,255	111,073	124,898	124,204
Switzerland		3.0%	9.3%	30.4%	37.0%	37.0%	38.8%	39.4%
Europe (17 countries) (1)	619,427	1,866,021	4,726,461	6,723,487	6,158,484	6,441,303	6,816,361	6,900,364
% diesel in Europe	7.1%	13.9%	32.1%	51.8%	53.3%	53.2%	51.7%	49.5%
Year-on-year change	11770	+0.7%	+10.7%	+6.9%	-5.2%	+4.6%	+5.8%	+1.2%
Tear-on-year change		+0.7%	+10.7%	+6.9%	-5.2%	T4.6%	₹3.0%	<b>+1.2</b> %

### ▶ REGISTRATIONS OF NEW HYBRID OR ELECTRIC PASSENGER CAR IN WESTERN EUROPE

(IN UNITS AND AS A % OF TOTAL REGISTRATIONS)

	POWER	2005	2010	2011	2012	2013	2014	2015	2016
	TOWER								
	electric	0	160	1,731	2,451	5,800	8,262	12,319	11,163
Germany		0.0%	0.0%	0.1%	0.1%	0.2%	0.3%	0.4%	0.3%
	hybrid	3,559	10,174	11,788	20,617	25,330	26,476	32,714	47,055
		0.1%	0.3%	0.4%	0.7%	0.9%	0.9%	1.0%	1.4%
	electric	0	112	631	426	654	1,281	1,677	3,829
Austria		0.0%	0.0%	0.2%	0.1%	0.2%	0.4%	0.5%	1.2%
	hyrbrid	460	1,248	1,310	2,174	2,595	2,360	3,514	4,711
		0.1%	0.4%	0.4%	0.6%	0.8%	0.8%	1.1%	1.4%
	electric	0	47	263	562	500	1,165	1,358	2,048
Belgium		0.0%	0.0%	0.0%	0.1%	0.1%	0.2%	0.3%	0.4%
_	hyrbrid	471	4,073	6,676	5,875	6,283	8,350	10,711	16,892
	-	0.1%	0.7%	1.2%	1.2%	1.3%	1.7%	2.1%	3.1%
	electric	2	50	460	527	533	1,637	4,468	1,320
Denmark		0.0%	0.0%	0.3%	0.3%	0.3%	0.9%	2.2%	0.6%
	hyrbrid -	5	148	263	431	1,099	1,233	2,657	6,242
	ny i bii a	0.0%	0.1%	0.2%	0.3%	0.6%	0.7%	1.3%	2.8%
	electric	0	69	367	439	811	1,076	1,461	2,143
Snain	electric	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.2%
Spain	byrbrid	908	6,253	10,061	10,073	10,152	12,458	20,547	27,688
	hyrbrid	0.1%	0.6%	1.2%	1.4%	1.4%	1.5%	2.0%	2.4%
	-14-1-	6	184	2,630	5,663	8,779	10,561	17,268	21,751
F	electric -	0.0%	0.0%	0.1%	0.3%	0.5%	0.6%	0.9%	1.1%
France		2,857	9,655	13,635	27,889	46,745	43,143	61,619	58,385
	hybrid	0.1%	0.4%	0.6%	1.5%	2.6%	2.4%	3.2%	2.9%
		28	112	306	524	864	1,100	1,452	1,260
	electric	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%
Italy		1,132	4,841	5,161	6,836	15,156	21,488	26,262	38,387
	hyrbrid	0.1%	0.2%	0.3%	0.5%	1.2%	1.6%	1.7%	2.1%
		7	355	1,996	3,950	7,882	18,090	25,779	24,222
	electric	0.0%	0.3%	1.4%	2.9%	5.5%	12.5%	17.1%	15.7%
Norway		337	3,144	3,645	6,116	9,827	10,774	15,704	34,841
	hyrbrid	0.3%	2.5%	2.6%	4.4%	6.9%	7.5%	10.4%	22.5%
		0	96	846	828	2,618	2,913	3,204	3,992
	electric -	0.0%	0.0%	0.2%	0.2%	0.6%	0.8%	0.7%	1.0%
The Netherlands		2,940	16,099	14,868	25,614	43,639	26,749	56,261	30,206
	hyrbrid	0.6%	3.3%	2.7%	5.1%	10.5%	6.9%	12.5%	7.9%
		0	167	1,098	1,262	2,512	6,697	9,934	10,264
	electric	0.0%	0.0%	0.1%	0.1%	0.1%	0.3%	0.4%	0.4%
United Kingdom		5,766	22,148	23,398	25,892	30,203	45,148	64,692	79,440
	hyrbrid	0.2%	1.1%	1.2%	1.3%	1.3%	1.8%	2.5%	3.0%
		1	9	181	268	435	1,240	2,880	2,945
	electric	0.0%	0.0%	0.1%	0.1%	0.2%	0.4%	0.8%	0.8%
Sweden									
	hyrbrid	1,947	3,628	2,909	3,539	5,823	10,421	14,478	23,896
		0.7%	1.3%	1.0%	1.3%	2.2%	3.4%	4.2%	6.4%
	electric	13	199	446	523	1,177	1,804	3,777	3,372
Switzerland		0.0%	0.1%	0.1%	0.2%	0.4%	0.6%	1.2%	1.1%
	hyrbrid	1,413	4,210	5,358	6,945	7,225	6,949	8,400	10,492
		0.5%	1.4%	1.7%	2.1%	2.4%	2.3%	2.6%	3.3%
Western Fursi	electric	57	1,611	11,263	17,707	32,990	56,778	87,034	89,841
Western Europe (Including countries		0.0%	0.0%	0.1%	0.2%	0.3%	0.5%	0.7%	0.6%
not presented)	hyrbrid -	23,210	90,198	102,979	146,287	208,934	222,109	327,363	393,372
not presented)	hyrbrid	0.2%	0.7%	0.8%	1.2%	1.8%	1.8%	2.5%	2.8%

### ► NEW LIGHT COMMERCIAL VEHICLE (UP TO 5T) REGISTRATIONS BY COUNTRY (IN UNITS)

	1980	1990	2000	2010	2013	2014	2015	2016
Germany	101,393	125,384	212,290	202,446	217,966	236,422	243,305	263,495
Austria	15,473	21,539	27,243	28,130	30,849	31,320	33,013	36,104
Belgium	30,609	52,490	54,090	56,006	56,734	56,886	65,179	72,421
Denmark	15,711	19,649	33,092	16,848	24,532	29,133	33,177	37,493
Spain	88,042	229,821	299,246	116,770	85,855	114,247	155,400	172,796
Finland	12,574	27,507	15,056	11,550	11,194	11,359	11,986	14,181
France	277,887	393,795	414,966	417,612	367,331	372,074	379,428	410,102
Greece	45,124	29,480	23,008	10,935	3,534	5,066	5,756	5,767
Ireland	8,640	24,136	41,474	10,486	11,016	16,752	23,837	28,252
Italy	109,270	156,995	225,517	177,887	101,858	119,460	134,265	202,095
Luxembourg	1,014	1,863	3,083	3,291	3,325	3,600	4,016	4,614
Norway	11,395	20,582	31,627	30,422	32,293	30,717	34,394	37,180
The Netherlands	33,498	53,080	96,570	49,863	50,756	51,929	57,921	70,656
Portugal	38,597	64,236	152,836	45,756	18,222	26,290	30,996	35,007
United Kingdom	212,042	247,728	245,163	231,539	278,957	329,761	380,996	383,193
Sweden	12,038	26,362	31,854	38,543	37,690	42,223	45,124	52,002
Switzerland	18,091	22,753	24,121	26,507	31,938	31,688	34,297	34,066
Eur. union (1)	790,064	1,398,657	1,875,488	1,417,662	1,299,819	1,446,522	1,604,399	1,788,178
Europe (17 countries)	1,031,398	1,517,400	1,931,236	1,474,591	1,364,050	1,508,927	1,673,090	1,859,424

### ▶ NEW HEAVY TRUCK (OVER 5T) REGISTRATIONS BY COUNTRY, EXCLUDING COACHES AND BUSES (IN UNITS)

	1980	1990	2000	2010	2013	2014	2015	2016
Germany	59,061	73,770	96,830	75,014	82,233	81,057	85,002	87,695
Austria	5,642	7,222	8,508	5,138	7,320	6,706	7,151	7,829
Belgium	8,604	10,690	11,061	7,133	7,400	7,638	8,188	9,497
Denmark	3,179	3,539	4,597	2,682	4,233	3,628	4,687	5,033
Spain	23,208	30,432	33,700	13,215	12,900	15,896	22,043	24,340
Finland	4,497	4,218	3,072	2,368	3,076	2,168	2,400	2,924
France	41,846	50,028	57,918	34,221	43,265	37,559	41,714	47,134
Greece	1,178	497	1,633	1,081	317	335	439	276
Ireland	3,511	2,748	4,666	1,011	1,553	1,743	1,867	2,511
Italy		31,973	38,388	17,532	13,324	11,952	15,020	20,778
Luxembourg	690	1,136	1,451	803	966	1,020	1,089	1,232
Norway	3,056	2,106	3,564	3,126	4,688	4,657	4,366	5,060
The Netherlands	13,346	14,804	16,835	9,390	13,057	10,195	13,547	15,148
Portugal	8,370	7,186	7,403	3,116	2,201	3,071	3,956	4,779
United Kingdom	57,489	45,794	51,864	27,988	49,796	35,033	44,364	46,715
Sweden	6,703	5,998	5,549	4,605	4,698	5,089	5,289	6,340
Switzerland	3,955	4,832	4,733	3,388	3,503	4,426	4,079	4,165
Eur. union (1)	187,726	272,597	343,475	205,297	246,339	223,090	256,756	282,231
Europe (17 countries)	244,335	296,973	351,772	211,811	254,530	232,173	265,201	291,456

### ▶ NEW COACH AND BUS (OVER 5T) REGISTRATIONS BY COUNTRY (IN UNITS)

	1980	1990	2000	2010	2013	2014	2015	2016
Germany	6,058	4,235	5,684	4,697	5,088	5,034	5,476	6,070
Austria	676	450	706	733	688	871	878	1,008
Belgium	585	580	974	909	626	982	778	593
Denmark	579	311	419	450	288	330	269	202
Spain	1,511	2,376	2,738	2,119	1,506	1,830	2,537	3,202
Finland	625	429		300	225	436	330	407
France	3,558	3,160	4,320	5,382	6,321	5,409	6,724	6,059
Greece		625	374	325	25	43	44	91
Ireland		24	121	47	163	206	313	362
Italy		3,825	4,152	3,931	2,401	1,800	2,163	2,128
Luxembourg	53	57	108	173	167	156	247	196
Norway	684	380	427	1,052	910	697	660	1,148
The Netherlands	1,082	1,069	949	524	587	649	332	817
Portugal		482	806	418	155	170	199	282
United Kingdom	5,792	3,324	4,496	3,203	3,648	3,373	3,931	4,245
Sweden	943	863	1,071	1,302	1,080	1,207	1,172	1,158
Switzerland	371	580	491	476	534	568	689	607
Eur. union (1)	17,707	20,068	26,918	24,513	22,968	22,496	25,393	26,820
Europe (17 countries)	22,517	22,770	27,836	26,041	24,412	23,761	26,742	28,575

<sup>(1)</sup> European Union: 9 countries in 1980, 10 in 1985, 12 from 1990 to 1994, 15 from 1995.

### ► NEW PASSENGER CAR REGISTRATIONS IN NEW EU MEMBER STATES (IN UNITS)

	1980	1990	2000	2010	2013	2014	2015	2016
Bulgaria			15,646	20,986	20,718	21,186	24,256	27,646
Croatia	62,009	70,541	38,587	31,360	27,802	33,962	35,715	44,106
Estonia	10,600	19,640	10,295	19,424	19,694	21,135	21,033	22,997
Hungary	133,233	198,982	43,476	53,059	56,139	67,476	77,171	96,555
Latvia	7,300	16,602	6,365	10,665	10,636	12,452	13,766	16,357
Lithuania	6,158	10,467	7,970	12,165	12,163	14,461	17,071	20,284
Poland	478,752	235,522	333,490	270,895	288,998	325,371	352,378	418,033
Czech Republic	148,592	151,699	169,580	174,320	164,746	192,314	230,857	259,693
Romania	64,432	215,554	106,333	72,143	57,710	70,172	81,162	94,919
Slovakia	55,090	57,125	64,033	69,268	66,000	72,252	77,979	88,165
Slovenia	67,665	59,324	61,142	50,091	51,585	53,959	59,664	58,963
Total new EU members (1)	907,400	749,361	818,330	753,016	776,191	884,740	991,052	1,147,718

### ▶ NEW LIGHT COMMERCIAL VEHICLE (UP TO 5T) REGISTRATIONS IN THE NEW EU MEMBER COUNTRIES (IN UNITS)

	1980	1990	2000	2010	2013	2014	2015	2016
Bulgaria			3,211	3,054	3,346	4,208	4,875	4,391
Croatia	3,360	7,671	2,845	3,658	5,309	5,240	6,909	8,359
Estonia	1,500	2,944	1,406	2,801	2,943	3,296	3,962	4,423
Hungary	26,686	20,479	9,337	11,058	11,573	16,066	17,719	21,545
Latvia	900	1,753	649	2,307	2,380	2,688	2,473	2,324
Lithuania	1,270	3,371	1,044	1,715	1,967	2,160	2,533	3,003
Poland	33,653	35,985	42,852	40,862	42,532	47,643	55,004	57,114
Czech Republic	14,786	16,024	11,318	11,669	11,768	13,346	17,595	19,472
Romania	14,789	35,842	10,404	12,269	10,046	11,399	13,471	15,269
Slovakia	5,812	14,428	6,953	5,135	5,094	5,661	7,297	7,459
Slovenia	6,274	6,897	4,744	5,820	6,072	6,373	6,686	7,782
Total new EU members (1)	90,900	101,881	91,918	96,690	103,030	118,080	138,524	151,141

### ▶ NEW LIGHT VEHICLE REGISTRATIONS (PASSENGER CARS AND LIGHT COMMERCIAL VEHICLES) IN THE NEW EU MEMBER STATES (IN UNITS)

	1980	1990	2000	2010	2013	2014	2015	2016
Bulgaria			18,857	24,040	24,064	25,394	29,131	32,037
Croatia	65,369	78,212	41,432	35,018	33,111	39,202	42,624	52,465
Estonia	12,100	22,584	11,701	22,225	22,637	24,431	24,995	27,420
Hungary	159,919	219,461	52,813	64,117	67,712	83,542	94,890	118,100
Latvia	8,200	18,355	7,014	12,972	13,016	15,140	16,239	18,681
Lithuania	7,428	13,838	9,014	13,880	14,130	16,621	19,604	23,287
Poland	512,405	271,507	376,342	311,757	331,530	373,014	407,382	475,147
Czech Republic	163,378	167,723	180,898	185,989	176,514	205,660	248,452	279,165
Romania	79,221	251,396	116,737	84,412	67,756	81,571	94,633	110,188
Slovakia	60,902	71,553	70,986	74,403	71,094	77,913	85,276	95,624
Slovenia	73,939	66,221	65,886	55,911	57,657	60,332	66,350	66,745
Total new EU members (1)	998,300	851,242	910,248	849,706	879,221	1,002,820	1,129,576	1,298,859

### ▶ NEW HEAVY TRUCK, COACH AND BUS (OVER 5T) REGISTRATIONS IN THE NEW EU MEMBER COUNTRIES (IN UNITS)

	1980	1990	2000	2010	2013	2014	2015	2016
Bulgaria (2)			1,000	800	1,300	1,300	1,500	1,600
Croatia	612	1,463	599	636	708	994	1,044	1,464
Estonia	400	927	502	848	1,034	910	934	979
Hungary	2,900	4,400	2,408	4,051	5,263	5,177	6,045	5714
Latvia	1,000	1,284	520	1,525	1,323	954	1,372	1663
Lithuania	1,000	2,297	1,355	2,789	3,456	2,373	3,633	6055
Poland	7,464	11,079	11,611	16,461	19,748	17,884	23,429	27321
Czech Republic	6,400	8,200	5,750	7,416	8,787	10,199	12,416	12629
Romania	3,113	5,019	2,686	3,060	3,491	4,168	6,485	8260
Slovakia	1,796	3,754	2,870	3,856	4,131	4,063	4,637	4783
Slovenia	1,876	1,635	985	1,131	1,255	1,607	2,025	2,537
Total new EU members (1)	22,800	33,500	29,700	41,900	50,500	49,600	63,500	73,000

<sup>(1)</sup> New EU member states: 8 countries in 2000; 10 countries between 2006 and 2012; 11 countries from 2013. (2) CCFA estimates

Since 1998, French manufacturers have given production figures in numbers of vehicles assembled, according to where they come off the production line. The notion of small series has disappeared. Overall data from 1996 and detailed data from 1997 have been reprocessed accordingly.

#### ► WORLD VEHICLE PRODUCTION BY BRAND (IN UNITS)

	1980	1990	2000	2010	2013	2014	2015	2016
Citroën	536,415	783,224	1,168,470	1,452,847	1,261,890	1,176,273	1,153,855	1,135,894
DS						115,835	103,342	85,218
Peugeot	734,461	1,369,359	1,708,968	2,152,331	1,552,416	1,602,350	1,702,393	1,915,220
Others					19,587	22,670	22,191	16,527
PSA Group (1)	1,647,221	2,152,583	2,877,438	3,605,178	2,833,893	2,917,128	2,981,781	3,152,859
Renault	1,659,099	1,571,264	2,356,616	2,099,027	2,128,489	2,091,282	2,255,701	2,664,073
Dacia			55,183	341,090	443,879	517,537	570,533	612,728
Renault Samsung Motors			14,517	276,169	132,307	153,150	206,418	234,147
Renault Group (2)	1,659,099	1,571,264	2,426,316	2,716,286	2,704,675	2,761,969	3,032,652	3,510,948
C.B.M.	105							
Renault Trucks (3)	54,086	60,263	96,040	31,874	n/a	n/a	n/a	n/a
Mack Trucks		15,423	34,562					
Etalmobil (Sovam)	113	75	44	0	0	0	0	0
Unic	17,809							
Heuliez (4)		231	391					
Irisbus-Renault (4)			2,547					
TOTAL	3,378,433	3,784,416	5,402,776	6,353,338	5,538,568	5,679,097	6,014,433	6,663,807
KD and CKD units	616,466	287,512						

# ► WORLD COMMERCIAL VEHICLE PRODUCTION (ALL WEIGHTS, INCLUDING COACHES, BUSES AND ROAD TRACTORS) BY BRAND (IN UNITS)

	1980	1990	2000	2010	2013	2014	2015	2016
Citroën	49,034	93,259	192,238	180,462	169,728	177,494	185,969	195,360
Peugeot	127,428	81,439	186,917	210,252	198,577	195,048	208,075	217,665
Others					19,587	22,670	22,191	16,527
PSA group (1)	200,979	174,698	379,155	390,714	387,892	395,212	416,235	429,552
Renault	166,760	254,334	312,801	302,706	335,987	341,427	387,670	420,564
Dacia			12,580	17,704	20,610	21,987	28,208	31,238
Renault Group (2)	166,760	254,334	325,381	320,410	356,597	363,414	415,878	451,802
C.B.M.	105							
Renault Trucks (3)	54,086	60,263	96,040	31,874	n/a	n/a	n/a	n/a
Mack Trucks		15,423	34,562					
Etalmobil (Sovam)	113	75	44	0	0	0	0	0
Unic	17,809							
Heuliez (4)		231	391				0	0
Irisbus-Renault (4)			2,547				0	0
TOTAL	439,852	489,601	803,558	742,998	744,654	758,626	832,113	881,354
KD and CKD units	68,587	79,271						

<sup>(1)</sup> Up to 1985, Talbot is included in PSA Group.

### ▶ VEHICLE PRODUCTION IN FRANCE BY FRENCH AND FOREIGN AUTOMOBILE MANUFACTURERS (IN UNITS)

	1980	1990	2000	2010	2013	2014	2015	2016
FOREIGN MANUFACTURERS								
Bugatti				0				
Fiat			10,377	888				
Heuliez-Opel				0	0	0	0	0
Lancia			2,265	1,561				
Smart			101,365	97,373	98,239	87,195	93,357	98,955
Toyota			0	158,512	192,166	226,208	228,033	237,851
Passenger cars			114,007	258,334	290,405	313,403	321,390	336,806
Light commercial vehicles (Fiat)			39,428	19,450				
Heavy trucks (Scania)			10,710	9,594	n/a	n/a	n/a	n/a
Irisbus-Heuliez				451	n/a	n/a	n/a	n/a
Irisbus				2,473	n/a	n/a	n/a	n/a
Evobus			535	551	n/a	n/a	n/a	n/a
Coaches and buses			535	3,475	n/a	n/a	n/a	n/a
Total foreign brands			164,680	290,853	n/a	n/a	n/a	n/a
FRENCH MANUFACTURERS								
Total French brands			3,183,681	1,938,528	1,445,489	1,502,806	1,656,470	1,753,473
FRENCH AND FOREIGN MANUI	FACTURERS							
Total all vehicles			3,348,361	2,229,381	1,735,894	1,816,209	1,977,860	2,090,279

Source: CCFA

<sup>(2)</sup> In 1999, Renault took control of Dacia, and then in September 2000, of Samsung Motors. The Renault Trafic II was manufactured by IBC, a UK-based subsidiary of General Motors and by Nissan in Spain (until 2014). Since 2006, some of its production has been accounted for in private cars.

<sup>(3)</sup> Between 1990 and 2000, Mack was integrated in Renault VI. In 2001, the heavy trucks activity of Renault was combined with that of AB Volvo. Renault VI was renamed Renault Trucks.

<sup>(4)</sup> On January 1, 1999, Renault VI (Renault Trucks) sold its coach and bus business to Irisbus, part of Iveco

### ▶ PRODUCTION OF PASSENGER CARS BY BRAND (IN UNITS)

	1980	1990	2000	2010	2013	2014	2015	2016
Citroën	536,366	689,965	976,232	1,272,385	972,073	998,779	967,886	940,534
DS					120,089	115,835	103,342	85,218
Peugeot	607,033	1,287,920	1,522,051	1,942,079	1,353,839	1,407,302	1,494,318	1,697,555
PSA Group (1)	1,446,242	1,977,885	2,498,283	3,214,464	2,446,001	2,521,916	2,565,546	2,723,307
Renault	1,492,339	1,316,930	2,043,815	1,796,321	1,792,337	1,749,855	1,868,031	2,243,509
Dacia			42,603	323,386	423,269	495,550	542,325	581,490
Renault Samsung Motors			14,517	276,169	132,307	153,150	206,418	234,147
Renault Group (1)	1,492,339	1,316,930	2,100,935	2,395,876	2,348,078	2,398,555	2,616,774	3,059,146
TOTAL	2,938,581	3,294,815	4,599,218	5,610,340	4,794,079	4,920,471	5,182,320	5,782,453
KD and CKD units	467,879	208,241						
of which production in France			2,765,803	1,665,797	1,163,730	1,180,381	1,241,794	1,300,111
Citroën			504,323	468,398	236,463	220,516	204,040	186,831
DS					117,222	89,013	80,980	70,468
Peugeot			1,094,756	722,214	496,762	563,618	607,150	648,536
PSA Group (1)			1,599,079	1,190,612	850,447	873,147	892,170	905,835
Renault			1,166,724	475,185	313,283	307,234	349,624	394,276
Renault Group (1)			1,166,724	475,185	313,199	307,234	349,624	394,276

<sup>(1)</sup> See the notes on page 70.

### ► WORLD PRODUCTION BY FRENCH MANUFACTURERS (IN UNITS)

Brands/models	World production	Production in France	Production outside France
PSA Group	2,723,307	905,835	1,817,472
Citroën	940,534	186,831	753,703
C-ZERO	1,854		1,854
C1	65,577		65,577
C3	317,567	120,059	197,508
C4	327,940	50,660	277,280
E-MEHARI	969	969	
C-ELYSEE	127,610		127,610
C5	13,372	10,085	3,287
C6	4,316		4,316
NEMO	2,253		2,253
BERLINGO	74,018		74,018
SPACETOURER	5,058	5,058	
DS	85,218	70,468	14,750
DS3	40,659	40,659	
DS4	21,980	20,307	1,673
DS5	12,455	9,502	2,953
DS6	10,124		10,124
Peugeot	1,697,555	648,536	1,049,019
ION	2,346		2,346
108	66,556		66,556
206	93,384		93,384
208	317,471	64,809	252,662
2008	250,629	197,858	52,771
301	102,224		102,224
308	304,118	214,064	90,054
3008	133,974	91,856	42,118
5008	28,196	28,196	
405	143,751		143,751
408	116,847		116,847
4008	12,727		12,727
508	50,207	45,078	5,129

NB: Renault also produced 2,855 Twizy at its Valladolid plant (Spain) Source: CCFA

Brands/models	World production	Production in France	Production outside France
BIPPER	2,625	miriano	2,625
PARTNER	65,819		65,819
TRAVELLER	4,411	4,411	00,010
DIVERS	2,270	2,264	6
Renault Group	3,059,146	394,276	2,664,870
Renault	2,243,509	394,276	1,849,233
TWINGO	83,853		83,853
CLIO	427,124	139,297	287,827
KWID	115,055		115,055
KADJAR	166,259		166,259
CAPTUR	261,027		261,027
ZOE	25,477	25,477	
LOGAN/SANDERO	427,550		427,550
DUSTER	167,482		167,482
MEGANE	298,552	90,243	208,309
FLUENCE	44,355		44,355
KOLEOS	14,672		14,672
TALISMAN	46,336	46,336	
ESPACE	26,393	26,393	
KANGOO	61,036	58,502	2,534
DIVERS	78,338	8,028	70,310
Dacia	581,490	0	581,490
LOGAN/SANDERO	308,989		308,989
DUSTER	173,828		173,828
DOKKER	61,558		61,558
LODGY	37,115		37,115
Renault Samsung Motors	234,147	0	234,147
ROGUE	137,036		137,036
SM3 / FLUENCE	9,426		9,426
SM5 / LATITUDE	4,975		4,975
QM5 (KOLEOS)	16,052		16,052
SM6	51,329		51,329
SM7	15,329		15,329
Total	5,782,453	1,300,111	4,482,342

### ► LIGHT COMMERCIAL VEHICLES (UP TO 5T) PRODUCTION BY BRAND (IN UNITS)

	1980	1990	2000	2010	2013	2014	2015	2016
Citroën	49,034	93,259	192,238	180,462	169,728	177,494	185,969	195,360
Peugeot	127,428	81,439	186,917	210,252	198,577	195,048	208,075	217,665
Others					19,587	22,670	22,191	16,527
PSA Group (1)	200,979	174,698	379,155	390,714	387,892	395,212	416,235	429,552
Renault (2)	166,760	254,334	312,801	302,706	335,987	341,427	387,670	420,564
Dacia			12,580	17,704	20,610	21,987	28,208	31,238
Renault Group (1)	166,760	254,334	325,381	320,410	356,597	363,414	415,878	451,802
Renault Trucks (1)	11,632	7,464	8,321	0	0	0	0	0
Others	86	71	42	0	0	0	0	0
TOTAL	379,457	436,567	712,899	711,124	744,489	758,626	832,113	881,354
KD and CKD units	68,587	79,271						
of which production in France			370,538	243,029	281,759	322,425	414,676	453,362
Citroën			53,561	42,882	38,793	40,680	41,471	45,752
Peugeot			67,629	38,514	30,656	33,201	39,058	40,320
Autres					19,587	22,670	22,191	16,527
PSA Group (1)			121,190	81,396	89,036	96,551	102,720	102,599
Renault			240,985	161,633	192,723	225,874	311,956	350,763
Renault Group (1)			240,985	161,633	192,723	225,874	311,956	350,763
Renault Trucks (1)			8,321	0	0	0	0	0
Others			42	0	0	0	0	0

<sup>(1)</sup> See notes on page 70.

### ► LIGHT COMMERCIAL VEHICLE PRODUCTION BY MODEL IN 2016 (IN UNITS)

Brands/models	World production	Production in France	Production outside France
PSA Group	429,552	102,599	326,953
Citroën	195,360	45,752	149,608
C3	10,213	8,873	1,340
C4	3,692	3,180	512
NEMO	6,463		6,463
BERLINGO	84,585		84,585
JUMPY	33,699	33,699	
JUMPER	56,708		56,708
Peugeot	217,665	40,320	177,345
208	15,003	160	14,843
308	4,070	4,070	
BIPPER	6,286		6,286
PARTNER	90,355		90,355
EXPERT	36,090	36,090	
BOXER	65,861		65,861
Autres	16,527	16,527	
Renault Group	451,802	350,763	101,039
Renault	420,564	350,763	69,801
CLIO	34,506		34,506
KANGOO	124,282	103,750	20,532
LOGAN	1,478		1,478
TRAFIC	117,341	117,341	
MASTER	142,143	129,672	12,471
OTHERS	814		814
Dacia	31,238		31,238
DOKKER	31,238		31,238
TOTAL	881,354	453,362	427,992

Source: CCFA

<sup>(2)</sup> As of 2006, some Renault Trafic II vehicles are classified as passenger cars.

### ► HEAVY TRUCK (OVER 5T) PRODUCTION BY BRAND (IN UNITS)

	1980	1990	2000	2010	2013 (3)	2014	2015	2016
Renault Trucks (1)	39,475	50,493	87,719	31,874	32,295	25,702	31,598	31,933
of which Mack Trucks		15,423	34,562					
Others (2)	17,836	4	2	0	0	0	0	0
TOTAL	57,311	50,497	87,721	31,874	32,295	25,702	31,598	31,933
of which production in France			44,402	29,702				
Renault Trucks (1)			44,400	29,702				
Others (2)			2	0				

<sup>(1)</sup> Between 1990 and 2000, Mack was integrated in Renault VI. In 2001, the heavy trucks activity of Renault was combined with that of AB Volvo. Renault VI was renamed Renault Trucks

### ► COACH AND BUS (OVER 5T) PRODUCTION BY BRAND (IN UNITS)

	1980	1990	2000	2010	2013	2014	2015	
Renault Trucks (1)	2,979	2,306						
C.B.M.	105							
Heuliez (2)		231	391					
Irisbus-Renault (2)			2,547					
TOTAL	3,084	2,537	2,938					
of which production in France			2,938					
Renault Trucks (1)								
Heuliez (2)			391					
Irisbus-Renault (2)			2,547					

<sup>(1)</sup> From 1986 to 1990, the bus sub-frames supplied by Renault VI are included in Heuliez production. (2) On January 1st, 1999, Renault VI (Renault Trucks) sold its coach and bus business to Irisbus, part of Iveco.

### ► SALES OF HEAVY TRUCKS BY RENAULT TRUCKS (IN UNITS)

	2012	2013	2014	2015	2016
TOTAL	52,172	43,956	38,648	46,973	47,983
More than 16t	30,771	25,302	21,266	26,111	25,976
7 to 16t	7,460	6,993	4,436	5,487	5,957
Less than 7t	13,941	11,661	12,946	15,375	16,050

Source: CCFA

<sup>(2)</sup> Including Unic up to 1984

<sup>(3)</sup> As of 2012, the scope of the heavy trucks concerns invoices of 7 tonnes and more

### ▶ COMMERCIAL VEHICLE PRODUCTION (INCLUDING COACHES AND BUSES) BY WEIGHT AND ENGINE TYPE (IN UNITS)

		1980	1990	2000 (1)	2010	2013	2014	2015	2016
		318,633	402,994	577,926	531,452	543,866	544,739	588,686	619,851
Un to 2 54	G	281,031	128,422	55,883	61,998	61,407	52,488	46,973	54,803
Up to 3.5t	D	37,602	274,572	521,229	469,178	476,896	486,431	537,345	558,175
	EL			814	276	5,563	5,820	4,368	6,873
		60,824	33,573	134,973	179,672	200,788	213,887	243,427	261,503
From 3.5t to 5.1t	G	14,675	1,961	1,724	0	0	0	0	0
	D	46,149	31,612	133,249	179,672	200,788	213,887	243,427	261,503
From 5.1t to 12t	D	25,538	6,377	13,593	2,453	n/a	n/a	n/a	n/a
From 12t to 16t	D	12,541	8,251	5,009	3,066	n/a	n/a	n/a	n/a
From 16t to 20t	D	6,909	5,518	7,304	4,484	n/a	n/a	n/a	n/a
Over 20t	D	3,054	3,650	6,255	5,543	n/a	n/a	n/a	n/a
Road tractors	D	9,269	11,278	20,998	16,328	n/a	n/a	n/a	n/a
		3,084	2,548	2,938					
Coaches - Buses	D	3,035	2,548	2,606					
Coaches - Buses	GA			332					
	EL	49							
Total gasoline		295,706	130,383	57,607	61,998	61,407	52,488	46,973	54,803
Total diesel		144,097	343,806	710,243	680,724	n/a	n/a	n/a	n/a
Total electric		49	0	814	276	5,563	5,820	4,368	6,873
Total NGV or LPG				332					
Total all categories		439,852	474,189	768,996	742,998	n/a	n/a	n/a	n/a

G: Gasoline. D: Diesel. EL: Electric. GA: NGV or LPG

### ► LIGHT COMMERCIAL VEHICLE (UP TO 5T) PRODUCTION BY TYPE (IN UNITS)

	1980	1990	2000 (1)	2010	2013	2014	2015	2016
Passenger cars deri	vatives							
Citroën	26,904	22,942	29,449	14,972	13,590	13,072	11,715	13,905
Peugeot	69,411	55,208	41,451	33,403	22,650	18,720	19,122	19,073
PSA Group (2)	103,229	78,150	70,900	48,375	36,240	31,792	30,837	32,978
Renault Group	30,420	56,245	60,320	48,167	34,325	37,810	40,158	35,984
Total	133,649	134,395	131,220	96,542	70,565	69,602	70,995	68,962
Small vans								
Citroën	45,573	67,257	100,832	98,042	88,466	89,765	90,957	91,048
Peugeot	27,002	18,537	70,443	97,608	96,754	93,909	95,144	96,641
PSA Group (2)	90,178	85,794	171,275	195,650	185,220	183,674	186,101	187,689
Renault Group	126,779	129,335	147,670	97,142	137,447	109,070	117,863	124,282
Total	216,957	215,129	318,945	292,792	322,667	292,744	303,964	311,971
Fourgons								
Citroën	23,813	32,209	61,957	67,448	67,672	74,657	83,297	90,407
Peugeot	33,031	47,623	75,023	79,241	79,173	82,419	93,809	101,951
Others					19,587	22,670	22,191	16,527
PSA Group (2)	56,844	79,832	136,980	146,689	166,432	179,746	199,297	208,885
Renault Group	40,508	84,681	104,811	148,404	157,682	189,314	224,799	259,484
Renault Trucks			8,321	0	0	0	0	0
Sovam-Etalmobil	86	71	42	0	0	0	0	0
Total	97,438	164,584	250,154	295,093	324,114	369,060	424,096	468,369
4WD								
Peugeot		1,730						
Pick-ups, small vans	, others							
Renault Group			12,580	26,697	27,308	27,220	33,058	32,052

<sup>(1)</sup> World production of French manufacturers as of 1997.

<sup>(1)</sup> World production of French manufacturers as of 1997

<sup>(2)</sup> Including Talbot up to 1985. Source: CCFA

### **DELIVERIES BY FRENCH MANUFACTURERS OUTSIDE FRANCE**

Since 1996, exports by French manufacturers include both assembled vehicles and KD/CKD units. Vehicles delivered to French Overseas Departments are no longer counted as exports. Dacia's exports are included in the scope of consolidation as of 2005, the Renault Trafic is included as of 2006, and Renault Samsung Motors as of 2007 (180,973 passenger cars). Also, certain exports are sent to regions and not specific countries.

### ▶ NEW PASSENGER CAR DELIVERIES BY DESTINATION (IN UNITS)

	1980	1990	2000	2010	2013	2014	2015	2016
Europe (1)	1,202,834	1,645,276	2,636,150	2,331,256	2,007,183	2,233,561	2,384,342	2,597,262
Eur. union (2)	946,760	1,479,316	2,261,904	1,893,455	1,469,718	1,659,147	1,871,647	2,068,564
Germany	202,939	277,424	337,743	299,072	237,280	266,233	266,587	339,993
Austria	35,775	36,175	41,510	50,767	42,564	41,119	41,349	45,844
Belgium-Luxembourg	105,966	144,896	172,806	182,241	149,689	142,305	146,015	151,959
Denmark	4,059	13,919	30,239	27,801	39,950	46,744	49,204	56,683
Spain	100,640	297,846	556,934	302,663	203,460	259,366	310,876	348,207
Greece	·	11,458	54,270	10,744	6,039	9,015	12,132	13,350
Italy	381,626	324,952	353,616	317,851	222,666	254,347	304,829	362,678
The Netherlands	84,063	95,340	120,438	108,951	87,484	95,028	106,236	90,353
Portugal	14,729	59,459	68,375	58,750	29,262	41,692	54,165	66,261
United Kingdom	156,071	245,989	432,507	280,244	243,338	275,266	294,142	290,542
Sweden	13,060	18,001	31,473	16,691	23,680	28,570	32,650	37,692
10 new EU member states				130,576	117,872	133,722	104,417	115,165
12, then 13 new EU member states (3)				176,330	159,864	185,575	170,849	184,142
CEEC/CIS (3)	23,619	31,569	164,814	206,868	288,395	375,470	258,054	262,982
Hungary		2,040	23,887	6,156	9,599	10,725	11,031	14,585
Poland		806	59,093	53,521	46,709	52,141	50,485	62,874
Romania			7,520	41,804	29,677	37,989	45,361	49,786
Russia			6,042	158,018	243,839	354,701	272,461	182,432
Switzerland	51,821	43,832	45,654	50,740	38,722	37,530	43,545	41,337
Turkey		13,069	148,264	168,456	201,600	152,800	211,096	224,379
Africa	133,213	45,675	69,865	171,484	257,752	230,637	241,078	196,459
South Africa	22,439	0	13,913	14,711	21,661	13,933	23,223	16,835
North Africa	15,542	20,432	37,236	139,790	211,448	186,116	184,708	152,016
Nigeria	61,133	8,319	8,860	210	1,049	1,244	301	171
America	145,204	29,360	230,270	559,780	703,734	458,990	426,937	490,120
Argentina	11,899	516	97,605	149,746	243,448	122,434	122,408	177,049
Brazil			80,205	320,930	349,337	274,577	210,638	186,229
Colombia	11,885	9,112	16,659	6,329	2,383	49,331	50,819	51,825
Mexico		20	1,408	24,822	10,454	8,382	10,685	7,626
Asia (1)	26,178	96,645	166,261	1,201,459	833,072	1,001,386	1,070,526	1,422,282
Japan	883	14,264	15,976	12,346	13,180	12,687	25,072	18,016
China		3,960	54,334	392,569	587,311	766,683	756,268	635,296
Iran	12,836	29,852	45,722	516,121	28,547	27,913	38,176	340,139
India				4,488	64,368	44,849	50,877	132,235
South Korea				157,824	63,711	114,027	90,056	251,102
Pacific	6,290	5,761	9,984	14,079	16,827	16,793	17,929	11,188
Australia	2,398	820	2,765	9,761	11,827	11,933	13,435	6,805
Total all categories	1,529,652	1,881,998	3,174,447	4,306,065	3,842,199	3,961,884	4,159,198	4,735,057
KD and CKD units	471,744	208,241						

### ► NEW COMMERCIAL VEHICLE DELIVERIES BY DESTINATION (IN UNITS)

	1980	1990	2000	2010	2013	2014	2015	2016
Europe (1)	88,235	174,998	379,289	357,998	368,180	434,133	456,712	513,113
Eur. union (2)	74,382	156,268	312,421	312,293	321,887	384,461	418,876	476,550
Germany	17,490	23,581	50,081	46,406	67,191	82,541	90,020	99,293
Austria	2,185	3,702	4,697	6,797	6,873	6,711	7,585	8,259
Belgium-Luxembourg	11,455	18,383	22,857	29,330	32,353	27,736	29,267	42,443
Spain	71	44,110	57,516	28,263	26,866	29,591	38,386	40,887
Italy	26,207	19,923	35,910	39,690	35,519	45,236	34,656	52,716
The Netherlands	8,234	7,995	23,087	13,848	13,822	14,273	15,904	22,367
Portugal	2,805	14,291	34,551	18,557	9,663	13,238	15,539	18,484
United Kingdom	8,390	21,127	55,647	60,997	70,458	97,429	101,797	94,776
10 new EU member states				28,891	33,389	38,022	44,233	71,491
12, then 13 new EU member states (3)				33,784	40,842	49,636	55,213	85,750
CEEC/CIS (3)	361	2,781	25,100	16,121	18,814	20,937	29,981	22,716
Poland	301	97	5,624	14,258	15,429	17,487	13,563	20,223
Switzerland	3,317	2,921	4,293	8,500	8,266	7,944	7,855	7,725
Africa	75,802	18,320	16,074	27,769	41,457	40,132	27,611	24,601
North Africa	18,334	8,588	13,509	24,690	37,558	36,911	26,466	21,779
America	5,875	5,453	36,682	85,810	109,866	75,224	61,943	63,191
Asia (1)	6,930	11,302	8,260	5,632	5,562	6,634	9,512	9,018
Pacific	776	1,364	1,797	2,208	4,069	4,547	6,064	6,386
Total all categories	178,126	213,502	444,516	480,430	530,355	571,759	563,013	617,832
KD and CKD units	39,428	12,207						

<sup>(1)</sup> As of 2004, exports to Cyprus are included in Europe, rather than Asia

Source: CCFA

<sup>(2)</sup> European Union: 9 countries in 1980; 10 countries in 1985, 12 countries from 1990 to 1994; 15 countries between 1995 and 2003; 25 countries between 2004 and 2005; 27 countries from 2006 to 2012; 28 countries since 2013.

<sup>(3)</sup> CEEC/CIS, excluding the 10 new countries that joined the European Union in 2004 and 2005, the 12 new countries that joined the European Union from 2006 to 2012, and the 13 that joined in 2013.

### PHYSICAL AND FINANCIAL DATA FOR THE AUTOMOTIVE MANUFACTURING INDUSTRY

Physical and financial data derive from annual enterprise surveys (EAE) on the automotive sector. Since 2008, they have been replaced by the ESANE information system, which combines administrative data and surveys.

These statistics are one of the main sources of our understanding of French industry. SESSI, previously the Secretary of State for Industry's statistics department and now attached to INSEE, uses those figures.

The data reflects the activity of companies with French and foreign capital, located in France, and whose main activity can extend outside France.

The lifespan of companies (creation, reorganisation, acquisition, sale) can feature major variations from one year to the next.

The introduction of a new economic nomenclature, taking into account data both from surveys and administrative data (and in particular, cross-referencing both), and new rules governing statistics (ordering parties, etc.) are the reason behind a slight reduction in the scope of the sector between 2007 and 2008.

From 2016, INSEE was basing its work on the notion of 'enterprise' defined by decree 2008-1354 in application of the 'modernisation of

the economy' law (LME) which is based on the notion of groups of companies (rather than legal units), so as to better take into account the new economic realities that have arisen through globalisation. Data for 2012 and 2013 (below) come from this new source. Trends between the old and new scopes are minor for the moment.

	Units	1990	2000	2010	2012	2013	2014	2015 (1)	2016 (1)
PHYSICAL DATA									
Employees (2)	Units	216,848	190,830						
Employees on 12/31 (excluding temporary staff)				137,527	137,918	130,480	122,585	116,500	112,000
Production in France (only light vehicles since 2012)	Thousands		3,348	2,229	1,967	1,736	1,816	1,978	2,090
Production per employee	Units		17.5	16.2	14.3	13.3	14.8	17.0	18.7
FINANCIAL DATA									
Net sales	€ millions	49,472	73,684	78,969	77,455	77,075	76,420	80,500	84,500
Export sales	€ millions	18,817	42,290	45,526	46,419	45,487	47,288	49,100	51,500
Exports as a % of total sales	%	38.0%	57.4%	57.6%	59.9%	59.0%	61.9%	61.0%	60.9%
Added Value (AV) before tax	€ millions	10,650	13,282	10,112	7,622	8,288	9,643	10,500	11,000
Added value/sales	%	21.5%	18.0%	12.8%	9.8%	10.8%	12.6%	13.0%	13.0%
Added value per employee	€thousands	49	70	74	55	64	79	90	98
Social costs	€ millions	1,860	2,153	2,302	2,377	2,176	2,030		
Social costs per employee	€thousands	8.6	11.3	16.7	17.2	16.7	16.6		
Wages and salaries	€ millions	4,271	5,093	5,696	5,672	5,696	5,355		
Wages and salaries per employee	€thousands	19.7	26.7	41.4	41.1	43.7	43.7		
Personnel costs	€ millions	6,132	7,246	7,999	8,049	7,872	7,384		
Personnel costs per employee	€thousands	28.3	38.0	58.2	58.4	60.3	60.2		
Personnel costs/AV	%	57.6%	54.6%	79.1%	105.6%	95.0%	76.6%		
Gross operating surplus	€ millions	3,855	5,201	1,340	-1,129	-378	1,502		
Gross operating surplus/AV	%	36.2%	39.2%	13.3%	-14.8%	-4.6%	15.6%		
Interest expense	€ millions	1,170	1,178	2,862	1,287	2,058	3,104		
Interest expense/AV	%	11.0%	8.9%	28.3%	16.9%	24.8%	32.2%		
Interest income	€ millions	1,095	2,508	2,191	2,147	2,251	3,102		
Interest income/AV	%	10.3%	18.9%	21.7%	28.2%	27.2%	32.2%		
Net interest income	€ millions	-74	1,330	-671	860	193	-3		
Net interest income/AV	%	-0.7%	10.0%	-6.6%	11.3%	2.3%	0.0%		
Cash flow	€ millions	2,918	5,499	1,078	-327	-310	2,954		
Cash flow/ AV	%	27.4%	41.4%	10.7%	-4.3%	-3.7%	30.6%		
Net income (loss)	€ millions	969	2,851	293	n/a	n/a	-12		
Net income/sales	%	2.0%	3.9%	0.4%	n/a	n/a	0.0%		
Capital expenditure	€ millions	3,139	3,807						
Gross fixed investments exclusive of contributions	€ millions			2,078	2,324	1,913	1,850	1,800	1,900
Capital expenditure/sales	%	6.3%	5.2%	2.6%	3.0%	2.5%	2.4%	2.2%	2.2%
Capital expenditure/AV	%	29.5%	28.7%	20.6%	30.5%	23.1%	19.2%	17.1%	17.3%

<sup>(1)</sup> CCFA estimates for 2015 and 2016

<sup>(2)</sup> Until 2007, these are actual employees: average employee numbers, corrected by the balance of employees hired (temporary staff) and quoted as hired staff.

### PHYSICAL AND FINANCIAL DATA FOR THE AUTOMOTIVE MANUFACTURING INDUSTRY

The physical and financial data in the table below are taken from surveys (EAE reports) conducted every year of French companies in the automotive equipment manufacturing industry and from 2008, from the new ESANE information system. The trends witnessed since 2016 are described on the opposite page, featuring some changes to the presentation of the data. For example, headcount on December 31, 2013 was 80,416 using the previous scope, and 86,624 with the new one.

In 1993, a new French business category (NAF1), standardized throughout the European Union, was put in place. A number of companies

were reclassified in the metalworking, electrical equipment and car seating industries, resulting in a statistical break in data.

Since 2008, this category has become NAF2, still standardized throughout the European Union: OEM companies, electrical equipment manufacturers for engines and vehicles and car seat manufacturers are now included in this category.

Companies listed in the new "automotive equipment manufacturing" sector do not represent, therefore, all suppliers of the automotive industry. Added to these should be manufacturers of glass, tires, doors and locks and automotive springs... In addition to these activities, the automotive manufacturing and automotive equipment manufacturing industries purchase a number of intermediate products (metals, rubber, plastics, etc.), services (consulting, research, advertising, etc.) and capital goods from other sectors.

	Units	1990	2000	2010	2012	2013	2014	2015 (1)	2016 (1)
PHYSICAL DATA									
No. of companies (>20 employees up to 2007)	units	320	243	639	687	624	764		
Employees (2)	units	112,963	94,171						
Employees on 12/31 (excluding temporary staff)				61,759	88,752	86,624	84,271	82,600	81,000
FINANCIAL DATA									
Sales before tax	€ millions	14,452	17,766	16,056	20,934	20,356	20,793	22,000	23,500
Export sales	€ millions	4,018	7,512	7,865	10,275	10,057	9,837		
Exports as a % of total sales	%	27.8%	42.3%	49.0%					
Exports as a % of production (source: FIEV)				51%	54%	55%	54%	55%	54%
Added value (AV) before tax	€ millions	4,530	4,643	3,885	5,201	5,187	5,324		
Added value/sales before tax	%	31.3%	26.1%	24.2%	24.8%	25.5%	25.6%		
Added value per employee before tax	€ thousands	40	49	63	59	60	63		
Social costs	€ millions	867	902	937	1,395	1,389	1,360		
Social costs per employee	€ thousands	7.7	9.6	15.2	15.7	16.0	16.1		
Wages and salaries	€ millions	2,060	2,213	2,302	3,217	3,232	3,249		
Wages and salaries per employee	€ thousands	18.2	23.5	37.3	36.3	37.3	38.5		
Personnel costs	€ millions	2,926	3,115	3,239	4,613	4,621	4,608		
Personnel costs per employee	€ thousands	25.9	33.1	52.4	52.0	53.3	54.7		
Personnel costs/AV	%	64.6%	67.1%	83.4%	88.7%	89.1%	86.6%		
Gross operating surplus	€ millions	1,337	1,206	412	264	247	409		
Gross operating surplus/AV	%	29.5%	26.0%	10.6%	5.1%	4.8%	7.7%		
Interest expense	€ millions	387	440	177	140	339	250		
Interest expense/AV	%	8.5%	9.5%	4.6%	2.7%	6.5%	4.7%		
Interest income	€ millions	213	337	217	591	355	295		
Interest income/AV	%	4.7%	7.3%	5.6%	11.4%	6.8%	5.5%		
Net interest income	€ millions	-174	-103	40	451	15	46		
Net interest income/AV	%	-3.8%	-2.2%	1.0%	8.7%	0.3%	0.9%		
Cash flow	€ millions	883	889	341	454	345	434		
Cash flow/AV	%	19.5%	19.2%	8.8%	8.7%	6.7%	8.2%		
Net income (loss)	€ millions	400	-92	-17	36	-154	-84		
Net income/sales	%	2.8%	-0.5%	-0.1%	0.2%	-0.8%	-0.4%		
Capital expenditure	€ millions	899	1,024						
Gross fixed investments exclusive of contributions	€ millions			413	743	708	663		
Capital expenditure/sales	%	6.2%	5.8%	2.6%	3.6%	3.5%	3.2%		
Capital expenditure/AV	%	19.8%	22.0%	10.6%	14.3%	13.7%	12.4%		

<sup>(1)</sup> FIEV estimates

<sup>(2)</sup> Actual employees: average employee numbers, corrected by the balance of employees hired (temporary staff) and quoted as hired staff.

### ► NEW PASSENGER CAR REGISTRATIONS BY BRAND (IN UNITS)

The special French Temporary Transit series was included in the new passenger car registrations as of 2004.

	1980	1990	2000	2010	2013	2014	2015	2016
Citroën	270,983	266,822	261,508	301,607	194,728	199,382	201,065	195,011
DS				26,539	43,589	31,746	30,257	28,081
Peugeot (1)	414,335	498,481	397,547	400,663	289,587	305,014	327,393	335,881
Dacia				104,641	89,844	102,516	97,441	110,529
Renault	759,312	639,440	602,415	497,820	337,608	353,890	382,504	407,930
Bolloré				0	658	1,170	1,191	944
Others France	56	146	63	54	249	52	50	51
TOTAL FRANCE	1,444,686	1,404,889	1,261,533	1,331,324	956,263	993,770	1,039,901	1,078,427
Alfa Romeo	25,380	15,916	12,774	13,033	8,047	7,608	6,353	7,334
Audi	17,455	32,762	34,937	50,936	59,147	56,395	58,734	64,686
BMW	17,239	29,580	31,576	46,074	46,742	47,682	53,558	60,521
Fiat	53,147	128,822	95,983	72,717	47,683	45,737	54,443	62,544
Ford	68,426	159,575	117,061	114,810	76,470	75,089	80,729	79,173
Honda	8,293	14,002	8,716	11,251	8,846	7,091	7,325	9,143
Hyundai		0	11,019	18,785	25,738	17,165	23,968	28,043
Infiniti				267	197	669	1,139	3,295
Jaguar	269	1,290	1,939	1,126	879	715	1,530	3,738
Jeep		3,824	3,001	1,177	1,327	2,783	8,585	9,983
Kia		0	2,631	24,056	33,503	28,186	29,146	33,684
Lada	13,069	15,758	1,867	346	59	9	3	2
Lancia	6,801	18,225	5,864	3,368	4,812	6,105	1,469	185
Land Rover	237	3,611	7,570	2,735	6,716	6,794	8,846	10,388
Lexus				1,921	2,960	3,486	4,457	5,100
Mazda	13,021	18,563	6,366	10,232	6,272	6,062	8,418	10,320
Mercedes	14,430	28,605	43,389	45,612	46,966	49,148	55,376	62,060
Mini				18,007	19,099	18,277	22,512	25,176
Mitsubishi				3,514	3,448	3,496	3,936	2,922
Nissan	17,700	25,707	31,330	54,084	62,983	68,072	74,102	69,072
Opel	32,709	113,490	133,576	94,877	59,620	61,246	64,170	68,280
Porsche	1,060	1,297	825	2,073	2,813	3,449	4,943	5,396
Rover	20,690	41,147	13,474	0	0	-	0	0
Saab	179	2,459	3,265	574	7	0	0	0
Seat	306	48,052	40,562	30,645	22,039	21,090	22,009	21,648
Skoda	1,636	1,825	11,570	18,533	19,341	20,412	21,759	23,620
Smart			6,645	6,408	5,267	4,149	8,107	8,980
Ssangyong		0	19	451	209	344	636	963
Subaru		0	2,312	1,146	928	731	841	851
Suzuki		0	11,355	22,070	15,485	15,835	18,506	20,528
Tesla				11	38		708	944
Toyota	13,095	15,839	43,698	65,390	71,693	66,774	71,755	77,696
Volkswagen	75,727	155,971	152,868	146,538	141,427	139,554	144,103	143,101
Volvo	8,207	12,415	6,777	11,841	11,024	12,459	13,876	15,599
TOTAL FOREIGN (2)	428,516	904,241	872,351	920,345	834,193	-	877,325	936,750
TOTAL ALL CATEGORIES	1,873,202	2,309,130	2,133,884	2,251,669	1,790,456		1,917,226	2,015,177
of which Temporary Transit				39,011	34,205		31,665	31,448
TOTAL FRANCE (AS A %)	77.1%	60.8%	59.1%	59.1%	53.4%	55.3%		53.5%
TOTAL FOREIGN (AS A %)	22.9%	39.2%	40.9%	40.9%	46.6%	44.7%	45.8%	46.5%

<sup>(1)</sup> Including Talbot up to 1985

### ► USED PASSENGER CAR REGISTRATIONS (IN UNITS)

	1980	1990	2000	2010	2013	2014	2015	2016
TOTAL ALL CATEGORIES	4,441,423	4,758,750	5,082,122	5,386,007	5,317,717	5,446,131	5,562,082	5,643,352
Used/new ratio	2.4	2.1	2.4	2.4	3.0	3.0	2.9	2.8

### ► USED LIGHT COMMERCIAL VEHICLE REGISTRATIONS (IN UNITS)

	1980	1990	2000	2010	2013	2014	2015	2016
TOTAL ALL CATEGORIES		644,925	651,033	806,398	750,371	772,709	789,073	806,052
Used/new ratio		1.6	1.6	1.9	2.0	2.1	2.1	2.0

<sup>(2)</sup> Including others

### ► NEW DIESEL PASSENGER CAR REGISTRATIONS BY BRAND (IN UNITS)

The special French Temporary Transit series was included in the new passenger car registrations as of 2004.

	1980	1990	2000	2010	2013	2014	2015	2016
Citroën	24,158	111,881	138,628	228,977	144,873	134,756	113,446	93,165
DS				14,864	29,082	21,190	15,281	13,157
Peugeot (1)	65,199	189,322	206,153	307,518	203,291	214,419	190,548	176,231
Dacia				53,737	58,334	64,895	54,326	48,735
Renault	45,862	205,374	257,909	352,530	236,972	224,489	233,998	233,354
TOTAL FRANCE (2)	135,219	506,577	602,711	957,626	672,552	659,749	607,599	564,642
Alfa Romeo		2,524	7,444	8,432	5,145	4,273	2,995	3,307
Audi	19,591	13,495	25,901	45,201	48,513	45,192	44,445	46,529
BMW-Mini		8,271	21,065	50,906	54,094	53,289	57,145	60,739
Chrysler-Dodge-Jeep			4,161	2,863	1,203	2,462	7,183	7,345
Fiat-Lancia	10,352	33,913	38,337	28,240	15,686	13,199	16,935	18,384
Ford	1,833	56,331	58,896	89,334	44,174	40,861	41,986	39,398
Honda			413	5,029	5,051	4,111	4,364	4,709
Hyundai			5,510	13,174	18,472	10,592	15,069	16,572
Kia			1,200	15,428	19,948	17,327	15,870	17,322
Land Rover		2,980	5,656	2,637	6,524	6,473	8,192	9,879
Mazda		5,200	3,204	6,768	5,221	4,792	4,802	4,466
Mercedes	10,635	15,676	30,007	41,460	41,355	43,542	47,646	50,748
Mitsubishi		1,623	3,227	3,102	2,828	1,953	2,053	1,905
Nissan-Infiniti	694	4,982	15,533	35,092	47,899	48,843	46,879	44,310
Opel	6,178	28,218	63,726	63,751	32,343	31,738	29,335	27,444
Rover		4,419	7,480	0	0	0	0	0
Seat		14,367	27,861	25,462	14,467	11,696	10,683	8,478
Skoda			7,741	14,781	12,601	13,870	12,930	12,773
Suzuki			3,165	9,263	4,649	3,947	4,359	4,038
Toyota-Lexus		3,594	12,282	35,744	23,546	20,332	17,879	11,141
Volkswagen		50,975	89,487	118,702	99,149	91,387	80,893	75,422
Volvo	1,198	4,097	4,786	11,614	10,332	11,545	12,747	13,541
TOTAL FOREIGN (2)	50,815	255,477	443,774	635,547	527,177	486,909	489,525	485,776
TOTAL ALL CATEGORIES	186,034	762,054	1,046,485	1,593,173	1,199,729	1,146,658	1,097,124	1,050,418
of which Temporary Transit				34,432	31,988	27,127	27,141	22,887
% diesel	9.9%	33.0%	49.0%	70.8%	67.0%	63.8%	57.2%	54.8%
TOTAL FRANCE AS A %	72.7%	66.5%	57.6%	60.1%	56.1%	57.5%	55.4%	53.8%
TOTAL FOREIGN AS A %	27.3%	33.5%	42.4%	39.9%	43.9%	42.5%	44.6%	46.2%

### ▶ NEW LIGHT COMMERCIAL VEHICLE REGISTRATIONS (UP TO 5T) BY BRAND (IN UNITS)

	1980	1990	2000	2010	2013	2014	2015	2016
Citroën	53,245	80,958	77,048	70,579	61,601	63,233	59,295	62,418
DS				259	730	625	489	485
Peugeot (1)	58,986	60,813	74,950	72,228	60,469	59,197	59,649	65,771
Dacia				5,434	3,959	3,377	2,594	1,582
Renault	116,602	162,549	139,752	135,591	116,282	117,823	124,634	131,742
Others France	256	415	40	528	807	953	905	1,348
TOTAL FRANCE	229,089	304,735	291,790	284,619	243,848	245,208	247,566	263,346
Fiat	8,326	10,139	25,253	34,659	33,021	30,757	32,071	36,626
Ford	9,099	16,080	18,110	20,437	16,929	20,273	22,534	25,567
Hyundai			588	237	299	194	195	256
Isuzu			108	1,961	2,167	1,960	2,024	2,030
Iveco	2,941	11,543	16,534	11,610	10,837	11,555	11,414	13,519
Land Rover	645	2,718	1,857	1,550	1,516	1,796	2,591	776
Mazda	579	1,067	916	482	60	63	58	73
Mercedes	5,495	11,156	23,139	19,051	18,024	17,710	18,643	19,767
Mitsubishi			3,392	2,639	1,625	1,341	1,836	1,998
Nissan	861	5,063	5,197	7,307	8,761	8,617	7,260	10,121
Opel	664	2,408	7,561	7,195	5,404	5,545	6,782	6,992
Toyota	7,112	6,099	1,771	4,013	3,932	4,669	5,210	5,322
Volkswagen	8,091	9,673	13,819	13,249	15,563	17,552	16,375	18,359
TOTAL FOREIGN (2)	48,798	89,060	123,176	132,993	123,483	126,866	131,860	146,756
TOTAL ALL CATEGORIES	277,887	393,795	414,966	417,612	367,331	372,074	379,426	410,102
TOTAL FRANCE AS A %	82.4%	77.4%	70.3%	68.2%	66.4%	65.9%	65.2%	64.2%
TOTAL FOREIGN AS A %	17.6%	22.6%	29.7%	31.8%	33.6%	34.1%	34.8%	35.8%

<sup>(1)</sup> Including Talbot up to 1985,(2) Including others.

### ▶ NEW PASSENGER CAR AND LIGHT COMMERCIAL VEHICLE REGISTRATIONS BY BRAND (IN UNITS)

The special French Temporary Transit series was included in the new passenger car registrations as of 2004.

	1980	1990	2000	2010	2013	2014	2015	2016
Citroën	324,228	347,780	338,556	372,186	256,329	262,615	260,360	257,429
DS				26,798	44,319	32,371	30,746	28,566
Peugeot	473,321	559,294	472,497	472,891	350,056	364,211	387,042	401,652
Dacia				110,075	93,803	105,893	100,035	112,111
Renault	875,914	801,989	742,167	633,411	453,890	471,713	507,138	539,672
TOTAL FRANCE	1,673,775	1,709,624	1,553,323	1,615,943	1,200,111	1,238,978	1,287,467	1,341,773
Fiat	61,473	138,961	121,236	107,376	80,704	76,494	86,514	99,170
Ford	77,525	175,655	135,171	135,247	93,399	95,362	103,263	104,740
Land Rover	882	6,329	9,427	4,285	8,232	8,590	11,437	11,164
Mercedes	19,925	39,761	66,528	64,663	64,990	66,858	73,086	81,827
Nissan-Infiniti	18,561	30,770	36,527	61,658	71,941	77,358	76,001	82,488
Opel	33,373	115,898	141,137	102,072	65,024	66,791	70,952	75,272
Rover	20,812	41,343	13,564	0	0	0	0	0
Seat	306	51,999	42,230	31,080	22,039	21,090	22,009	21,648
Toyota-Lexus	20,207	21,938	45,469	71,324	74,968	74,929	81,422	88,118
Volkswagen	83,818	165,644	166,687	159,787	156,990	157,106	160,478	161,460
TOTAL FOREIGN	477,314	993,301	995,527	1,053,338	957,676	928,981	1,009,185	1,083,506
TOTAL ALL CATEGORIES	2,151,089	2,702,925	2,548,850	2,669,281	2,157,787	2,167,959	2,296,652	2,425,279
TOTAL FRANCE AS A %	77.8%	63.3%	60.9%	60.5%	55.6%	57.1%	56.1%	55.3%
TOTAL FOREIGN AS A %	22.2%	36.7%	39.1%	39.5%	44.4%	42.9%	43.9%	44.7%

### ► NEW HEAVY TRUCK (OVER 5T) REGISTRATIONS BY BRAND (IN UNITS)

	1980	1990	2000	2010	2013	2014	2015	2016
Renault Trucks	17,984	20,453	20,818	10,908	12,069	10,367	11,568	12,531
Total France	18,312	20,738	20,992	10,964	12,105	10,423	11,584	12,553
DAF	1,881	3,460	4,365	4,464	5,388	4,193	4,723	5,815
Iveco	6,578	7,204	6,998	4,003	4,449	4,354	4,783	5,293
MAN	327	1,433	3,498	2,729	4,145	3,811	4,581	4,910
Mercedes	8,014	9,500	9,976	5,229	7,766	5,911	6,128	7,089
Scania	1,389	2,711	4,963	2,553	3,499	3,626	4,359	5,219
Volvo	3,724	4,647	6,739	3,938	5,507	4,912	5,219	5,789
TOTAL FOREIGN	23,534	29,290	36,924	23,257	31,160	27,136	30,132	34,582
TOTAL ALL CATEGORIES	41,846	50,028	57,916	34,221	43,265	37,559	41,716	47,135
TOTAL FRANCE AS A %	43.8%	41.5%	36.2%	32.0%	28.0%	27.8%	27.8%	26.6%
TOTAL FOREIGN AS A %	56.2%	58.5%	63.8%	68.0%	72.0%	72.2%	72.2%	73.4%

### ► NEW HEAVY TRUCK (OVER 5T) REGISTRATIONS (IN UNITS)

	1980	1990	2000	2010	2013	2014	2015	2016
TOTAL			59,056	55,591	51,418	47,227	47,336	51,231
Used/new ratio			1.0	1.6	1.2	1.3	1.1	1.1

### ► NEW COACH AND BUS (OVER 5T) REGISTRATIONS BY BRAND (IN UNITS)

	1980	1990	2000	2010	2013	2014	2015	2 016
Renault	2,126	1,692	1,633					
Others France	107	255	367					
Kässbohrer-Setra	479	392	261					
Mercedes	554	245	602					
TOTAL ALL CATEGORIES	3,558	3,160	4,320					
Iveco Bus Group (1)				2,412	2,902	2,483	3,197	2,917
Evobus Group (2)				1,433	1,933	1,964	2,050	1,646
VGF Group (3)				559	323	247	589	465
Bova				116	28	1	0	0
Temsa				309	229	121	146	158
Van Hool	57	250	230	169	138	93	98	126
Others				384	768	500	644	747
TOTAL ALL CATEGORIES				5,382	6,321	5,409	6,724	6,059

- (1) Irisbus Group: Iveco and Iveco Bus, Irisbus, Heuliez (2) Evobus: Kässbohrer-Setra and Mercedes
- (3) Neoman Bus: MAN and Neoplan, Scania from 2015

### **VEHICLE OWNERSHIP**

### ► MOTORISATION RATE (INTERNATIONAL COMPARISONS) NUMBER OF CARS AND COMMERCIAL VEHICLES PER 1,000 INHABITANTS ON DECEMBER 31

	1985	1995	2005	2015
European Union 28 countries			530	582
European Union 15 countries (1)	380	473	580	602
13 new EU member states			345	500
Germany	450	529	597	593
Belgium	363	463	527	569
Spain	276	430	580	595
France	446	520	591	598
Italy	412	541	666	706
United Kingdom	379	474	571	587
Sweden	400	445	514	540
Poland	117	229	388	628
Turkey	27	65	124	195
Canada	559	562	585	646
USA	708	759	803	821
South Korea	25	177	328	417
Japan	375	527	592	609
Argentina	173	167	181	316
Brazil	86	89	124	206
China	3	8	24	118
India	3	6	9	22

(1) As of 1995, the EU includes 15 countries. Sources: CCFA estimates, then OICA from 2005 onward

### ► TOTAL VEHICLES IN USE (IN THOUSANDS) (ON JANUARY 1, 2017)

	All fuels	Diesel (1)
Passenger cars		
Up to 5 HP	14,769	8,122
6 to 10 HP	15,953	10,975
11 HP and over	1,668	840
Total passenger cars	32,390	19,938
Light commercial vehicles (LCV)		
Up to 2.5t	3,611	3,360
From 2.5t to 3.5t	2,473	2,465
From 3.6t to 5t	16	15
Total LCVs up to 5t	6,100	5,840
Total passenger cars and LCVs	38,490	25,778
Heavy trucks over 5t		
Rigids		
From 5t to 12t	70	70
From 12t to 16t	42	42
From 16t to 20t	109	109
20t and over	110	110
Total rigids	331	331
Tractors	206	206
Total heavy trucks	537	537
Coaches and buses	91	88
Total commercial vehicles over 5t	628	625
Total commercial vehicles all sizes	6,728	6,465
Total all vehicles	39,118	26,403

(1) Including diesel hybrid Source: CCFA estimates

### **▶ VEHICLE OWNERSHIP**

	unit	1980	1990	2000	2010	2013	2014	2015	2016 (1)
Households without a vehicle	%	29.2%	23.2%	19.7%	16.5%	16.9%	17.2%	17.1%	(,
Households with a vehicle	%	70.8%	76.8%	80.3%	83.5%	83.1%	82.8%	82.9%	
Households with one vehicle	%	54.3%	50.5%	50.7%	47.6%	48.3%	48.8%	48.4%	
Households with two vehicles	%	14.8%	23.0%	25.4%	30.7%	29.9%	28.9%	29.4%	
Households with three or more vehicles	%	1.7%	3.3%	4.2%	5.2%	5.0%	5.1%	5.1%	
Average age of the vehicle	year		5.90	7.25	8.0	8.6	8.7	8.9	
Average ownership period	year		3.66	4.43	5.0	5.3	5.4	5.5	
Used passenger cars	%		50.0	56.1	58.9	59.0	58.5	58.5	
Total average kilometers	km	12,200	13,041	13,560	11,755	11,282	11,083	11,245	
Gasoline average kilometers	km	11,600	11,651	10,780	8,108	7,551	7,618	7,714	
Diesel average kilometers	km	26,200	20,950	18,140	14,542	13,959	13,574	13,821	
<b>Domestic passenger road transportation</b>									
By passenger car	billions of passenger-km		598.7	697.6	709.8	712.9	720.9	736.5	756.4
By coach-bus	billions of passenger-km		52.3	55.9	67.0	76.4	77.9	79.5	82.0
Total traffic	billions of passenger-km		736.6	849.5	889.8	908.6	917.0	934.7	957.0
Road transport as a % of total traffic	%		88.4	88.7	87.3	86.9	87.1	87.3	87.3
Annual change	'							,	
By passenger car	%			-0.1	+0.8	+0.3	+1.1	+2.2	+2.7
By coach-bus	%			+2.6	+4.4	+10.8	+1.9	+2.1	+3.1

(1) Provisional.

Source: TNS-SOFRES PARCAUTO, calculations by INRETS-ADEME, INSEE and SOeS

### ► TOTAL VEHICLES IN USE ON JANUARY 1 (IN THOUSANDS)

	1980	1990	2000	2010	2014	2015	2016	2017
Passenger cars								
Up to 5 HP	5,090	8,312	10,572	12,946	13,948	14,210	14,475	14,769
6 to 10 HP	11,460	13,385	15,723	16,583	16,115	15,990	15,901	15,953
Over 10 HP	1,890	1,313	1,186	1,521	1,588	1,600	1,624	1,668
Total passenger cars	18,440	23,010	27,480	31,050	31,650	31,800	32,000	32,890
Of which diesel (1)	730	3,265	9,261	17,458	19,645	19,836	19,900	19,938
Commercial vehicles								
Up to 3.5t	1,985	4,125	4,974	5,750	5,915	5,965	6,014	6,084
From 3.5t to 5t	103	20	12	10	15	15	16	16
From 5t to 20t	250	334	287	250	235	233	227	221
20t and over	26	41	46	91	102	106	106	110
Tractors	129	160	210	202	195	200	199	206
Total commercial vehicles	2,493	4,680	5,529	6,303	6,462	6,608	6,562	6,728
Of which diesel (1)	976	2,342	4,202	5,632	6,091	6,280	6,355	6,465
Coaches and buses	57	68	80	85	88	89	90	91
Overall total	20,990	27,758	33,090	37,438	38,200	38,408	38,652	39,118
Of which diesel (1)	1,763	5,675	13,543	23,172	25,821	26,116	26,255	26,403

(1) Including diesel hybrid Source: CCFA estimates

# FUEL AND TAXATION, EMISSIONS AND $\mathbf{CO}_2$

### ▶ ROAD FUEL CONSUMPTION, PRICES AND TAXES

	UNITS	1980	1990	2000	2010	2013	2014	2015	2016
FUEL CONSUMPTION									
Regular gasoline	Millions of litres	4,216	959						
Premium leaded - AVSR	Millions of litres	20,007	19,911	3,924					
Premium unleaded	Millions of litres		3,406	14,329	9,501	6,650	6,397	6,292	6,297
Premium unleaded 95-E10	Millions of litres				1,379	2,714	2,971	3,198	3,465
% of total gasoline	%				12.7%	29.0%	31.7%	33.6%	35.5%
TOTAL GASOLINE	Millions of litres	24,223	24,276	18,253	10,880	9,363	9,368	9,510	9,762
DIESEL	Millions of litres	11,415	20,664	32,373	39,749	40,559	40,718	41,187	41,153
TOTAL ROAD FUEL	Millions of litres	35,638	44,940	50,627	50,629	49,922	50,086	50,697	50,915

Source: CPDP

### ► RETAIL PRICES OF FUEL (ANNUAL AVERAGE)

	UNITES	1980	1990	2000	2010	2013	2014	2015	2016
Regular gasoline inc. VAT	euros/litre	0.49	0.80						
Tax as a %	%	57	73						
Premium leaded - AVSR	euros/litre	0.52	0.81	1.17					
Tax as a %	%	57	74	71					
Premium unleaded 98	euros/litre		0.79	1.11	1.38	1.59	1.54	1.42	1.36
Tax as a %	%		71	69	60	55	56	61	64
Gasoline	euros/litre	0.52	0.81	1.12	1.35	1.54	1.48	1.35	1.30
Tax as a %	%	57	74	69	61	56	58	63	66
Diesel	euros/litre	0.37	0.54	0.85	1.15	1.35	1.29	1.15	1.11
Tax as a %	%	46	61	62	54	49	51	59	63

Source: SOeS

### ▶ TOTAL AUTOMOBILE EMISSIONS IN MAINLAND FRANCE BETWEEN 1990 AND 2016

	1990	1995	2000	2005	2010	2015	2016 (1)	Change 2016/1990	Change 2016/2015		
ROAD POLLUTANTS (IN THOUSA	ROAD POLLUTANTS (IN THOUSANDS OF TONNES)										
SO <sub>2</sub>	143	117	23	4.2	0.8	0.8	0.8	-99%	0,3%		
CO	5,919	4,254	2,596	1,463	742	395	368	-94%	-6.8%		
NOx	1,224	1,106	930	750	582	472	453	-63%	-4.2%		
COVNM	910	688	446	238	104	56	51	-94%	-9.3%		
Lead (in tonnes)	3,902	1,171	48	47	50	54	53	-99%	-0.7%		
PM10: particles	75	85	69	55	47	34	33	-56%	-3.7%		
OTHER EMISSIONS (IN MILLIONS	OF TONNES)										
CO <sub>2</sub> net of CO <sub>2</sub> emissions of renewable energies	110	119	126	128	122	121	122	10%	0.3%		
CO <sub>2</sub> from combustion of biomass	0	0.4	0.9	1.7	6.7	7.5	7.4		-0.7%		

(1) 2016 estimates.

Source: CITEPA/Secten data, updated May 2017

### ▶CO2 EMISSIONS IN MAINLAND FRANCE BY BUSINESS SECTOR (IN MILLIONS OF TONS OF CO2)

	1990	1995	2000	2005	2010	2015	2016 (1)
Energy processing	69	58	63	67	59	40	44
Manufacturing industry	114	110	109	102	87	73	74
Residential/Commercial	83	86	88	97	90	74	75
Transport	110	119	126	128	122	121	122
of which road	110	119	126	128	122	121	122
of which other transportation	6.9	7.1	7.8	6.8	6.1	6.0	6.1
Agriculture/silviculture	11.1	11.6	12.0	12.6	12.3	12.1	11.9
TOTAL EXCLUDING LLUCF (2)	394	391	407	415	378	327	333
LLUCF (2)	-33	-39	-31	-56	-46	-43	-43
TOTAL WITH LLUCF (2)	362	352	376	359	331	284	290

(1) 2016 estimates.

(2) LLUCF: Land Use, Land Use Change and Forestry. Source: CITEPA/CORALIE/Secten format, May 2017.

### ► AVERAGE CO, EMISSIONS OF NEW PASSENGER CARS IN FRANCE AND EUROPE (IN GRAMS OF CO, PER KM)

	1995	2000	2005	2010	2013	2014	2015	2016	2016/2000
FRANCE									
Gasoline	177	168	159	130	122	119	116	116	-52
Diesel	175	155	149	130	117	114	111	109	-46
TOTAL	176	162	152	130	117	114	111	110	-52
EUROPE 15 COUNTRIES									
TOTAL	186	171	161	141	127	122	119	118	-53

Source: ADEME (June 2017)

### **FOREIGN TRADE AND AUTOMOTIVE TAXES AND DUTIES**

### ► FRENCH AUTOMOTIVE FOREIGN TRADE IN VALUE (IN € MILLIONS AND % YEAR-ON-YEAR CHANGE)

		New light New cars commercial vehicles		New heavy trucks		Parts and engines		Automotive industry sector		Used vehicles		Automotive sector		
Exports (FOB)														
1990	10,818	6%	846	-6%	988	7%	9,919	10%	22,571	7%	490	67%	23,060	8%
2000	19,828	12%	2,146	32%	2,328	34%	18,213	11%	42,515	14%	1,125	-6%	43,640	13%
2005	26,187	-5%	2,630	-8%	2,669	-5%	19,543	1%	51,031	-3%	1,571	0%	52,602	-3%
2010	15,241	11%	1,684	20%	2,330	29%	20,361	22%	39,616	18%	1,051	8%	40,667	18%
2015	14,975	10%	4,161	39%	2,884	13%	21,107	4%	43,128	9%	1,374	12%	44,502	9%
2016	15,589	4%	4,368	5%	3,143	9%	21,609	2%	44,709	4%	1,464	7%	46,173	4%
Imports (CIF)														
1990	9,813	7%	1,467	3%	1,564	-9%	5,596	1%	18,439	3%	638	21%	19,077	3%
2000	16,961	14%	1,997	9%	2,695	26%	11,024	11%	32,678	14%	959	-8%	33,637	13%
2005	20,671	4%	2,969	12%	3,285	6%	15,897	6%	42,822	5%	765	18%	43,587	6%
2010	22,380	7%	2,901	38%	2,440	6%	15,254	19%	42,975	13%	1,196	-1%	44,171	13%
2015	25,164	13%	3,156	5%	3,461	17%	17,985	14%	49,765	13%	1,235	10%	51,000	13%
2016	27,657	10%	3,582	14%	3,962	14%	19,209	7%	54,410	9%	1,219	-1%	55,629	9%
Balance (export	ts-imports	s)												
1990		+1,005		-621		-576		+4,323		+4,131		-148		+3,983
2000		+2,867		+149		-367		+7,189		+9,837		+166		+10,003
2005		+5,517		-338	-616		+3,646		+8,208		+807		+9,015	
2010		-7,139		-1,217	-110		+5,107		-3,359		-144		-3,504	
2015		-10,189		+1,005	-577		+3,123		-6,637		+139		-6,498	
2016		-12,068		+786		-819		+2,401		-9,700		+245		-9,456
Coverage rate (	exports/ii	mports x	100)											
1990		110		58	63		177		122		77		121	
2000		117		107	107 86		165		130		117		130	
2010		68		58	58 95		133		92		88		92	
2015		60		132		83	117		87		111		87	
2016		56		122		79	112		82		120			83

FOB (free-on-board): transaction value including freight and insurance up to the border of the exporting country. CIF (cost, insurance, freight): transaction value including freight and insurance up to the border of the importing country. Source: Customs data processed by CCFA

### ► AUTOMOTIVE TAXES AND DUTIES (IN € MILLIONS)

	1990	2000	2010	2012	2013	2014	2015	2016
Tax on road-use oil products (including VAT)	21,335	30,630	32,324	35,608	35,891	35,782	36,294	36,412
Tax on vehicle registration certificates	846	1,373	1,917	2,117	2,039	2,071	2,086	2,188
Automotive insurance tax	2,780	3,429	4,126	4,378	4,468	4,588	4,662	4,739
Road tax	1,901	539	0	0	0	0	0	0
Tax on company cars	345	644	992	985	876	827	753	692
Tax based on number of axles	75	223	168	172	171	170	169	167
Fixed rate police and traffic fines, sentence fines	317	720	1,255	1,624	1,666	1,579	1,596	1,858
Driver's license tax	86	14	1	1	1	3	4	
Regional development tax	0	442	539	535	538	571	555	512
Government royalty	30	132	186	198	300	314	326	331
Taxe générale sur les activités polluantes (TGAP) (1)			500	600	800	700	600	561
VAT on spending to acquire vehicles (passenger cars)	6,028	6,232	7,780	7,521	7,003	7,319	8,108	8,969
VAT on repairs, maintenance, MOTs and driving licences	2,443	4,059	5,603	5,756	5,788	5,895	6,057	
Automotive taxes and duties (including VAT)	38,178	50,438	57,401	61,506	61,555	61,833	63,225	
of which specific automotive taxation			37,300	37,400	37,800	37,600	40,800	
of which tax on fuels: TICPE and VAT on TICPE			28,200	28,200	28,400	28,200	31,500	33,491
ADDITIONAL INFORMATION (IN € MILLIONS)								
Freeway tolls (excl. VAT)		4,457	8,110	8,450	8,780	9,120	9,390	9,830
Freeway tolls (incl. VAT)	2,592	5,330	9,700	10,106	10,501	10,944	11,268	11,796
Total expense by the APUs (2) for the road			17,200	17,900	18,100	16,500	15,200	

<sup>(1)</sup> According to agrofuels rate

<sup>(2)</sup> APU: Public agencies: the entire transportation expenditure (all modes) is equal to the everyday expenditure and the capital expenditure; the figure shown may include dual accounts and it is thus a plus.

Sources: Internal Revenue, CCFA, URF, Transport Satellite Account (SOeS), French National Transport Accounting Commission.

### **USEFUL ADDRESSES**

# ► FRENCH AUTOMOTIVE MANUFACTURERS

#### **PSA Group**

75, avenue de la Grande Armée - 75116 Paris

Tel.: 01 40 66 55 11 Fax: 01 40 66 54 14

www.psa.fr - www.peugeot.com

#### Citroën

Immeuble Colisée III - 12, rue Fructidor 75835 Paris cedex 17

Tel.: 01 58 79 79 79 Fax: 01 58 79 72 25

www.psa.fr - www.citroen.com

#### DS

6, rue Fructidor 75017 Paris Tel.: 01 58 79 79 79

www.DSautomobiles.com

### **Renault Group**

13-15, quai Le Gallo

92153 Boulogne Billancourt cedex

Tel.: 01 76 84 50 50 www.renault.com

#### **Renault Trucks**

99, route de Lyon 69800 St Priest Tel.: 04 72 96 51 11 Department of External Relations 14, rue Hoche - KUPKA C

92039 La Défense Cedex www.renault-trucks.com

#### Alpine-Renault

Avenue de Bréauté - 76885 Dieppe cedex

Tel.: 01 76 86 31 50 Fax: 01 76 86 34 00

### ► AUTOMOTIVE ORGANISATIONS IN FRANCE

# Association Française du Gaz Naturel pour Véhicules (AFGNV)

8, rue de l'Hôtel de Ville 92200 Neuilly-sur-Seine Tel.: 01 80 21 08 00

www.afgnv.info

### Fédération Française de Carrosserie Industries et Services (FFC)

Immeuble Le Cardinet 8, rue Bernard Buffet 75017 PARIS Tel.: 01 44 29 71 00

Fax: 01 47 66 41 08 www.ffc-carrosserie.org

# Chambre Syndicale Internationale de l'Automobile et du Motocycle (CSIAM)

5, square de l'Avenue du Bois BP 2116 - 75771 Paris cedex 16

Tel.: 01 53 64 50 30 Fax: 01 40 67 95 94 www.csiam-fr.org

### Comité d'organisation des salons internationaux de l'Automobile, du Cycle, du Motocycle et des Sports (AMC Promotion)

39, avenue Franklin Roosevelt

75008 Paris Tel.: 01 56 88 22 40 Fax: 01 42 56 50 80

www.amcpromotion.com

# Conseil National des Professions de l'Automobile (CNPA)

50, rue Rouget-de-l'Isle 92158 Suresnes cedex Tel.: 01 40 99 55 00 Fax: 01 47 28 44 15

www.cnpa.fr

# Fédération des Industries d'Equipements pour Véhicules (FIEV)

79, rue Jean-Jacques Rousseau 92158 Suresnes cedex Tel.: 01 46 25 02 30 Fax: 01 46 97 00 80

www.fiev.fr

# Groupement pour l'Amélioration des Liaisons dans l'Automobile (GALIA)

20, rue Danjou 92100 Boulogne-Billancourt

Tél: 01 41 31 68 68 Fax: 01 41 31 68 60 www.galia.com

#### **Groupement Plasturgie Automobile (GPA)**

125, rue Aristide Briand 92300 Levallois Tél: 01 44 01 16 38 Fax: 01 44 01 16 38

www.autoplasticgate.com

### PFA, French Automotive & Mobility Cluster

2, rue de Presbourg 75008 Paris

Tel.: 01 41 44 94 30 www.pfa-auto.fr

### Syndicat National des Loueurs de Véhicules en Longue Durée (SNLVLD)

Immeuble Arc en Ciel

Bâtiment B

17, rue de la Vanne 92120 Montrouge Tel.: 01 85 65 11 25

www.snlvld.com

### Syndicat des Véhicules de Loisirs (UNI VDL)

3, rue des Cordelières 75013 Paris Tel.: 01 43 37 86 61

Fax: 01 45 35 07 39 www.univdl.org

# Union des Industries et Métiers de la Métallurgie (UIMM)

56, avenue de Wagram 75017 Paris

Tel.: 01 40 54 20 20 Fax: 01 47 66 22 74

www.uimm.fr

### **Union Routière de France (URF)**

9, rue de Berri 75008 Paris

Tel.: 01 44 13 37 17 Fax: 01 44 13 32 98 www.unionroutiere.fr

### Union Technique de l'Automobile, du Motocycle et du Cycle (UTAC)

BP 212 - 91311 Montlhéry cedex

Tel.: 01 69 80 17 00 Fax: 01 69 80 17 17 www.utac.com

# ► INTERNATIONAL AUTOMOTIVE ORGANISATIONS

### Association des Constructeurs Européens d'automobiles (ACEA)

85, avenue des Nerviens 1040 Bruxelles (Belgique) Tel.: 00 32 2 732 55 50 Fax: 00 32 2 738 73 10

www.acea.be

#### Organisation Internationale des Constructeurs d'Automobiles (OICA)

4, rue de Berri - 75008 Paris Tel.: 01 43 59 00 13 Fax: 01 45 63 84 41

www.oica.net

### ► AUTOMOTIVE ASSOCIATIONS IN FRANCE

#### 40 millions d'automobilistes

118, bd Haussmann 75008 Paris Tel.: 02 43 50 06 30

Fax: 02 43 50 06 31

www.40millionsdautomobilistes.com

### **ACA - Automobile Club Association**

Siège : 38, avenue du Rhin CS 80049

67027 Strasbourg Cedex Tel.09 70 40 11 11

Bureau parisien : 9 rue d'Artois - 75008 Paris

Tel.: 01 40 55 43 00 www.automobileclub.org

### Fédération Française du Sport Automobile (FFSA)

32, avenue de New-York - 75781 Paris Cedex 16 Tel : 01 44 30 24 00

Fax: 01 42 24 16 80

#### La Prévention Routière

4, rue Ventadour - 75001 Paris

Tel.: 01 44 15 27 00 Fax: 01 42 27 98 03

www.prevention routiere. as so. fr

#### Société des Ingénieurs de l'Automobile (SIA)

79, rue Jean-Jacques Rousseau - 92158 Suresnes cedex

Tel.: 01 41 44 93 70 Fax: 01 41 44 93 79

www.sia.fr

### UTOMOTIVE INDUSTRY RESEARCH ORGANISATIONS IN FRANCE

### Association pour le développement du transport et de la mobilité électriques **France (AVERE France)**

22, avenue Jean Aicard 75011 Paris Tel.: 01 53 25 00 60 www.avere-france.org

### Fondation sécurité routière

2, rue de Presbourg 75008 Paris

www.fondationsecuriteroutiere.org

### Groupe d'Etudes et de Recherches Permanent sur l'Industrie et les Salariés de l'Automobile (GERPISA)

Ecole Normale Supérieure de Cachan Bât. Desjardin - 61, avenue du Président Wilson 94235 Cachan Cedex

Tel.: 01 47 40 20 00 www.leblog.gerpisa.org

#### **IDforCAR**

Technocampus Composites Chemin du Chaffault - ZI du Chaffault 44340 Bouguenais

Tel: 02 28 44 36 50 Fax: 02 99 34 10 61 www.id4car.org

#### IFP Energies nouvelles (IFPEN)

1 & 4, avenue de Bois Préau 92852 Rueil Malmaison Cedex

Tel.: 01 47 52 60 00 Fax: 01 47 52 70 00

www.ifpenergiesnouvelles.fr

#### Institut Français des Sciences et Technologies des Transports, de l'Aménagement et des Réseaux (IFSTTAR)

IFSTTAR head office

Département Economie et Sociologie des

Transports (DEST) 14-20, Boulevard Newton

Cité Descartes, Champs sur Marne 77447 Marne la vallée Cedex 2

Tel.: 01 81 66 80 00 www.ifsttar.fr

#### **LUTB Transport & Mobility Systems**

c/o CCI de Lyon Place de la Bourse 69289 Lyon Cedex 02 Tel.: 04 72 40 57 00 Fax: 04 72 40 58 60

www.lutb.fr

#### Pôle Mov'eo

Haute-Normandie head office Technopôle du Madrillet Avenue Galilée BP 20060 76801 Saint Etienne du Rouvray Cedex

Tel.: 02 32 91 54 50 www.pole-moveo.org

#### Pôle Véhicule du Futur

Head office: Etupes

Centre d'affaires Technoland

15, rue Armand Japy - 25461 Etupes Cedex

General Secretary: Mulhouse Technopole de Mulhouse - BP 2118

40, rue Marc Seguin 68060 Mulhouse Cedex Tel.: 03 89 32 76 44 Fax: 03 89 32 76 45

www.vehiculedufutur.com

### **Programme National de Recherche** et d'Innovation dans les Transports terrestres (PREDIT)

Tour Sequoia - 92055 La Défense Cedex

Tel.: 01 40 81 14 17 Fax: 01 40 81 15 22 www.predit.prd.fr



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WW.CCFA.FR

# MONDIAL

### PARIS MOTOR SHOW

The MONDIAL PARIS MOTOR SHOW, the most visited automotive event in the world, will be held at Paris Expo Porte de Versailles from October 4-14, 2018. For this edition, the programme has been revised and the content enriched, bringing the promise of constructive meetings... all of this on a site that has been refurbished for an improved experience.

By visitor numbers (1,072,697 visitors in 2016) and media exposure (10,000 journalists, more than half of whom come from 100 different countries), the MONDIAL DE L'AUTO is the biggest automotive show in the world, and also the oldest event dedicated to cars, serving as a reminder of France's pioneering role in the birth of the automobile and its industry. Since it was first held 120 years

ago, the Mondial has offered a shop window to innovation. At the very heart of Paris, the Mondial continues to invite visitors to rethink their automotive dreams. Today more than ever, its purpose is to anticipate new uses and to accompany new services. The Mondial 2018 will be open to the public from October 4-14, and events will be held in the city from September 30 onwards.

As well as the traditional show with a bigger-thanever Hall 1 featuring the major automakers, the Mondial is developing a new visitor experience for the public. Of the many projects, the following are worth a mention:









► A Supercars area:

### **MONDIAL LIMITED**

(Hall 1)

For the first time, to better accommodate luxury brands, the Mondial will offer a completely revamped area to bewitch the public with their models and welcome their customers in the best possible conditions

### ► THE MOTORBIKES MONDIAL

A whole hall will be dedicated to 2and 3-wheeler motorised vehicles, taking the show back to its roots; the early days featured both motorbikes and cars. It will give greater visibility to the show, through the media, politicians and visitors. The motorbike universe will be spotlighted with a totally new staging concept.



(Hall 2.2)

The vehicle is at the very heart of mobility of the future... The public will discover all the ranges available in this special hall, with an entertainment approach offering interactive workshops.

► A theme-based, history-slant show (Hall 7.1), with legendary and contemporary vehicles, which for the first time will combine cars. motorbikes and the road, widening still further the global dream and the shared prestigious past of the automobile



### MONDIAL PARIS MOTOR SHOW

The MONDIAL PARIS MOTOR SHOW is also innovating by extending its trade appeal beyond the automotive industry itself.

#### ► «Paris and the mobility»

On Monday October 1 there will be an international keynote forum on the future of mobility, featuring the major players: leaders from the automotive industry and the digital world, politicians, captains of business, researchers, etc.



credit: Dubuissor

► MONDIAL.TECH: A meeting of innovative technology professions preparing the automobile of the future.

Hall 7.3 will welcome professionals for conferences and a reveal of the innovations of the future. It will bring together the very best of what's available technologically from start-ups and digital leaders.





edit: Dubuissor



developments.







identities of the different events and a common message around the notion of mobility. This is the role of the wheel-like 'O', depicting mobility and the techno-digital vibe.

The MONDIAL PARIS MOTOR SHOW is organised with the support of CCFA (French automobile manufacturers' association), FIEV (French Automotive Equipment Industries Association), CSIAM (International Association of the Automobile and the Motorcycle) and FFC (French Bodybuilding Federation).



### MONDIAL PARIS MOTOR SHOW, a tale of mobility

### **MONDIAL DE L'AUTO**

By visitor numbers (1,072,697 visitors in 2016) and media exposure (10,000 journalists, more than half of whom come from 100 different countries), the MONDIAL DE L'AUTO is the biggest automotive show in the world, and also the oldest event dedicated to cars, serving as a reminder of France's pioneering role in the birth of the automobile and its industry. In 1898, the Tuileries Gardens set the stage for the first international show dedicated to the leading automakes of the time. And not everybody was allowed to participate: in order to exhibit, the cars first had

to do a return trip between Paris and Versailles, i.e. 40 kilometres... to show that they were real cars capable of getting around under their own steam! Three years later, the show moved to Grand Palais... for 60 years! Two world wars were not enough to knock the event of its pedestal, and it went past the one million visitor mark in 1954. The idea of leaving the capital, so closely associated with the event, was never on the agenda. In 1962, the show moved to Porte de Versailles and has been there ever since.

### **MONDIAL DE LA MOTO**

Cycles (meaning bicycles and motorbikes) made their first appearance in 1901 at the Grand Palais at the annual show entitled 'International Auto, Cycle and Sports Show'. The motorbikes were displayed at the Grand Palais, generally in the Balcon galleries. From 1974 onwards, every other year, the 'Motor Show' was called the 'Motor Show and Motorbike Show'. In 1993, the Motorbike and Bicycle Show merged into an event entitled 'The Two-Wheeler Show'. In 2011, at Porte de Versailles, the show became 'The Paris Motorbike, Scooter and Quad Show'.





# MONDIAL

PARIS MOTOR SHOW













from 4 to 14 october 2018





