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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 $\mathrm{CO}_{2}$ 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.



TELEPHONE: $33149525100 \cdot F A X:+33147237473 \cdot$ WEBSITE: www.ccfa.fr - E-MAIL: ccfa@ccfa.fir

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 lle-de-France
GERPISA: Groupe d'Etudes et de Recherches Permanents sur I'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)
UIMIM: 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 Workers)
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 AUTOMOTIUE 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.

|  | 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).


More reyistrations of vehicles made by French automakers in Westchn Enrope since 2018

# a global automotive market in growth, renewed buoyancy BUT STILL WITH CONTRASTING LOCAL TRENDS 

|  | Units | 2015 | 2016 | $\begin{array}{r} \text { Change } \\ 2016 / 2015 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: |
| 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 Renault 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 |
| World key figures for french manufacturers (PSA and Renault Groups) |  |  |  |  |
| 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 |

(1) ALENA: Canada, USA, Mexico
(2) ASEAN: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines,

Singapore, Thailand, Vietnam
Source: OICA, CCFA estimates for June 2017.

CHANGES IN WORLD MOTOR VEHICLE PRODUCTION
SINCE 1990
In thousands of units



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).



MARKETS OF FRENCH MANUFACTURERS OUTSIDE EU-17:
ALL VEHICLES


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 MARKETS OF FRENCH MANUFACTURERS: EVOLUTION COMPARED WITH 1997


## WORLD RANKINGS OF AUTOMOBILE 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 TRUCKSRENAULT TRUCKS-MACK | 216 | 200 | -7.5 |
| 39 | ĀSHOK LEYLAN̄D | 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.

Sources: OICA, CCFA estimates July 2017


SHARE OF THE HOME REGION OF THE MANUFACTURER As a \% AS A PERCENTAGE OF ITS TOTAL PRODUCTION


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 ( $-1 \% / 4^{\text {th }}$ ranking) and Nissan ( $+8 \% / 6^{\text {th }}$ ranking) not moving in the rankings. Honda (+10\%/7 $7^{\text {th }}$ rank) moved up, Suzuki-Maruti down ( $-3 \% / 11^{\text {th }}$ 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 WORID'S LEADING AUTOMOTIIE REEIONS 



Percentaye of vehictes manuriactured
for export in Japan in 2016

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, Canada and Mexico (3) |  | Japan |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PASSENGER CARS |  |  |  |  |  |  |
| 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 | 117 |
| 2000 | 14,779 | 100 | 7,092 | 100 | 8,359 | 100 |
| 2010 | 15,260 | 103 | 5,084 | 72 | 8,310 | 99 |
| 2016 | 16,783 | 114 | 6,730 | 95 | 7,874 | 94 |
| IMPORTS (2) | In thousands | Share of production | In thousands | Share of production | In thousands | Share of production |
| 1990 | 1,495 | 12\% | 3,029 | 42\% | 186 | 2\% |
| 2000 | 2,629 | 18\% | 2,225 | 31\% | 268 | 3\% |
| 2010 | 1,900 | 12\% | 2,310 | 45\% | 186 | 2\% |
| 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 | 45\% |
| 2010 | 3,400 | 22\% | 857 | 17\% | 4,275 | 51\% |
| 2016 | 6,205 | 37\% | 1,574 | 23\% | 4,118 | 52\% |
| LIGHT COMMERCIAL 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 | 199 |
| 2000 | 2,327 | 100 | 8,669 | 100 | 1,782 | 100 |
| 2010 | 1,819 | 78 | 7,089 | 82 | 1,319 | 74 |
| 2016 | 2,482 | 107 | 11,146 | 129 | 1,374 | 77 |
| IMPORTS (2) | In thousands | Share of production | In thousands | Share of production | In thousands | Share of production |
| 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 | 0\% |
| EXPORTS (2) | In thousands | Share of production | In thousands | Share of production | In thousands | Share of production |
| 1990 | 179 | 11\% | 32 | 1\% | 1,349 | 38\% |
| 2000 | 248 | 11\% | 339 | 4\% | 659 | 37\% |
| 2010 | 330 | 18\% | 177 | 2\% | 566 | 43\% |
| 2016 | 529 | 21\% | 244 | 2\% | 516 | 38\% |

(1) 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

|  | 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 $62 \%$.


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.

|  | Passenger cars |  |  |  | Light commercial vehicles |  |  |  | Total |  | Change 2016/2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2015 |  | 2016 |  | 2015 |  | 2016 |  | 2015 | 2016 |  |
|  | 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\% |  |  |  | $4.4 \%$ |  |  |  | $4.6 \%$ |  |  |

(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.

|  | Total |  | Change 2015/2014 |
| :---: | :---: | :---: | :---: |
|  | 2014 | 2015 |  |
|  | 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 <br> (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)

$\square 2005$ ■ (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 $\$ 73$ bn 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 \$24 bn). Russian imports halved compared to 2015, at $\$ 16 \mathrm{bn}$.


Total glohal trading in automotive industry productis in 2015

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

| Areas | World |  |  | USA and Canada, later North America (1) |  |  | European Union (2) |  |  | Japan |  |  | Other countries (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. HONG-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 |  |  | 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 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 $€ 32 \mathrm{bn}$. 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 $\$ 292 \mathrm{bn}$; 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.




As a \%

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.


MARKET SHARES OF COUNTRIES ON THE NEW PASSENGER CAR MARKET

(1) Austria, Belgium-Luxembourg, Denmark, Finland, Norway, The Netherlands, Sweden, Switzerland
(2) Portugal, Greece, Ireland

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 and sedan). They regularly renew existing models (C3 3008 and Mégane (Scenic) in 2016).


| Groups | Brands | Economy and low ranges | Low-mid range | High-mid range | Premium range |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PSA GROUP | CITROËN | C-Zéro, C1, C3 (Picasso), C4-Cactus, Nemo, Berlingo, E-Mehari | C4 (Picasso), C4 Air Cross, Jumpy, SpaceTourer, Jumper | C5, C-Elysée |  |
|  | DS | DS3 | DS4 | DS5 |  |
|  | PEUGEOT | iOn, 108, 208, 2008, Bipper, Partner | 308, RCZ, 3008, 4008, 5008, Expert, Traveller, Boxer | 508, 301 |  |
| RENAULT GROUP | RENAULT | Twingo, Clio, Captur, Kangoo, ZOE | Mégane (Scénic), Fluence, Master | Trafic, Kadjar, Koleos | Espace, Talisman |
|  | DACIA | Logan, Sandero, Duster, Dokker | Lodgy |  |  |
| BMW | BMW | i3 | 1,2 Series | 4, X1 Series | $\begin{aligned} & \hline 3,5,6,7, X 3, X 4, X 5, X 6, Z 4, \\ & \text { I8 Series } \end{aligned}$ |
|  | MINI | Mini |  |  |  |
| DAIMLER | MERCEDES | Citan | A, B, CLA Classes, Vito | GLA | C, E, S, GL, SL, CLS, SLK, <br> GLC, GLE Classes |
|  | SMART | fortwo, forfour |  |  |  |
| FIAT | ALFA ROMEO | Mito | Guiletta |  | Giulia, 4C |
|  | FIAT | Panda, 500, Punto, Fiorino, Doblo, Qubo | Ducato, Tipo | Freemont, Talento |  |
|  | JEEP | Renegade |  | Wrangler, Compass, Cherokee | Grand Cherokee |
|  | LANCIA | Ypsilon | Delta |  | Thema, Voyager |
| FORD EUROPE | FORD | Ka, Fiesta, B-Max, T. Courier, <br> T. Connect, Ecosport | Focus, (Grand) C-Max, Kuga, Transit, T. Custom | Mondeo | Mustang, Galaxy, S-Max, Edge |
| GEELY | VOLVO |  |  | V40 | $\begin{aligned} & \text { S60, S80, V60, V70, C70, } \\ & \text { XC60, XC70, XC90 } \\ & \hline \end{aligned}$ |
| 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 GROUP | JAGUAR |  |  |  | XE, XF, XJ, XK, F-TYPE |
|  | LAND ROVER |  |  | Freelander, RR Evoque | Discovery, Range Rover |
| TOYOTA | LEXUS |  | CT |  | GS, IS, LS, RX, NX |
|  | TOYOTA | IQ, Aygo, Yaris, Verso-S | Verso, Auris, Corolla | Avensis, Prius, CH-R, RAV4 | GT86, Land Cruiser |
| VOLKSWAGEN GROUP | AUDI | A1, S1 | A3, S3 | A4, A5, TT, Q3 | A6, A7, A8, Q5, Q7 |
|  | PORSCHE |  |  |  | 911, Boxster, Cayman, Macan, Cayenne, Panamera |
|  | SEAT | Mii, Ibiza | Leon, Altea | Toledo, Exeo | Alhambra |
|  | SKODA | Citigo, Roomster, Yeti | Fabia, Rapid | Octavia | Superb |
|  | VOLKSWAGEN | Up!, Polo, Caddy | Golf, Jetta, New Beetle, Touran, Eos, Crafter | Passat, Scirocco, Tiguan, Transporter | Sharan, Phaeton, Touareg |

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# 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 | Convertibles | 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 NETHERLANDS | 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 <br> 17 COUNTRIES | 41 | 28 | 18 | 13 | 0 | 48 | 11 | 1 | 1 | 11 | 28 |

Source: CCFA

As a \%
BREAKDOWN OF NEW PASSENGER CAR REGISTRATIONS of the total market 50

$\square 1990 \square 2000 \square 2006 \square 2015 \square 2016$

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.


- 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.


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 |
| :---: | :---: | :---: | :---: | :---: |
|  | cc | 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 cm 3 between 2007 and 2016. On the other hand, the average power rating has increased 6 kW since 2013, to 96 kW . These indicators tend to be higher in Northern Europe.

The share of $4 \times 4 \mathrm{~s}$ 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
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 50\%.

- 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.


Share of vehicles in use in Western Europe that were over ten years old in 2016


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.

LIGHT COMMERCIAL VEHICLE REGISTRATIONS IN EUROPE
In millions of units
(17 COUNTRIES)


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


FRENCH MARKET SHARE

## As a \% of total market


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

MARKET SHARE OF FRENCH MANUFACTURERS IN MAJOR EUROPEAN COUNTRIES
As a \%


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 $16,000 \mathrm{~km} /$ 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 level.

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.


Level of reyistrations of new commercial vehicles in Westerin Europe in 2016

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

|  | 2005 | 2014 | 2015 | 2016 | Change <br> 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 PRODUCTION |  |  |  |  |  |
| 5.1t to 15,9t | 113 |  |  |  |  |
| 16t and over | 339 |  |  |  |  |
| TOTAL | 453 | 400 | 430 | 490 | $14 \%$ |

NEW HEAVY TRUCK REGISTRATIONS IN EUROPE


RENAULT TRUCKS' MARKET SHARE IN THE MAIN EUROPEAN COUNTRIES As a \%


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.


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.

REGISTRATIONS OF NEW LIGHT VEHICLES (UP TO 5T GVWR)


FRENCH MANUFACTURERS MARKET SHARE: NEW LIGHT COMMERCIAL VEHICLES


FRENCH MANUFACTURER MARKET SHARE: NEW HEAVY TRUCKS


- 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 |  |  |  |
| NEW VEHICLE REGISTRATIONS |  |  |  |
| 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

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.

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\%).

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 fall in stafif numbers in the
automotive industry in Western
Elirope from 2005 to 2014

- THE AUTOMOTIVE INDUSTRY IN THE EU 28 IN 2014 (1)

|  | Units | Eur. union $(28$ countries) | Germany | France | $\begin{array}{\|r} 6 \text { new EU } \\ \text { members (2) } \end{array}$ | United <br> 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.

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

|  | Units | PSA Group | Renault Group |
| :--- | :--- | ---: | ---: |
| Sales | € millions | $\mathbf{5 4 , 0 3 0}$ | $\mathbf{5 1 , 2 4 3}$ |
| Capital expenditures | € millions | $\mathbf{2 , 1 0 7}$ | $\mathbf{2 , 0 3 9}$ |
| Net income | $€$ millions | $\mathbf{2 , 1 4 9}$ | $\mathbf{3 , 5 4 3}$ |
| Employees worldwide (1) | no. of people | $\mathbf{1 7 0 , 1 5 6}$ | $\mathbf{1 2 4 , 8 4 9}$ |
| of which France | no. of people | $\mathbf{7 2 , 7 4 5}$ | $\mathbf{4 6 , 2 4 0}$ |

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-surOrne (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 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Automotive activity: Peugeot and Citroën | Automotive equipment: Faurecia | Financing: PSA Finance | Others | Eliminations | Automotive sector | Financial 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 |  |

(1) On December 31.
(2) 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 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)

Russīa
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

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)


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

## Ethionia

44 Wukro
Kenya
45 (URYSIA) (project)
Moroceo
46 Kenitra (project)
47 Casablanca
48 Tanger
Nigeria
49 Kaduna (PAN Nigéria Ltd)
Tunisia
50 Tunis (STAFIM) (project)

China
51 Chengdu
52 Shenzhen
53 Wuhan
54 Wuhan Japan
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)

65 Mizushima (Mitsubishi) 66 Okazaki (Mitsubishi)

## Kazakhstan

67 Koustanaï
Malaysia
68 Gurun 69 Tan Chong Motors (projet)

## Uzhekistan

70 Jizzakh
(SC Uzavtosanoat) (project)
Vietnam
71 Chulai (Thaco)

# WORLD PRODUCTION OF FRENCH MANUFACTURERS 



## Vehicles produced by French automohile manufacturers worlthitite 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 |  |  |  |  |
| Peugeot, Citroën | iOn, 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 | 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 | 2,680,943 / 3,169,452 |
| Peugeot, Citroën | Expert, Jumpy | 2016 | Hordain | 632,804 / 582,442 |
| Peugeot, Citroën | Traveller, Spacetourer | 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 | 2011 | 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


NEW LIGHT COMMERCIAL VEHICLES
In thousands of units (UP TO 5T)

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


## - 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\%).


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.


ADDED VALUE PRODUCED BY THE AUTOMOTIVE MANUFACTURING In 2015 € thousands per employee


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 FRANGE'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 THEREGIONS

|  | Direct | indirect | Induced | Reference |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Regions | jobs | jobs | jobs | year | 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, | 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 lle de France - A la page nb |
| Val d'Oise and Yvelines | 75,000 | 75,000 | $\begin{array}{r} \text { between } \\ 50,000 \\ \text { and } \\ 100,000 \\ \hline \end{array}$ | 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 lle 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 Ile 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 INDUSTRY 

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 $\mathrm{n}^{\circ} 25$ of October 2015 and 'Ideas for...' $n^{\circ} 06$ of February 2017), production costs could also be decreased by reducing taxation on production.


Difiference hetween France
and Germany for hourty lathor costs
in manufacturing
helween 2000 and 2015,
to France's ilisadvantage

LABOR COSTS IN MANUFACTURING INDUSTRY


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.

## COMPETITIUE 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


Source: CCFA


EURO EXCHANGE RATE VARIATION


RAW MATERIAL PRICES IN EURO



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
Base 100 in 2010


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 2 L 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 TAK 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).


## The first year of existence of the Automotive Future Finnd

- INVESTMENT FUNDS

FSI and FMEA

The strategic investment fund (FSI) (created in November 2008) became 'Bpifrance Participations' in 2013 when Bpifrance was created.

Fund for the modernisation of automotive equipment manufacturers (FMEA) (created in January 2009 and which in January 2015 became the 'automotive future fund').

## Objectives and attributions

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
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 $€ 5-€ 60 \mathrm{~m}$.'
'Initial allocation of $€ 600 \mathrm{~m}$ equally shared between PSA, Renault SA and FSI (now Bpirfrance Participations).

Automotive future fund (FAA) (since January 2015)

Automotive future fund (FAA)

Automotive future fund (FAA) Tier 2

## Objectives and attributions

$€ 600 \mathrm{~m}$ distributed equally between three subscribers (Bpifrance, Renault, PSA) to accompany Tier 1 supplier projects, investing amounts between $€ 5 \mathrm{~m}$ and $€ 60 \mathrm{~m}$.
$€ 50 \mathrm{~m}$ 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 $€ 1 \mathrm{~m}$ and $€ 5 \mathrm{~m}$.

## 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 $€ 400 \mathrm{~m}$ and the FSI over $€ 200 \mathrm{~m}$, invested $€ 330 \mathrm{~m}$ 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; $€ 750 \mathrm{~m}$ 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 $€ 300 \mathrm{~m}$, 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 $€ 110 \mathrm{~m}$ 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. $€ 332 \mathrm{~m}$.

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)in $€$ millions | ERDS (2) <br> in $€$ millions | Total budget |  | Of which public financing (3) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 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

(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).

AUTOMOTIVE INDUSTRY RESEARCH AND DEVELOPMENT SPENDING


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.


Number of companies that had a husiness unit helonging to a competitiveness chlusterin2013.

- 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 (FUl 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-RhôneAlpes 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 20162020 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.


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.

[^1]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 $120,000 \mathrm{~km}$ 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 AUTOMOTIUE 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
( $€ 8.6 \mathrm{bn}$ ). The balance of the automotive industry branch was €-9.7 bn.

The positive balance of the 'parts and engines' item fell again ( $-30 \%$ to $€ 3.4 \mathrm{bn}$ ), but exports grew $2 \%$ to $€ 22 \mathrm{bn}$. 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 |  |

(1) Not including military equipment.
(2) Exports / imports $\times 100$.

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.

## - EXPORTER RANKINGS - YEAR 2015

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



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 ( $€+0.8 \mathrm{bn}$ ), 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 ( $€ 2.4 \mathrm{bn}$ ).

## FRENCH AUTOMOTIUE 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 ( $€ 2.5 \mathrm{bn}$ ) and Italy ( $€ 2.2 \mathrm{bn}$ ). Algeria ranked seventeenth with $€ 144 \mathrm{~m}$ 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 ( $€ 477 \mathrm{~m}$ ) and Brazil ( $€ 349 \mathrm{~m}$ ) were respectively eleventh and fourteenth. Brazil's total was again in sharp decline.

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


- LEADING DESTINATIONS OF AUTOMOTIVE EXPORTS FROM FRANCE

NEW PASSENGER CARS


NEW HEAVY TRUCKS (INCLUDING COACHES AND BUSES)


Sources: Customs data processed by CCFA


Leading husiness partiner of the automotive industry in France

In $€$ millions
NEW LIGHT COMMERCIAL VEHICLES



## 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 $14 \%$.


The reatration in the nercentege of new diesel nowered nassenyer eats reyistered in France compared with 2012

## - DIESEL PASSENGER CARS

|  | 1990 | 2000 | 2005 | 2010 | 2015 | 2016 | $\begin{aligned} & \text { \% change } \\ & 2016 / 2015 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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\% |  |
| EXPORTS |  |  |  |  |  |  |  |
| In units | 292,061 | 975,038 | 1,500,989 | 1,346,022 | 1,452,186 | 1,492,686 | +2.8 |
| As a \% of total exports | 15.5\% | 33.7\% | 39.1\% | 31.3\% | 34.9\% | 32.4\% |  |
| REGISTRATIONS |  |  |  |  |  |  |  |
| In units | 762,054 | 1,046,485 | 1,466,296 | 1,593,173 | 1,097,124 | 1,050,418 | -4.3 |
| As a \% of total registrations | 33.0\% | 49.0\% | 69.2\% | 70.8\% | 57.2\% | 54.8\% |  |
| CARS IN USE |  |  |  |  |  |  |  |
| In units | 3,775,000 | 9,980,000 | 14,348,000 | 18,165,000 | 19,900,000 | 19,938,000 | +0.2 |
| As a \% of all cars in use | 16.0\% | 35.6\% | 47.7\% | 58.0\% | 62.2\% | 61.6\% |  |

Source: CCFA.

- ELECTRIC AND HYBRID PASSENGER CAR REGISTRATIONS

|  | 2009 |  | 2010 |  | 2011 |  | 2012 |  | 2013 |  | 2014 |  | 2015 |  | 2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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\% |

$\rightarrow$ 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 | $\mathbf{2 . 8}$ |
| 9 | DACIA | Duster | 2.5 |
| 10 | PEUGEOT | 2008 | $\mathbf{2 . 3}$ |



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 REEISTRATIONS 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 $28 \%$ ).

- RANKINGS OF MAIN NEW

PASSENGER MODELS IN 2016

| Rank | Brand | Model | \% market |
| :--- | :--- | :--- | ---: |
| 1 | Renault | Clio | 5.6 |
| 2 | Peugeot | 208 | 4.9 |
| 3 | Renault | Megane | 4.5 |
| 4 | Peugeot | 308 | 3.7 |
| 5 | Citroen | C3 | 3.7 |
| 6 | Renault | Captur | 3.5 |
| 7 | Peugeot | 2008 | 3.3 |
| 8 | Citroen | C4 | 3.2 |
| 9 | Dacia | Sandero | 2.8 |
| 10 | Fiat | 500 | 2.2 |
| 11 | Volkswagen | Golf | 2.1 |
| 12 | Renault | Twingo | 2.0 |
| 13 | Volkswagen | Polo | 2.0 |
| 14 | Peugeot | 3008 | 1.9 |
| 15 | Renault | Kadjar | 1.9 |
| 16 | Dacia | Duster | 1.8 |
| 17 | Toyota | Yaris | 1.5 |
| 18 | Mini | Mini | 1.2 |
| 19 | Nissan | Qashqai | 1.2 |
| 20 | Ford | Fiesta | 1.2 |
| 21 | Opel | Corsa | 1.0 |
| 24 | Citroen | C4 Cactus | 1.0 |
| 22 | Volkswagen | Tiguan | 1.0 |
| 23 | Peugeot | 508 | 0.9 |
| 25 | Opel | Mokka | 0.9 |
| 26 | Ford | Focus | 0.9 |
| 27 | DS | DS3 | 0.8 |
| 28 | Audi | A3 | 0.8 |
| 29 | Volkswagen | Touran | 0.8 |
| 30 | Renault | Talisman | 0.8 |
|  |  |  |  |
|  |  |  |  |

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).


$\square 1990 \square 2000 \square 2010 \square 2015 \square 2016$

- NEW PASSENGER CAR REGISTRATIONS BY RANGE

| Range | 1990 |  | 2000 |  | 2010 |  | 2015 |  | 2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | units | \% | units | \% | units | \% | units | \% | 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 | 1990 |  | 2000 |  | 2010 |  | 2015 |  | 2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 |

## 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.


Share of vehicles over 10 years old reyistered in 2016

- 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 |
|  | \% 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\% |

Source: CCFA


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 $2.3 \%$.


Number of new vehicles registered overseas in 2016

| 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

In number of vehicles


FRENCH MANUFACTURER MARKET SHARE IN FRENCH OVERSEAS DEPARTMENTS (NEW PASSENGER CARS)
As a \% of the total market


PASSENGER CARS: USED/NEW RATIO


## 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 25 s have cars, compared to $65 \%$ in 2010 and $49 \%$ in 2000.

- CAR OWNERSHIP RATE (HOUSEHOLDS WITH AT LEAST ONE CAR) (ASA \%)

|  | 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\% |  | 60.4\% | 61.5\% | 63.6\% |  |
| 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.

CAR OWNERSHIP BASED ON AREA


## 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 2000 s 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 $106,000 \mathrm{~km}$, i.e. $13,000 \mathrm{~km}$ more than in 2000 and $37,000 \mathrm{~km}$ more than in 1990. Average mileage for diesel cars, which are used more and more each year, has increased to $118,800 \mathrm{~km}$; petrol cars are used less intensely and are down to $84,700 \mathrm{~km}$.


Shares of vehicles used on a daily [or almost daily] hasis

- 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 |
| BREAKDOWN BY POWER CATEGORY FOR TAX PURPOSES |  |  |  |  |  |  |  |  |
| 2 and 3 HP | \% | 12.3 | 3.4 | 1.6 | 0.7 |  |  |  |
| 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 |  |  |  |
| 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 $18 \%$.

VEHICLE USE


## DOMESTIC PASSENGER TRANSPORT



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.


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 FREICHT 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



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 



Dedine in the share of diesel engines in Francer's private car maxtetin2016

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

|  | Units | 1990 | 2000 | 2015 | 2016 | Average annual change as a \% |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 05/90 | 16/05 | 16/15 |
| TOTAL VEHICLES (ANNUAL AVERAGES) | thousands of vehicles | 28,106 | 33,464 | 38,562 | 38888 | +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 <br> (ALL ROAD TRANSPORTATION) | millions of litres |  |  |  |  |  |  |  |
| 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 leadfree 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 CO2 EMISSIONS 



Since 1990, traffic of French and foreign vehicles in France has increased by 43\%; the associated $\mathrm{CO}_{2}$ 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 $\mathrm{CO}_{2}$ 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 $\mathrm{CO}_{2}$ EMISSIONS NET OF RENEWABLE ENERGY SOURCES


Sources: CITEPA and Traffic Statistics
AVERAGE KILOMETRES COVERED PER YEAR BY A PASSENGER CAR In thousands of km


Source: Traffic Statistics
CHANGE IN TRANSPORT ENERGY EFFICIENCY (2)
Base 100 in 1990


Sources: MEDDE/SOeS, CCFA calculations
(2) Energy efficiency relates to the change in the amount of $\mathrm{CO}_{2}$ 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 $\mathrm{CO}_{2}$ 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 21 st 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.

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


## 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.

SURVEY ON CAR-POOLING OVER THE PAST 12 MONTHS


■ $2012 \square 2013 \square 2014 \square 2015$
Source: PARCAUTO TNS SOFRES, processed by CCFA and IFSTTAR

## 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.


MAIN REASONS FOR CAR-POOLING

Source : 6t survey for ADEME, 2015

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 



- 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 | Passenger road transport (buses, coaches and taxis) | Including passenger transport by buses and coaches | Including passenger transport by taxi or rental car with driver | Passenger <br> 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.


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 $-2 \%$.
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.

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


FREIGHT TRANSPORT INDICES IN FRANCE


FREIGHT TRANSPORT INDICES IN FRANCE: ROAD



FREIGHT TRANSPORT INDICES IN FRANCE: RAIL AND FLUVIAL

(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 quintile.


SHARE OF FUEL IN HOUSEHOLD CONSUMPTION, INCLUDING HOUSEHOLDS



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 $5^{\text {th }}$ 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.

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 GUB intexfor long-haul road merchandise transport eosts 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 longhaul 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
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 | Fuel prices |
| :---: | :---: | :---: | :---: | :---: |
| 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


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 secondhand 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 totel 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 secondhand 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 |  | 24,140 |  | 28,245 |  | 28,410 |  | +0.6\% |
| Spending on passenger cars per household | euros | 3,685 |  | 4,348 |  | 4,788 |  | 4,899 |  | +2.3\% |
| Spending on passenger cars per vehicle-owning household | euros | 4,818 |  | 5,414 |  | 5,776 |  | 5,909 |  | +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.

TOTAL AMOUNTS OVER TWELVE MONTHS OF NEW CONSUMER LOANS TO INDIVIDUALS
INTEREST RATES OF NEW CONSUMER LOANS TO INDIVIDUALS (NOT INCLUDING OVERDRAFTS, As a \% ANNUAL INTEREST RATE)


J2004 J2005 J2007 J2009 J2011 J2013 J2015 J2017



Share of rental
with or without option to huy for ears hought new by hourseholis in France in 2016


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 11\%.

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 $€ 21 \mathrm{bn}$. 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.

- LIGHT VEHICLE SALES NETWORKS IN FRANCE ON JANUARY 1, 2015

| Brands | Primary <br> dealership |
| :--- | ---: |
| Renault | 683 |
| Peugeot | 421 |
| Citroën | $\mathbf{4 2 8}$ |
| French brands | 1,532 |
| Ford | 291 |
| Opel | $\mathbf{2 5 0}$ |
| Fiat | 186 |
| Volkswagen | $\mathbf{3 2 0}$ |
| BMW | $\mathbf{1 5 3}$ |
| Mercedes-Benz | 170 |
| Japanese Brands | $\mathbf{1 , 1 3 3}$ |
| Korean brands | $\mathbf{4 5 7}$ |
| Other brands | $\mathbf{1 , 5 1 8}$ |
| TOTAL | 6,010 |

Sources: CNPA, CCFA


Retail sales of automobile equipment also benefited from this trend, growing 3.8\% compared to 2015.

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 period.

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 $945,000 \mathrm{NV}$ s for a turnover of $€ 31.9$ bn ex-VAT.

REVENUE FROM CARS AND MOTORCYCLES SALES AND REPAIRS
(IN CURRENT $\in$ BILLIONS, INCLUDING VAT) (IN CURRENT $€$ BILLIONS, INCLUDING VAT)

| Activity | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | Change <br> $2016-2015$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Motor <br> vehicle sales | 71.7 | 74.3 | 78.0 | 73.2 | 71.2 | 72.9 | 77.0 | 82.8 | $7.6 \%$ |

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

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).


Net turinover, in 2016, recoril year,
of car sales and repairs in France, aceoring tolins:

## 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.


EIV mrocessed in 2015

- 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


Re-use and reinjection rate within the automotive Sector ill 2015

[^2]

Source: ADEME

# PRODUCTION OF THE AUTOMOTIVE INDUSTRY AND ITS ECONOMIC IMPACT 



## Increase in total antomotive sector purchases hetwecn 2013 and 2015

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 TOTALPURCHASES)

|  |  | 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 | $\begin{array}{r} \text { Current } € \\ \text { billion } \end{array}$ | 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 |

(1) These data are provisional
(2) 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)

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\%).

## AUTOMOTIVE OEMS AND SUPPLIERS



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 (IN THOUSANDS)

| Activity | Employees (1) |
| :--- | ---: |
| Assemblers or engine makers | 126 |
| OEMs | 66 |
| Metal products | $\mathbf{5 0}$ |
| Manufacture of rubber and plastic products | $\mathbf{4 8}$ |
| Metallurgy | $\mathbf{3 8}$ |
| Manufacture of IT, electronic and optical products | 26 |
| Production of mechanical parts | 26 |
| Production of electrical equipment | 18 |
| Body builders or developers | 19 |
| Chemicals | $\mathbf{1 6}$ |
| Production of glass products | $\mathbf{5}$ |
| Textiles | $\mathbf{2}$ |
| Refined oil products | $\mathbf{1}$ |
| Production leather items | $\mathbf{0}$ |


(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)

|  | 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 $1^{\text {ST }} 2014$


Source: INSEE
(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 \%).


## 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 <br> 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 |

(1) 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 REEION 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 | 0 | 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 | 0 | 3,237 | 1,830 | 665 | 7,890 |
| Hyundai-Kia | 857 | 162 | 702 | 437 | 0 | 3,237 | 1,830 | 665 | 7,890 |
| Chinese manufacturers | 0 | 0 | 454 | 0 | 0 | 0 | 14,120 | 1 | 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 | 0 | 546 | 0 | 0 | 165 | 0 | 1,208 | 1,919 |
| TATA | 0 | 0 | 546 | 0 | 0 | 9 | 0 | 529 | 1,085 |
| ALL MANUFACTURERS QUOTAD 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 | $\begin{array}{r} \text { European } \\ \text { union } \\ 28 \text { countries } \end{array}$ | 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 (INUNITS)

|  | 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\% |  |

(1) 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)

| PSA GROUP | 2005 (2) | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2,111 | 1,849 | 1,689 | 1,471 | 1,345 | 1,395 | 1,479 | 1,471 |
|  | 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 |
|  | 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 |
|  | 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 |
|  | 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 |
|  | 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 |
|  | 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 |
|  | 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 |
|  | 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 |
|  | 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 |
|  | 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 |
|  | 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 |
|  | 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 |
|  | 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\% |
|  | 331 | 266 | 279 | 240 | 233 | 258 | 299 | 328 |
| RENAULT GROUP | 15.4\% | 17.0\% | 16.5\% | 16.3\% | 15.9\% | 15.9\% | 16.5\% | 16.3\% |
|  | 284 | 233 | 246 | 197 | 195 | 207 | 229 | 272 |
| FCA Group | 13.2\% | 14.9\% | 14.5\% | 13.4\% | 13.3\% | 12.8\% | 12.7\% | 13.5\% |
|  | 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 |
| General Motors | 7.1\% | 5.0\% | 5.5\% | 5.2\% | 5.1\% | 5.2\% | 5.7\% | 5.2\% |
|  | 212 | 185 | 215 | 213 | 208 | 225 | 218 | 242 |
| Voikswagen Group | 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 |
| Daimier | 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 |
| Nissan | 4.8\% | 2.7\% | 3.2\% | 3.3\% | 3.1\% | 2.9\% | 2.7\% | 3.3\% |
|  | 65 | 39 | 42 | 34 | 31 | 38 | 41 | 39 |
| Toyota-Lexus-Daihatsu | 3.0\% | 2.5\% | 2.5\% | 2.3\% | 2.1\% | 2.3\% | 2.3\% | 2.0\% |
| Other Japanese 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 |
| Hyundai-Kia | 2.4\% | 0.4\% | 0.3\% | 0.3\% | 0.2\% | 0.2\% | 0.2\% | 0.3\% |
| her brands (including MG-Rover. Saab) | 78 | 27 | 31 | 29 | 27 | 30 | 35 | 26 |
| her 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 |
|  | 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\% |

(1) For the scope of the new EU member states, see page 73.
(2) Not including Bulgaria in 2005.

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.

# REGISTRATIONS 

- 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 | $\begin{array}{r} \text { PSA } \\ \text { Group } \end{array}$ | Citroën and DS | Peugeot | Renault Group | Fiat <br> Group <br> (including <br> 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\% | 3.3\% | 1.6\% | 1.7\% | 5.2\% | 3.0\% | 37.6\% | 7.2\% | 7.3\% | 9.2\% | 10.4\% | 9.3\% | 5.1\% |
| Austria | 330 | 18 | 8 | 10 | 27 | 19 | 114 | 19 | 23 | 22 | 17 | 37 | 26 |
|  | 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\% | 12.1\% | 5.2\% | 7.0\% | 13.6\% | 3.6\% | 21.3\% | 4.7\% | 7.1\% | 8.8\% | 6.5\% | 10.4\% | 6.4\% |
| Denmark | 223 | 35 | 13 | 22 | 18 | 3 | 54 | 14 | 14 | 6 | 9 | 44 | 21 |
|  | 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\% | 13.0\% | 5.7\% | 7.3\% | 11.8\% | 5.2\% | 21.3\% | 5.2\% | 7.8\% | 4.9\% | 4.6\% | 14.3\% | 9.4\% |
| Finland | 119 | 4 | 2 | 2 | 6 | 1 | 33 | 10 | 7 | 5 | 6 | 29 | 10 |
|  | 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 |
|  | 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 | 9 | 4 | 6 | 4 | 6 | 12 | 4 | 7 | 5 | 5 | 22 | 2 |
|  | 100\% | 11.9\% | 4.8\% | 7.1\% | 4.6\% | 8.1\% | 15.6\% | 4.7\% | 9.1\% | 6.9\% | 6.7\% | 27.9\% | 2.6\% |
| Ireland | 147 | 6 | 1 | 4 | 13 | 1 | 34 | 15 | 8 | 6 | 4 | 35 | 22 |
|  | 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 | 4 | 2 | 2 | 5 | 2 | 14 | 2 | 2 | 6 | 5 | 4 | 3 |
|  | 100\% | 8.4\% | 3.6\% | 4.8\% | 10.3\% | 4.7\% | 26.8\% | 4.8\% | 4.7\% | 12.3\% | 9.6\% | 8.0\% | 5.2\% |
| The Netherlands | 383 | 42 | 14 | 28 | 39 | 14 | 83 | 21 | 33 | 25 | 17 | 57 | 31 |
|  | 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\% | 14.7\% | 5.1\% | 9.6\% | 15.1\% | 5.4\% | 18.3\% | 3.9\% | 5.8\% | 8.1\% | 8.8\% | 13.4\% | 3.6\% |
| United Kingdom | 2,693 | 177 | 79 | 99 | 112 | 86 | 528 | 318 | 251 | 252 | 182 | 432 | 186 |
|  | 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\% |
| Sweden | 372 | 16 | 5 | 11 | 20 | 8 | 104 | 13 | 8 | 25 | 17 | 56 | 32 |
|  | 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. (15 countries) | 13,479 | 1,383 | 572 | 812 | 1,343 | 944 | 3,135 | 953 | 901 | 952 | 882 | 1,660 | 822 |
|  | 100\% | 10.3\% | 4.2\% | 6.0\% | 10.0\% | 7.0\% | 23.3\% | 7.1\% | 6.7\% | 7.1\% | 6.5\% | 12.3\% | 6.1\% |
| Norway | 155 | 7 | 2 | 5 | 3 | 0 | 42 | 8 | 4 | 13 | 9 | 48 | 7 |
|  | 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 <br> (17 countries) | 13,949 | 1,410 | 583 | 827 | 1,368 | 959 | 3,274 | 974 | 919 | 995 | 918 | 1,757 | 845 |
|  | 100\% | 10.1\% | 4.2\% | 5.9\% | 9.8\% | 6.9\% | 23.5\% | 7.0\% | 6.6\% | 7.1\% | 6.6\% | 12.6\% | 6.1\% |
| Bulgaria | 28 | 2 | 1 | 2 | 6 | 0 | 6 | 2 | 1 | 1 | 0 | 5 | 2 |
|  | 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\% | 6.4\% | 9.4\% | 3.4\% | 3.4\% | 15.5\% | 8.3\% |
| Estonia | 23 | 2 | 1 | 1 | 3 | 0 | 5 | 1 | 1 | 1 | 0 | 8 | 2 |
|  | 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 |
|  | 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 | 1 | 1 | 1 | 1 | 1 | 4 | 1 | 1 | 0 | 0 | 4 | 1 |
|  | 100\% | 8.0\% | 3.5\% | 4.5\% | 5.6\% | 4.1\% | 24.5\% | 6.7\% | 5.9\% | 3.0\% | 2.3\% | 26.8\% | 8.2\% |
| Lithuania | 20 | 1 | 0 | 0 | 1 | 4 | 5 | 1 | 1 | 1 | 0 | 5 | 1 |
|  | 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 |
|  | 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 | 14 | 5 | 8 | 23 | 5 | 122 | 15 | 8 | 7 | 8 | 23 | 30 |
|  | 100\% | 5.2\% | 2.1\% | 3.1\% | 8.7\% | 1.8\% | 47.1\% | 5.8\% | 3.3\% | 2.7\% | 2.9\% | 8.9\% | 11.5\% |
| Romania | 95 | 3 | 1 | 3 | 35 | 2 | 20 | 7 | 5 | 3 | 4 | 10 | 6 |
|  | 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 | 6 | 3 | 3 | 9 | 3 | 20 | 2 | 5 | 2 | 1 | 6 | 4 |
|  | 100\% | 9.7\% | 4.5\% | 5.2\% | 14.9\% | 5.0\% | 33.9\% | 4.0\% | 8.1\% | 4.0\% | 2.1\% | 10.3\% | 7.5\% |
| 11 new EU members | 1,148 | 61 | 24 | 37 | 141 | 34 | 361 | 73 | 75 | 37 | 34 | 200 | 108 |
|  | 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(28 countries) | 15,097 | 1,471 | 607 | 864 | 1,509 | 993 | 3,635 | 1,047 | 994 | 1,031 | 952 | 1,957 | 953 |
|  | 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\% |

[^3]
## REGISTRATIONS

- 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.

| PSA GROUP | 1990 | 2000 | 2010 (1) | 2012 | 2013 | 2014 | 2015 | 2016 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1,719 | 1,930 | 1,776 | 1,407 | 1,282 | 1,332 | 1,422 | 1,410 |
|  | 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 |
|  | 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 |
|  | 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 |
|  | 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 |
|  | 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 |
|  | 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 |
|  | 3.2\% | 5.5\% | 5.1\% | 5.6\% | 5.8\% | 5.7\% | 6.2\% | 6.6\% |
| BMW Group | 364 | 499 | 735 | 780 | 775 | 808 | 906 | 995 |
|  | 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 |
|  | 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 |
|  | 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 |
|  | 5.8\% | 4.8\% | 5.0\% | 4.1\% | 4.4\% | 4.5\% | 4.7\% | 4.7\% |
| Hyundai-Kia | 18 | 303 | 539 | 687 | 679 | 686 | 758 | 826 |
|  | 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 |
|  | 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 |
|  | 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 |
|  | 4.9\% | 2.1\% | 0.4\% | 0.2\% | 0.2\% | 0.3\% | 0.3\% | 0.3\% |
| TOTAL EUROPE (17 COUNTRIES) | 13,517 | 14,738 | 12,975 | 11,763 | 11,545 | 12,102 | 13,184 | 13,949 |
|  | 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\% |

- 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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 |
| RENAULT GROUP | 18.3\% | 14.1\% | 17.0\% | 16.3\% | 15.8\% | 15.7\% | 16.3\% | 16.1\% |
|  | 163 | 275 | 214 | 178 | 174 | 184 | 201 | 240 |
| FCA | 10.7\% | 14.2\% | 14.5\% | 12.9\% | 12.8\% | 12.2\% | 12.0\% | 12.9\% |
|  | 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\% |
|  | 74 | 178 | 133 | 133 | 140 | 150 | 163 | 176 |
| Daimler | 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 |
| Nissan | 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-Daihatsu | 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 |
|  | 4.6\% | 5.3\% | 2.4\% | 1.7\% | 1.9\% | 1.9\% | 2.1\% | 2.1\% |
| Hyundai-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 brands | 5.6\% | 3.6\% | 1.8\% | 2.0\% | 1.9\% | 1.9\% | 2.0\% | 1.4\% |
| TOTAL EUROPE (17 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).

## REGISTRATIONS

- 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 |
| PSA GROUP | 9.5\% | 8.5\% | 8.2\% | 8.2\% | 8.1\% | 7.1\% | 5.7\% | 5.3\% |
|  | 193 | 112 | 108 | 90 | 87 | 106 | 120 | 141 |
| RENAULT GROUP | 18.7\% | 13.0\% | 12.9\% | 11.5\% | 11.3\% | 11.9\% | 12.1\% | 12.3\% |
|  | 50 | 45 | 34 | 30 | 25 | 26 | 30 | 34 |
| FCA Group | 4.8\% | 5.3\% | 4.0\% | 3.9\% | 3.2\% | 3.0\% | 3.0\% | 3.0\% |
|  | 59 | 65 | 59 | 48 | 46 | 58 | 65 | 73 |
| Ford Group | 5.7\% | 7.5\% | 7.0\% | 6.2\% | 6.0\% | 6.6\% | 6.6\% | 6.3\% |
|  | 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 |
| Voikswagen 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 |
| BMW 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 |
|  | 1.8\% | 2.6\% | 3.3\% | 3.6\% | 3.1\% | 3.1\% | 3.6\% | 3.0\% |
|  | 60 | 47 | 41 | 41 | 47 | 57 | 65 | 77 |
| Toyota-Lexus-Dainatsu | 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\% |
| Hyundai-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 |
| Volvo | 0.6\% | 1.1\% | 1.2\% | 1.2\% | 1.2\% | 1.2\% | 1.2\% | 1.2\% |
| Tata Group | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 6 |
|  | 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 EU MEMBERS STATES | 1,035 | 857 | 841 | 783 | 777 | 885 | 990 | 1,148 |
|  | 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\% |

- 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\% |
|  | 35 | 15 | 18 | 16 | 18 | 21 | 26 | 29 |
| RENAULT GROUP | 24.4\% | 16.3\% | 16.2\% | 16.3\% | 17.1\% | 17.8\% | 18.5\% | 19.0\% |
|  | 21 | 19 | 21 | 20 | 21 | 23 | 28 | 32 |
| FCA Group | 14.7\% | 19.8\% | 19.0\% | 19.6\% | 20.1\% | 19.6\% | 20.4\% | 21.1\% |
|  | 14 | 10 | 11 | 10 | 10 | 14 | 18 | 20 |
| Ford Group | 9.8\% | 10.1\% | 10.2\% | 10.1\% | 10.2\% | 11.5\% | 12.8\% | 13.2\% |
|  | 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\% |
|  | 10 | 7 | 6 | 7 | 7 | 8 | 9 | 9 |
| Daimler | 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 |
| Nissan | 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-Dainatsu | 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 |
| Hyundai-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 (incluaing 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 EU MEMBERS 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\% |

(1) 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).

# REEISTRATIONS 

- 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 |

(1) 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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Germany | 193,841 | 327,046 | 1,023,997 | 1,220,675 | 1,400,556 | 1,449,919 | 1,534,990 | 1,535,525 |
|  | 8.0\% | 9.8\% | 30.3\% | 41.9\% | 47.4\% | 47.8\% | 47.9\% | 45.8\% |
| Austria | 7,425 | 74,197 | 191,402 | 167,106 | 180,847 | 172,382 | 179,821 | 188,819 |
|  | 3.3\% | 25.7\% | 61.9\% | 50.9\% | 56.7\% | 56.8\% | 58.3\% | 57.3\% |
| Belgium | 54,897 | 154,804 | 290,301 | 415,728 | 314,844 | 299,149 | 299,357 | 279,528 |
|  | 13.8\% | 32.7\% | 56.3\% | 76.0\% | 64.8\% | 61.9\% | 59.7\% | 51.8\% |
| Denmark | 2,352 | 3,305 | 14,898 | 72,670 | 58,119 | 59,524 | 64,095 | 80,325 |
|  | 3.2\% | 4.1\% | 13.2\% | 47.3\% | 32.0\% | 31.7\% | 31.0\% | 36.0\% |
| Spain |  | 140,740 | 734,256 | 693,905 | 479,318 | 565,409 | 648,212 | 652,097 |
|  |  | 14.2\% | 53.1\% | 70.7\% | 66.3\% | 66.1\% | 62.7\% | 56.9\% |
| Finland |  | 7,215 |  | 44,574 | 38,372 | 41,299 | 38,882 | 39,647 |
|  |  | 5.2\% |  | 41.5\% | 37.1\% | 38.9\% | 35.7\% | 33.3\% |
| France | 186,050 | 762,054 | 1,046,485 | 1,593,173 | 1,199,729 | 1,146,658 | 1,097,124 | 1,050,418 |
|  | 9.9\% | 33.0\% | 49.0\% | 70.8\% | 67.0\% | 63.8\% | 57.2\% | 52.1\% |
| Greece |  | 60 | 2,006 | 5,661 | 33,993 | 45,383 | 47,875 | 43,428 |
|  |  | 0.1\% | 0.7\% | 4.0\% | 57.9\% | 63.7\% | 63.2\% | 55.1\% |
| Ireland |  | 12,413 | 23,259 | 55,016 | 53,838 | 70,463 | 88,618 | 102,611 |
|  |  | 15.0\% | 10.1\% | 62.2\% | 72.4\% | 73.2\% | 71.0\% | 70.0\% |
| Italy | 138,562 | 179,779 | 812,203 | 901,310 | 703,122 | 747,024 | 872,493 | 1,038,879 |
|  | 8.1\% | 7.8\% | 33.6\% | 45.9\% | 53.9\% | 54.9\% | 55.4\% | 57.0\% |
| Luxembourg |  | 8,206 | 21,110 | 37,403 | 34,230 | 35,825 | 32,694 | 32,661 |
|  |  | 21.4\% | 50.4\% | 75.2\% | 73.4\% | 71.9\% | 70.4\% | 64.6\% |
| Norway |  | 1,581 | 8,761 | 95,733 | 74,693 | 70,190 | 61,482 | 47,622 |
|  |  | 2.6\% | 9.0\% | 74.9\% | 52.5\% | 48.7\% | 40.8\% | 30.8\% |
| The Netherlands | 30,450 | 54,738 | 134,426 | 98,477 | 103,518 | 105,013 | 129,803 | 72,527 |
|  | 6.8\% | 10.9\% | 22.5\% | 20.4\% | 24.8\% | 27.1\% | 28.9\% | 19.0\% |
| Portugal |  | 10,426 | 62,417 | 149,046 | 76,575 | 102,044 | 121,650 | 135,180 |
|  |  | 4.9\% | 24.2\% | 66.7\% | 72.3\% | 71.2\% | 68.2\% | 65.2\% |
| United Kingdom | 5,850 | 128,160 | 313,149 | 936,448 | 1,127,758 | 1,240,858 | 1,275,411 | 1,285,383 |
|  | 0.4\% | 6.4\% | 14.1\% | 46.1\% | 49.8\% | 50.1\% | 48.4\% | 47.7\% |
| Sweden |  | 1,335 | 18,325 | 147,802 | 165,717 | 179,090 | 198,956 | 191,510 |
|  |  | 0.6\% | 6.3\% | 51.0\% | 61.5\% | 58.9\% | 57.7\% | 51.4\% |
| Switzerland |  | 9,998 | 29,466 | 88,760 | 113,255 | 111,073 | 124,898 | 124,204 |
|  |  | 3.0\% | 9.3\% | 30.4\% | 37.0\% | 37.0\% | 38.8\% | 39.4\% |
| Europe (17 countries) (1) \% diesel in Europe | 619,427 | 1,866,021 | 4,726,461 | 6,723,487 | 6,158,484 | 6,441,303 | 6,816,361 | 6,900,364 |
|  | 7.1\% | 13.9\% | 32.1\% | 51.8\% | 53.3\% | 53.2\% | 51.7\% | 49.5\% |
| Year-on-year change |  | +0.7\% | +10.7\% | +6.9\% | -5.2\% | +4.6\% | +5.8\% | +1.2\% |

## REGISTRATIONS

- 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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Germany | electric | 0 | 160 | 1,731 | 2,451 | 5,800 | 8,262 | 12,319 | 11,163 |
|  |  | 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\% |
| Austria | electric | 0 | 112 | 631 | 426 | 654 | 1,281 | 1,677 | 3,829 |
|  |  | 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\% |
| Belgium | electric | 0 | 47 | 263 | 562 | 500 | 1,165 | 1,358 | 2,048 |
|  |  | 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\% |
| Denmark | electric | 2 | 50 | 460 | 527 | 533 | 1,637 | 4,468 | 1,320 |
|  |  | 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 |
|  |  | 0.0\% | 0.1\% | 0.2\% | 0.3\% | 0.6\% | 0.7\% | 1.3\% | 2.8\% |
| Spain | electric | 0 | 69 | 367 | 439 | 811 | 1,076 | 1,461 | 2,143 |
|  |  | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 0.2\% |
|  | hyrbrid | 908 | 6,253 | 10,061 | 10,073 | 10,152 | 12,458 | 20,547 | 27,688 |
|  |  | 0.1\% | 0.6\% | 1.2\% | 1.4\% | 1.4\% | 1.5\% | 2.0\% | 2.4\% |
| France | electric | 6 | 184 | 2,630 | 5,663 | 8,779 | 10,561 | 17,268 | 21,751 |
|  |  | 0.0\% | 0.0\% | 0.1\% | 0.3\% | 0.5\% | 0.6\% | 0.9\% | 1.1\% |
|  | hybrid | 2,857 | 9,655 | 13,635 | 27,889 | 46,745 | 43,143 | 61,619 | 58,385 |
|  |  | 0.1\% | 0.4\% | 0.6\% | 1.5\% | 2.6\% | 2.4\% | 3.2\% | 2.9\% |
| Italy | electric | 28 | 112 | 306 | 524 | 864 | 1,100 | 1,452 | 1,260 |
|  |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% |
|  | hyrbrid | 1,132 | 4,841 | 5,161 | 6,836 | 15,156 | 21,488 | 26,262 | 38,387 |
|  |  | 0.1\% | 0.2\% | 0.3\% | 0.5\% | 1.2\% | 1.6\% | 1.7\% | 2.1\% |
| Norway | electric | 7 | 355 | 1,996 | 3,950 | 7,882 | 18,090 | 25,779 | 24,222 |
|  |  | 0.0\% | 0.3\% | 1.4\% | 2.9\% | 5.5\% | 12.5\% | 17.1\% | 15.7\% |
|  | hyrbrid | 337 | 3,144 | 3,645 | 6,116 | 9,827 | 10,774 | 15,704 | 34,841 |
|  |  | 0.3\% | 2.5\% | 2.6\% | 4.4\% | 6.9\% | 7.5\% | 10.4\% | 22.5\% |
| The Netherlands | electric | 0 | 96 | 846 | 828 | 2,618 | 2,913 | 3,204 | 3,992 |
|  |  | 0.0\% | 0.0\% | 0.2\% | 0.2\% | 0.6\% | 0.8\% | 0.7\% | 1.0\% |
|  | hyrbrid | 2,940 | 16,099 | 14,868 | 25,614 | 43,639 | 26,749 | 56,261 | 30,206 |
|  |  | 0.6\% | 3.3\% | 2.7\% | 5.1\% | 10.5\% | 6.9\% | 12.5\% | 7.9\% |
| United Kingdom | electric | 0 | 167 | 1,098 | 1,262 | 2,512 | 6,697 | 9,934 | 10,264 |
|  |  | 0.0\% | 0.0\% | 0.1\% | 0.1\% | 0.1\% | 0.3\% | 0.4\% | 0.4\% |
|  | hyrbrid | 5,766 | 22,148 | 23,398 | 25,892 | 30,203 | 45,148 | 64,692 | 79,440 |
|  |  | 0.2\% | 1.1\% | 1.2\% | 1.3\% | 1.3\% | 1.8\% | 2.5\% | 3.0\% |
| Sweden | electric | 1 | 9 | 181 | 268 | 435 | 1,240 | 2,880 | 2,945 |
|  |  | 0.0\% | 0.0\% | 0.1\% | 0.1\% | 0.2\% | 0.4\% | 0.8\% | 0.8\% |
|  | 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\% |
| Switzerland | electric | 13 | 199 | 446 | 523 | 1,177 | 1,804 | 3,777 | 3,372 |
|  |  | 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 Europe (Including countries not presented) | electric | 57 | 1,611 | 11,263 | 17,707 | 32,990 | 56,778 | 87,034 | 89,841 |
|  |  | 0.0\% | 0.0\% | 0.1\% | 0.2\% | 0.3\% | 0.5\% | 0.7\% | 0.6\% |
|  | hyrbrid | 23,210 | 90,198 | 102,979 | 146,287 | 208,934 | 222,109 | 327,363 | 393,372 |
|  |  | 0.2\% | 0.7\% | 0.8\% | 1.2\% | 1.8\% | 1.8\% | 2.5\% | 2.8\% |

## REGISTRATIONS

- 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 |

[^4]
## REGISTRATIONS

- 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 |

[^5]
## WORLD PRODUCTION BY FRENCH MANUFACTURERS

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 |  |  |  |  |  |  |

(1) Up to 1985, Talbot is included in PSA Group.
(2) 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.
(3) 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.
(4) On January 1, 1999, Renault VI (Renault Trucks) sold its coach and bus business to Irisbus, part of Iveco

- 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 MANUFACTURERS |  |  |  |  |  |  |  |  |
| Total all vehicles |  |  | 3,348,361 | 2,229,381 | 1,735,894 | 1,816,209 | 1,977,860 | 2,090,279 |

Source: CCFA

## WORLD PRODUCTION BY FRENCH MANUFACTURERS

- 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 |

(1) 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 |


| Brands/models | World production | Production in France | Production outside France |
| :---: | :---: | :---: | :---: |
| BIPPER | 2,625 |  | 2,625 |
| PARTNER | 65,819 |  | 65,819 |
| TRAVELLER | 4,411 | 4,411 |  |
| 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 <br> 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 |

WORLD PRODUCTION BY FRENCH MANUFACTURERS

- 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 |

(1) See notes on page 70 .
(2) As of 2006, some Renault Trafic II vehicles are classified as passenger cars.

- 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

## WORLD PRODUCTION BY FRENCH MANUFACTURERS

- 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 |  |  |  |  |

(1) 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
(2) Including Unic up to 1984
(3) As of 2012, the scope of the heavy trucks concerns invoices of 7 tonnes and more

- 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 |  |  |  |  |  |

(1) 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 7 t | 13,941 | 11,661 | 12,946 | 15,375 | 16,050 |

[^6]
## WORLD PRODUCTION BY FRENCH MANUFACTURERS

-COMMERCIAL VEHICLE PRODUCTION (INCLUDING COACHES AND BUSES) BY WEIGHT AND ENGINE TYPE (IN UNITS)

|  |  | 1980 | 1990 | 2000 (1) | 2010 | 2013 | 2014 | 2015 | 2016 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Up to 3.5t |  | 318,633 | 402,994 | 577,926 | 531,452 | 543,866 | 544,739 | 588,686 | 619,851 |
|  | G | 281,031 | 128,422 | 55,883 | 61,998 | 61,407 | 52,488 | 46,973 | 54,803 |
|  | 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 |
| From 3.5t to 5.1t |  | 60,824 | 33,573 | 134,973 | 179,672 | 200,788 | 213,887 | 243,427 | 261,503 |
|  | 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 |
| Coaches - Buses |  | 3,084 | 2,548 | 2,938 |  |  |  |  |  |
|  | D | 3,035 | 2,548 | 2,606 |  |  |  |  |  |
|  | 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
(1) World production of French manufacturers as of 1997

- LIGHT COMMERCIAL VEHICLE (UP TO 5T) PRODUCTION BY TYPE (IN UNITS)

|  | 1980 | 1990 | 2000 (1) | 2010 | 2013 | 2014 | 2015 | 2016 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Passenger cars derivatives |  |  |  |  |  |  |  |  |
| 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 |

[^7]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 |  |  |  |  |  |  |

(1) As of 2004, exports to Cyprus are included in Europe, rather than Asia
(2) 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.
(3) 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.
Source: CCFA

## 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 20081354 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 |
| FINANGIAL 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\% |

[^8]
## 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\% |  |  |

(1) FIEV estimates
(2) Actual employees: average employee numbers, corrected by the balance of employees hired (temporary staff) and quoted as hired staff.

## REGISTRATIONS

- 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 | 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 | 328 | 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 | 802,115 | 877,325 | 936,750 |
| TOTAL ALL CATEGORIES | 1,873,202 | 2,309,130 | 2,133,884 | 2,251,669 | 1,790,456 | 1,795,885 | 1,917,226 | 2,015,177 |
| of which Temporary Transit |  |  |  | 39,011 | 34,205 | 30,648 | 31,665 | 31,448 |
| TOTAL FRANCE (AS A \%) | 77.1\% | 60.8\% | 59.1\% | 59.1\% | 53.4\% | 55.3\% | 54.2\% | 53.5\% |
| TOTAL FOREIGN (AS A \%) | 22.9\% | 39.2\% | 40.9\% | 40.9\% | 46.6\% | 44.7\% | 45.8\% | 46.5\% |

(1) Including Talbot up to 1985
(2) Including others

- 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 |

## REGISTRATIONS

- 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\% |

(1) Including Talbot up to 1985,
(2) Including others.

## REGISTRATIONS

- 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 | 2016 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 | 14,769 | 8,122 |
| Up to 5 HP | 15,953 | 10,975 |
| 6 to 10 HP | 1,668 | 840 |
| 11 HP and over | 32,390 | 19,938 |
| Total passenger cars | 3,611 |  |
| Light commercial vehicles (LCV) | 2,473 | 3,360 |
| Up to 2.5t | 16 | 2,465 |
| From 2.5t to 3.5t | 6,100 | 15 |
| From 3.6t to 5t | 38,490 | 5,840 |
| Total LCVs up to 5t |  | 25,778 |
| Total passenger cars and LCVs | 70 |  |
| Heavy trucks over 5t | 42 |  |
| Rigids | 109 | 70 |
| From 5t to 12t | 110 | 42 |
| From 12t to 16t | 331 | 109 |
| From 16t to 20t | 206 | 110 |
| 20t and over | 537 | 331 |
| Total rigids | 91 | 206 |
| Tractors | 628 | 537 |
| Total heavy trucks | 6,728 | 88 |
| Coaches and buses | 39,118 | 625 |
| Total commercial vehicles over 5t |  | 26,465 |
| Total commercial vehicles all sizes |  |  |
| Total all vehicles |  |  |

(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 |  |
| Domestic passenger road transportation |  |  |  |  |  |  |  |  |  |
| 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 TAKATION, EMISSIONS AND CO2 

- 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) | $\begin{array}{r} \text { Change } \\ 2016 / 1990 \end{array}$ | $\begin{array}{r} \text { Change } \\ 2016 / 2015 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ROAD POLLUTANTS (IN THOUSANDS OF TONNES) |  |  |  |  |  |  |  |  |  |
| $\mathrm{SO}_{2}$ | 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) |  |  |  |  |  |  |  |  |  |
| $\mathrm{CO}_{2}$ net of $\mathrm{CO}_{2}$ emissions of renewable energies | 110 | 119 | 126 | 128 | 122 | 121 | 122 | 10\% | 0.3\% |
| $\mathrm{CO}_{2}$ 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
$-\mathrm{CO}_{2}$ EMISSIONS IN MAINLAND FRANCE BY BUSINESS SECTOR (IN MILLIONS OF TONS OF $\mathrm{CO}_{2}$ )

|  | 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 $\mathbf{2}_{2}$ 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 cars |  | New light commercial vehicles |  | Newheavy 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 (exports-imports) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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/imports $\times 100$ ) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1990 |  | 110 |  | 58 |  | 63 |  | 177 |  | 122 |  | 77 |  | 121 |
| 2000 |  | 117 |  | 107 |  | 86 |  | 165 |  | 130 |  | 117 |  | 130 |
| 2010 |  | 68 |  | 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 |  |

[^9]
## USEFUL ADDRESSES

## - FRENCH AUTOMOTIVE

 MANUFACTURERS
## PSA Group

75, avenue de la Grande Armée - 75116 Paris
Tel.: 0140665511
Fax: 0140665414
www.psa.fr - www.peugeot.com

## Citroën

Immeuble Colisée III-12, rue Fructidor
75835 Paris cedex 17
Tel.: 0158797979
Fax: 0158797225
www.psa.fr - www.citroen.com
DS
6, rue Fructidor
75017 Paris
Tel.: 0158797979
www.DSautomobiles.com

## Renault Group

13-15, quai Le Gallo
92153 Boulogne Billancourt cedex
Tel.: 0176845050
www.renault.com

## Renault Trucks

99, route de Lyon
69800 St Priest
Tel.: 0472965111
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.: 0176863150
Fax: 0176863400

- AUTOMOTIVE ORGANISATIONS IN FRANCE

Association Française du Gaz Naturel pour Véhicules (AFGNV)
8, rue de l'Hôtel de Ville
92200 Neuilly-sur-Seine
Tel.: 0180210800
www.afgnv.info
Fédération Française de Carrosserie Industries et Services (FFC)
Immeuble Le Cardinet
8, rue Bernard Buffet
75017 PARIS
Tel.: 0144297100
Fax: 0147664108
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.: 0153645030
Fax: 0140679594
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.: 0156882240
Fax: 0142565080
www.amcpromotion.com
Conseil National des Professions de l'Automobile (CNPA)
50, rue Rouget-de-l'Isle
92158 Suresnes cedex
Tel.: 0140995500
Fax: 0147284415
www.cnpa.fr
Fédération des Industries d'Equipements pour Véhicules (FIEV)
79, rue Jean-Jacques Rousseau
92158 Suresnes cedex
Tel.: 0146250230
Fax: 0146970080
www.fiev.fr
Groupement pour l'Amélioration des
Liaisons dans l'Automobile (GALIA)
20, rue Danjou
92100 Boulogne-Billancourt
Tél : 0141316868
Fax: 0141316860
www.galia.com
Groupement Plasturgie Automobile (GPA)
125, rue Aristide Briand
92300 Levallois
Tél : 0144011638
Fax: 0144011638
www.autoplasticgate.com
PFA, French Automotive \& Mobility Cluster
2, rue de Presbourg
75008 Paris
Tel.: 0141449430
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.: 0185651125
www.snlvid.com
Syndicat des Véhicules de Loisirs (UNI VDL)
3 , rue des Cordelières
75013 Paris
Tel.: 0143378661
Fax: 0145350739
www.univdl.org
Union des Industries et Métiers de la Métallurgie (UIMM)
56, avenue de Wagram
75017 Paris
Tel.: 0140542020
Fax: 0147662274
www.uimm.fr
Union Routière de France (URF)
9, rue de Berri
75008 Paris
Tel.: 0144133717
Fax: 0144133298
www.unionroutiere.fr

Union Technique de l'Automobile, du Motocycle et du Cycle (UTAC)
BP 212-91311 Montlhéry cedex
Tel.: 0169801700
Fax: 0169801717
www.utac.com

## - INTERNATIONAL AUTOMOTIVE ORGANISATIONS

Association des Constructeurs Européens d'automobiles (ACEA)
85, avenue des Nerviens
1040 Bruxelles (Belgique)
Tel.: 003227325550
Fax: 003227387310
www.acea.be
Organisation Internationale des Constructeurs d'Automobiles (OICA)
4, rue de Berri - 75008 Paris
Tel.: 0143590013
Fax: 0145638441
www.oica.net

- AUTOMOTIVE ASSOCIATIONS IN FRANCE

40 millions d'automobilistes
118, bd Haussmann
75008 Paris
Tel.: 0243500630
Fax: 0243500631
www. 40 millionsdautomobilistes.com
ACA - Automobile Club Association
Siège : 38, avenue du Rhin CS 80049
67027 Strasbourg Cedex
Tel. 0970401111
Bureau parisien : 9 rue d'Artois - 75008 Paris
Tel.: 0140554300
www.automobileclub.org
Fédération Française du Sport
Automobile (FFSA)
32, avenue de New-York - 75781 Paris Cedex 16
Tel.: 0144302400
Fax: 0142241680
www.ffsa.org

## La Prévention Routière

4, rue Ventadour - 75001 Paris
Tel.: 0144152700
Fax: 0142279803
www.preventionroutiere.asso.fr
Société des Ingénieurs de l'Automobile (SIA)
79, rue Jean-Jacques Rousseau - 92158 Suresnes cedex
Tel.: 0141449370
Fax: 0141449379
www.sia.fr

## AUTOMOTIVE INDUSTRY RESEARCH OREANISATIONS IN FRANCE

Association pour le développement du transport et de la mobilité électriques France (AVERE France)
22, avenue Jean Aicard
75011 Paris
Tel.: 0153250060
www.avere-france.org

Fondation sécurité routière
2, rue de Presbourg
75008 Paris
www.fondationsecuriteroutiere.org
Groupe d'Etudes et de Recherches Permanent sur I'Industrie et les Salariés de l'Automobile (GERPISA)
Ecole Normale Supérieure de Cachan
Bât. Desjardin-61, avenue du Président Wilson
94235 Cachan Cedex
Tel.: 0147402000
www.leblog.gerpisa.org

## IDforCAR

Technocampus Composites
Chemin du Chaffault - ZI du Chaffault 44340 Bouguenais
Tel : 0228443650
Fax: 0299341061 www.id4car.org

IFP Energies nouvelles (IFPEN)
1 \& 4, avenue de Bois Préau
92852 Rueil Malmaison Cedex
Tel.: 0147526000
Fax: 0147527000
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.: 0181668000
www.ifsttar.fr

LUTB Transport \& Mobility Systems
c/o CCl de Lyon
Place de la Bourse
69289 Lyon Cedex 02
Tel.: 0472405700
Fax: 0472405860
www.lutb.fr

## Pôle Mov’eo

Haute-Normandie head office
Technopôle du Madrillet
Avenue Galilée BP 20060
76801 Saint Etienne du Rouvray Cedex
Tel. : 0232915450
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.: 0389327644
Fax: 0389327645
www.vehiculedufutur.com

Programme National de Recherche et d'Innovation dans les Transports terrestres (PREDIT)
Tour Sequoia - 92055 La Défense Cedex
Tel.: 0140811417
Fax: 0140811522
www.predit.prd.fr

# CCFA REGULARIV PUBLISHES leaflets ON VARIOUS AUTOMOBILE-RELATED SUBJECTS: PRESS KITS, PRESS SURVEYS, ETC. ALL THESE PUBLICATIONS CAN BE CONSULTED ON OUR WEBSITE WWW.CCFA.FR 

## MONDIAL

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.


For the first time, to better with their models and welcome

- THE MOTORBIKES MONDIAL (Hall 3)
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.



## - A Supercars area: <br> A Supercars area: MONDIAL LIMITED

## (Hall 1)

 accommodate luxury brands, the Mondial will offer a completely revamped area to bewitch the public their customers in the best possible conditions.,


- New services and new uses combined at the MOBILITY MONDIAL
(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.

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:

## 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.


The MONDIAL PARIS MOTOR SHOW has a new graphic identity to accompany these developments.

Chosen by the AMC PROMOTION team and created by Havas Paris, the new ensign of the Parisian event, depicting openness to digital and technology developments, is timeless, sober and elegant to better position the show in relation to other shows in Europe and to gain in exposure internationally. Luxury, style and modernity are the key attributes relayed by this new graphic identity, which combines a rectangle, a bespoke typeface and a Parisian evocation, in reference to the great Parisian luxury brands. The idea was also to frame a formal coherence between the


- 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.


dentities 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 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'.



[^0]:    Source: CCFA.

[^1]:    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.

[^2]:    - Composition of an end of life vehicle in 2014

[^3]:    (1) i.e. respectively 541,232 and 65,650 units for Citroën and DS in EU-28.

[^4]:    (1) European Union: 9 countries in 1980, 10 in 1985, 12 from 1990 to 1994, 15 from 1995.

[^5]:    (1) New EU member states: 8 countries in 2000; 10 countries between 2006 and 2012; 11 countries from 2013.
    (2) CCFA estimates

[^6]:    Source: CCFA

[^7]:    (1) World production of French manufacturers as of 1997.
    (2) Including Talbot up to 1985

[^8]:    (1) CCFA estimates for 2015 and 2016
    (2) Until 2007, these are actual employees: average employee numbers, corrected by the balance of employees hired (temporary staff) and quoted as hired staff.

[^9]:    (1) According to agrofuels rate
    (2) 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.

