2018
2019

The Automobile Industry Pocket Guide

ACEA
European Automobile Manufacturers Association

WWW.ACEA.BE

Foreword

The European Automobile Manufacturers' Association (ACEA) publishes this Pocket Guide annually in order to provide you with an extensive overview of one of Europe's key industries. We have been doing this since 2008, and after 10 editions, I am pleased to say that the Automobile Industry Pocket Guide has become the point of reference for all those interested in automotive issues and related EU policies.

Today, the automotive sector provides direct and indirect jobs to 13.3 million Europeans, representing 6.1% of total EU employment. Car registrations grew by 3.4% in 2017, passing the symbolic mark of 15 million units for the first time since 2007. In parallel, more than 2.6 million trucks, buses, coaches and vans were built in the EU in 2017, an increase of 1.8%. But even as we are coming close to pre-crisis figures, the situation of the European auto industry remains fragile.

It is crucial that we maintain this trajectory of recovery within Europe, as well as safeguarding our industry's competitiveness on the global level. EU auto manufacturers exported 5.9 million motor vehicles in 2017, generating a trade surplus of €90.3 billion for the European Union. Compared with the EU's total trade balance in manufactured goods, worth some €290 billion, automobile exports make a vital contribution to the overall trade position of the EU.

Not only do we generate jobs and economic growth, automobiles are also a vital source of government revenue. Taxation on motor vehicles, for instance, is worth €413 billion annually in the EU-15 alone – that is almost three times the total budget of the European Union!

At the same time, ACEA's members remain committed to addressing tomorrow's challenges. Although car production has been on the rise again since 2013, manufacturers have been able to decouple their environmental footprint from production growth. For example, total CO2 emissions from car production fell by 23.7% over the past decade, while the water consumption per car produced has been reduced by a staggering 31% since 2008.

The same ambition level applies to our objective of making mobility cleaner, smarter and safer in the future. To that end, EU automakers and suppliers invest €53.8 billion in innovation each year. This not only makes the automotive sector the EU's number one investor in R&D, responsible for 27% of total spending, but also marks an increase of 7.4% compared to last year.

Erik Jonnaert
ACEA Secretary General

BMW Group

DAF

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FCA
FIAT CHRYSLER AUTOMOBILES

Ford

HONDA
The Power of Dreams

HYUNDAI

IVECO

JAGUAR

LAND ROVER

PSA
GROUPE

GROUPE
RENAULT

TOYOTA

VOLKSWAGEN
AKTIENGESELLSCHAFT

VOLVO

VOLVO

ACEA represents Europe's car, van, truck and bus makers

Members and partners

The European Automobile Manufacturers' Association (ACEA) is the advocate for the automobile industry in Europe, representing the 15 major manufacturers of passenger cars, vans, trucks and buses with production sites in the EU.

ACEA's members are: BMW Group, DAF Trucks, Daimler, Fiat Chrysler Automobiles, Ford of Europe, Honda Motor Europe, Hyundai Motor Europe, Iveco, Jaguar Land Rover, PSA Group, Renault Group, Toyota Motor Europe, Volkswagen Group, Volvo Cars and Volvo Group.

ACEA has permanent cooperation with the European Council for Automotive R&D (EUCAR), which is the industry body for collaborative research and development.

ACEA works closely with the 29 national automobile manufacturers' associations in Europe, and maintains a dialogue on international issues with automobile associations around the world.

ACEA's mission and priority areas

ACEA's mission

- Define and advocate the common interests, policies and positions of the European automobile industry.
- Engage in dialogue with the European institutions and other stakeholders in order to advance understanding of industry issues, and to contribute to effective policy and legislation at both European and global levels.
- Act as a portal for expert knowledge on vehicle-related regulation.
- Communicate the role and importance of the industry, using reliable data and information.
- Monitor activities that affect the automobile industry, cooperating with the other stakeholders involved.
- Undertake strategic reflection on the increasingly global challenges of mobility, sustainability and competitiveness.

Priority fields

Through its member companies, ACEA taps into a wealth of technical, regulatory and practical expertise in the following priority fields:

- Connected and Automated Driving
- Competitiveness, Market and Economy
- Environment and Sustainability
- International Trade
- Research and Innovation
- Safety
- Transport Policy

How ACEA works

The ACEA Board of Directors is composed of the CEOs and Presidents of its member companies. Additionally, a Commercial Vehicle Board of Directors addresses the specific issues that face the commercial vehicle manufacturers that ACEA represents: DAF Trucks, Daimler Trucks, Iveco, MAN Truck & Bus, Scania, Volkswagen Commercial Vehicles and Volvo Group.

The day-to-day work of the ACEA secretariat is overseen by the Secretary General, who ensures that the Board of Directors' priorities are addressed. Technical expertise and advisory input comes from working groups on topics as diverse as emissions, road and vehicle safety, general transport policy, and regulatory compliance. These specialist working groups are made up of experts from the member companies.

The European Council for Automotive R&D (EUCAR) is the collaborative research organisation of the major automobile manufacturers in Europe, with the mission of strengthening industry competitiveness through strategic collaborative research and innovation.

EUCAR is committed to helping deliver safer, cleaner, smarter and more efficient transport solutions to society. Together with its members, EUCAR drives the strategy and assessment of collaborative automotive research and innovation, and establishes common work with the European Commission, member states and other key stakeholders.

EUCAR's collaborative research and innovation activities cover both passenger cars and commercial vehicles, focused on the following strategic pillars:

SAFE & INTEGRATED MOBILITY

Smart and safe vehicles for all purposes, integrated into a secure and intelligent transport system, progressing towards seamless mobility for all, maximum efficiency and ever-fewer accidents

SUSTAINABLE PROPULSION

Collaborative automotive R&I towards propulsion systems which are clean and energy efficient over the full life-cycle, with cost-effective technologies, while maintaining customer priorities

AFFORDABILITY & COMPETITIVENESS

New sustainable approach to developing and producing affordable and competitive vehicles in Europe

COMMERCIAL VEHICLES

An integrated approach for reliable, clean, safe and efficient freight transport and passenger mobility, through dedicated vehicle concepts and effective logistics

EUCAR’s members participate in high-quality projects with industry-relevant results. Projects are mainly financed through the European Union Framework Programmes for research and innovation, matched with industry funding.

The EUCAR project book contains an overview of all the current research and innovation projects, it can be found on **www.eucar.be.**

The European passenger car and commercial vehicle manufacturers within EUCAR are technology and business leaders and are crucial for the European economy.

EUCAR’s members are: BMW Group, DAF Trucks, Daimler, Fiat Chrysler Automobiles, Ford of Europe, Hyundai Motor Europe, Iveco, Jaguar Land Rover, PSA Group, Renault Group, Toyota Motor Europe, Volkswagen Group, Volvo Cars, and Volvo Group.

EUCAR is governed by its Council, composed of the heads of the research and advanced development divisions of the member companies.

The EUCAR Chairman is nominated annually from the Council on a rotating basis.

Key figures

EMPLOYMENT		
Manufacture of motor vehicles (EU28)	2.5 million people = 8.3% of EU employment in manufacturing	*2016*
Total (EU28 manufacturing, services and construction)	13.3 million people = 6.1% of total EU employment	*2016*

PRODUCTION		
Motor vehicles (world)	98.9 million units	*2017*
Motor vehicles (EU28)	19.6 million units = 20% of global motor vehicle production	*2017*
Passenger cars (world)	80.2 million units	*2017*
Passenger cars (EU28)	17.0 million units = 21% of global passenger car production	*2017*

REGISTRATIONS		
Motor vehicles (world)	97.9 million units	*2017*
Motor vehicles (EU27)	17.5 million units = 18% of global motor vehicle registrations/sales	*2017*
Passenger cars (world)	79.8 million units	*2017*
Passenger cars (EU27)	15.1 million units = 19% of global passenger car registrations/sales	*2017*
Petrol (EU15)	49.4%	*2017*
Diesel (EU15)	44.8%	*2017*
Electric (EU15)	1.5%	*2017*

VEHICLES IN USE		
Motor vehicles (EU28)	298.9 million units	*2016*
Passenger cars (EU28)	259.7 million units	*2016*
Motorisation rate (EU28)	587 units per 1,000 inhabitants	*2016*
Average age (EU25)	11 years	*2016*

TRADE		
Exports (extra-EU28)	€138.6 billion	*2017*
Imports (extra-EU28)	€48.3 billion	*2017*
Trade balance	€90.3 billion	*2017*

ENVIRONMENT		
Average CO2 emissions (EU28)	118.5 g CO2/km	*2017*

INNOVATION		
Automobiles and parts sector	€53.8 billion	*2016*

TAXATION		
Fiscal income from motor vehicles (EU15)	€413 billion	*2016/2017*

1

THE AUTOMOBILE INDUSTRY
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Employment

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Automotive sector: direct and indirect employment in the EU

IN THOUSANDS / 2016[1]

13.3m jobs

2.5m jobs direct | 10.8m jobs indirect

3.4m jobs manufacturing | 9.9m jobs non-manufacturing

2.5m jobs		
DIRECT MANUFACTURING	**2,502**
Motor vehicles	1,095
Bodies (coachwork), trailers and semi-trailers	160
Parts and accessories	1,246

0.9m jobs	
INDIRECT MANUFACTURING	**921**
Rubber tyres and tubes, retreading and rebuilding of rubber tyres	119
Computers and peripheral equipment	69
Electric motors, generators and transformers	265
Bearings, gears, gearing and driving elements	222
Cooling and ventilation equipment	246

4.4m jobs	
AUTOMOBILE USE	**4,411**
Sale of motor vehicles	1,514
Maintenance and repair of motor vehicles	1,543
Sale of motor vehicle parts and accessories	720
Retail sale of automotive fuel in specialised stores	452
Renting and leasing of motor vehicles	181

4.8m jobs	
TRANSPORT	**4,762**
Other passenger land transport	2,090
Freight transport by road	2,672

0.7m jobs	
CONSTRUCTION	**673**
Roads and motorways	630
Bridges and tunnels	43

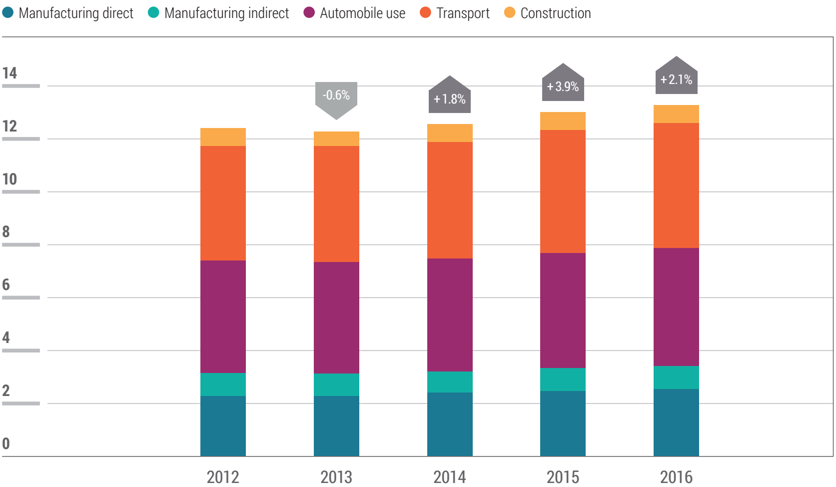
SOURCE: **EUROSTAT**

1. Provisional figures

The automotive industry provides indirect and direct jobs for 13.3 million Europeans

EU automotive employment

IN MILLION UNITS / 2012 – 2016



SOURCE: **EUROSTAT**

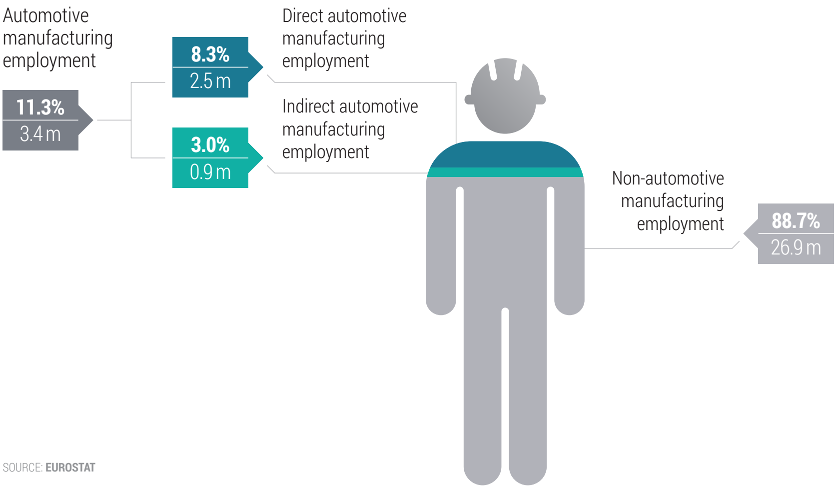
EU automotive employment	2012	2013	2014	2015	2016	% change 16/15
Manufacturing direct	2,290,859	2,291,594	2,372,434	2,451,219	2,501,787	2.1
Manufacturing indirect	833,531	811,344	818,755	891,906	921,031	3.3
Automobile use	4,299,615	4,261,539	4,260,784	4,300,879	4,410,637	2.6
Transport	4,320,068	4,335,551	4,444,942	4,703,520	4,762,392	1.3
Construction	622,808	591,233	614,245	646,932	673,100	4.0
TOTAL	**12,366,881**	**12,291,260**	**12,511,159**	**12,994,456**	**13,268,947**	**2.1**

SOURCE: **EUROSTAT**

The automotive sector accounts for 6.1% of all EU jobs

EU manufacturing employment

% SHARE / 2016



SOURCE: **EUROSTAT**

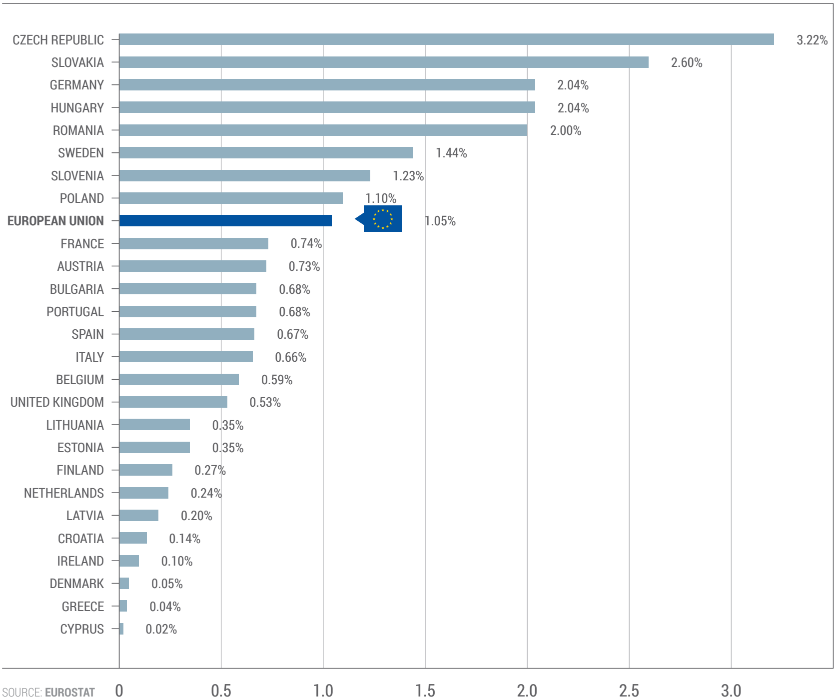
Direct automotive employment (manufacturing)	**2.5m people** = 8.3% of EU employment in manufacturing
Direct & indirect automotive manufacturing employment	**3.4m people** = 11.3% of EU employment in manufacturing
Total automotive employment (manufacturing, services and construction)	**13.3m people** = 6.1% of total EU employment
EU economically-active population (labour force)	**239.1m people**
EU total employment	**218.4m people**
EU employment in the manufacturing sector	**30.3m people** = 13.9% of total EU employment

SOURCE: **EUROSTAT**

11.3% of EU manufacturing employment is in the automotive sector

Direct automotive manufacturing employment: active population ratio

% SHARE, BY COUNTRY / 2016



SOURCE: **EUROSTAT**

Direct automotive manufacturing employment

BY COUNTRY / 2016

Austria	32,058	France	216,000	Poland	187,334
Belgium	29,115	Germany	857,336	Portugal	33,501
Bulgaria	21,782	Greece	1,755	Romania	174,321
Croatia	2,489	Hungary	92,816	Slovakia	71,240
Cyprus	77	Ireland	2,321	Slovenia	12,118
Czech Republic	168,408	Italy	165,676	Spain	152,010
Denmark	1,575	Latvia	1,899	Sweden	73,686
Estonia	2,271	Lithuania	5,009	United Kingdom	169,000
Finland	6,930	Netherlands	21,060		
		European Union	**2,501,787**		

SOURCE: **EUROSTAT**

The EU automotive sector directly employs 2.5 million people in manufacturing

2

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Production

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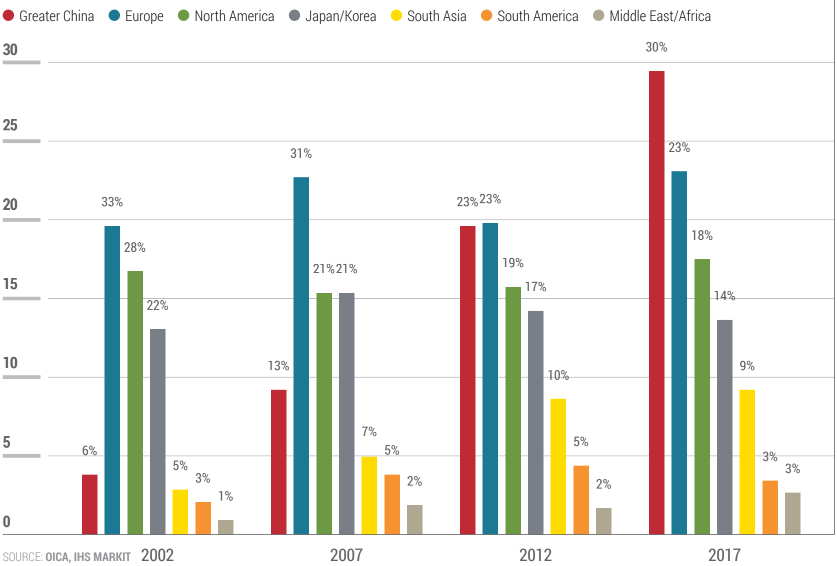
World motor vehicle production

IN MILLION UNITS, % SHARE / 2002 – 2017



SOURCE: OICA, IHS MARKIT

World motor vehicle production

IN 1,000 UNITS / 2017

	2017	2016	% change 17/16	% share 2017
Europe [1]	23,066	22,480	2.6	23.3
Greater China [2]	29,512	28,505	3.5	29.8
Japan/Korea	13,588	13,244	2.6	13.7
Middle East/Africa	2,562	2,294	11.7	2.6
North America	17,599	18,254	-3.6	17.8
South America	3,395	2,833	19.9	3.4
South Asia	9,207	8,940	3.0	9.3
WORLD	**98,930**	**96,549**	**2.5**	**100.0**

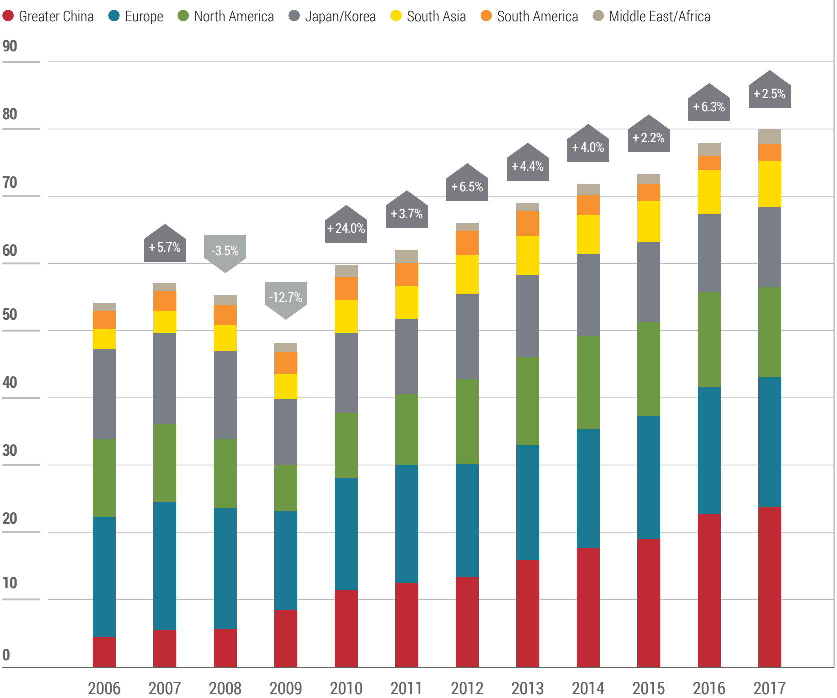
SOURCE: OICA, IHS MARKIT

1. Includes Turkey and CIS countries
2. Includes Hong Kong and Taiwan

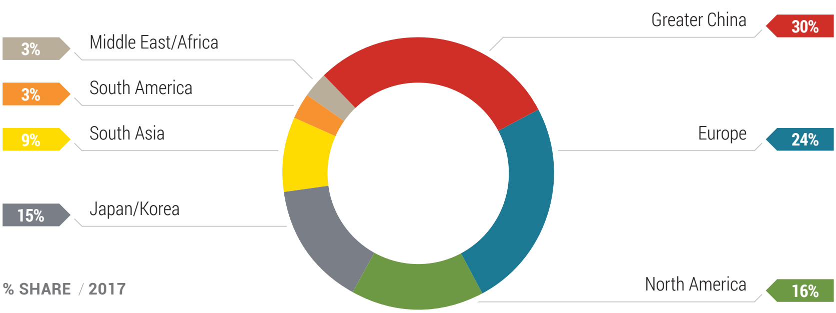
98.9 million motor vehicles were produced globally in 2017

World passenger car production

IN MILLION UNITS, % CHANGE / 2006 – 2017



SOURCE: **OICA, IHS MARKIT**

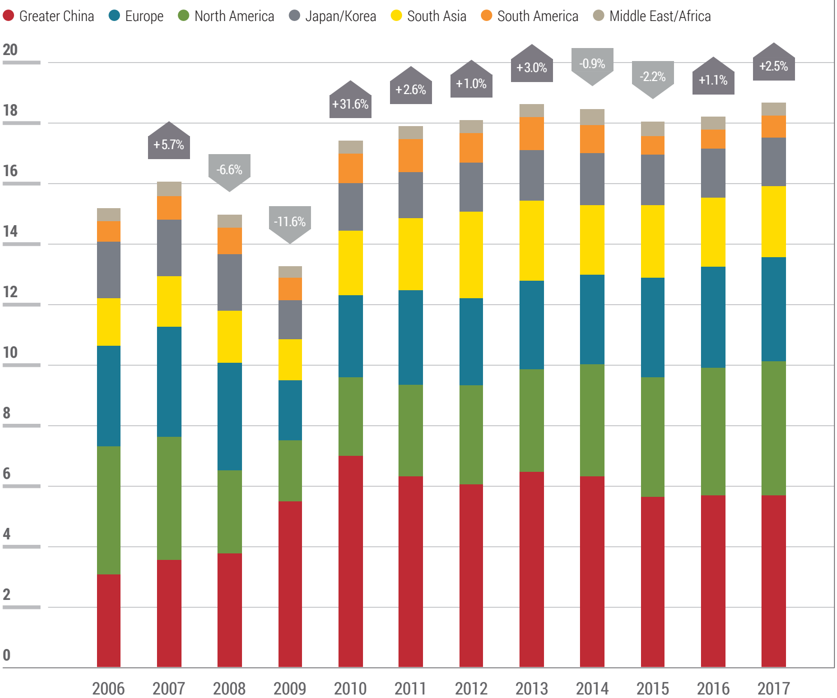


% SHARE / 2017

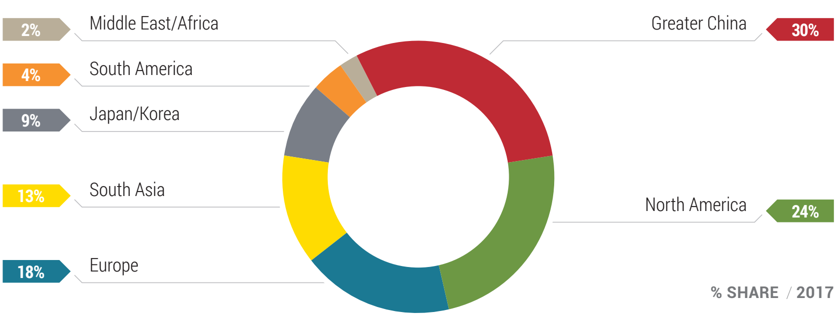
24% of all passenger cars produced worldwide are made in Europe

World commercial vehicle production

IN MILLION UNITS, % CHANGE / 2006 – 2017



SOURCE: **OICA, IHS MARKIT**



% SHARE / 2017

18% of all commercial vehicles made worldwide are manufactured in Europe

Motor vehicle production in the EU

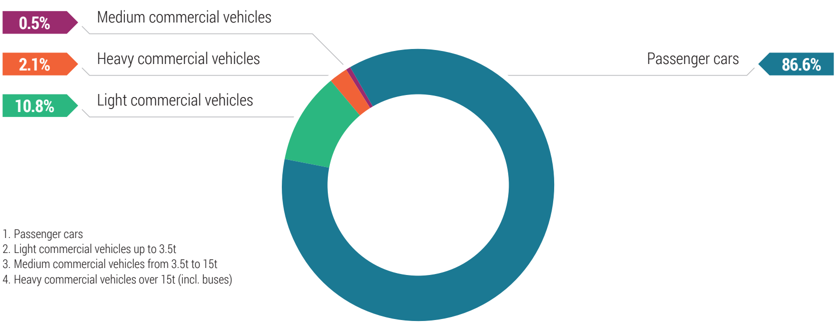
BY COUNTRY / 2017

	PC [1]	LCV [2]	MCV [3]	HCV [4]	TOTAL
Austria	81,637	–	9,326	7,281	98,244
Belgium	318,333	–	–	42,654	360,987
Czech Republic	1,413,881	–	–	6,112	1,419,993
Finland	91,598	–	–	120	91,718
France	1,674,717	556,847	14,386	44,776	2,290,726
Germany	5,645,581	378,651	23,009	126,607	6,173,848
Hungary	472,107	–	–	–	472,107
Italy	742,642	307,577	35,224	5,941	1,091,384
Lithuania		–	–	26	26
Netherlands	155,000	–	–	81,577	236,577
Poland	514,700	161,055	–	13,974	689,729
Portugal	126,426	42,816	6,302	–	175,544
Romania	364,654	–	–	50	364,704
Slovakia	949,365	–	–	–	949,365
Slovenia	189,852	–	–	–	189,852
Spain	2,291,492	608,233	8,803	27,341	2,935,869
Sweden	254,079	–	–	44,772	298,851
United Kingdom	1,671,166	59,795	4,733	13,691	1,749,385
European Union	**16,957,230**	**2,114,974**	**101,783**	**414,922**	**19,588,909**

SOURCE: **OICA, IHS MARKIT**

EU motor vehicle production by type

% SHARE / 2017

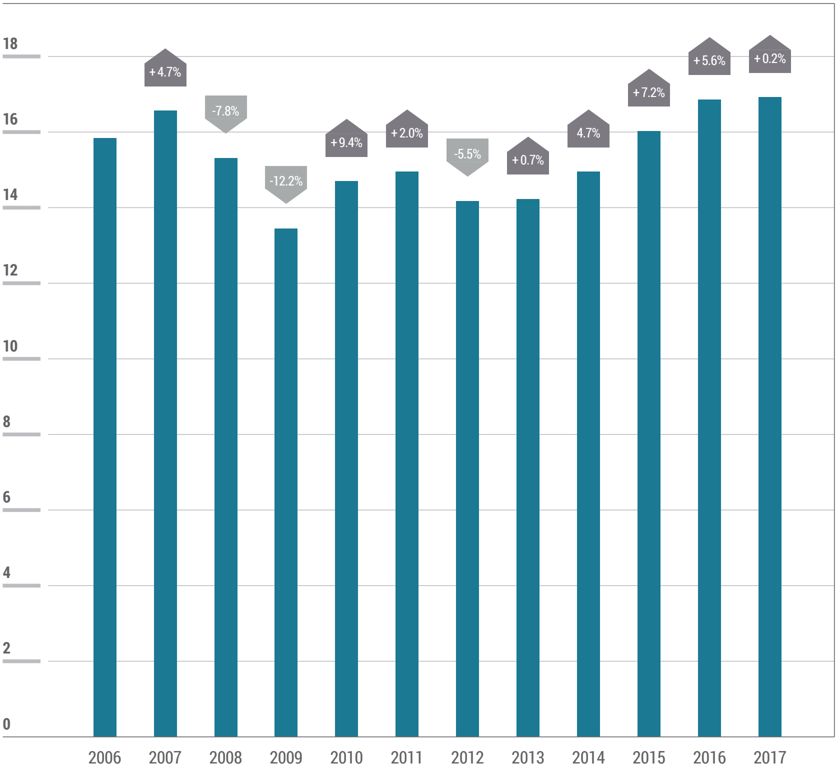


1. Passenger cars
2. Light commercial vehicles up to 3.5t
3. Medium commercial vehicles from 3.5t to 15t
4. Heavy commercial vehicles over 15t (incl. buses)

19.6 million motor vehicles were manufactured in the EU in 2017

Passenger car production in the EU

IN MILLION UNITS, % CHANGE / 2006 – 2017

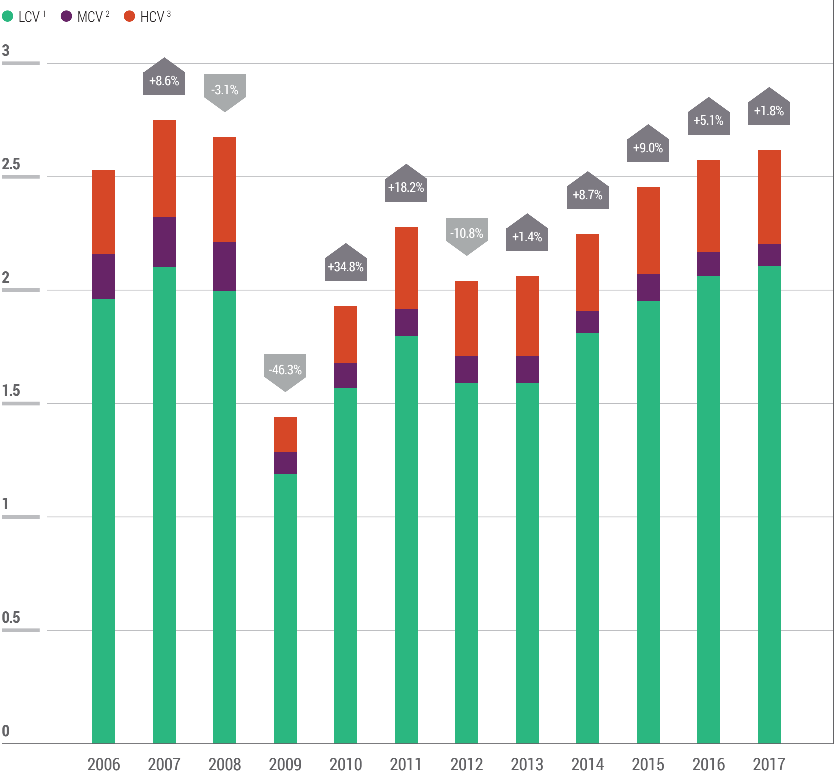


SOURCE: **OICA, IHS MARKIT**

17 million cars were made in the EU in 2017

Commercial vehicle production in the EU

IN MILLION UNITS, % CHANGE / 2006 – 2017



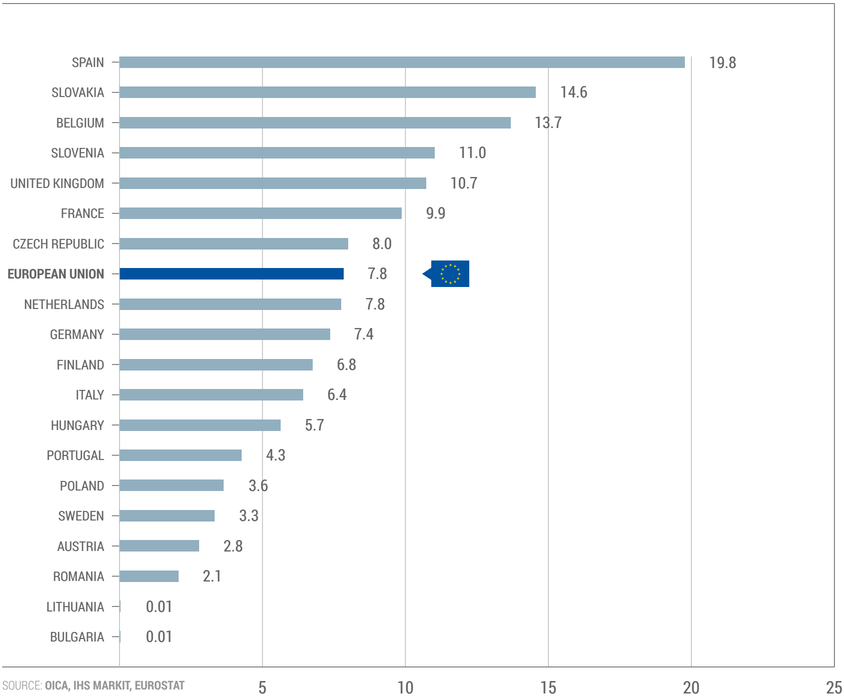
SOURCE: **OICA, IHS MARKIT**

1. Light commercial vehicles up to 3.5t
2. Medium commercial vehicles from 3.5t to 15t
3. Heavy commercial vehicles over 15t (incl. buses)

2.6 million commercial vehicles were produced in the EU in 2017

Motor vehicle production per direct automotive manufacturing employee

BY COUNTRY / 2016 *



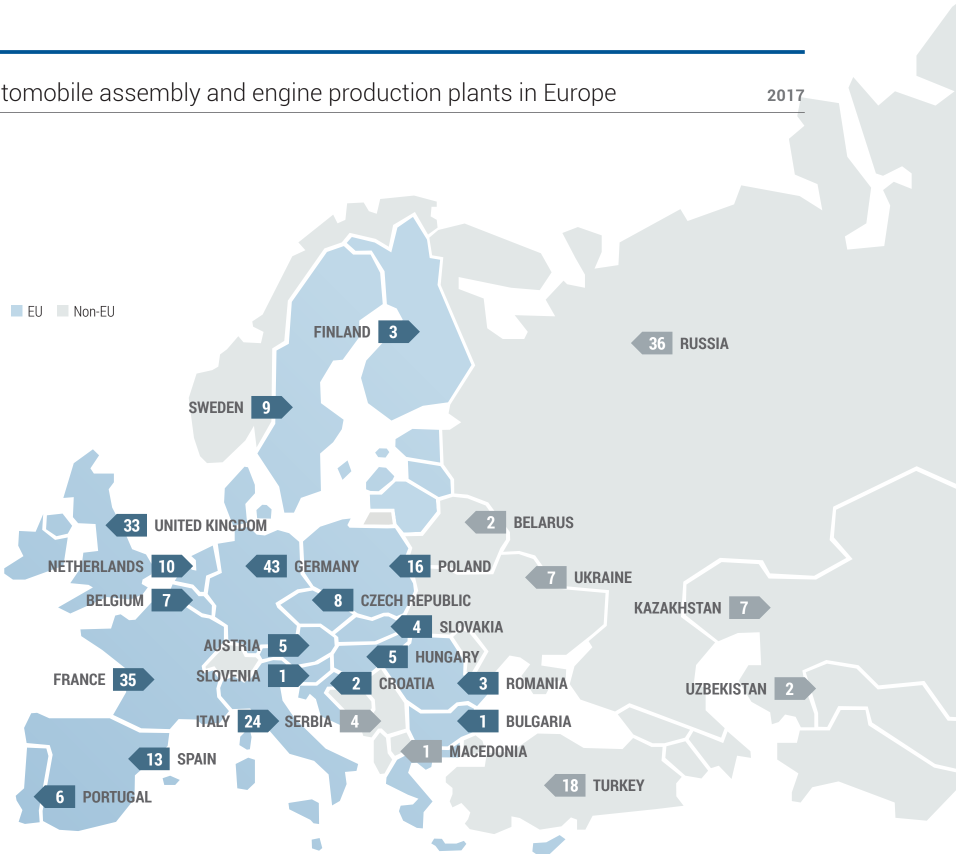
SOURCE: **OICA, IHS MARKIT, EUROSTAT**

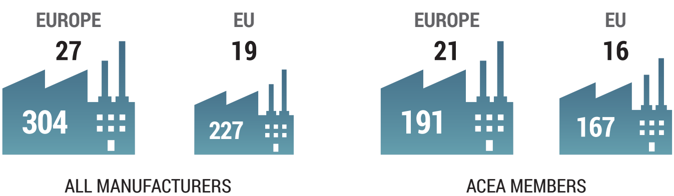
*Based on most recent direct automotive manufacturing employment data available.

The EU auto industry produces an average of 7.8 vehicles per worker annually

Automobile assembly and engine production plants in Europe

2017





SOURCE: **ACEA**

There are 227 automobile assembly and production plants in the EU

3

THE AUTOMOBILE INDUSTRY
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Registrations

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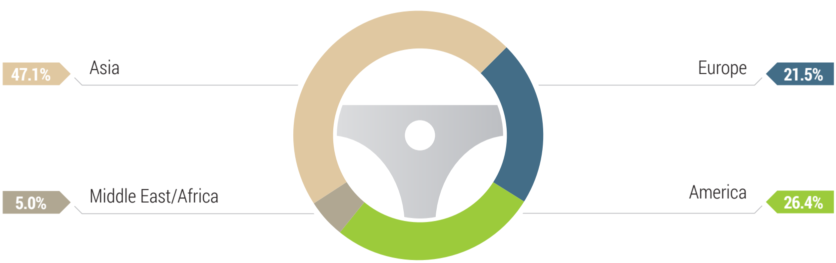
World new motor vehicle registrations

MARKET SHARES / 2017

Motor vehicles (In 1,000 units)	2017	2016	% change 17/16	% share 2017
EUROPE	**21,060**	**20,282**	**3.8**	**21.5**
EU [1]	17,543	16,969	3.4	17.9
EFTA	577	571	1.1	0.6
Russia	1,669	1,480	12.8	1.7
Turkey	982	1,012	-3.0	1.0
Ukraine	90	70	27.5	0.1
Others: Europe [2]	199	180	10.5	0.2
AMERICA	**25,838**	**25,598**	**0.9**	**26.4**
North America	21,280	21,555	-1.3	21.7
of which the US	*17,636*	*17,949*	*-1.7*	*18.0*
South America	4,558	4,043	12.7	4.7
of which Brazil	*2,234*	*2,046*	*9.2*	*2.3*
ASIA	**46,100**	**44,465**	**3.7**	**47.1**
China	29,547	28,720	2.9	30.2
Japan	5,233	4,945	5.8	5.3
India	4,035	3,747	7.7	4.1
South Korea	1,794	1,828	-1.9	1.8
Others: Asia [3]	5,492	5,224	5.1	5.6
MIDDLE EAST/AFRICA	**4,857**	**4,813**	**0.9**	**5.0**
WORLD	**97,855**	**95,158**	**2.8**	**100.0**

SOURCE: **ACEA, IHS MARKIT**

1. Data for Malta n.a.
2. Includes Belarus, Bosnia-Herzegovina, Kazakhstan, Macedonia, Serbia and Uzbekistan
3. Includes Hong Kong, Taiwan and all the other South Asian countries excluding India



Europe accounts for one fifth of the world's motor vehicle registrations

New passenger car registrations

MARKET SHARES / 2017

Passenger cars In 1,000 units	2017	2016	% change 17/16	% share 2017
EUROPE	**18,067**	**17,410**	**3.8**	**22.6**
EU [1]	15,138	14,641	3.4	19.0
EFTA	494	490	0.7	0.6
Russia	1,475	1,313	12.3	1.8
Turkey	723	757	-4.5	0.9
Ukraine	79	63	24.7	0.1
Others: Europe [2]	159	144	9.9	0.2
AMERICA	**20,359**	**20,389**	**-0.1**	**25.5**
North America [3]	16,842	17,275	-2.5	21.1
of which the US	*13,958*	*14,395*	*-3.0*	*17.5*
South America	3,518	3,114	13.0	4.4
of which Brazil	*1,855*	*1,687*	*10.0*	*2.3*
ASIA	**37,243**	**35,578**	**4.7**	**46.7**
China	24,050	23,057	4.3	30.1
Japan	4,385	4,123	6.4	5.5
India	3,300	3,020	9.3	4.1
South Korea	1,474	1,527	-3.5	1.8
Others: Asia [4]	4,033	3,850	4.7	5.1
MIDDLE EAST/AFRICA	**4,162**	**4,025**	**3.4**	**5.2**
WORLD	**79,831**	**77,403**	**3.1**	**100.0**

SOURCE: **ACEA, IHS MARKIT**

1. Data for Malta n.a.
2. Includes Belarus, Bosnia-Herzegovina, Kazakhstan, Macedonia, Serbia and Uzbekistan
3. Based on production type
4. Includes Hong Kong, Taiwan and all the other South Asian countries excluding India

79.8 million passenger cars were registered worldwide in 2017

New commercial vehicle registrations

MARKET SHARES / 2017

Commercial vehicles [1] in 1,000 units	2017	2016	% change 17/16	% share 2017
EUROPE	**2,993**	**2,873**	**4.2**	**16.6**
EU [2]	2,405	2,328	3.3	13.3
EFTA	83	80	3.1	0.5
Russia	195	167	16.6	1.1
Turkey	259	255	1.6	1.4
Ukraine	10	7	53.3	0.1
Others: Europe	40	36	13.0	0.2
AMERICA	**5,479**	**5,208**	**5.2**	**30.4**
North America [3]	4,438	4,280	3.7	24.6
of which the US	*3,678*	*3,554*	*3.5*	*20.4*
South America	1,040	929	12.0	5.8
of which Brazil	*380*	*360*	*5.6*	*2.1*
ASIA	**8,857**	**8,887**	**-0.3**	**49.1**
China	5,497	5,663	-2.9	30.5
Japan	847	822	3.1	4.7
India	735	727	1.1	4.1
South Korea	319	301	5.9	1.8
Others: Asia	1,459	1,374	6.2	8.1
MIDDLE EAST/AFRICA	**695**	**788**	**-11.8**	**3.9**
WORLD	**18,023**	**17,756**	**1.5**	**100.0**

SOURCE: **ACEA, IHS MARKIT**

1. Includes light, medium and heavy commercial vehicles, and buses and coaches
2. Data for Malta n.a.
3. Based on production type

18 million vans, trucks and buses were registered globally in 2017

Motor vehicle registrations in the EU[1]

BY COUNTRY / 2017

	PC [2]	LCV [3]	CV [4]	BC [5]	TOTAL
AUSTRIA	353,320	40,174	8,186	1,244	402,924
BELGIUM	546,558	76,397	9,818	869	633,642
BULGARIA	31,244	5,973	–	–	37,217
CROATIA	50,412	8,408	1,344	204	60,368
CYPRUS	13,080	2,029	104	–	15,213
CZECH REPUBLIC	271,595	19,398	10,008	804	301,805
DENMARK	221,818	35,892	5,027	856	263,593
ESTONIA	25,020	4,229	1,037	212	30,498
FINLAND	118,581	15,524	3,473	514	138,092
FRANCE	2,110,748	437,415	51,308	6,329	2,605,800
GERMANY	3,441,262	270,694	91,755	6,697	3,810,408
GREECE	88,083	6,627	445	190	95,345
HUNGARY	116,265	19,942	5,854	642	142,703
IRELAND	131,355	24,216	2,263	339	158,173
ITALY	1,970,497	193,533	24,373	3,357	2,191,760
LATVIA	16,692	2,242	1,561	245	20,740
LITHUANIA	25,865	3,202	6,996	392	36,455
LUXEMBOURG	52,775	4,754	1,138	239	58,906
NETHERLANDS	417,075	73,478	14,641	888	506,082
POLAND	486,352	60,990	27,658	2,293	577,293
PORTUGAL	222,134	38,523	5,372	361	266,390
ROMANIA	105,083	15,829	5,949	1,011	127,872
SLOVAKIA	96,085	7,581	4,210	403	108,279
SLOVENIA	70,892	12,107	2,346	178	85,523
SPAIN	1,234,931	199,101	24,675	3,527	1,462,234
SWEDEN	379,393	55,390	6,752	1,301	442,836
UNITED KINGDOM	2,540,617	362,149	52,120	7,666	2,962,552
European Union	**15,137,732**	**1,995,797**	**368,413**	**40,761**	**17,542,703**
ICELAND	21,277	2,025	391	156	23,849
NORWAY	158,650	35,838	6,244	1,190	201,922
SWITZERLAND	314,028	31,829	4,586	712	351,155
EFTA	**493,955**	**69,692**	**11,221**	**2,058**	**576,926**
EU + EFTA	**15,631,687**	**2,065,489**	**379,634**	**42,819**	**18,119,629**

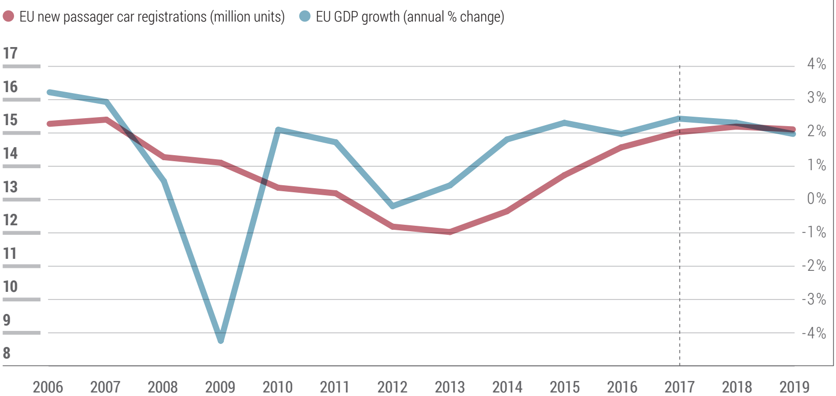
SOURCE: **ACEA**

1. Data for Malta n.a.
2. Passenger cars
3. Light commercial vehicles up to 3.5t
4. Commercial vehicles (trucks) over 3.5t
5. Buses and coaches over 3.5t

The EU represents a market of 17.5 million vehicles

New passenger car registrations and annual GDP growth in the EU

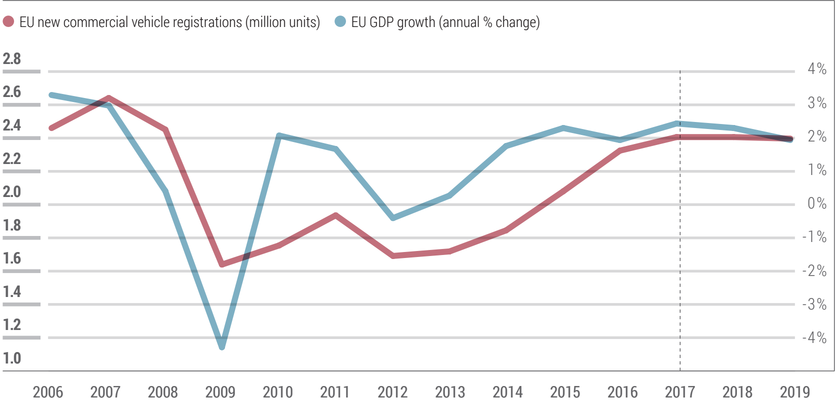
2006 – 2019



SOURCE: **ACEA, DG ECFIN, IHS MARKIT**

New commercial vehicle registrations and annual GDP growth in the EU

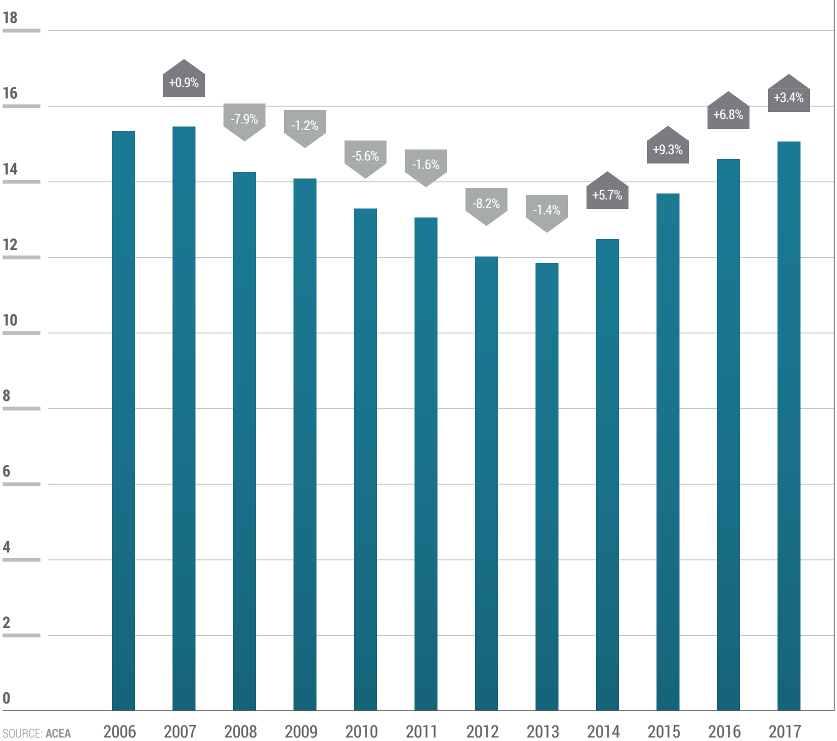
2006 – 2019



SOURCE: **ACEA, DG ECFIN, IHS MARKIT**

New passenger car registrations in the EU

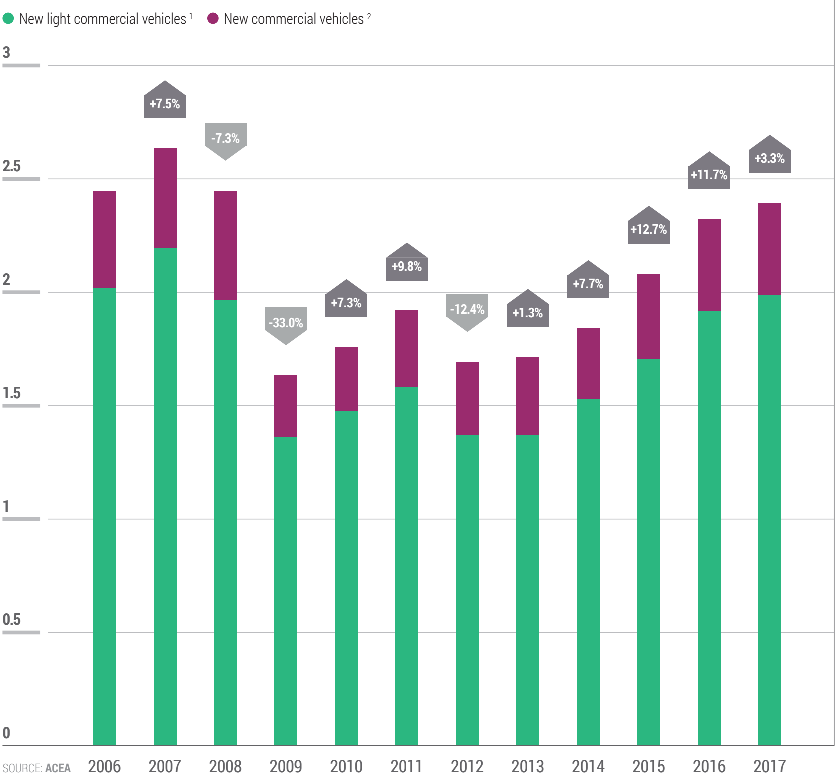
IN MILLION UNITS, % CHANGE / 2006 – 2017



SOURCE: **ACEA**

15.1 million cars were registered in the EU in 2017

New commercial vehicle registrations in the EU IN MILLION UNITS, % CHANGE / 2006 – 2017



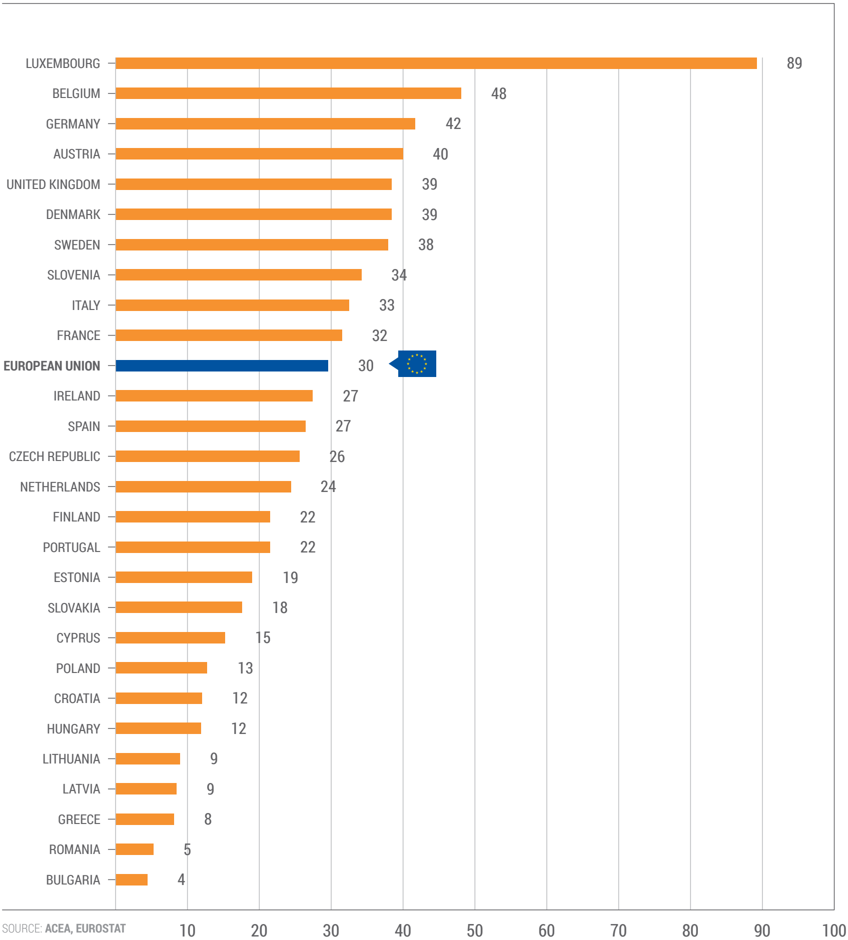
SOURCE: **ACEA**

1. Up to 3.5t
2. Trucks, buses and coaches over 3.5t

2.4 million commercial vehicles were registered in the EU in 2017

New passenger car registrations per 1,000 inhabitants

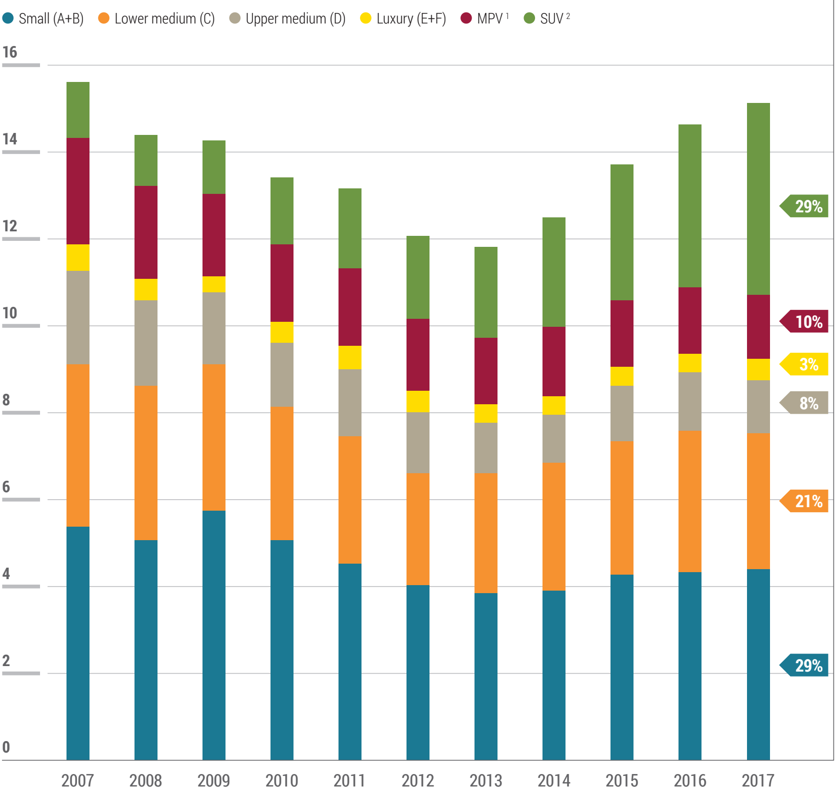
BY COUNTRY, IN UNITS / 2017



SOURCE: **ACEA, EUROSTAT**

30 new cars were registered per 1,000 inhabitants in the EU in 2017

New passenger cars sold in the EU BY SEGMENT, IN MILLION UNITS, % SHARE / 2007 – 2017



SOURCE: **IHS MARKIT**

1. Multi-purpose vehicles
2. Sport utility vehicles

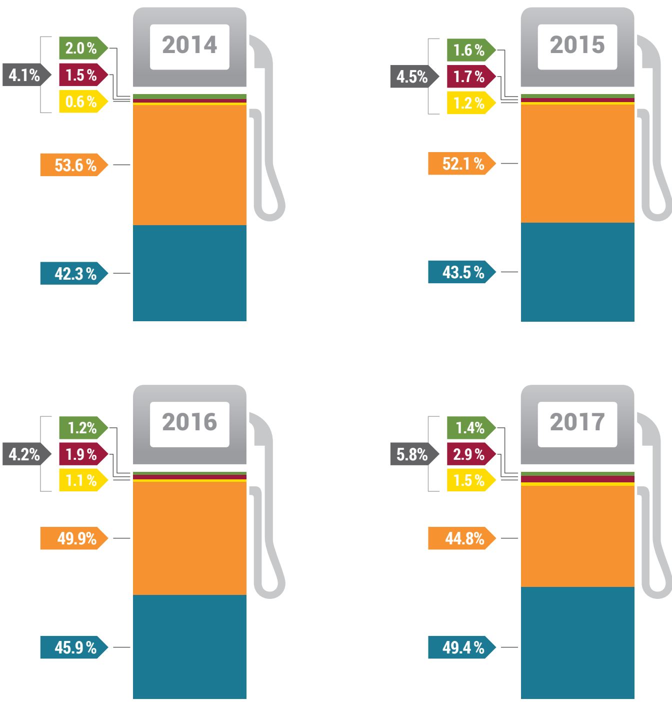
Small and medium cars make up 50% of total EU car sales

New passenger cars in the EU15 by fuel type

% SHARE / 2014 – 2017

● Petrol ● Diesel

● Total alternatively-powered vehicles ● Electrically-chargeable vehicles [1] ● Hybrid electric vehicles [2] ● Other than electric [3]



SOURCE: **ACEA, AAA**

1. Includes battery electric vehicles (BEV), extended-range electric vehicles (EREV), plug-in hybrid electric vehicles (PHEV) and fuel cell electric vehicles (FCEV)
2. Includes full and mild hybrids
3. Includes natural gas vehicles (NGV), LPG-fueled vehicles and ethanol (E85) vehicles

Petrol cars are the most sold fuel type in the European Union (49.4%)

4

THE AUTOMOBILE INDUSTRY
POCKET GUIDE 2018/2019

Vehicles in use

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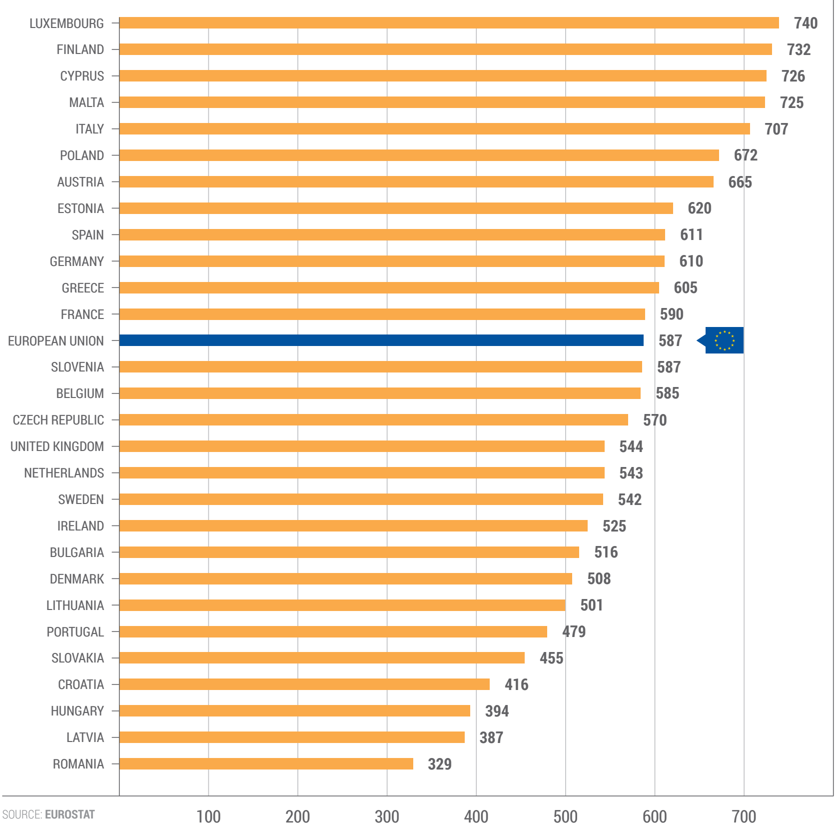
Motorisation rates in the EU

PER 1,000 INHABITANTS / 2016

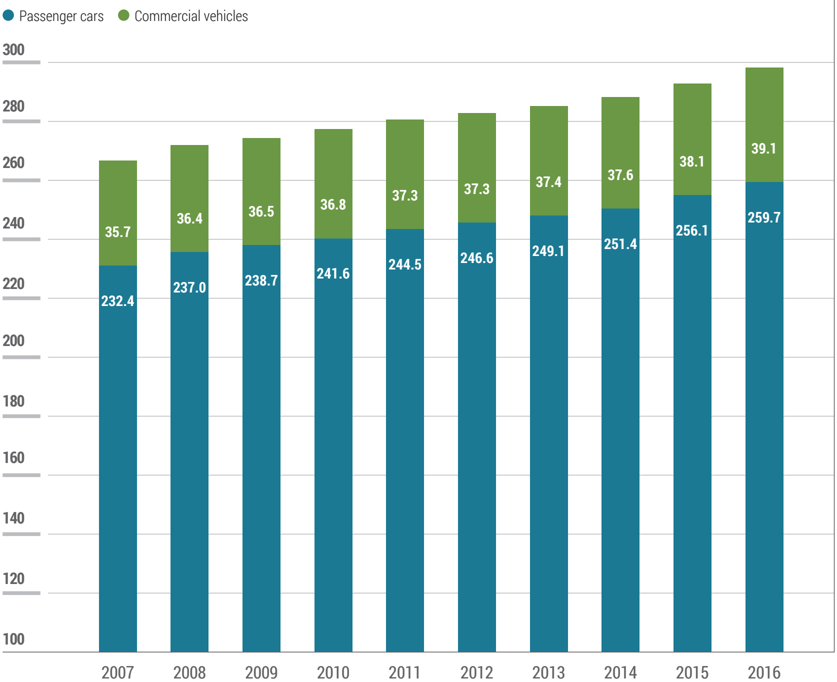


SOURCE: **EUROSTAT**

The EU counts 587 cars per 1,000 inhabitants

EU vehicle fleet: size and distribution

IN MILLION UNITS / 2007 – 2016



SOURCE: **OICA, IHS MARKIT**

Cars make up 87% of the EU vehicle fleet

Average age of the EU vehicle fleet

BY COUNTRY, IN YEARS / 2016

● Passenger cars ● Light commercial vehicles ● Heavy commercial vehicles   EU   Non-EU

EUROPEAN UNION*	Passenger cars	Light commercial vehicles	Heavy commercial vehicles
	11.0	10.9	12.0

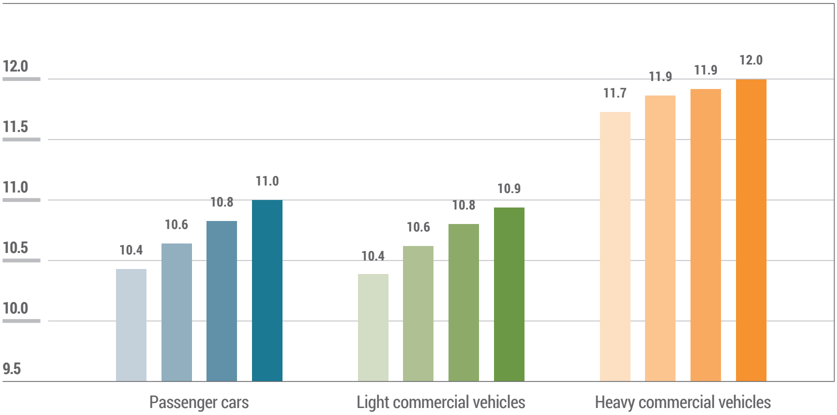
SOURCE: IHS MARKIT

* Data for Bulgaria, Cyprus and Malta not available

Cars in the EU are on average 11 years old

Average age of the EU fleet

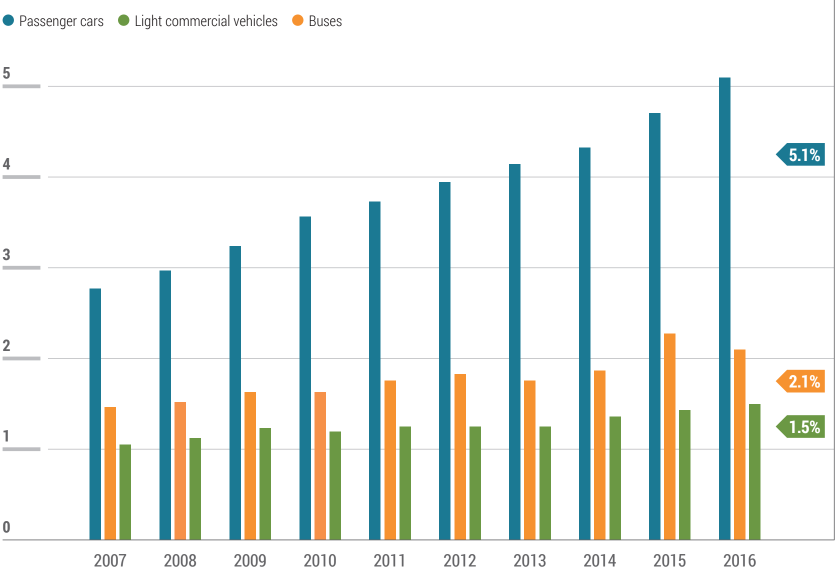
BY VEHICLE TYPE, IN YEARS / 2013 – 2016



SOURCE: **IHS MARKIT**

Share of alternatively-powered vehicles per segment*

%SHARE / 2007 – 2016



SOURCE: **EEA**

*Includes LPG, natural gas and electric vehicles

The EU vehicle fleet is getting older year-on-year

5

THE AUTOMOBILE INDUSTRY
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TRADE

Trade

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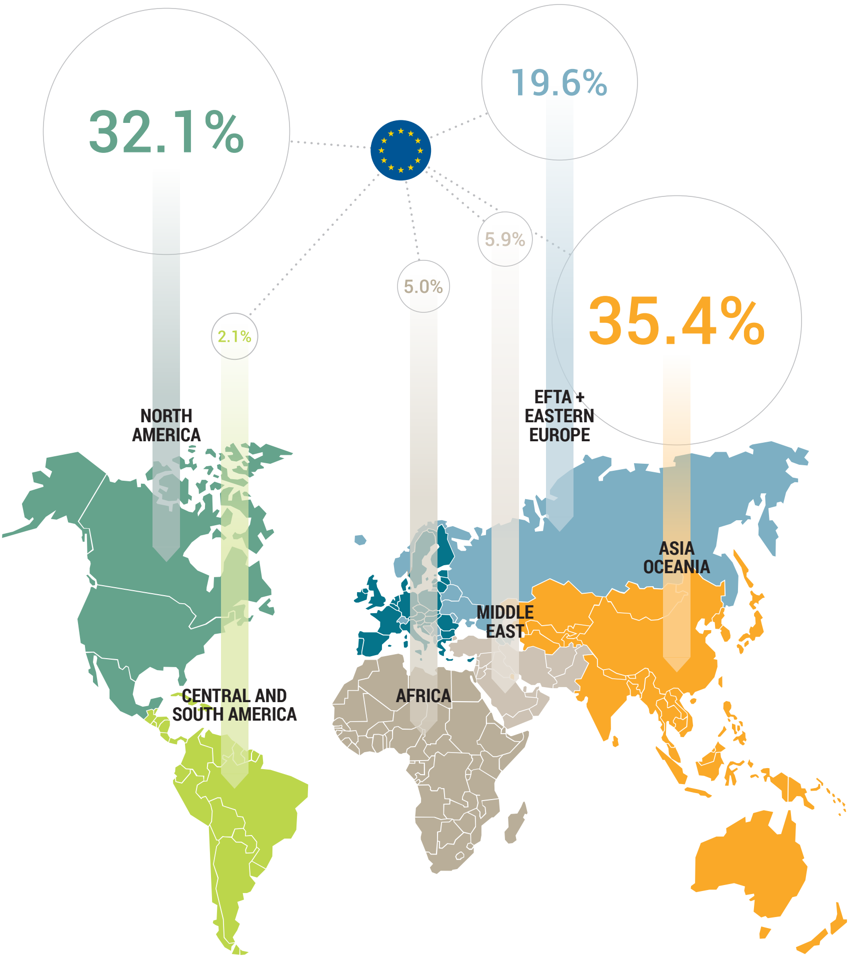
EU exports of motor vehicles

VALUE MARKET SHARE / 2017



SOURCE: **EUROSTAT**

The EU's biggest export market is Asia / Oceania

EU motor vehicle trade

BY TYPE, IN MILLION € / 2017

Trade in value	PC [1]	LCV [2]	CV & BC [3]	TOTAL
2017				
Imports	40,390	6,056	1,807	**48,253**
Exports	127,744	4,144	6,685	**138,573**
Trade balance	87,354	-1,913	4,879	**90,319**
2016				
Imports	38,237	5,921	1,831	**45,988**
Exports	124,793	4,090	6,275	**135,158**
Trade balance	86,556	-1,830	4,444	**89,170**
% change 17/16				
Imports	5.6%	2.3%	-1.3%	**4.9%**
Exports	2.4%	1.3%	6.5%	**2.5%**
Trade balance	0.9%	4.5%	9.8%	**1.3%**

SOURCE: **EUROSTAT**

EU motor vehicle trade

BY TYPE, IN UNITS / 2017

Trade in volume	PC [1]	LCV [2]	CV & BC [3]	TOTAL
2017				
Imports	3,078,917	454,610	129,098	**3,662,625**
Exports	5,373,630	322,548	178,882	**5,875,060**
2016				
Imports	2,862,389	446,589	99,437	**3,408,415**
Exports	5,425,745	339,158	489,788	**6,254,691**
% change 17/16				
Imports	7.6%	1.8%	29.8%	**7.5%**
Exports	-1.0%	-4.9%	-63.5%	**-6.1%**

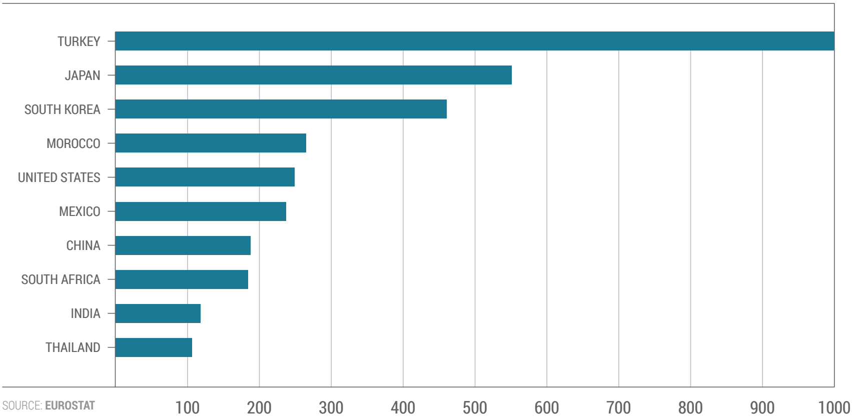
SOURCE: **EUROSTAT**

1. Passenger cars
2. Commercial vehicles up to 5t
3. Commercial vehicles over 5t, including buses and coaches

The automotive industry generates a trade surplus of €90.3 billion for the EU

Main countries of origin of EU motor vehicle imports

IN THOUSAND UNITS / 2017



SOURCE: **EUROSTAT**

Main countries of origin of EU motor vehicle imports

IN UNITS / 2017

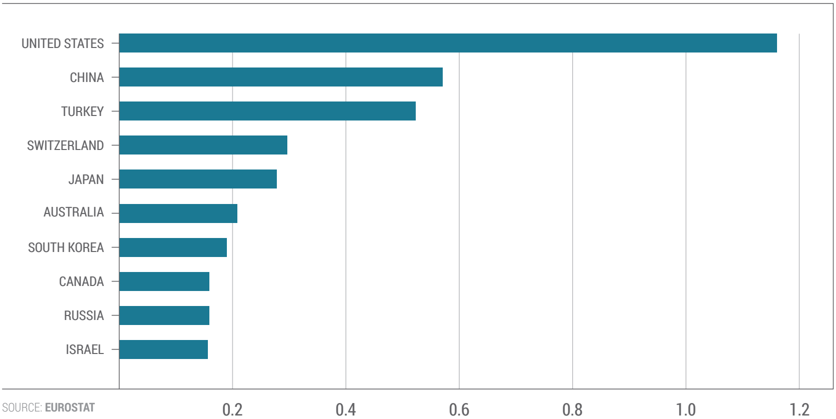
	2012	2013	2014	2015	2016	2017	% change 17/16	% share 2017
WORLD	**2,462,253**	**2,442,309**	**2,629,379**	**3,034,640**	**3,408,415**	**3,662,625**	**7.5**	**100.0**
Turkey	585,392	584,693	708,776	842,209	988,411	1,050,319	6.3	28.7
Japan	406,982	384,694	439,680	481,314	580,205	552,995	-4.7	15.1
South Korea	408,266	406,376	348,815	376,181	404,055	461,866	14.3	12.6
Morocco	64,625	99,503	168,995	188,370	217,969	264,607	21.4	7.2
United States	243,926	222,920	243,263	251,578	263,976	250,810	-5.0	6.8
Mexico	179,622	107,429	76,118	122,005	138,512	237,368	71.4	6.5
China	197,908	184,349	191,290	214,546	148,319	187,627	26.5	5.1
South Africa	67,702	59,515	87,083	141,633	192,405	184,658	-4.0	5.0
India	162,652	175,464	107,775	98,501	129,387	118,924	-8.1	3.2
Thailand	25,270	41,066	68,184	94,917	106,597	106,308	-0.3	2.9

SOURCE: **EUROSTAT**

3.7 million motor vehicles were imported to the EU in 2017

Main destinations for EU motor vehicle exports

IN MILLION UNITS / 2017



SOURCE: **EUROSTAT**

Main destinations for EU motor vehicle exports

IN UNITS / 2017

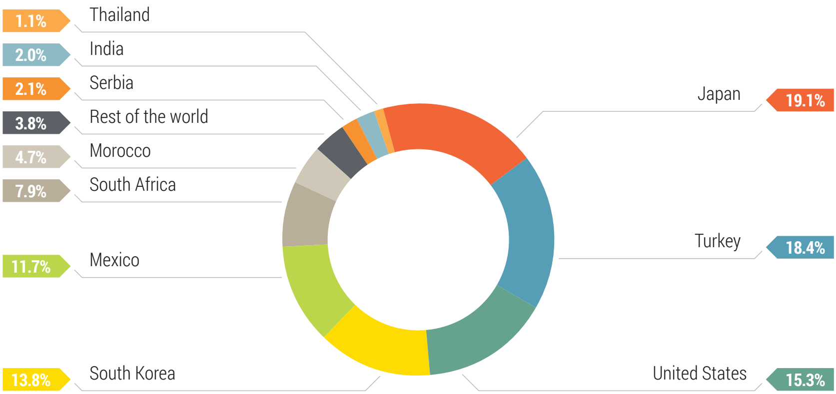
	2012	2013	2014	2015	2016	2017	% change 17/16	% share 2017
WORLD	6,466,867	6,696,077	6,048,329	6,084,787	6,254,691	5,875,060	-6.1	100.0
United States	890,655	963,281	1,010,196	1,271,613	1,201,022	1,163,873	-3.1	19.8
China	534,965	596,703	613,632	472,699	535,008	572,082	6.9	9.7
Turkey	395,544	533,957	416,496	592,114	585,266	524,283	-10.4	8.9
Switzerland	334,158	303,551	299,572	331,910	315,325	298,559	-5.3	5.1
Japan	208,865	246,658	237,675	250,839	279,789	279,987	0.1	4.8
Australia	190,833	188,738	183,085	227,920	206,825	209,796	1.4	3.6
South Korea	96,325	118,431	177,485	230,811	182,735	190,217	4.1	3.2
Canada	113,532	109,723	129,698	139,350	153,509	160,400	4.5	2.7
Russia	623,328	491,889	327,876	191,708	145,353	158,683	9.2	2.7
Israel	109,292	116,667	108,660	147,998	177,416	158,360	-10.7	2.7

SOURCE: **EUROSTAT**

The EU exported 5.9 million vehicles in 2017

Countries of origin of EU passenger car imports

VALUE MARKET SHARE / 2017



SOURCE: **EUROSTAT**

Countries of origin of EU passenger car imports

BY VALUE, IN MILLION € / 2017

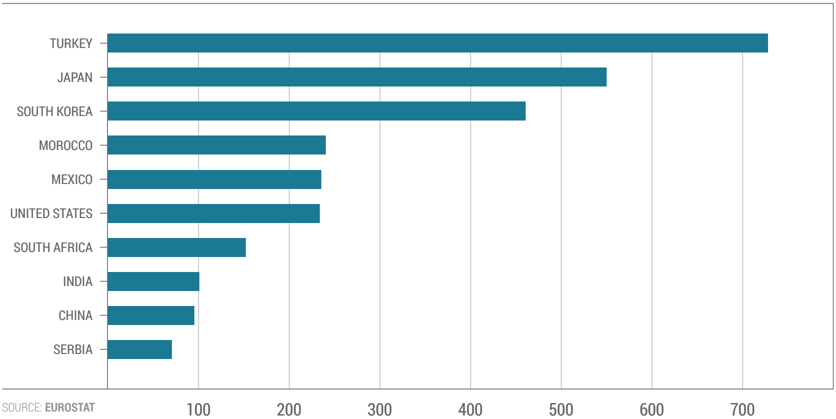
	2012	2013	2014	2015	2016	2017	% change 17/16	% share 2017
WORLD	**24,724**	**23,785**	**26,214**	**32,528**	**38,237**	**40,390**	**5.6**	**100.0**
Japan	6,262	5,894	6,685	7,718	9,142	7,731	-15.4	19.1
Turkey	3,162	3,523	4,373	5,056	6,414	7,442	16.0	18.4
United States	5,520	4,320	4,911	6,961	7,227	6,160	-14.8	15.3
South Korea	3,916	4,091	4,009	4,330	4,812	5,579	16.0	13.8
Mexico	2,500	1,605	1,068	1,642	2,213	4,715	113.1	11.7
South Africa	548	586	1,208	2,400	3,198	3,189	-0.3	7.9
Morocco	608	763	1,225	1,369	1,548	1,907	23.2	4.7
Serbia	277	1,081	1,149	1,035	999	844	-15.6	2.1
India	1,059	1,077	722	765	1,027	820	-20.2	2.0
Thailand	38	146	218	442	472	457	-3.0	1.1

SOURCE: **EUROSTAT**

Japan accounts for the highest import value of cars

Main countries of origin of EU passenger car imports

IN THOUSAND UNITS / 2017



SOURCE: **EUROSTAT**

Countries of origin of EU passenger car imports

IN UNITS / 2017

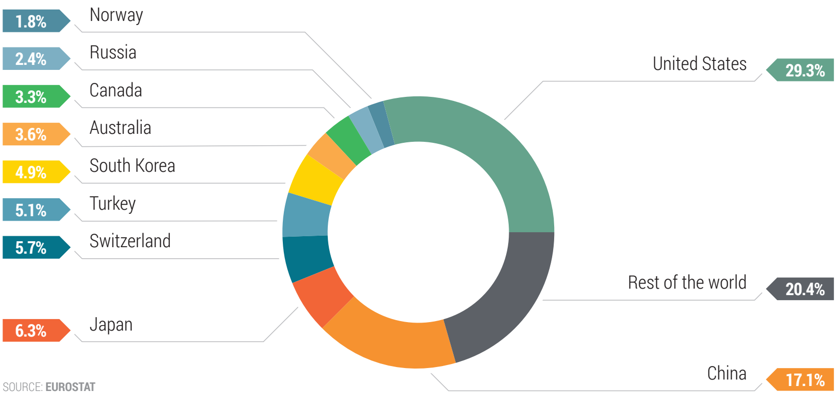
	2012	2013	2014	2015	2016	2017	% change 17/16	% share 2017
WORLD	**2,037,725**	**2,064,854**	**2,223,058**	**2,463,622**	**2,862,389**	**3,078,917**	**7.6**	**100.0**
Turkey	322,399	363,006	473,984	526,500	646,120	729,738	12.9	23.7
Japan	405,094	379,238	438,640	479,785	577,723	551,010	-4.6	17.9
South Korea	406,699	405,179	347,845	374,765	402,935	460,904	14.4	15.0
Morocco	62,386	83,956	152,588	169,823	196,739	240,907	22.5	7.8
Mexico	179,598	107,154	75,515	121,075	137,241	235,321	71.5	7.6
United States	236,360	215,437	235,008	243,101	254,776	234,065	-8.1	7.6
South Africa	43,946	42,483	68,078	122,143	166,027	152,763	-8.0	5.0
India	162,077	175,034	107,306	93,941	126,814	100,735	-20.6	3.3
China	125,267	112,769	117,948	86,540	71,144	95,733	34.6	3.1
Serbia	21,676	84,639	92,031	83,770	80,321	70,602	-12.1	2.3

SOURCE: **EUROSTAT**

The EU imported 3 million cars in 2017

Destinations for EU passenger car exports

VALUE MARKET SHARE / 2017



SOURCE: **EUROSTAT**

Main destinations for EU passenger car exports

BY VALUE, IN MILLION € / 2017

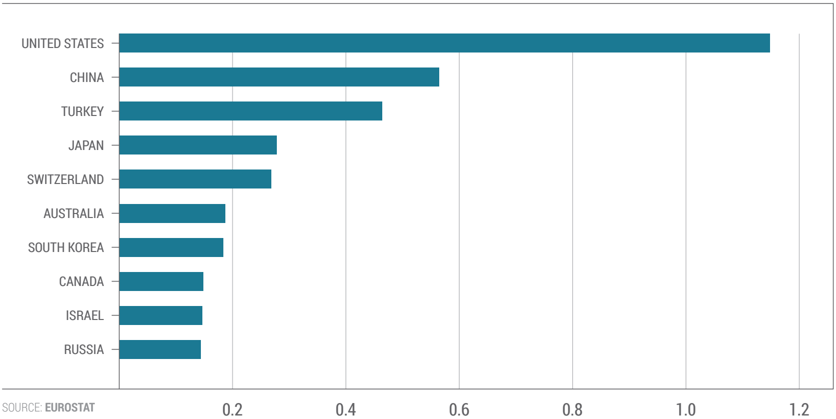
	2012	2013	2014	2015	2016	2017	% change 17 / 16	% share 2017
WORLD	107,967	111,594	114,993	129,049	124,793	127,744	2.4	100.0
United States	25,002	27,854	29,779	40,466	37,721	37,406	-0.8	29.3
China	19,298	19,672	23,492	17,948	19,741	21,907	11.0	17.1
Japan	6,310	6,404	5,996	6,465	7,340	8,046	9.6	6.3
Switzerland	6,859	6,193	6,375	7,619	7,333	7,257	-1.0	5.7
Turkey	4,885	5,999	5,133	7,454	7,772	6,520	-16.1	5.1
South Korea	2,497	3,127	4,693	6,910	5,791	6,308	8.9	4.9
Australia	3,498	3,633	3,482	4,593	4,603	4,634	0.7	3.6
Canada	2,997	2,849	3,014	3,640	3,904	4,216	8.0	3.3
Russia	8,744	7,049	5,198	3,667	2,926	3,116	6.5	2.4
Norway	3,262	3,214	3,179	3,375	3,325	2,284	-31.3	1.8

SOURCE: **EUROSTAT**

EU car exports are worth €127.7 billion

Main destinations for EU passenger car exports

IN MILLION UNITS / 2017



SOURCE: **EUROSTAT**

Main destinations for EU passenger car exports

IN UNITS / 2017

	2012	2013	2014	2015	2016	2017	% change 17/16	% share 2017
WORLD	**5,819,250**	**5,970,535**	**5,513,757**	**5,563,023**	**5,425,745**	**5,373,630**	**-1.0**	**100.0**
United States	880,698	952,634	998,504	1,223,020	1,170,639	1,149,919	-1.8	21.4
China	527,098	592,053	608,912	469,762	531,339	566,716	6.7	10.5
Turkey	357,256	488,138	372,753	531,720	534,180	465,808	-12.8	8.7
Japan	208,265	246,550	236,833	247,832	279,198	279,694	0.2	5.2
Switzerland	305,492	275,536	270,741	303,105	282,451	269,901	-4.4	5.0
Australia	150,960	166,768	162,756	206,701	188,599	189,361	0.4	3.5
South Korea	94,674	116,458	174,496	227,065	176,710	184,368	4.3	3.4
Canada	110,068	106,098	123,210	131,183	145,365	149,707	3.0	2.8
Israel	102,222	105,065	99,865	133,621	163,271	146,462	-10.3	2.7
Russia	566,094	439,755	301,107	181,458	134,420	144,911	7.8	2.7

SOURCE: **EUROSTAT**

5.4 million cars were exported by the EU in 2017

6

THE AUTOMOBILE INDUSTRY
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Environment

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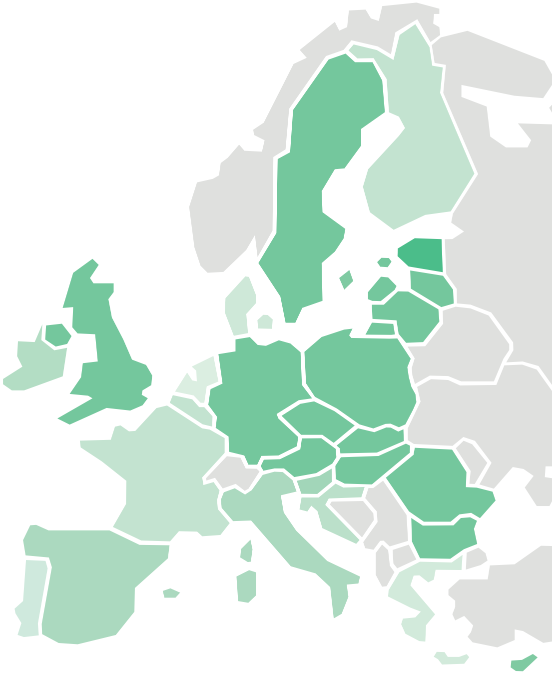
Average CO2 emissions from new passenger cars by country

IN G CO2/KM / 2017

	2017 average emissions (g CO2/km)	% change 2017 – 2016
Austria	120.7	0.2
Belgium	115.9	0.0
Bulgaria	126.1	0.2
Croatia	113.1	1.3
Cyprus	122.2	-1.1
Czech Republic	124.4	2.7
Denmark	107.1	0.9
Estonia	132.8	-0.8
Finland	118.2	-1.5
France	110.4	0.5
Germany	127.1	0.1
Greece	108.8	2.4
Hungary	125.6	-0.2
Ireland	111.6	-0.4
Italy	113.4	-0.1
Latvia	128.8	-0.1
Lithuania	127.4	1.0
Luxembourg	127.0	0.7
Malta	110.4	-1.2
Netherlands	108.3	2.3
Poland	127.7	1.4
Portugal	104.6	-0.1
Romania	120.6	-1.1
Slovakia	126.1	1.0
Slovenia	119.6	0.5
Spain	115.0	0.5
Sweden	122.3	-0.6
United Kingdom	121.1	0.8
EU average	118.5	0.3

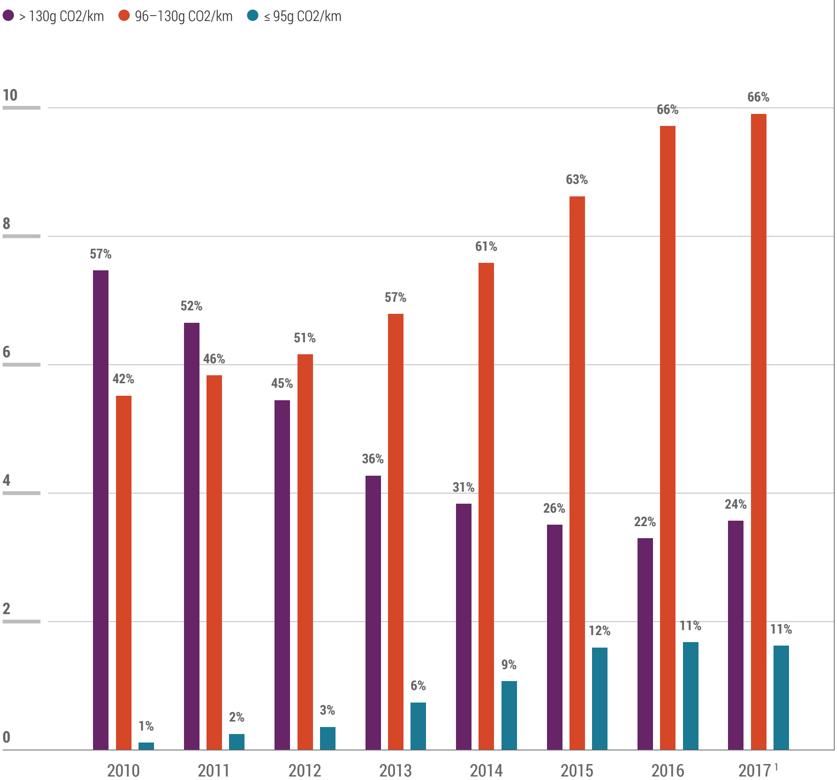
SOURCE: **EEA**



The average new car emits 118.5g CO2/km

New passenger cars in the EU by emissions classes

IN MILLION UNITS, % SHARE / 2010 – 2017



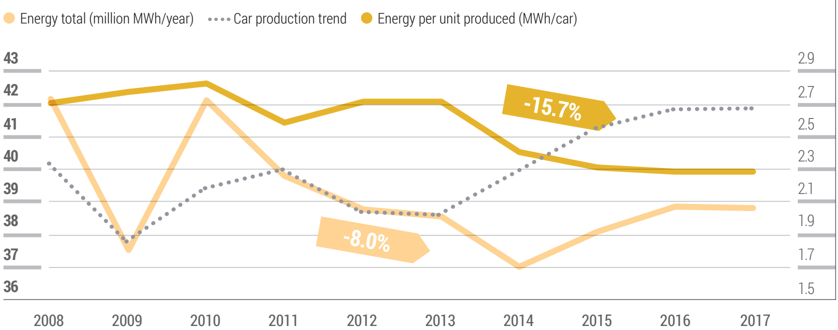
SOURCE: **EEA**

1. Provisional data

Market demand for fuel-efficient cars was stable in 2017

Energy consumption during production

2008 – 2017

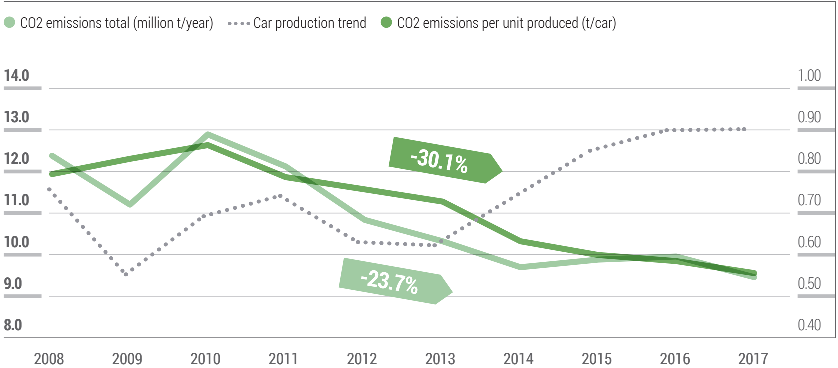


SOURCE: **ACEA MEMBERS**

As cars have become equipped with ever more features to make them safer, cleaner and smarter, the complexity of vehicle production has increased. This increase in complexity affects energy demand. Nevertheless, manufacturers have been working continuously to **improve the energy efficiency** of production. As a result, the energy consumption per car produced has decreased by 15.7% over the last decade.

CO_2 emissions from production

2008 – 2017



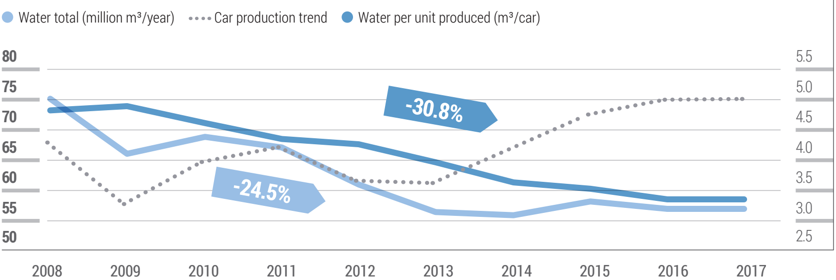
SOURCE: **ACEA MEMBERS**

The CO_2 emissions per car produced dropped by 30.1% between 2008 and 2017, while the overall figure went down by 23.7% over the same period, reflecting the industry's efforts to reduce CO_2 emissions from production. Even though car production has been on the rise again since 2013, **manufacturers have been able to decouple CO_2 emissions from production growth** by increasingly sourcing energy from renewable and/or low-carbon sources. As the chart shows, total CO_2 emissions have remained stable despite a substantial increase in production volume.

CO_2 emissions per car produced dropped by 30.1% over the last decade

Water used in production

2008 – 2017

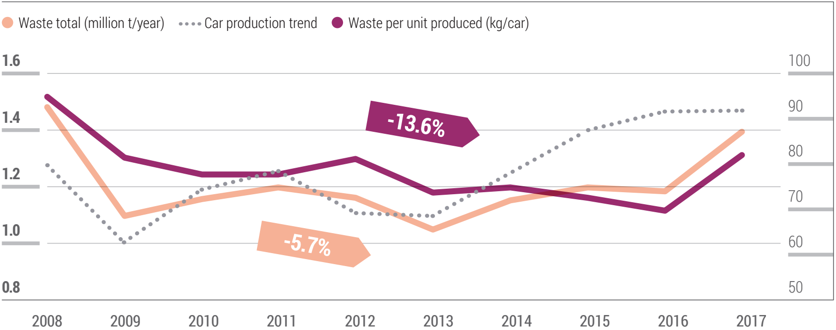


SOURCE: **ACEA MEMBERS**

Long-term **strategies for reducing water consumption** have made it possible to reduce water use per car produced by 30.8% between 2008 and 2017. This includes the increased application of recirculation technologies for the reuse of water.

Waste from production*

2008 – 2017



SOURCE: **ACEA MEMBERS**

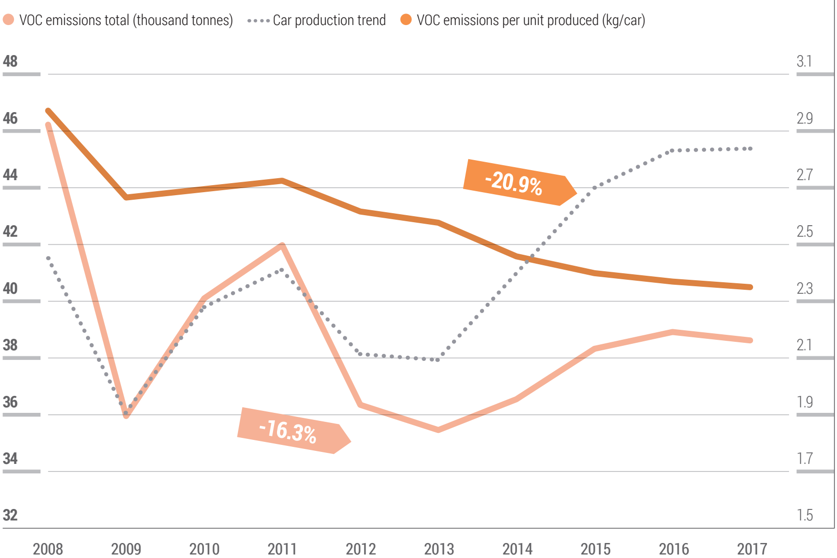
* excluding scrap metal and demolition waste

The waste generated per unit produced by the manufacturing of passenger cars went **down by 13.6% over ten years**. Waste fluctuations, both in absolute and per unit terms can be explained by the occurrence of singular events, such as a fall in total production during the economic crisis.

Water consumption per car produced has been reduced by 30.8% since 2008

VOC emissions from production

2008 – 2017



SOURCE: **ACEA MEMBERS**

Volatile organic compounds (VOC) are organic solvents mainly emitted from paint shops. The graph shows VOC emissions per car produced and the absolute emissions of all car manufacturers combined. With new technologies, such as the replacement of solvent-based paints with solvent-free, water-based equivalents, manufactures have been able to reduce unit emissions by 21% over the last ten years.

European manufacturers have significantly reduced the environmental impact of car production over the last decade

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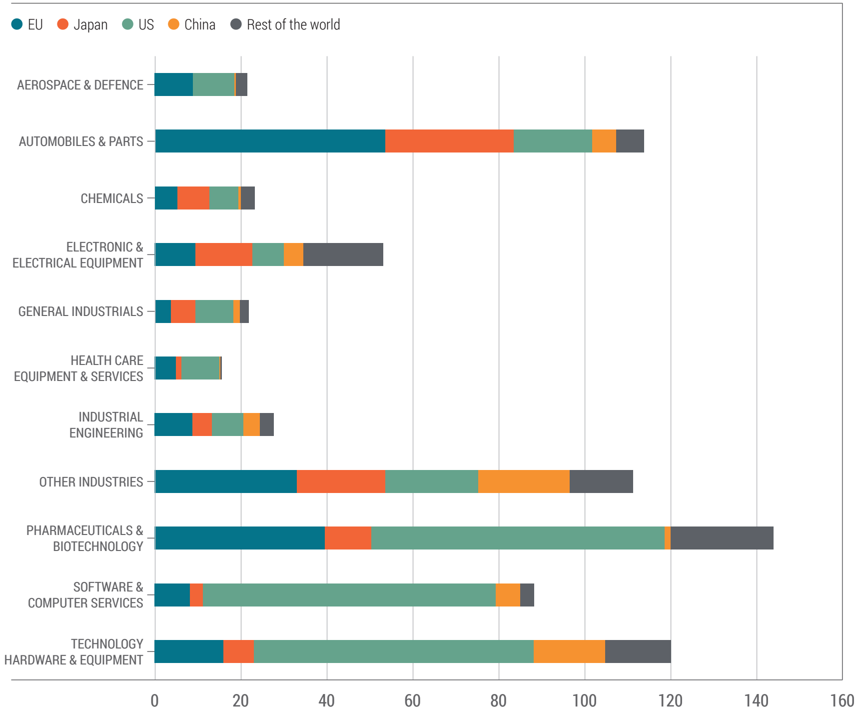
R&D investment by industry and main region

IN BILLION € / 2016

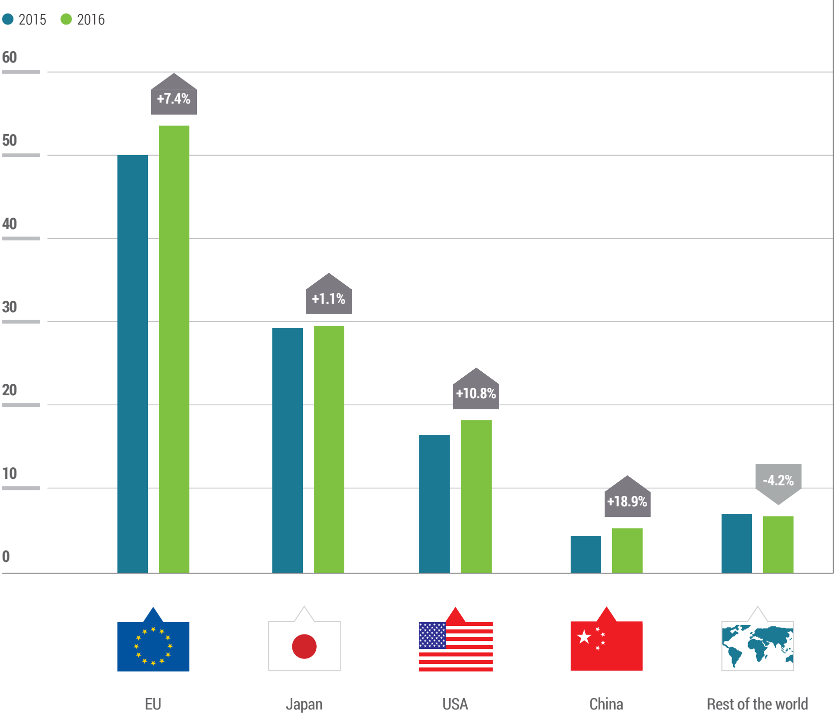


SOURCE: **THE 2017 EU INDUSTRIAL R&D INVESTMENT SCOREBOARD, EUROPEAN COMMISSION, JRC/DG RTD**

The EU is by far the world's largest investor in automotive R&D

R&D growth in the automotive sector: by world region

IN BILLION € / % CHANGE

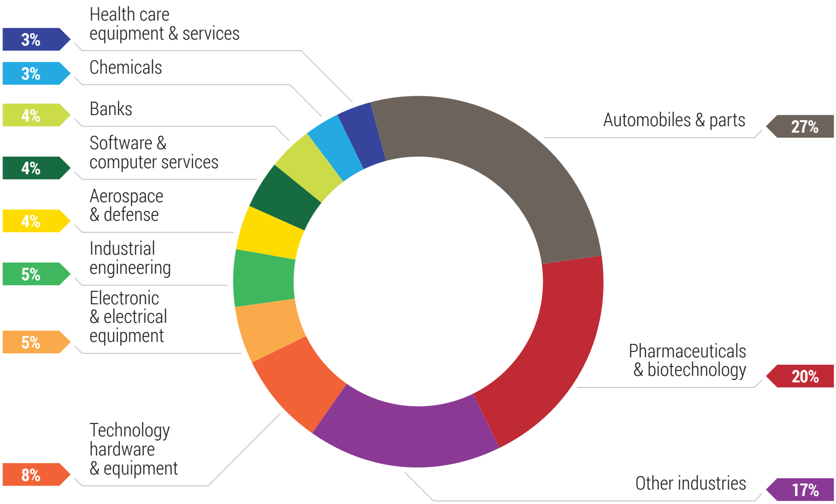


SOURCE: THE 2017 EU INDUSTRIAL R&D INVESTMENT SCOREBOARD, EUROPEAN COMMISSION, JRC/DG RTD

EU automotive investment in R&D has increased to €53.8 billion annually

R&D shares of sectors in the EU

%SHARE / 2016



SOURCE: THE 2017 EU INDUSTRIAL R&D INVESTMENT SCOREBOARD, EUROPEAN COMMISSION

EU R&D investment in the top 10 industrial sectors

IN BILLION € / 2016

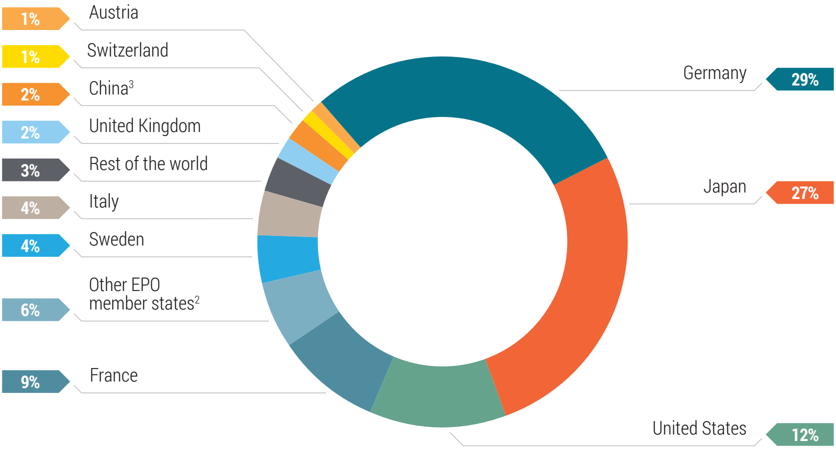
	R&D 2016
Automobiles & parts	53.8
Pharmaceuticals & biotechnology	39.6
Other industries	33.0
Technology hardware & equipment	16.0
Electronic & electrical equipment	9.4
Industrial engineering	8.9
Aerospace & defense	8.9
Software & computer services	8.4
Banks	8.0
Chemicals	5.4
Health care equipment & services	5.0

SOURCE: THE 2017 EU INDUSTRIAL R&D INVESTMENT SCOREBOARD, EUROPEAN COMMISSION, JRC/DG RTD

The automotive sector is the EU's number one investor in R&D, responsible for 27% of total spending

Patents granted in the automotive sector[1]

% SHARE / 2017



SOURCE: **EUROPEAN PATENT OFFICE (EPO)**

Automotive patents

BY COUNTRY / 2017

Germany	2,556
Japan	2,382
United States	1,016
France	803
Other EPO member states[2]	483
Sweden	343
Italy	309
Rest of the world	243
United Kingdom	200
China[3]	156
Switzerland	128
Austria	113
Total	**8,732**

SOURCE: **EUROPEAN PATENT OFFICE (EPO)**

1. Includes categories B60, B62, F02 and F16
   B60: Vehicles in general
   B62: Land vehicles for travelling otherwise than on rail
   F02: Combustion engines; hot-gas or combustion-product engine plants
   F16: Engineering elements or units; general measures for producing and maintaining effective functioning of machines or installations; thermal insulation in general
2. Includes Liechtenstein, Monaco, Turkey and the other EU+EFTA countries
3. Includes Taiwan

Over 8,700 patents were granted to the automotive sector in 2017

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Taxation

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CO2-based motor vehicle taxes in the EU in 2018

COUNTRY	CO2 / FUEL CONSUMPTION TAXES
Austria	Fuel consumption/pollution tax and company car tax CO2-based.
Belgium	CO2-based company car tax (all regions). Registration tax calculation CO2-based (Flanders and Walloon Region). Environmental correction on the annual circulation tax based on CO2 emissions (Flanders).
Croatia	Registration tax based on CO2 emissions and fuel consumption.
Cyprus	Registration tax and annual road tax CO2-based.
Denmark	Annual circulation tax based on fuel consumption (CO2-based).
Finland	Registration tax, annual circulation tax and excise duties for road traffic fuels CO2-based.
France	CO2-based bonus-malus system. Scrapping scheme for diesel cars (CO2-based). Annual tax and company car tax based on CO2 emissions.
Germany	CO2-based annual circulation tax.
Greece	Registration tax and annual circulation tax based on CO2 emissions.
Ireland	VAT deductibility, registration tax and annual circulation tax CO2-based.
Latvia	CO2-based registration tax.
Luxembourg	CO2-based annual circulation tax.
Malta	Registration tax based on CO2 emissions, price and vehicle length. Annual circulation tax based on CO2 emissions and vehicle age.
Netherlands	Registration tax, road tax and company car tax CO2-based.
Portugal	Registration tax and annual circulation tax CO2-based.
Romania	Scrappage programme and incentive bonuses CO2-based.
Slovenia	CO2-based registration tax.
Spain	Special tax on first registration CO2-based. Reduction on company car tax CO2-based.
Sweden	Bonus-malus system for incentives CO2-based. Annual circulation tax based on CO2 emissions.
United Kingdom	Annual circulation tax and company car tax based on CO2 emissions.

SOURCE: **ACEA TAX GUIDE 2018**

20 EU member states apply CO2 taxation

Overview of purchase and tax incentives for electric vehicles in the EU

COUNTRY	EV INCENTIVES
Austria	EVs are exempt from fuel consumption/pollution tax, ownership tax and company car tax. Deductible VAT for zero-emission cars.
Belgium	Exemption from registration tax for EVs and PHEVs, purchase subsidies for BEVs and FCEVs (Flanders). EVs pay the lowest rate of annual circulation tax (all three regions). 120% deduction from company car tax for zero-emission vehicles.
Bulgaria	EVs are exempt from ownership tax.
Cyprus	Vehicles emitting less than 120g CO2/km are exempt from registration tax and pay the lowest rate of annual road tax.
Czech Republic	EVs, HEVs and other APVs are exempt from road tax.
Denmark	BEVs pay only 40% of the registration tax. Hydrogen and fuel cell-powered vehicles are exempt.
Finland	BEVs pay the minimum rate of the CO2-based registration tax.
France	EVs are exempt from company car tax; local exemption from registration tax for APVs. Bonus granted for EVs and HEVs (CO2-based), and to switch an old diesel vehicle with a new BEV or PHEV.
Germany	EVs exempt from circulation tax for 10 years. Bonus granted for BEVs, FCEVs, PHEVs and EREVs.
Greece	Electric and hybrid vehicles exempt from registration tax, luxury tax and luxury living tax Electric and hybrid cars exempt from annual circulation tax (based on cc).
Hungary	EVs and PHEVs are exempt from registration tax, annual circulation tax and company car tax.
Ireland	EVs, PHEVs qualify for VRT (purchase tax) reliefs; EVs pay minimum rate of road tax Grant support for buying EVs and PHEVs.
Italy	EVs exempt from annual circulation tax for five years (75% reduction for following years).
Latvia	BEVs pay the lowest fee for technical inspections and the lowest amount for company car tax.
Luxembourg	EVs and FCEVs benefit from tax allowances on registration fees (EVs also pay min rate of annual circulation tax). Pure electric and hydrogen cars pay the lowest rate of the company car tax.
Malta	For pure electric vehicles the emission tax is zero.
Netherlands	Zero-emission cars are exempt from registration and motor vehicle tax, and pay the lowest rate of company car tax.
Portugal	Deductible VAT for EVs and PHEVs. BEVs are exempt from registration tax (75% reduction for PHEVs).
Romania	EVs are exempt from ownership tax. Incentive scheme grants bonus for buying BEVs and hybrids.
Slovakia	BEVs pay the lowest rate for registration tax and are exempt from motor vehicle tax.
Slovenia	Financial incentives are granted for the purchase of zero-emission vehicles. BEVs pay the lowest rate of tax on motor vehicle.
Spain	Local reductions on ownership tax for fuel-efficient vehicles. Reductions on company car taxation for APVs.
Sweden	Bonus available to purchase new vehicles with CO2 emissions of max 60g/km. Five years exemption from annual circulation tax for electric and plug-in hybrid cars.
United Kingdom	Cars emitting less than 50g/km are exempt from first year allowances (FYAs). Zero-emission vehicles attract a zero rate of vehicle excise duty (VED). Reduction on company car tax rates for ultra-low emissions and electric vehicles.

SOURCE: **ACEA TAX GUIDE 2018**

APV Alternatively-powered vehicle
BEV Battery electric vehicle
EREV Extended range electric vehicle
FCEV Fuel-cell electric vehicle
HEV Hybrid electric vehicle
LPG Liquefied petroleum gas
CNG Compressed natural gas
PHEV Plug-in hybrid eletric vehicle

Incentives for electric vehicles are available in 24 EU countries

Fiscal income from motor vehicles in the EU15[1]

	AUSTRIA	BELGIUM	DENMARK	FINLAND	FRANCE	GERMANY	GREECE
	€ bn 2015	€ bn 2016	DKK bn 2016	€ bn 2016	€ bn 2016	€ bn 2016	€ bn 2016
Purchase or transfer							
1. VAT on vehicle sales servicing/repair, parts, tyres	2.742	7.100	–	1.610	15.606	29.747	–
2. Fuels & lubricants	5.200	7.415	17.191	3.989	36.412	42.152	3.663
3. Sales & registration taxes	0.395	0.430	19.514	0.964	2.188	–	0.188
Annual ownership taxes	2.232	1.614	10.609	1.083	0.859	8.952	1.113
Driving license fees	–	0.017	–	–	–	0.168	–
Insurance taxes	0.331	0.960	1.534	0.384	4.739	4.300	–
Tolls	1.890	0.648	0.433	–	11.796	4.600	–
Customs duties	–	–	–	–	–	0.600	–
Other taxes	0.322	0.649	–	–	1.858	–	0.125
TOTAL (national currencies)	**13.112**	**18.833**	**49.281**	**8.030**	**73.458**	**90.519**	**5.089**
TOTAL (EURO)	**13.1**	**18.8**	**6.6**	**8.0**	**73.5**	**90.5**	**5.1**

	IRELAND	ITALY	NETHER-LANDS	PORTUGAL	SPAIN	SWEDEN	UNITED KINGDOM
	€ bn 2015	€ bn 2016	€ bn 2016	€ bn 2016	€ bn 2016	SEK bn 2016	£ bn 2017/2018[2]
Purchase or transfer							
1. VAT on vehicle sales servicing/repair, parts, tyres	0.601	17.350	1.321	3.446	–	24.500	12.500
2. Fuels & lubricants	3.028	35.820	9.664	3.259	18.758	48.200	28.100
3. Sales & registration taxes	0.684	1.690	1.551	0.672	4.364	–	–
Annual ownership taxes	1.124	6.610	4.058	0.554	2.718	14.300	6.000
Driving license fees	–	–	0.256	–	0.064	–	–
Insurance taxes	–	3.880	0.979	–	–	2.800	–
Tolls	–	2.030	–	0.320	–	1.800	–
Customs duties	–	–	–	0.050	–	–	–
Other taxes	–	5.620	1.663	0.200	0.708	4.500	1.500
TOTAL (national currencies)	**5.437**	**73.000**	**19.492**	**8.501**	**26.612**	**96.100**	**48.100**
TOTAL (EURO)	**5.4**	**73.0**	**19.5**	**8.5**	**26.6**	**9.6**	**54.8**

GRAND TOTAL = € 413 bn

SOURCE: **ACEA TAX GUIDE 2018**

1. Latest available data; only country for which sourced data is available are listed
2. 2012 estimates for income from VAT and other taxes

Motor vehicles account for €413 billion in taxes in the EU15

Share of VAT in net price of cars

VAT	
27%	Hungary
25%	Denmark, Croatia, Sweden
24%	Finland, Greece
23%	Ireland, Poland, Portugal
22%	Italy, Slovenia
21%	Belgium, Czech Republic, Latvia, Lithuania, Netherlands, Spain
20%	Austria, Bulgaria, Estonia, France, Slovakia, United Kingdom
19%	Cyprus, Germany, Romania
18%	Malta
17%	Luxembourg

SOURCE: **ACEA TAX GUIDE 2018**

Excise duties on fuels in €/1,000 litres

	UNLEADED PETROL	DIESEL
Austria	515	425
Belgium	615	560
Bulgaria	363	330
Croatia	519	411
Cyprus	479	450
Czech Republic	505	431
Denmark	566	364
Estonia	563	493
Finland	703	530
France	659	547
Germany	655	470
Greece	700	410
Hungary	391	360
Ireland	588	479
Italy	728	617
Latvia	476	372
Lithuania	434	347
Luxembourg	465	338
Malta	549	472
Netherlands	778	490
Poland	395	346
Portugal	659	471
Romania	424	394
Slovakia	514	368
Slovenia	508	426
Spain	461	367
Sweden	670	591
United Kingdom	661	661
EU minimum rates	**359**	**330**

SOURCE: **ACEA TAX GUIDE 2018**

Automobile taxation provides a vital source of governement revenue

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Avenue des Nerviens 85
B–1040 Brussels
T. +32 2 732 55 50
info@acea.be
@ACEA_eu

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