
2015
2016

The Automobile Industry Pocket Guide



ACEA

European
Automobile
Manufacturers
Association

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Foreword

It is with great pleasure that I present to you the 2015-2016 Automobile Industry Pocket Guide. With a new look and refreshed data, we hope that this edition will be more useful than ever for ACEA's stakeholders and partners. These new statistics show an industry that continues to provide employment and mobility for Europe's citizens, generate tax and trade revenue for governments, and lead the world in terms of innovation.

This new Pocket Guide paints a picture of a changing industry, one that is beginning to slowly recover from the shocks of the economic crisis of the late 2000s. Revised employment data shows that 12.1 million people now work directly or indirectly in the automotive sector, producing 17.2 million cars, vans, trucks and buses a year. A fleet of 288 million motor vehicles serves the population's mobility and transport needs across the EU. Sales of new motor vehicles were 14.4 million in 2014 in the EU, with European automobile trade experiencing a healthy trade surplus of €95.1 billion.

As the representative of one of Europe's most vital strategic industries, ACEA continues to contribute constructively to discussions with policy makers and other stakeholders in order to consolidate the sector's global competitiveness. ACEA believes that, with a recovery in progress, it is now more important than ever for policy makers to follow through on their wider plans to drive innovation, foster growth through international trade, and build a more supportive regulatory framework.



A blue ink handwritten signature of Erik Jonnaert, written in a cursive style.

Erik Jonnaert
ACEA Secretary General

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 manufacturers of passenger cars, vans, trucks and buses with production sites in the EU.

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

BMW Group		DAIMLER	 <small>FIAT CHRYSLER AUTOMOBILES</small>	
   	 HYUNDAI	IVECO	 	PSA PEUGEOT CITROËN
	TOYOTA	VOLKSWAGEN <small>AGTUNGSGESELLSCHAFT</small>		VOLVO

ACEA's mission and priority areas

ACEA's mission is to:

- 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; and
- Undertake strategic reflection on the increasingly global challenges of mobility, sustainability and competitiveness.

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

- 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 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.

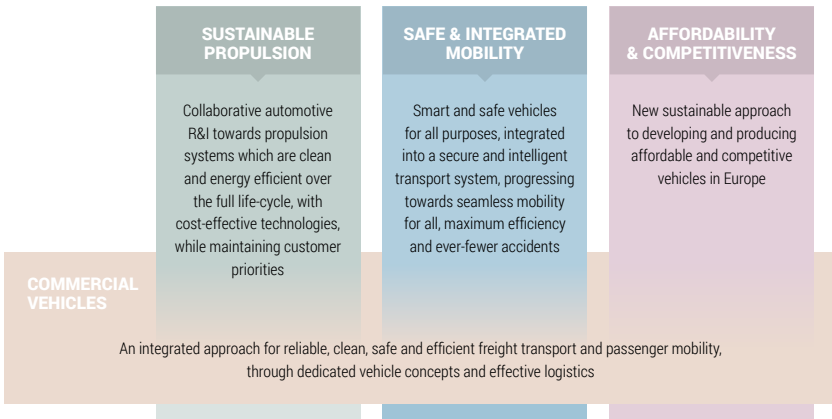
The day-to-day work of the ACEA secretariat is overseen by the Secretary General, who ensures that the Board of Directors' priorities are addressed. Technical expertise and advisory input comes from working groups on topics as diverse as emissions, road and vehicle safety, general transport policy and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



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

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

EUCAR collaborative research and innovation activities cover both passenger and commercial vehicles, focused on the following “Strategic Pillars”:



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.

EUCAR members are:

BMW Group, DAF Trucks, Daimler, Fiat Chrysler Automobiles, Ford of Europe, Hyundai Motor Europe, Jaguar Land Rover, Opel Group, PSA Peugeot Citroën, Renault Group, Toyota Motor Europe, Volkswagen Group, Volvo Cars and Volvo Group.

Key figures

EMPLOYMENT

Manufacture of motor vehicles (EU28)	2.3 million people = 7.6% of EU employment in manufacturing	2012
Total (EU28 manufacturing, services and construction)	12.1 million people = 5.6% of total EU employment	2012

PRODUCTION

Motor vehicles (world)	90.6 million units	2014
Motor vehicles (EU28)	17.2 million units = 19% of global motor vehicle production	2014
Passenger cars (world)	72.3 million units	2014
Passenger cars (EU28)	15.0 million units = 21% of global passenger car production	2014

REGISTRATIONS

Motor vehicles (world)	89.3 million units	2014
Motor vehicles (EU27)	14.4 million units = 16% of global motor vehicle registrations/sales	2014
Passenger cars (world)	70.9 million units	2014
Passenger cars (EU27)	12.6 million units = 18% of global passenger car registrations/sales	2014
Diesel (EU28)	53.0%	2014
Alternative fuels (EU28)	2.7%	2014

VEHICLES IN USE

Motor vehicles (EU28)	287.1 million units	2013
Passenger cars (EU28)	249.5 million units	2013
Motorisation rate (EU28+EFTA)	564 units per 1,000 inhabitants	2013
Average age (EU28)	9.7 years	2014

TRADE

Exports (extra-EU28)	€124.2 billion	2014
Imports (extra-EU28)	€29.1 billion	2014
Trade balance	€95.1 billion	2014

ENVIRONMENT

Average CO2 emissions (EU28)	123.4 g CO2/km	2014
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INNOVATION

Automobiles & parts sector	€41.5 billion	2013
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TAXATION

Fiscal income from motor vehicles (EU14)	€396 billion	2014
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1

THE AUTOMOBILE INDUSTRY
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Employment



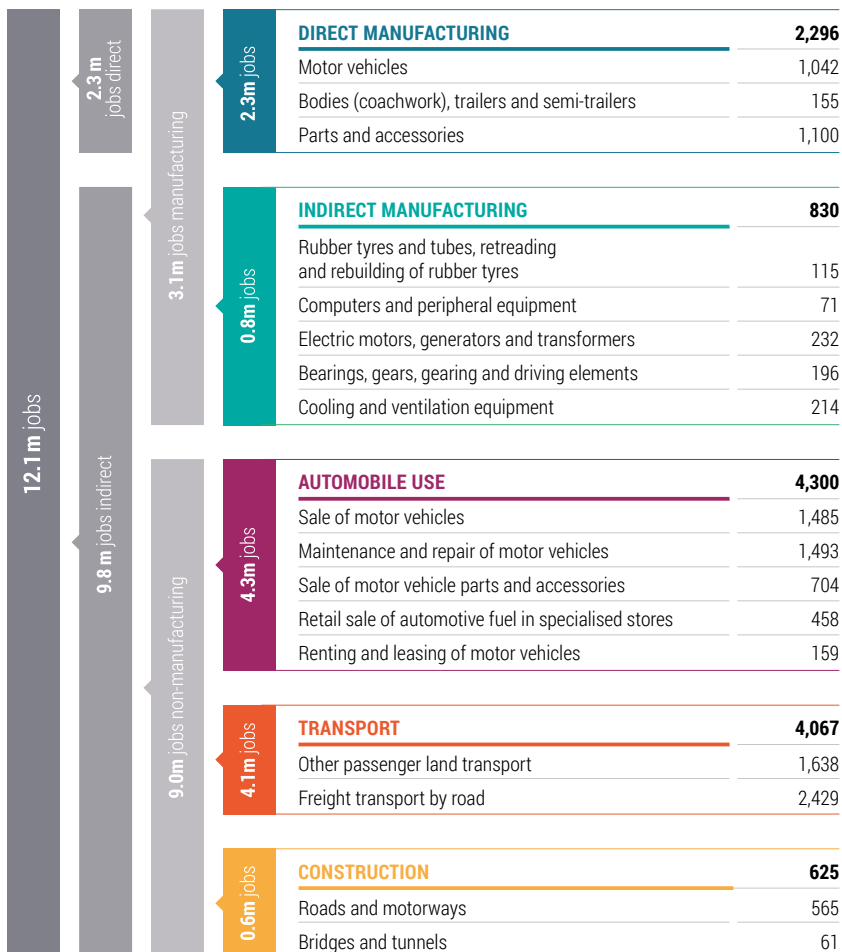
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Automotive sector: direct and indirect employment in the EU

IN THOUSANDS / 2012

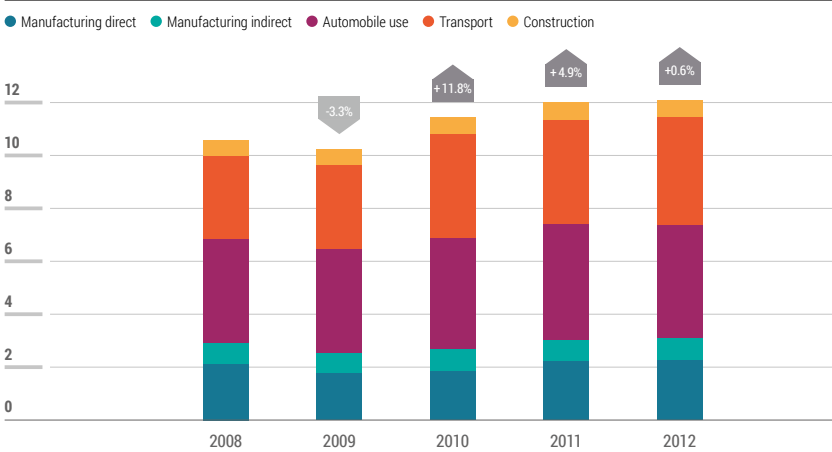


SOURCE: EUROSTAT

**The automotive industry generates
12.1 million direct and indirect jobs in the EU**

EU automotive employment

IN MILLION UNITS, BY YEAR / 2008 – 2012

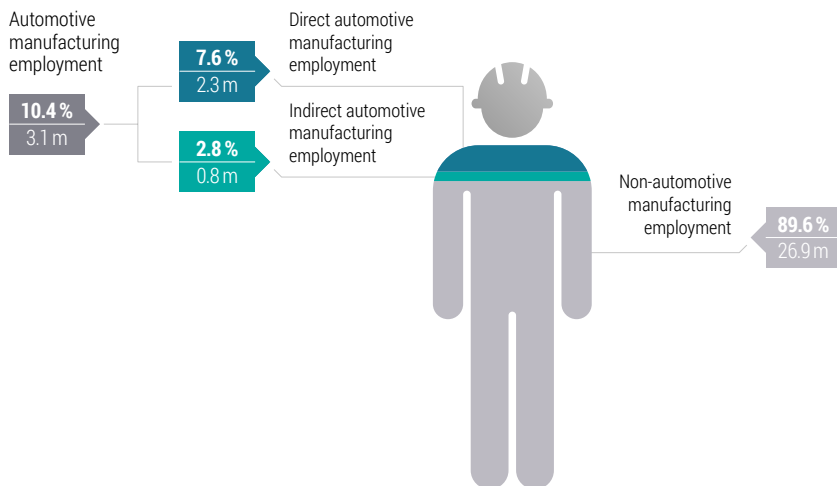


EU automotive employment	2008	2009	2010	2011	2012	% change 12/11
Manufacturing direct	2,118,834	1,807,450	1,910,240	2,230,937	2,296,416	2.9
Manufacturing indirect	829,564	750,301	806,518	844,287	829,588	-1.7
Automobile use	3,933,286	3,935,723	4,187,812	4,373,465	4,299,743	-1.7
Transport	3,135,972	3,191,869	3,925,908	3,945,370	4,067,166	3.1
Construction	610,848	587,592	653,989	653,752	625,386	-4.3
TOTAL	10,628,504	10,272,935	11,484,467	12,047,811	12,118,299	0.6

SOURCE: EUROSTAT

EU manufacturing employment

% SHARE / 2012



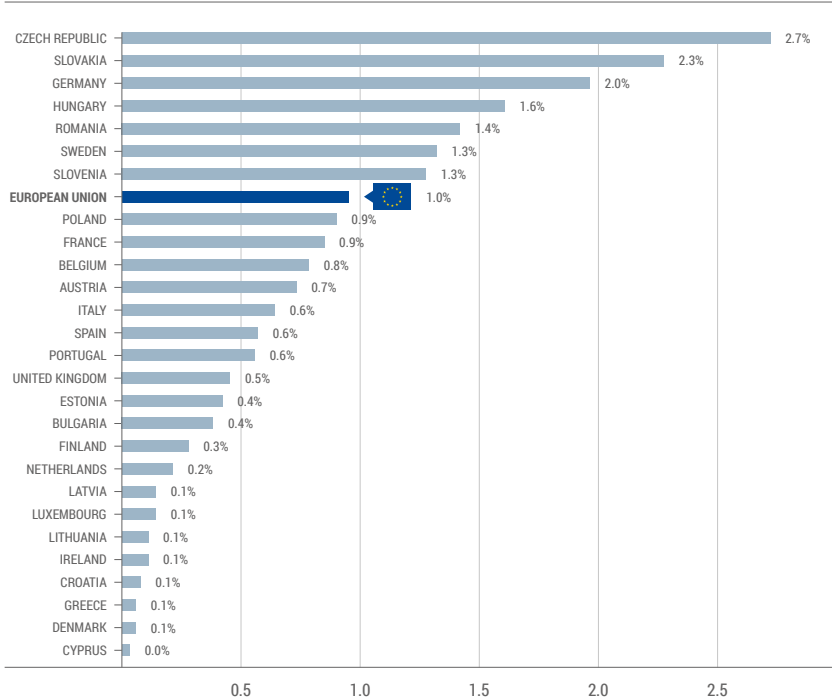
Direct automotive employment (manufacturing)	2.3 m people = 7.6% of EU employment in manufacturing
Direct & indirect automotive manufacturing employment	3.1 m people = 10.4% of EU employment in manufacturing
Total automotive employment (manufacturing, services and construction)	12.1 m people = 5.6% of total EU employment
EU economically-active population (labour force)	241.1 m people
EU total employment	217.5 m people
EU employment in the manufacturing sector	30.0 m people = 13.8% of total EU employment

SOURCE: EUROSTAT

10.4% of EU manufacturing employment is in the automotive sector

Direct automotive manufacturing employment /
Active population ratio

% SHARE BY COUNTRY / 2012



Direct automotive manufacturing employment

BY COUNTRY / 2012

Austria	31,555	France	243,779	Netherlands	19,527
Belgium	38,432	Germany	812,514	Poland	156,865
Bulgaria	12,790	Greece	2,843	Portugal	30,021
Croatia	1,529	Hungary	69,245	Romania	131,084
Cyprus	157	Ireland	2,370	Slovakia	61,571
Czech Republic	143,227	Italy	162,865	Slovenia	12,970
Denmark	1,684	Latvia	1,490	Spain	134,605
Estonia	2,894	Lithuania	1,657	Sweden	66,836
Finland	7,548	Luxembourg	358	United Kingdom	146,000

 European Union 2,296,416

SOURCE: EUROSTAT, SMMT

**The EU automotive sector provides
2.3 million direct manufacturing jobs**

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2

THE AUTOMOBILE INDUSTRY
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Production



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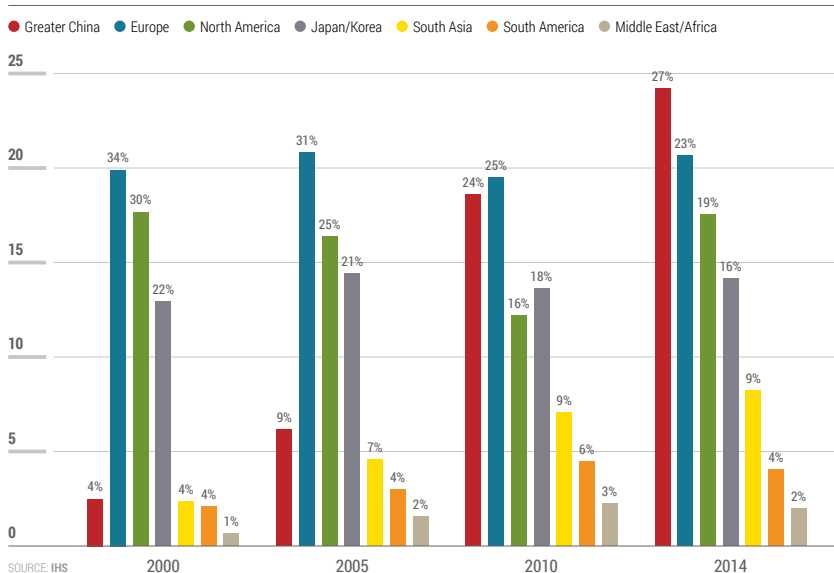
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World motor vehicle production

IN MILLION UNITS, % SHARE / 2000 – 2014



World motor vehicle production in 1,000 units

	2014	2013	% change 2014/2013	% share 2014
Europe ¹	20,643	20,025	3.1	22.8
Greater China ²	24,152	22,483	7.4	26.7
Japan/Korea	14,092	13,897	1.4	15.6
Middle East/Africa	1,925	1,561	23.3	2.1
North America	17,515	16,588	5.6	19.3
South America	4,014	4,787	-16.1	4.4
South Asia	8,211	8,618	-4.7	9.1
WORLD	90,552	87,958	2.9	100.0

SOURCE: IHS

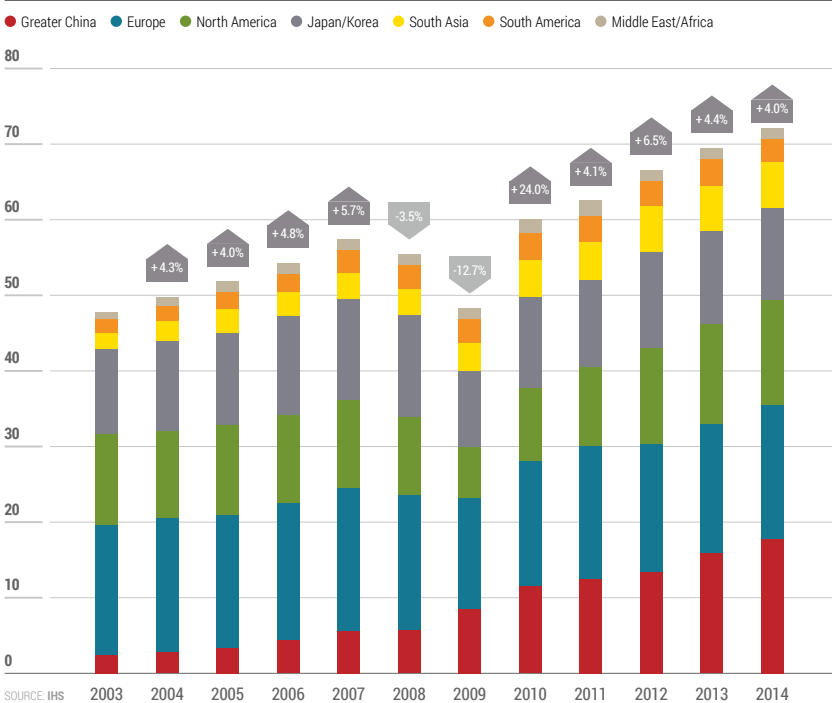
1. Includes Turkey and CIS countries

2. Includes Hong Kong and Taiwan

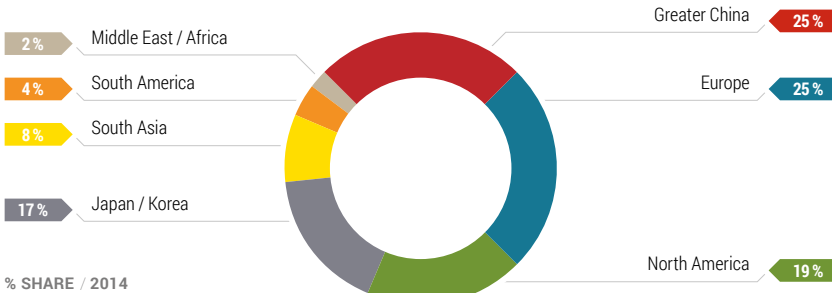
**90.6 million motor vehicles
were produced globally in 2014**

World passenger car production

IN MILLION UNITS, % CHANGE / 2003 – 2014



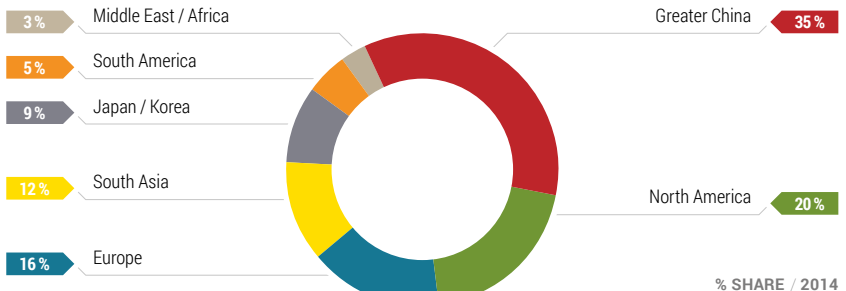
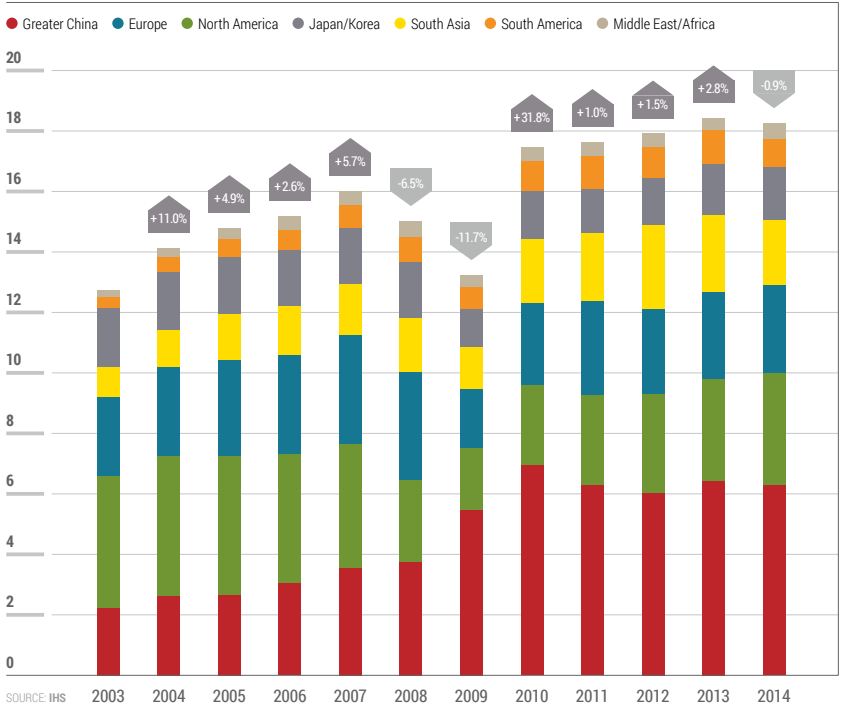
SOURCE: IHS



**72.3 million passenger cars
were produced globally in 2014**

World commercial vehicle production


IN MILLION UNITS, % CHANGE / 2003 – 2014



**18.3 million commercial vehicles
were manufactured worldwide in 2014**

Motor vehicle production in the EU

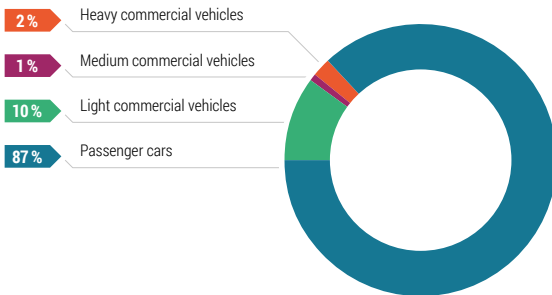
BY COUNTRY / 2014

	PC ¹	LCV ²	MCV ³	HCV ⁴	TOTAL
Austria	134,393	-	12,175	6,623	153,191
Belgium	481,642	0	1,823	29,760	513,225
Bulgaria	1,057	1,213	-	-	2,270
Czech Republic	1,157,371	3,826	0	820	1,162,017
Finland	45,842	-	-	279	46,121
France	1,455,160	356,174	8,024	35,873	1,855,231
Germany	5,446,423	366,161	39,179	103,075	5,954,838
Hungary	430,683	-	-	0	430,683
Italy	410,322	245,565	31,005	7,858	694,750
Netherlands	29,119	-	-	53,106	82,225
Poland	394,645	175,521	0	9,043	579,209
Portugal	102,250	56,362	2,400	-	161,012
Romania	391,425	0	0	17	391,442
Slovakia	842,860	-	-	-	842,860
Slovenia	118,215	-	-	-	118,215
Spain	1,851,828	535,800	12,082	18,752	2,418,462
Sweden	154,913	-	-	32,886	187,799
United Kingdom	1,539,456	44,033	6,786	7,617	1,597,892
 European Union	14,987,604	1,784,655	113,474	305,709	17,191,442

SOURCE: IHS

EU motor vehicle production by type

% SHARE / 2014

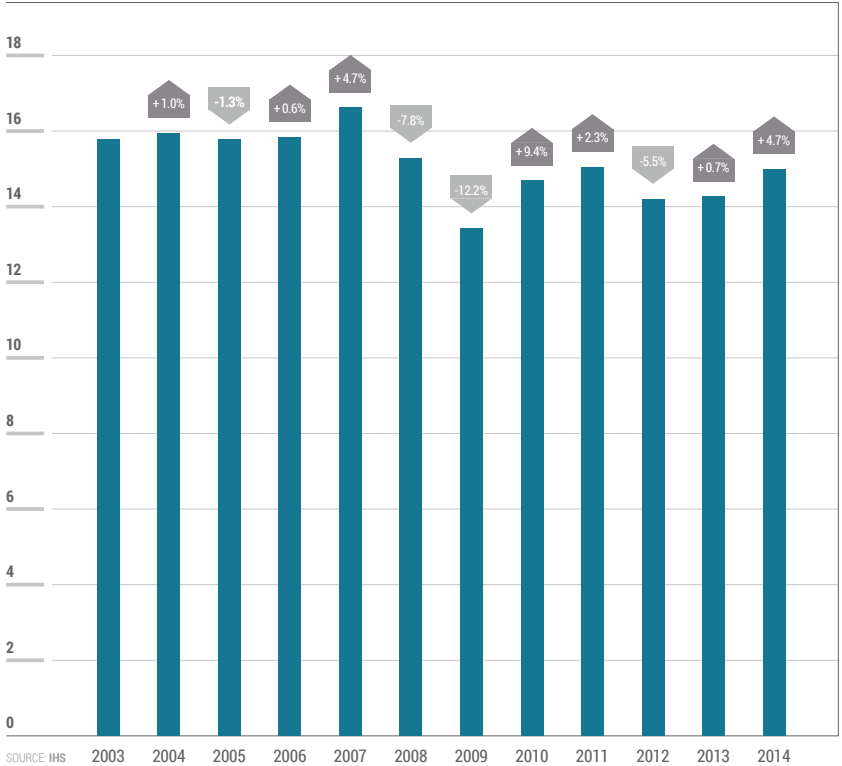


1. Passenger cars
2. Light commercial vehicles up to 3.5t
3. Medium commercial vehicles from 3.5t to 15t
4. Heavy commercial vehicles over 15t

**17.2 million motor vehicles
were manufactured in the EU in 2014**

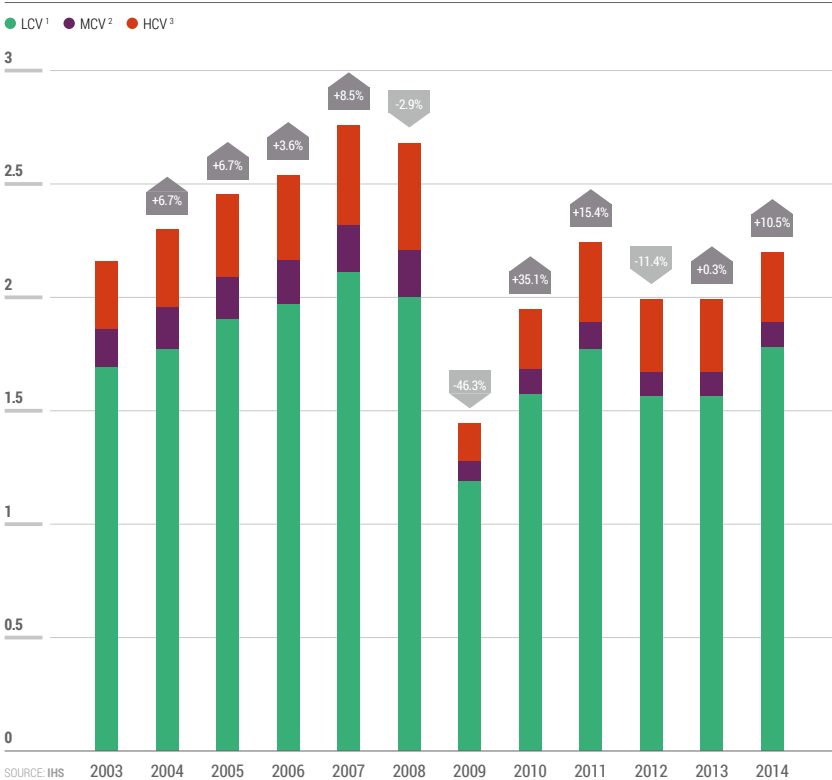
Passenger car production in the EU

IN MILLION UNITS, % CHANGE / 2003 – 2014



Commercial vehicle production in the EU

IN MILLION UNITS, % CHANGE / 2003 – 2014



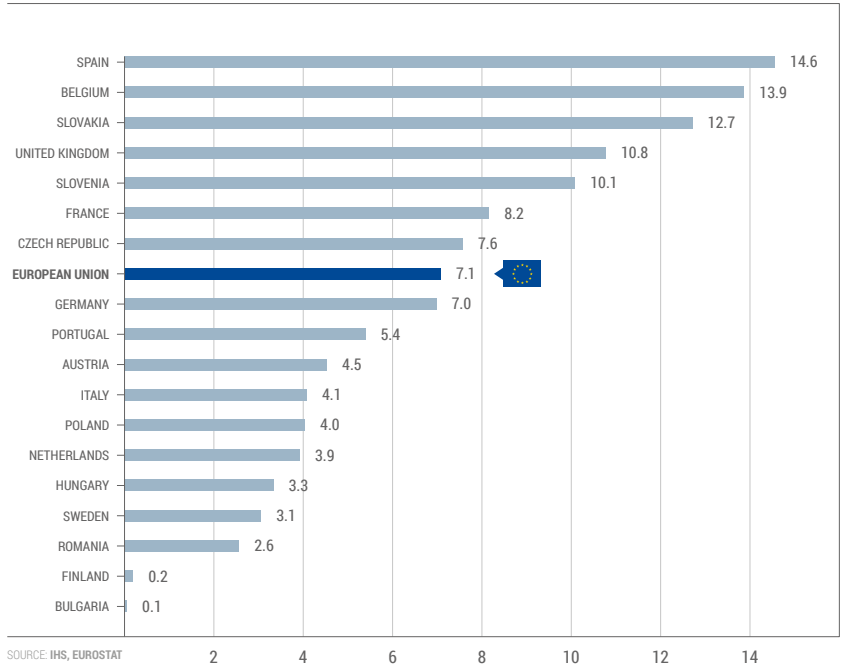
SOURCE: IHS

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

**2.2 million commercial vehicles
were produced in the EU in 2014**

Motor vehicle production per direct automotive manufacturing worker

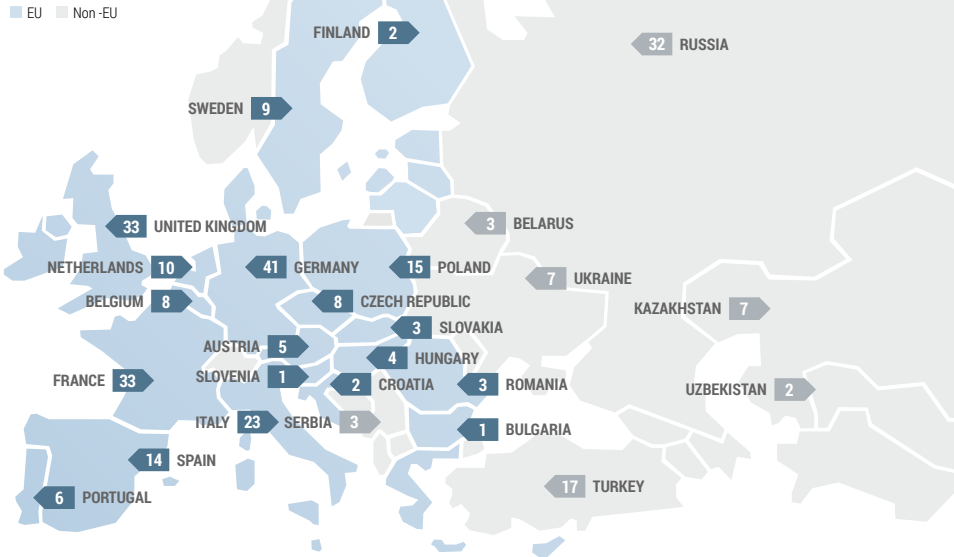
IN UNITS, BY COUNTRY / 2012*



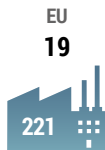
SOURCE: IHS, EUROSTAT

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

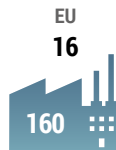
**The EU auto industry produces
an average of 7 vehicles per worker**



ALL MANUFACTURERS



ACEA MEMBERS



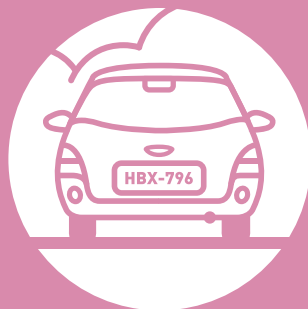
SOURCE: ACEA



3

THE AUTOMOBILE INDUSTRY
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Registrations



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World new motor vehicle registrations

MARKET SHARES / 2014

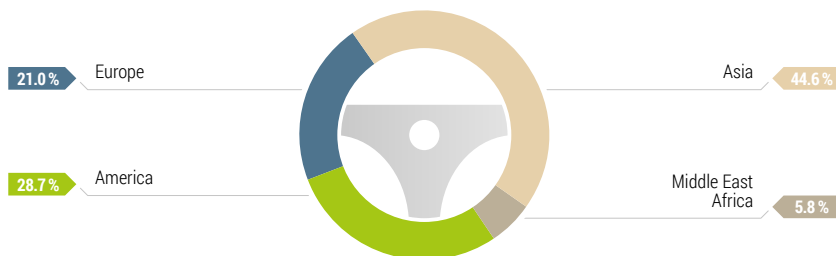
Motor vehicles	In 1,000 Units	2014	2013	% change 14/13	% share 2014
EUROPE		18,733	18,455	1.5	21.0
EU ¹		14,400	13,598	5.9	16.1
EFTA		526	529	-0.5	0.6
Russia		2,577	2,896	-11.0	2.9
Turkey		801	886	-9.6	0.9
Ukraine		99	221	-55.4	0.1
Others-Europe ²		330	325	1.5	0.4
AMERICA		25,604	25,107	2.0	28.7
North America		19,986	18,858	6.0	22.4
<i>of which the US</i>		<i>16,927</i>	<i>15,956</i>	<i>6.7</i>	<i>19.0</i>
South America		5,618	6,249	-10.1	6.3
<i>of which Brazil</i>		<i>3,494</i>	<i>3,764</i>	<i>-7.2</i>	<i>3.9</i>
ASIA		39,826	38,153	4.4	44.6
China		24,261	22,603	7.3	27.2
Japan		5,538	5,341	3.7	6.2
India		3,209	3,251	-1.3	3.6
South Korea		1,673	1,550	8.0	1.9
Others-Asia ³		5,144	5,408	-4.9	5.8
MIDDLE EAST/AFRICA		5,135	4,707	9.1	5.8
WORLD		89,297	86,422	3.3	100.0

SOURCE: ACEA, IHS

1. Data for Malta n.a.

2. Includes Belarus, Bosnia-Herzegovina, Kazakhstan, Macedonia, Serbia, Uzbekistan

3. Includes Hong Kong, Taiwan and all the other South Asian countries excluding India



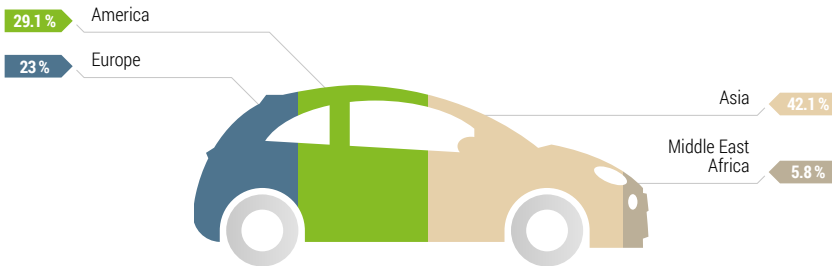
World new passenger car registrations

MARKET SHARES / 2014

Passenger cars	In 1,000 Units	2014	2013	% change 14/13	% share 2014
EUROPE		16,290	16,070	1.4	23.0
EU ¹		12,551	11,880	5.6	17.7
EFTA		456	457	-0.4	0.6
Russia		2,327	2,598	-10.4	3.3
Turkey		587	665	-11.6	0.8
Ukraine		91	202	-54.8	0.1
Others-Europe		278	269	3.4	0.4
AMERICA		20,646	20,340	1.5	29.1
North America		16,293	15,438	5.5	23.0
of which the US ²		13,842	13,115	5.5	19.5
South America		4,353	4,902	-11.2	6.1
of which Brazil		2,801	3,051	-8.2	4.0
ASIA		29,831	27,720	7.6	42.1
China		18,072	16,185	11.7	25.5
Japan		4,679	4,525	3.4	6.6
India		2,393	2,277	5.1	3.4
South Korea		1,420	1,287	10.4	2.0
Others-Asia		3,267	3,446	-5.2	4.6
MIDDLE EAST/AFRICA		4,105	3,726	10.2	5.8
WORLD		70,871	67,856	4.4	100.0

SOURCE: ACEA, IHS

1. Data for Malta n.a.
2. Based on production type



70.9 million cars were registered worldwide in 2014

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World new commercial vehicle registrations

MARKET SHARES / 2014

Commercial vehicles ¹ in 1,000 units	2014	2013	% change 14/13	% share 2014
EUROPE	2,443	2,385	2.4	13.3
EU ²	1,849	1,718	7.6	10.0
EFTA	71	72	-1.3	0.4
Russia	250	298	-16.0	1.4
Turkey	213	221	-3.6	1.2
Ukraine	7	19	-61.9	0.0
Others-Europe	53	57	-7.3	0.3
AMERICA	4,958	4,767	4.0	26.9
North America	3,693	3,420	8.0	20.0
<i>of which the US</i> ³	<i>3,085</i>	<i>2,840</i>	<i>8.6</i>	<i>16.7</i>
South America	1,265	1,347	-6.0	6.9
<i>of which Brazil</i>	<i>693</i>	<i>713</i>	<i>-2.8</i>	<i>3.8</i>
ASIA	9,995	10,433	-4.2	54.2
China	6,190	6,418	-3.6	33.6
Japan	858	815	5.3	4.7
India	816	974	-16.3	4.4
South Korea	254	263	-3.7	1.4
Others-Asia	1,877	1,961	-4.3	10.2
MIDDLE EAST/AFRICA	1,030	981	5.0	5.6
WORLD	18,426	18,566	-0.8	100.0

SOURCE: ACEA, IHS

1. Includes Light, Medium & Heavy Commercial Vehicles and Buses & Coaches

2. Data for Malta n.a.


3. Based on production type



**18.4 million trucks, vans and buses
were registered globally in 2014**

Motor vehicle registrations in the EU

BY COUNTRY / 2014

	PC ¹	LCV ²	CV ³	TOTAL
Austria	303,318	31,168	7,729	342,215
Belgium	482,939	53,373	8,943	545,255
Bulgaria	20,359	3,972	n.a.	24,331
Croatia	33,997	5,215	1,058	40,270
Cyprus	8,283	1,151	26	9,460
Czech Republic	192,314	13,165	10,115	215,594
Denmark	189,051	28,498	4,159	221,708
Estonia	20,861	2,906	892	24,659
Finland	106,236	10,624	3,251	120,111
France	1,795,885	370,362	44,680	2,210,927
Germany	3,036,773	228,323	91,622	3,356,718
Greece	71,218	4,856	558	76,632
Hungary	67,476	15,937	5,306	88,719
Ireland	96,344	16,646	2,000	114,990
Italy	1,359,616	117,709	14,640	1,491,965
Latvia	12,452	2,539	1,270	16,261
Lithuania	14,503	1,997	2,539	19,039
Luxembourg	49,793	3,357	1,172	54,322
Netherlands	387,835	51,792	11,031	450,658
Poland	327,219	45,376	19,183	391,778
Portugal	142,827	26,166	3,365	172,358
Romania	70,172	9,903	5,055	85,130
Slovakia	72,249	5,630	4,093	81,972
Slovenia	53,296	6,978	1,660	61,934
Spain	855,308	113,863	18,110	987,281
Sweden	303,948	41,933	6,586	352,467
United Kingdom	2,476,435	321,686	44,909	2,843,030
 European Union ⁴	12,550,707	1,535,125	313,952	14,399,784
Iceland	9,536	855	190	10,581
Norway	144,202	29,611	6,460	180,273
Switzerland	301,942	28,822	4,796	335,560
EFTA	455,680	59,288	11,446	526,414
EU + EFTA	13,006,387	1,594,413	325,398	14,926,198

SOURCE: ACEA, NATIONAL AUTOMOTIVE ASSOCIATIONS

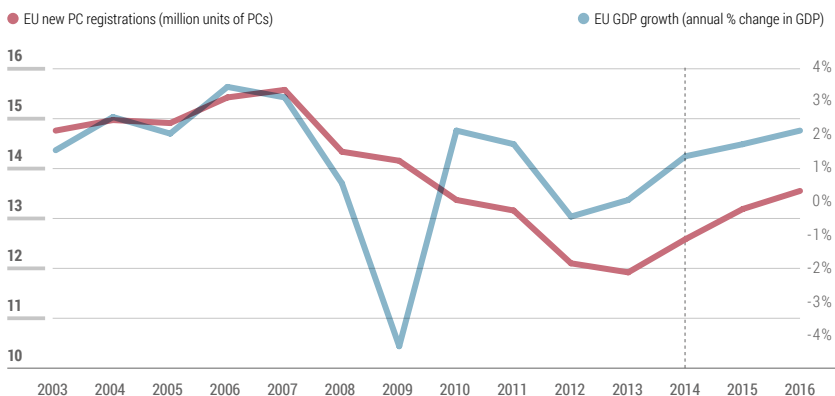
1. Passenger cars
2. New light commercial vehicles up to 3.5t
3. New commercial vehicles (trucks) over 3.5t
4. Data for Malta n.a.

The EU represents a market of 14.4 million vehicles

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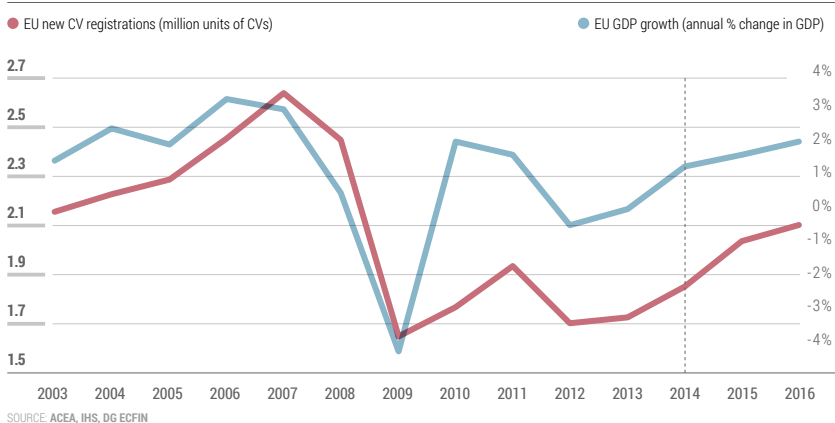
New passenger car registrations and annual GDP growth in the EU

2003 – 2016

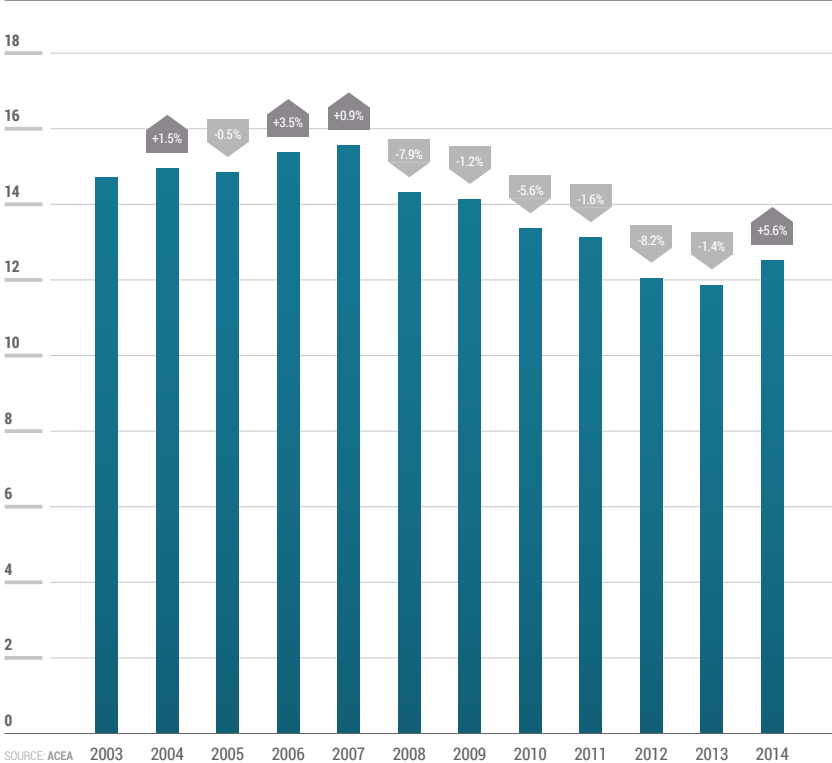


New commercial vehicle registrations and annual GDP growth in the EU

IN MILLION UNITS / 2003 – 2016

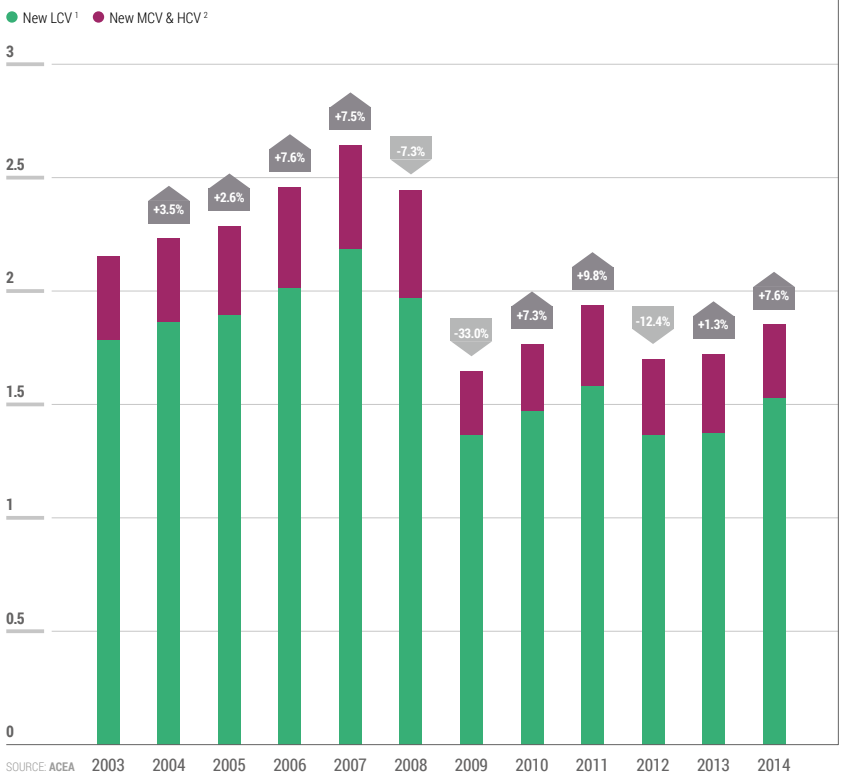


New passenger car registrations in the EU IN MILLION UNITS, % CHANGE / 2003 – 2014



12.5 million cars were registered in the EU in 2014

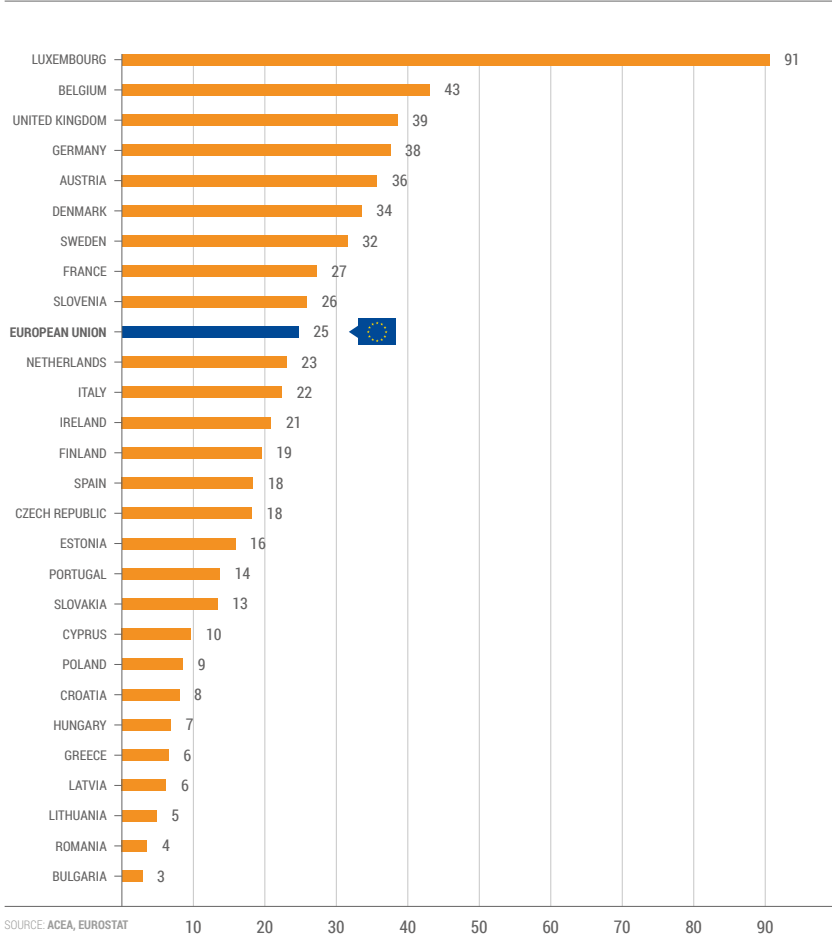
New commercial vehicle registrations in the EU IN MILLION UNITS, % CHANGE / 2003 – 2014



1. New light commercial vehicles up to 3.5t

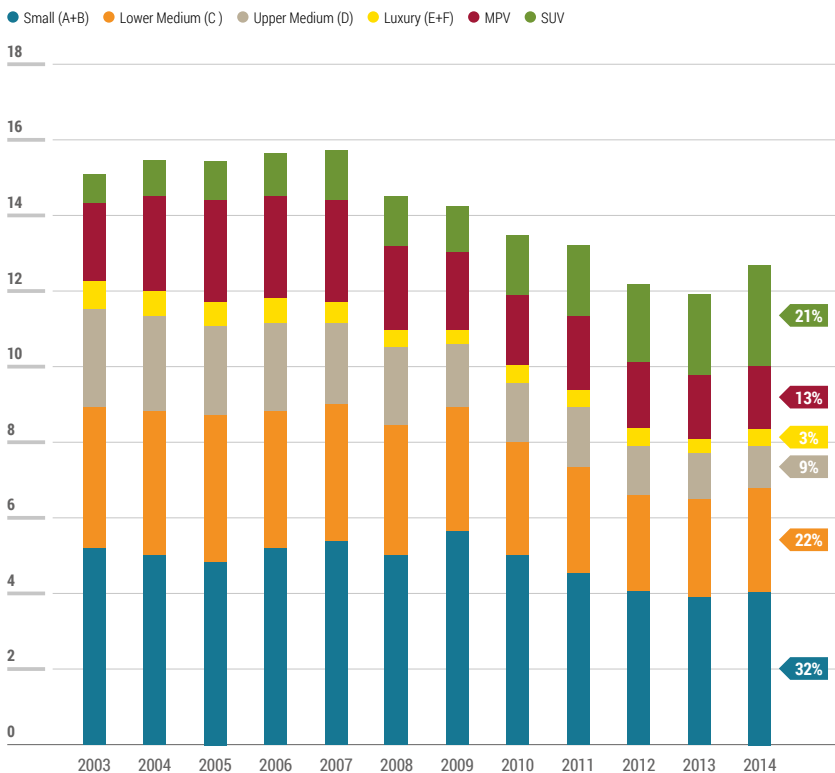
2. New medium and heavy commercial vehicles (trucks) over 3.5t

New passenger car registrations per 1,000 inhabitants **BY COUNTRY, IN UNITS / 2014**



**25 new cars were registered
per 1,000 inhabitants in the EU in 2014**

New passenger cars sold in the EU BY SEGMENT, IN MILLION UNITS, % SHARE / 2003 – 2014

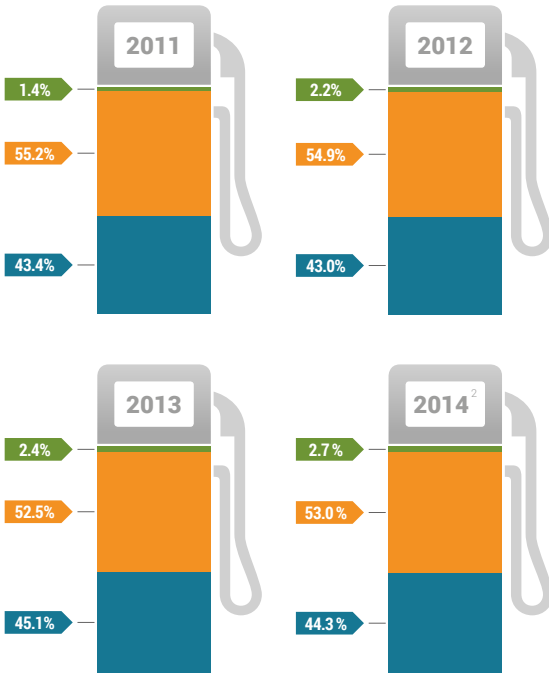


SOURCE: IHS

New passenger cars in the EU by fuel type

% SHARE / 2011 – 2014

● Petrol ● Diesel ● Alternative fuels¹



SOURCE: EEA

1. Includes pure electric, liquefied petroleum gas vehicles (LPGs), natural gas vehicles (NG), ethanol (E85), biodiesel and plug-in hybrid vehicles

2. Provisional data

Alternative fuel vehicles represent a small but growing share of the car market



4

THE AUTOMOBILE INDUSTRY
POCKET GUIDE 2015/2016

Vehicles in use



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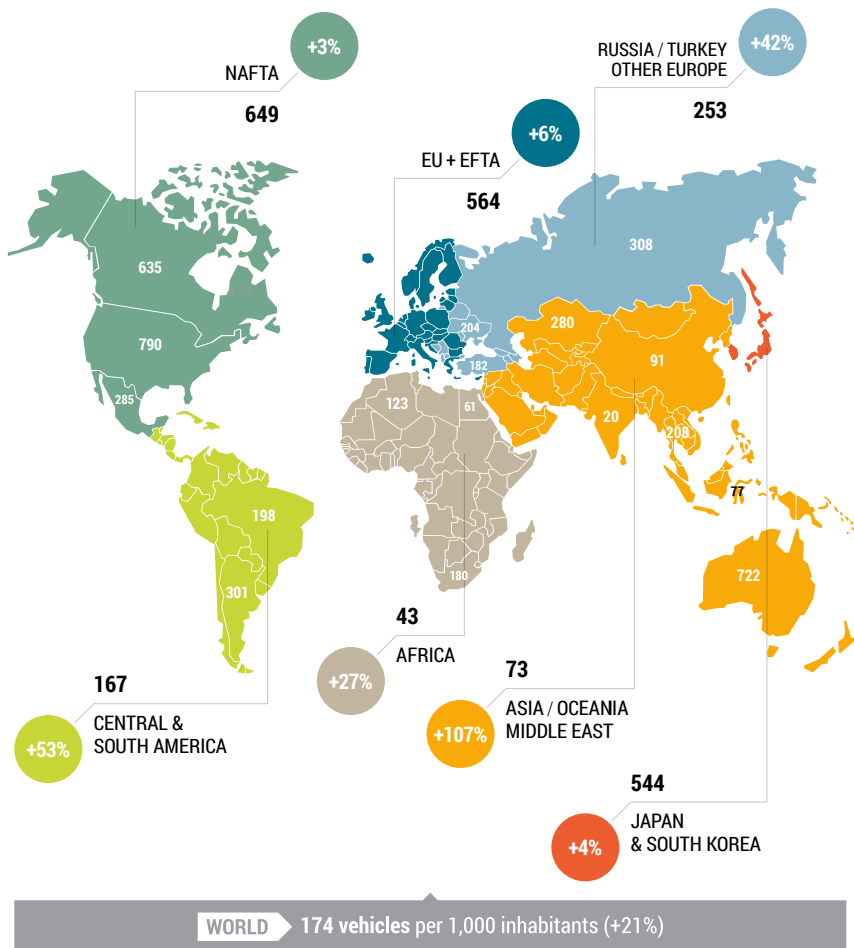
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Motorisation rate per 1,000 inhabitants

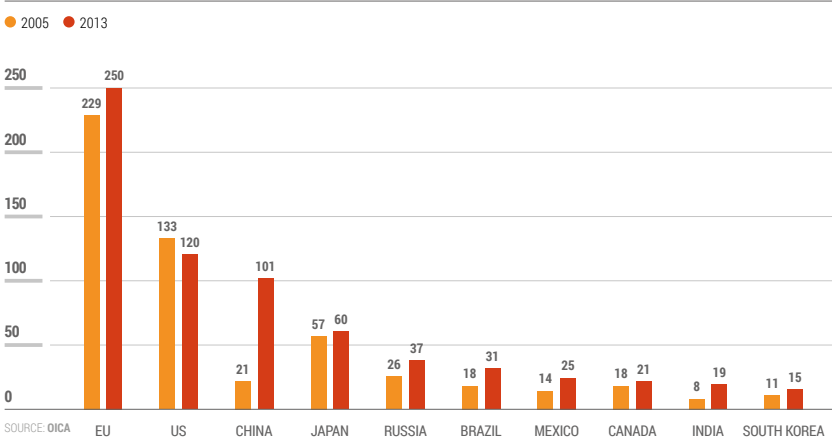
IN UNITS, % CHANGE / 2013 – 2005



SOURCE: OICA

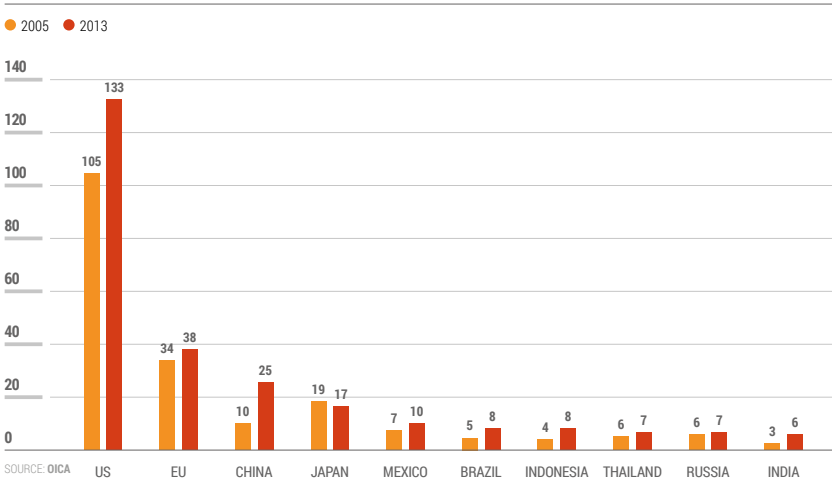
Passenger cars in use

INTERNATIONAL COMPARISON, IN MILLION UNITS / 2005 – 2013



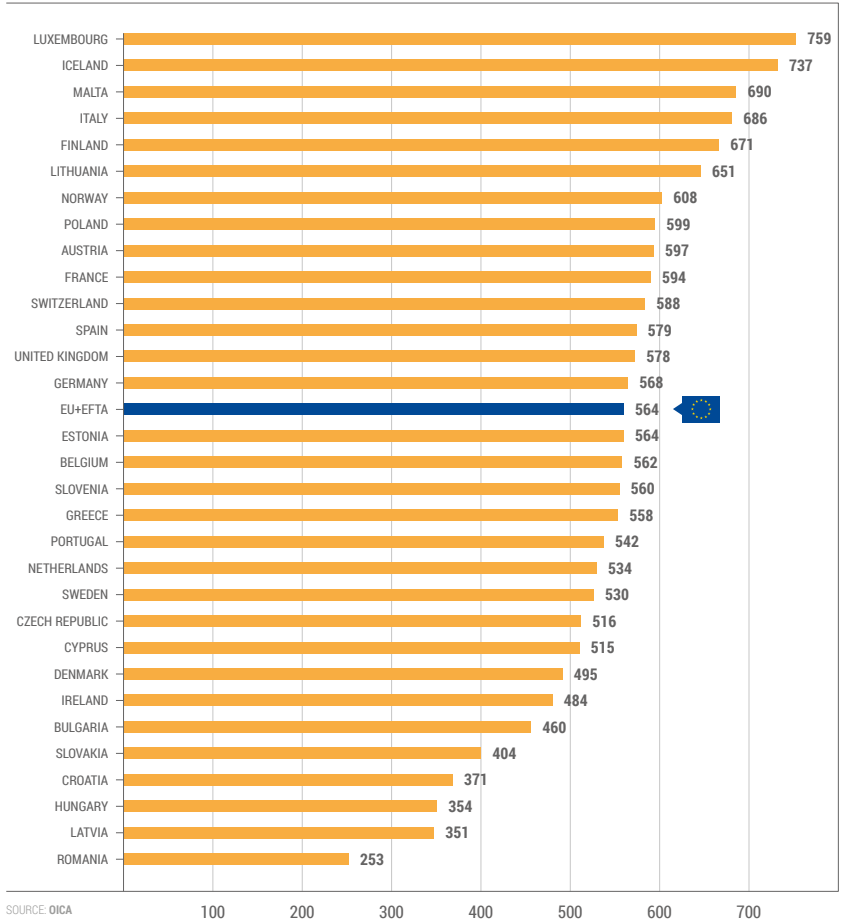
Commercial vehicles in use

INTERNATIONAL COMPARISON, IN MILLION UNITS / 2005 – 2013



Motorisation rate in EU+EFTA

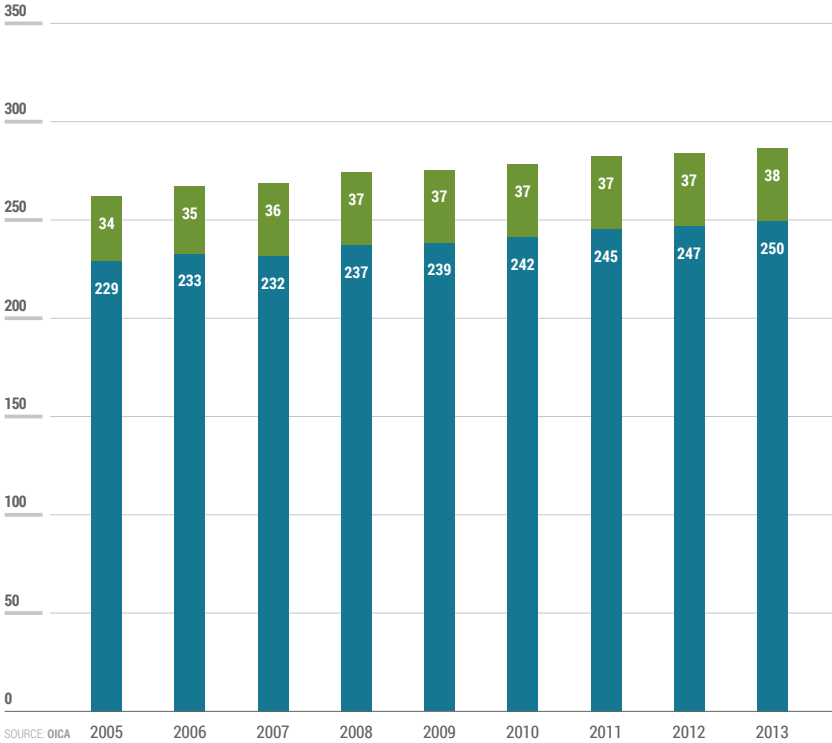
PER 1,000 INHABITANTS / 2013



EU vehicle fleet

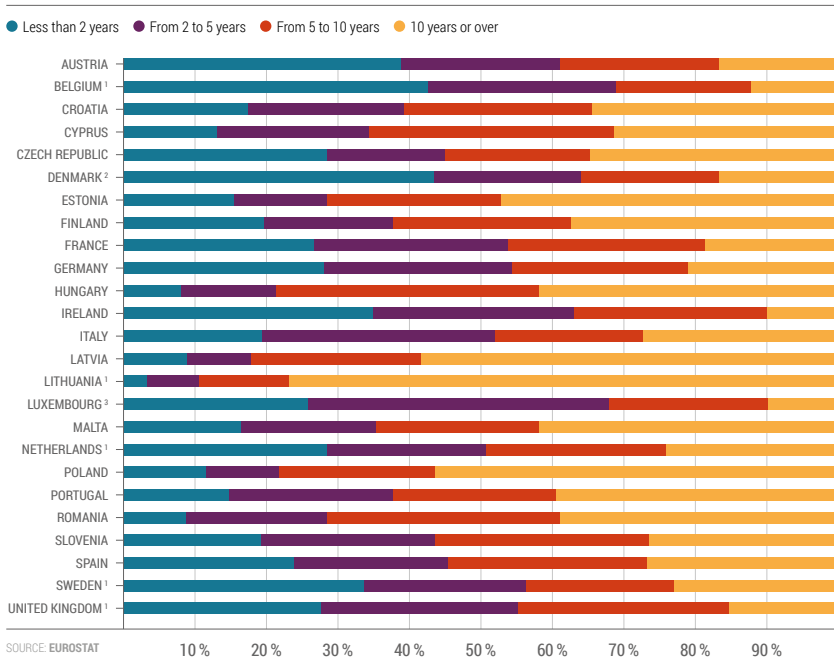
IN MILLION UNITS / 2005 – 2013

● Passenger cars ● Commercial vehicles



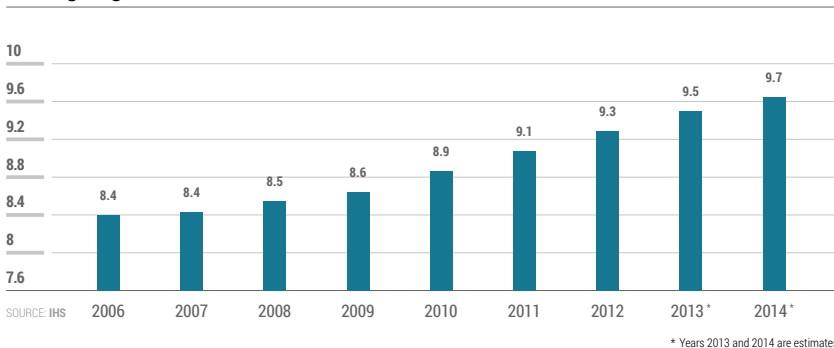
Passenger car fleet by country and age

% SHARE / 2012



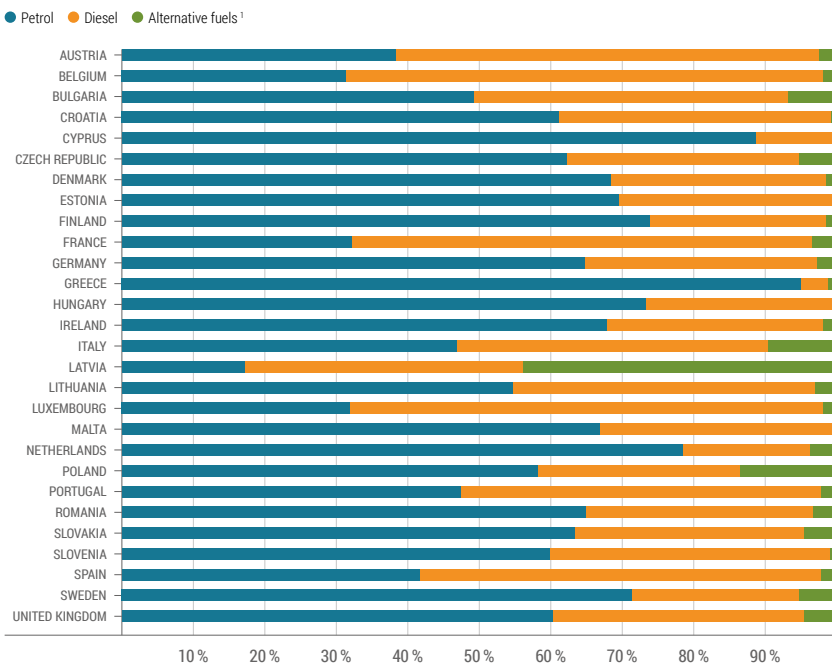
Average age of the EU car fleet

IN YEARS / 2006 – 2014



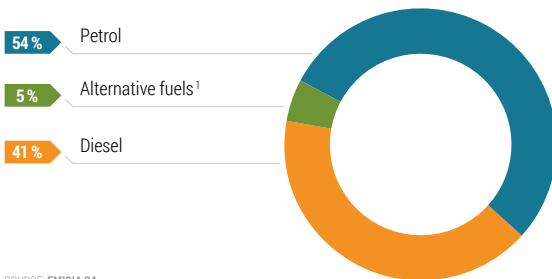
Passenger car fleet by fuel type

% SHARE / 2014



EU passenger car fleet by fuel type

% SHARE / 2014



1. Includes E85, CNG, LPG and hybrid gasoline

SOURCE: EMISIA SA

**Most cars on EU roads have
an internal combustion engine**

Trade



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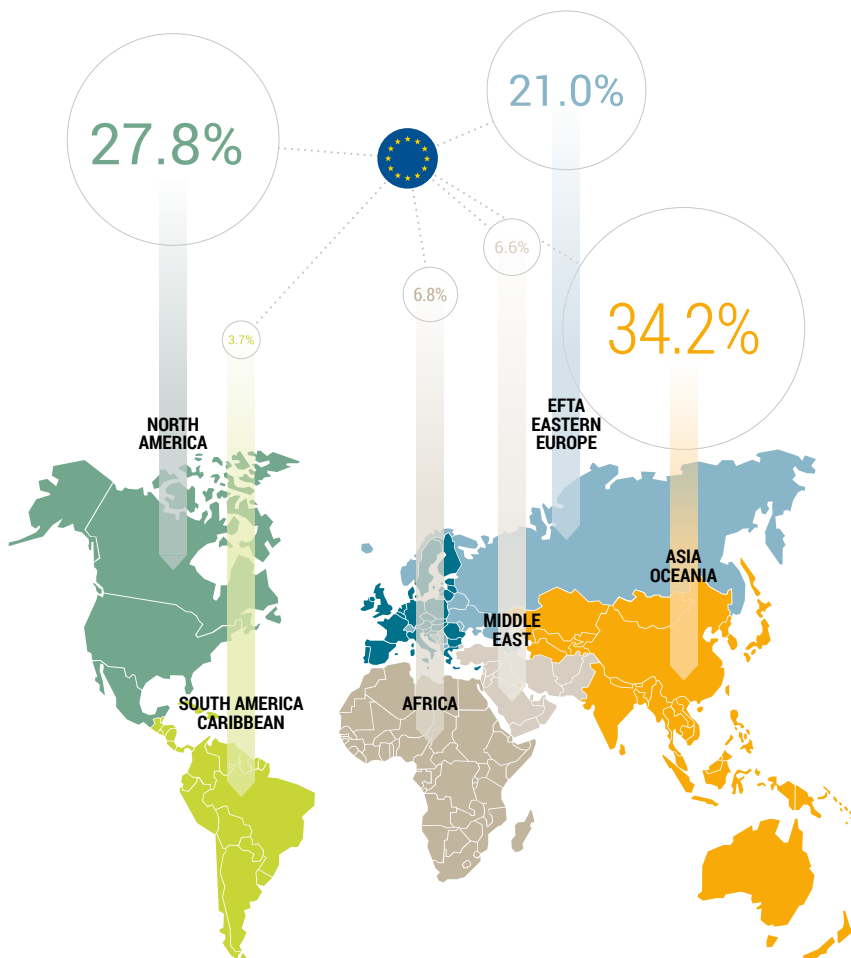
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EU exports of motor vehicles

VALUE MARKET SHARE / 2014



SOURCE: EUROSTAT

EU motor vehicle trade

BY TYPE, IN MILLION € / 2014

Trade in value (€m)	PC ¹	LCV ²	CV & BC ³	TOTAL
2013				
Imports	23,657	3,501	999	28,157
Exports	111,289	4,495	6,954	122,738
Trade balance	87,631	994	5,955	94,581
2014				
Imports	24,093	3,891	1,133	29,117
Exports	114,077	3,927	6,236	124,240
Trade balance	89,984	36	5,103	95,123
% CHG 14/13				
Imports	1.8%	11.1%	13.4%	3.4%
Exports	2.5%	-12.6%	-10.3%	1.2%
Trade balance	2.7%	-96.4%	-14.3%	0.6%

SOURCE: EUROSTAT

EU motor vehicle trade

BY TYPE, IN UNITS / 2014

Trade in volume (in units)	PC ¹	LCV ²	CV & BC ³	TOTAL
2013				
Imports	2,031,780	288,077	89,387	2,409,244
Exports	5,850,713	487,310	238,243	6,576,266
2014				
Imports	2,043,919	310,426	90,029	2,444,374
Exports	5,461,083	366,656	178,452	6,006,191
% CHG 14/13				
Imports	0.6%	7.8%	0.7%	1.5%
Exports	-6.7%	-24.8%	-25.1%	-8.7%

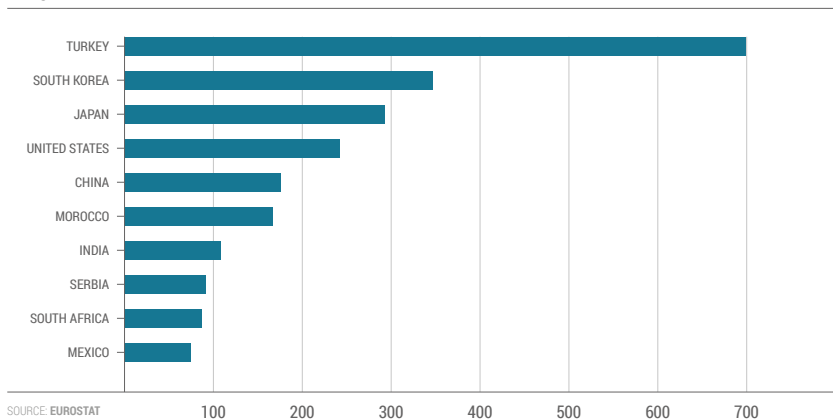
SOURCE: EUROSTAT

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

**The automobile industry generates
a €95.1 billion trade surplus**

Origin of most EU motor vehicle imports

IN THOUSAND UNITS / 2014



Origin of most EU motor vehicle imports

IN UNITS / 2014

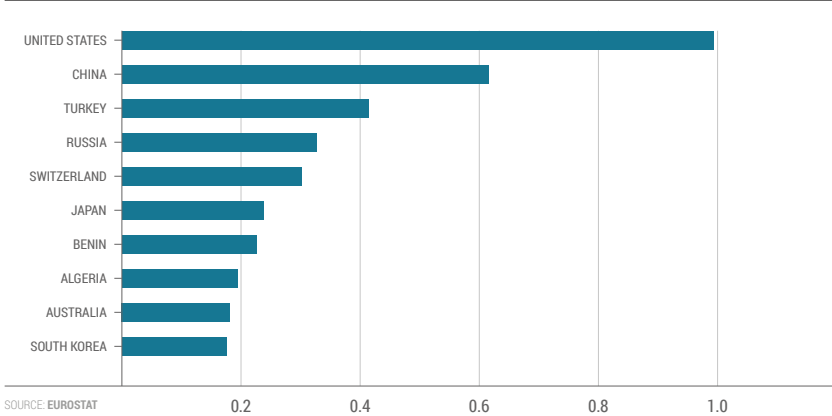
	2009	2010	2011	2012	2013	2014	% change 14/13	% share 2014
WORLD	2,531,911	2,481,054	2,585,897	2,430,784	2,409,244	2,444,374	1.46%	100%
Turkey	499,903	571,291	574,610	583,629	584,633	700,152	19.8%	28.6%
South Korea	356,052	299,739	388,211	408,251	406,281	348,263	-14.3%	14.2%
Japan	695,001	613,035	517,420	397,523	380,990	293,243	-23.0%	12.0%
United States	156,350	186,788	243,497	242,986	220,531	241,022	9.3%	9.9%
China	210,196	165,136	161,540	183,283	169,569	174,100	2.7%	7.1%
Morocco	4,916	4,904	20,302	64,624	99,503	168,989	69.8%	6.9%
India	267,618	226,269	234,160	162,626	174,994	107,587	-38.5%	4.4%
Serbia	285	304	4,366	21,747	84,715	91,870	8.4%	3.8%
South Africa	38,886	74,227	85,666	67,690	59,515	86,641	45.6%	3.5%
Mexico	116,478	137,761	183,965	179,620	107,334	73,448	-31.6%	3.0%

SOURCE: EUROSTAT

**About 2.5 million vehicles
are imported to the EU annually**

Main destinations for EU motor vehicle exports

IN MILLION UNITS / 2014



Main destinations for EU motor vehicle exports

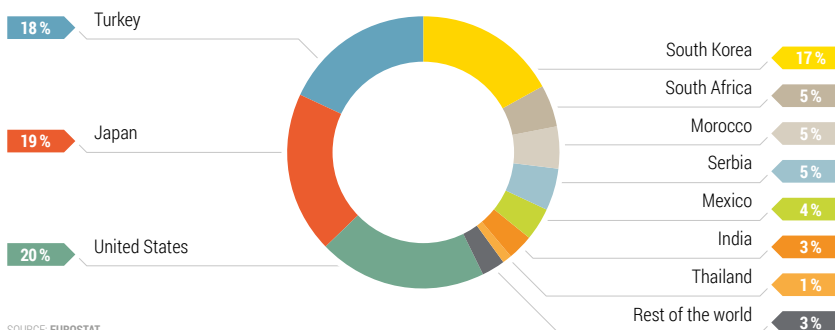
IN UNITS / 2014

	2009	2010	2011	2012	2013	2014	% change 14 / 13	% share 2014
WORLD	3,699,021	4,731,016	6,326,671	6,411,638	6,576,266	6,006,191	-8.7%	100.0%
United States	550,879	714,955	751,830	884,545	960,413	994,487	3.5%	16.6%
China	174,245	349,738	487,108	534,745	559,033	612,563	9.6%	10.2%
Turkey	188,652	383,896	434,380	395,419	532,522	415,857	-21.9%	6.9%
Russia	191,938	324,866	516,794	623,221	491,766	327,845	-33.3%	5.5%
Switzerland	225,443	281,868	322,000	332,169	300,601	298,588	-0.7%	5.0%
Japan	114,730	148,212	177,975	207,314	245,443	235,557	-4.0%	3.9%
Benin	78,626	90,701	145,972	232,570	252,025	223,651	-11.3%	3.7%
Algeria	88,396	92,942	118,417	244,982	220,602	193,276	-12.4%	3.2%
Australia	96,378	141,256	156,800	190,302	187,664	182,887	-2.5%	3.0%
South Korea	33,537	66,173	76,961	96,318	118,396	175,723	48.4%	2.9%

SOURCE: EUROSTAT

Origin of EU passenger car imports

VALUE MARKET SHARE / 2014



SOURCE: EUROSTAT

Origin of most EU passenger car imports

BY VALUE, IN MILLION € / 2014

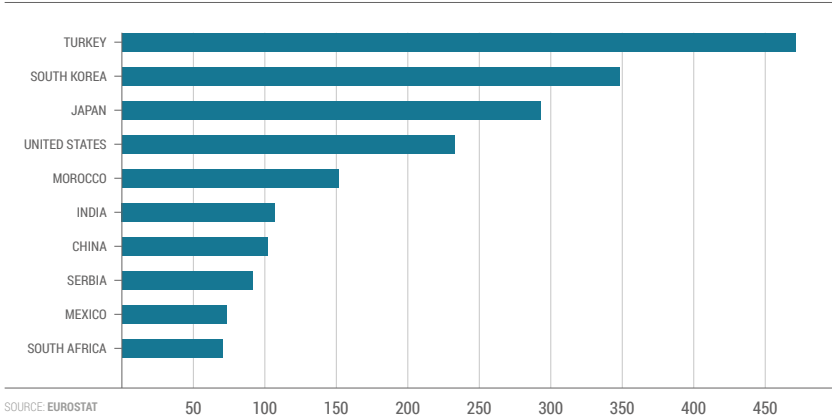
	2009	2010	2011	2012	2013	2014	% change 14/13	% share 2014
WORLD	22,129	22,339	24,824	24,422	23,657	24,093	1.8%	100.0%
United States	2,967	3,491	4,670	5,516	4,312	4,901	13.7%	20.3%
Japan	8,276	7,532	7,243	6,002	5,804	4,630	-20.2%	19.2%
Turkey	3,210	3,416	3,353	3,141	3,521	4,318	22.6%	17.9%
South Korea	2,631	2,477	3,424	3,915	4,086	3,998	-2.2%	16.6%
South Africa	470	846	896	548	586	1,234	110.8%	5.1%
Morocco	27	10	163	608	763	1,225	60.6%	5.1%
Serbia	2	2	2	277	1,081	1,149	6.3%	4.8%
Mexico	1,501	1,758	2,463	2,500	1,604	1,036	-35.4%	4.3%
India	1,539	1,300	1,570	1,058	1,075	720	-33.0%	3.0%
Thailand	112	142	96	38	145	218	50.1%	0.9%

SOURCE: EUROSTAT

**The US and Japan account
for the highest import value for cars**

Origin of most EU passenger car imports

IN THOUSAND UNITS / 2014



Origin of most EU passenger car imports

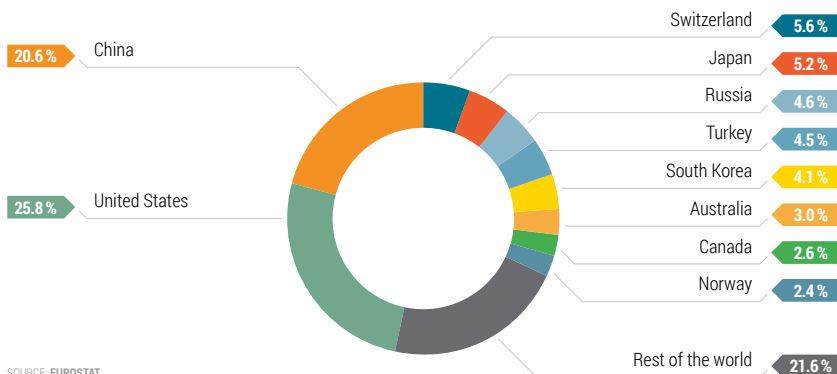
IN UNITS / 2014

	2009	2010	2011	2012	2013	2014	% change 14 / 13	% share 2014
WORLD	2,221,792	2,132,374	2,233,866	2,006,257	2,031,780	2,043,919	0.6%	100.0%
Turkey	316,196	332,643	337,340	320,636	362,946	469,537	29.4%	23.0%
South Korea	353,726	297,744	386,592	406,684	405,084	347,294	-14.3%	17.0%
Japan	679,785	598,772	507,004	395,635	375,534	292,204	-22.2%	14.3%
United States	150,768	180,241	236,822	235,420	213,047	232,830	9.3%	11.4%
Morocco	3,044	2,959	19,846	62,385	83,956	152,583	81.7%	7.5%
India	266,204	224,809	233,008	162,051	174,564	107,118	-38.6%	5.2%
China	155,738	155,681	149,455	110,642	97,989	100,808	2.9%	4.9%
Serbia	134	178	4,235	21,676	84,639	91,753	8.4%	4.5%
Mexico	116,468	137,746	183,949	179,596	107,059	72,845	-32.0%	3.6%
South Africa	31,418	65,351	71,591	43,934	42,483	69,177	62.8%	3.4%

SOURCE: EUROSTAT

Destinations for EU passenger car exports

VALUE MARKET SHARE / 2014



SOURCE: EUROSTAT

Main destinations for EU passenger car exports

BY VALUE, IN MILLION € / 2014

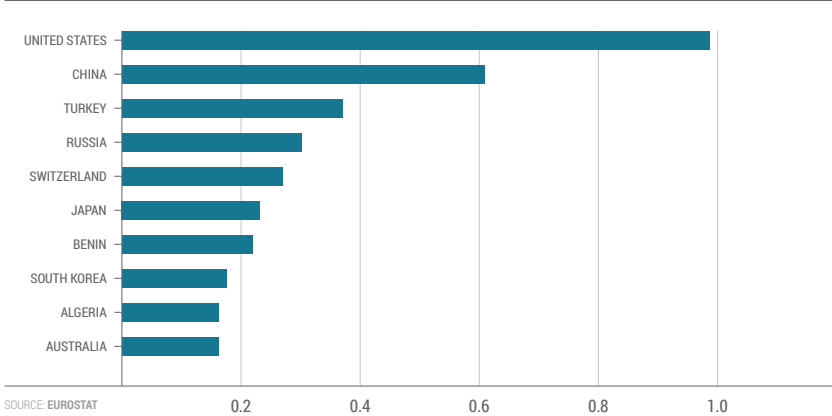
	2009	2010	2011	2012	2013	2014	% change 14/13	% share 2014
WORLD	47,715	75,767	93,171	107,751	111,289	114,077	2.5%	100.0%
United States	12,768	19,128	19,482	24,939	27,822	29,426	5.8%	25.8%
China	5,475	12,182	17,335	19,296	19,670	23,488	19.4%	20.6%
Switzerland	3,935	5,219	6,646	6,832	6,170	6,336	2.7%	5.6%
Japan	2,713	3,843	5,089	6,304	6,388	5,938	-7.0%	5.2%
Russia	2,563	4,063	7,016	8,744	7,048	5,207	-26.1%	4.6%
Turkey	2,067	4,255	5,229	4,884	5,998	5,127	-14.5%	4.5%
South Korea	805	1,682	1,955	2,497	3,127	4,684	49.8%	4.1%
Australia	1,613	2,758	3,177	3,497	3,631	3,478	-4.2%	3.0%
Canada	1,789	2,414	2,480	2,996	2,845	2,999	5.4%	2.6%
Norway	1,854	2,699	3,016	3,174	3,027	2,781	-8.1%	2.4%

SOURCE: EUROSTAT

**The US is the EU's
most valuable car export market**

Main destinations for EU passenger car exports

IN MILLION UNITS / 2014



Main destinations for EU passenger car exports

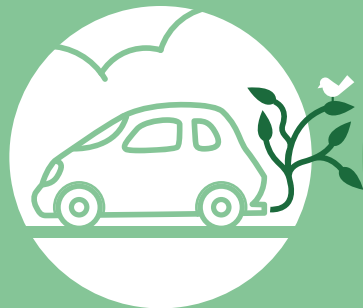
IN UNITS / 2014

	2009	2010	2011	2012	2013	2014	% change 14 / 13	% share 2014
WORLD	3,339,264	4,197,129	5,111,768	5,764,020	5,850,713	5,461,083	-6.7%	100.0%
United States	547,349	708,586	731,144	874,588	949,766	982,790	3.5%	18.0%
China	172,221	345,582	478,877	526,878	554,383	607,843	9.6%	11.1%
Turkey	170,457	339,562	388,001	357,131	486,703	372,268	-23.5%	6.8%
Russia	176,596	291,164	470,880	565,987	439,632	301,062	-31.5%	5.5%
Switzerland	203,939	255,875	291,900	303,503	272,586	267,923	-1.7%	4.9%
Japan	114,650	148,083	175,242	206,714	245,335	234,713	-4.3%	4.3%
Benin	73,672	86,884	138,786	224,191	249,312	219,023	-12.1%	4.0%
South Korea	32,659	64,142	75,144	94,667	116,423	172,734	48.4%	3.2%
Algeria	75,484	74,694	102,859	215,936	194,154	164,121	-15.5%	3.0%
Australia	84,157	123,250	141,396	150,429	165,694	162,556	-1.9%	3.0%

SOURCE: EUROSTAT

18% of EU car exports go to the US

Environment



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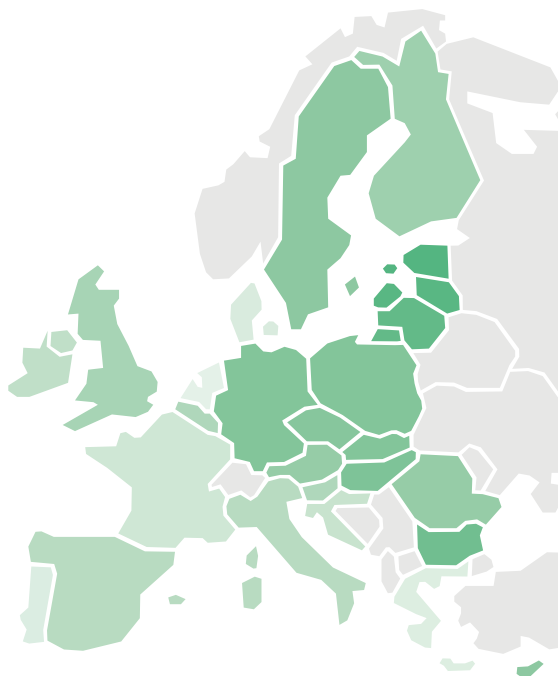
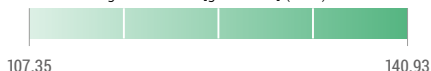


Average emissions of new passenger cars by country

IN G CO₂/KM / 2014

	2014 average emissions (g CO ₂ /km)	% change 14 / 13
Austria	128.6	-2.3
Belgium	121.3	-2.2
Bulgaria	136.0	-4.0
Croatia	115.8	
Cyprus	130.1	-6.6
Czech Republic	131.8	-2.1
Denmark	110.2	-2.2
Estonia	140.9	-4.1
Finland	127.4	-3.3
France	114.2	-2.7
Germany	132.5	-2.7
Greece	108.2	-3.3
Hungary	133.0	-1.0
Ireland	117.1	-3.0
Italy	118.2	-2.4
Latvia	140.4	-4.6
Lithuania	135.8	-2.8
Luxembourg	129.9	-2.6
Malta	115.1	-3.0
Netherlands	107.3	-1.6
Poland	132.7	-3.9
Portugal	108.8	-3.0
Romania	128.3	-2.9
Slovakia	131.8	-2.5
Slovenia	121.3	-3.4
Spain	118.6	-3.1
Sweden	131.0	-1.7
United Kingdom	124.6	-2.9
EU average	123.4	-2.6

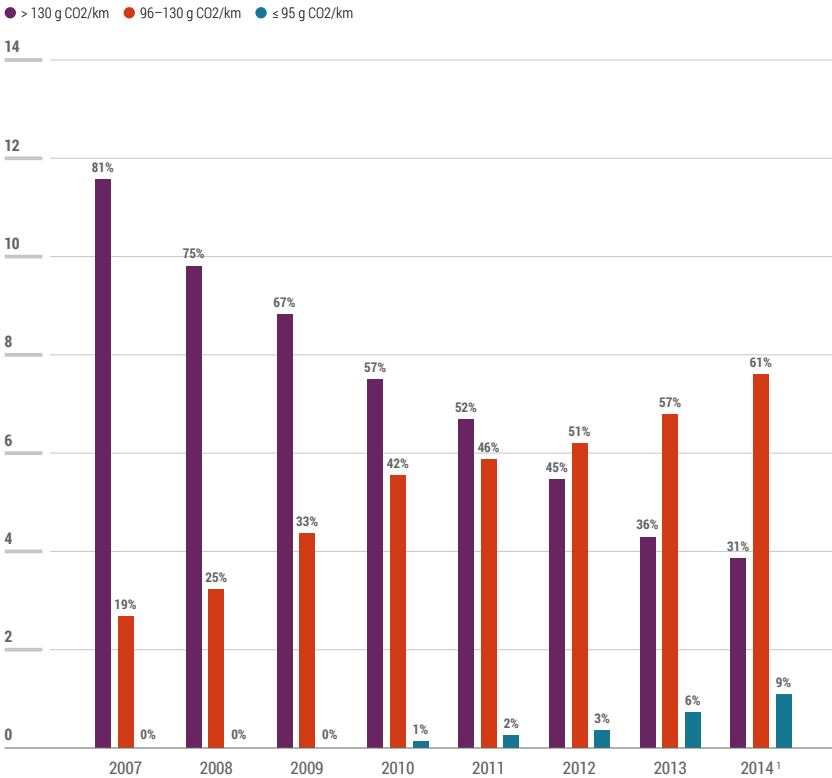
SOURCE: EEA

2014 average emissions [g CO₂/km] (Sum)

CO₂ emissions of new cars are continuing on the downward trend

New passenger cars in the EU by emissions classes

IN MILLION UNITS, % SHARE / 2007 – 2014



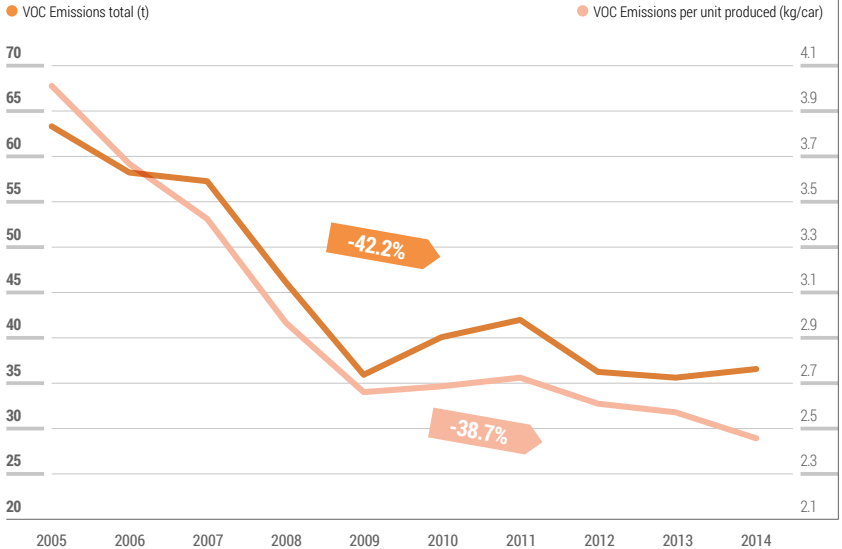
SOURCE: AAA (2007-2009), EEA (2010-2014). THE GEOGRAPHICAL SCOPE OF THE DATA CHANGES OVER TIME FROM EU-15 (2007-2009) TO EU-27 (2010-2013) AND EU-28 (2014).

1. Provisional data

**The market demand for
more fuel-efficient cars is growing**

VOC emissions from production

THOUSAND TONNES / 2005 – 2014



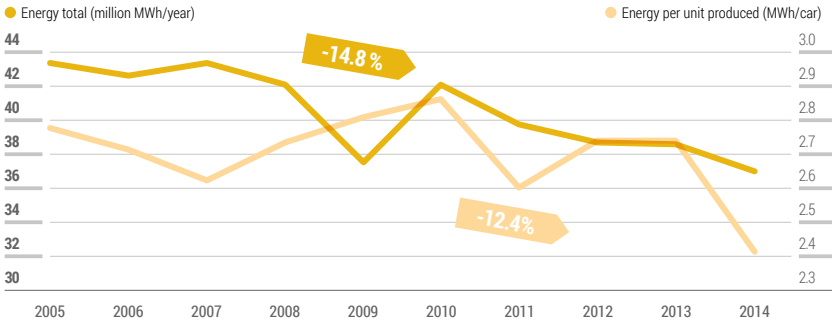
SOURCE: ACEA MEMBERS

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 38.7% over the last ten years.

European manufactures have significantly reduced the environmental impact of vehicle production over the last decade

Energy consumption during production

IN MWh / 2005 – 2014

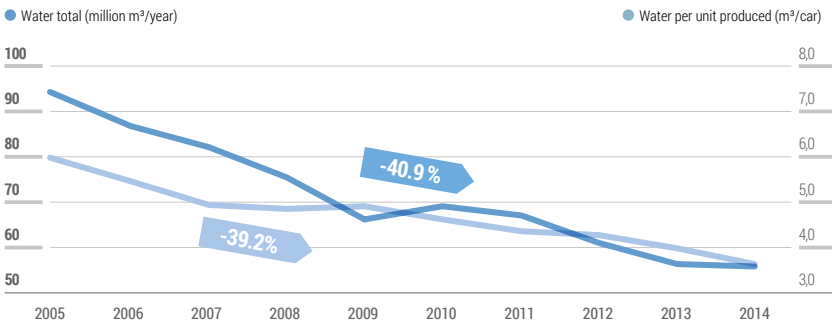


SOURCE: ACEA MEMBERS

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, energy consumption per car produced has been decreased by 12.4% over the last decade. Fluctuations in energy consumption can be explained by lower production volumes, especially during the economic crisis, as well as variable weather conditions in some years.

Water used in production

IN MILLION M³ / 2005 – 2014



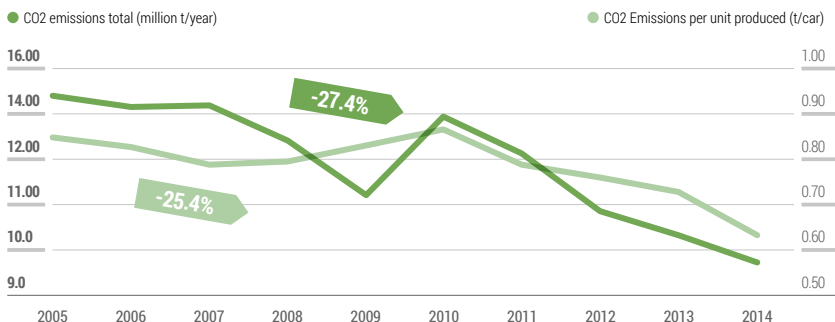
SOURCE: ACEA MEMBERS

Long-term strategies for reducing **water consumption** have made it possible to reduce water use per car produced by 39.2% between 2005 and 2014. This includes the increased application of recirculation technologies for the reuse of water.

Less energy and water are produced when making cars

CO2 emissions from production

IN MILLION TONNES / 2005 – 2014

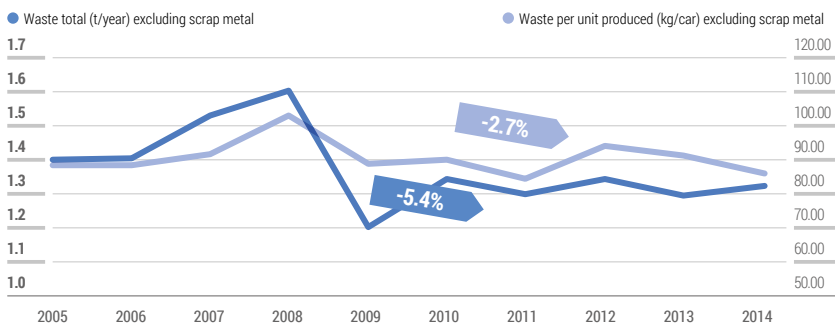


SOURCE: ACEA MEMBERS

The CO2 emissions per car produced dropped by 25.4% between 2005 and 2014, while the overall figure went down by 27.4%, reflecting the industry's efforts to reduce CO2 emissions.

Waste (excluding scrap metal) from production

IN MILLION TONNES / 2005 – 2014



SOURCE: ACEA MEMBERS

The total amount of waste generated by the manufacturing of passenger cars went down by 5.4% 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.

**CO2 emissions from car production
are down by over a quarter since 2005**

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Innovation



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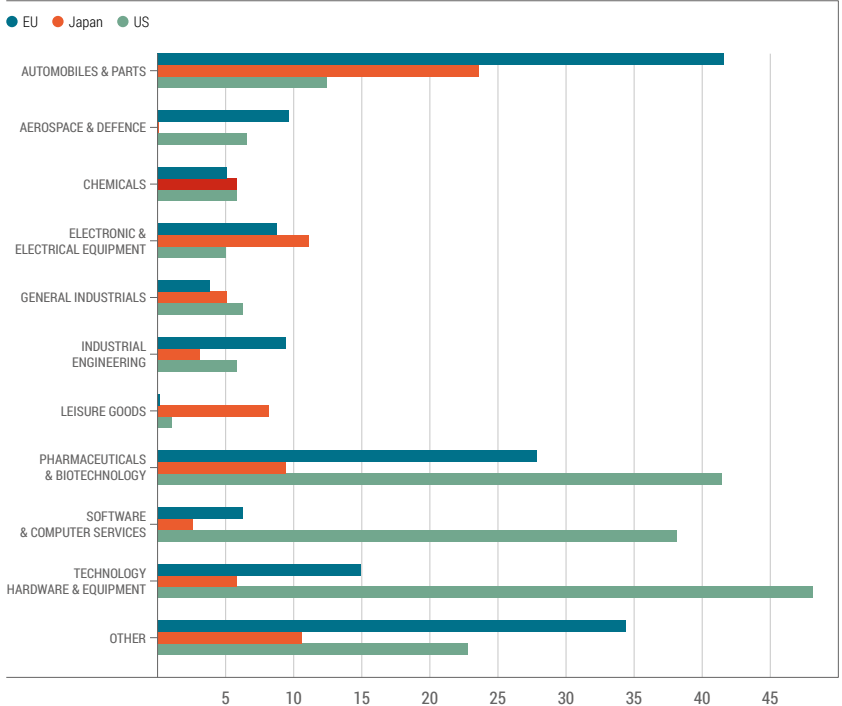
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R&D expenditure of industrial sectors in the main world regions

IN BILLION € / 2013

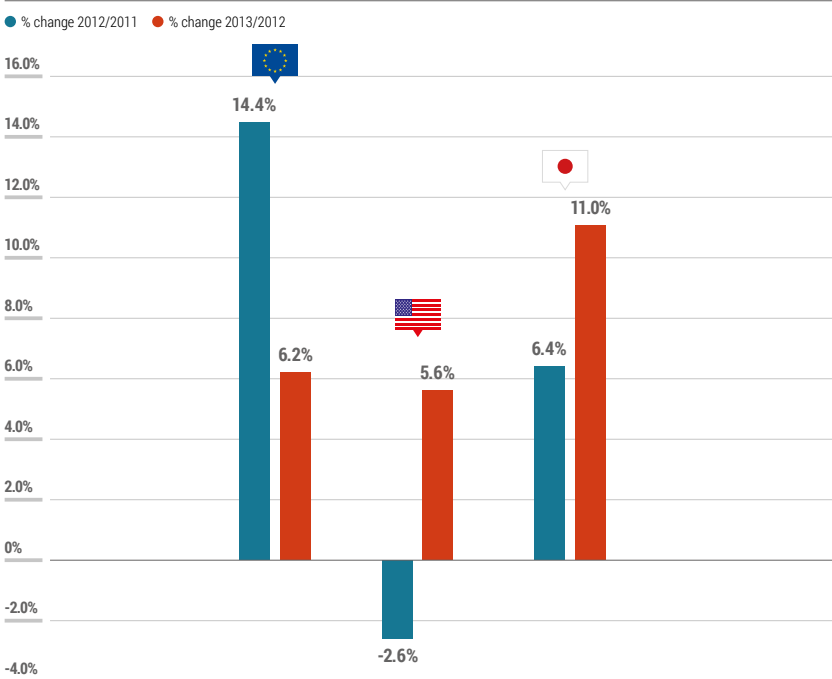


SOURCE: THE 2014 EU INDUSTRIAL R&D INVESTMENT SCOREBOARD EUROPEAN COMMISSION, JRC/DG RTD

**The EU is the world's largest investor
in automotive industry R&D**

R&D growth in the automobiles & parts sector for EU, US and Japan based companies

% CHANGE / 2011 – 2012 VS 2012 – 2013

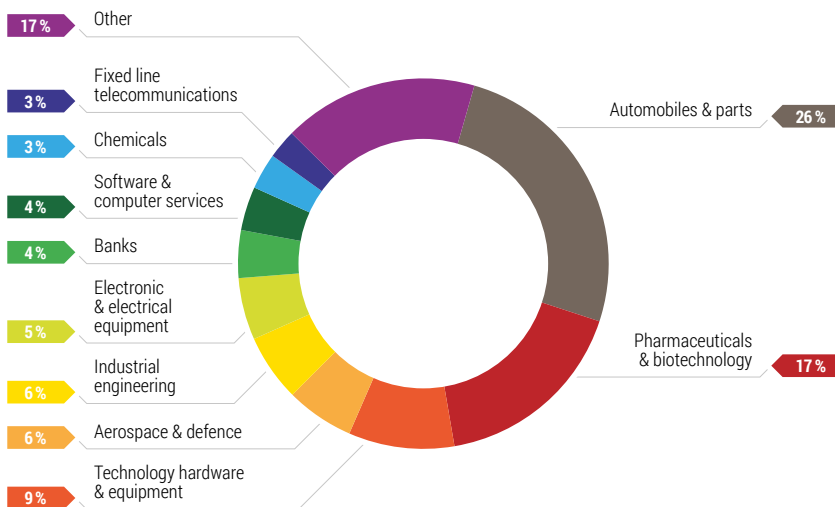


SOURCE: THE 2014 EU INDUSTRIAL R&D INVESTMENT SCOREBOARD EUROPEAN COMMISSION, JRC/DG RTD.

EU companies in the automobile and parts sector continue to increase their R&D investments

R&D shares of sectors in the EU

2013



SOURCE: THE 2014 EU INDUSTRIAL R&D INVESTMENT SCOREBOARD EUROPEAN COMMISSION, JRC/DG RTD

EU R&D investment in the top 10 industrial sectors

IN € MILLION / 2013

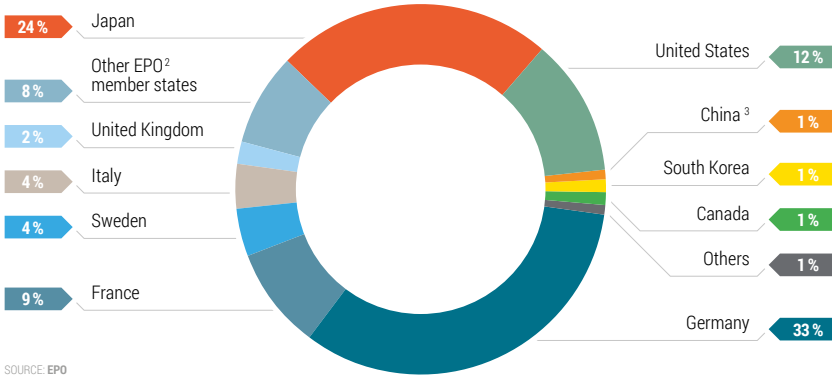
	R&D 2013
Automobiles & parts	41,538
Pharmaceuticals & biotechnology	27,879
Technology hardware & equipment	14,976
Aerospace & defence	9,650
Industrial engineering	9,498
Electronic & electrical equipment	8,787
Banks	6,751
Software & computer services	6,206
Chemicals	5,116
Fixed line telecommunications	4,131
Other	27,606

SOURCE: THE 2014 EU INDUSTRIAL R&D INVESTMENT SCOREBOARD EUROPEAN COMMISSION, JRC/DG RTD.

The automotive sector is the EU's number one investor in R&D, with €41.5 billion invested per year

Patents granted in the automotive sector ¹

2014



SOURCE: EPO

Patents by country

2014

Germany	1,987
France	526
Italy	238
Sweden	237
United Kingdom	138
other EPO member states ²	501
Japan	1,481
United States	735
Republic Of Korea	47
China ³	79
Canada	31
Others	56
Total patent applications	6,056

SOURCE: 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 Albania, Liechtenstein, Monaco, Macedonia, Serbia, San Marino, Turkey, EU28 and EFTA countries.
 3. Includes Taipei

In 2014, about 6,000 patents were granted to the automotive sector by EPO

Taxation



ACEA

European
Automobile
Manufacturers
Association

WWW.ACEA.BE



CO2 based motor vehicle taxes in the EU in 2015

COUNTRY	CO2 / FUEL CONSUMPTION TAXES
Austria	Fuel consumption tax (CO2 based) levied on the first car registration of a car.
Belgium	CO2-based registration tax (Wallonia). Registration tax based on CO2 emissions, Euro standards, fuel consumption and age (Flanders). CO2-based company car tax.
Cyprus	Registration tax and annual circulation tax based on CO2 emissions.
Germany	CO2-based annual circulation tax.
Denmark	Annual circulation tax based on fuel consumption. Registration tax (based on price) linked to fuel consumption.
Spain	CO2-based registration tax.
Finland	Registration tax and annual circulation tax based on CO2 emissions.
France	Registration tax, annual circulation tax and company car tax based on CO2 emissions.
Greece	CO2-based annual circulation tax.
Croatia	Registration tax based on price, CO2 emissions and fuel consumption.
Ireland	Registration tax and annual circulation tax based on CO2 emissions.
Luxembourg	CO2-based annual circulation tax.
Latvia	CO2-based registration tax.
Malta	Registration tax based on price, CO2 emissions and vehicle length. Annual circulation tax based on CO2 emissions and age.
Netherlands	CO2-based registration tax.
Portugal	Registration tax based on cubic capacity and CO2 emissions. Annual circulation tax based on cubic capacity, CO2 emissions and age.
Romania	Registration tax based on CO2 emissions, cubic capacity, exhaust emissions and age.
Sweden	Annual circulation tax based on CO2 emissions and exhaust emissions.
Slovenia	CO2-based registration tax.
United Kingdom	Annual circulation tax and company car tax based on CO2 emissions.

SOURCE: ACEA TAX GUIDE

Overview of purchase and tax incentives for electric vehicles in the EU in 2015

COUNTRY	INCENTIVES
Austria	EVs exempt from fuel consumption tax and monthly vehicle tax.
Belgium	EVs and PHEVs exempt from registration tax (Flanders). EVs pay the lowest rate of tax under the annual circulation tax. Reduction of company car taxation (CO2-based).
Czech Republic	Electric, hybrid and other alternative fuel vehicles exempt from road tax.
Germany	EVs ten year exemption from paying annual circulation tax.
Denmark	EVs (< 2,000 kg) exempt from registration tax.
Finland	EVs pay the minimum rate of the CO2-based registration tax.
France	EVs and HEVs benefit from a premium (CO2-based). EVs exempt from company car tax (hybrid vehicles exempt for the first two years).
Greece	EVs and HEVs exempt from registration tax, luxury tax and luxury living tax. Electric and hybrid passenger cars exempt from annual circulation tax (based on cubic capacity).
Hungary	EVs exempt from registration tax and annual circulation tax.
Ireland	EVs, plug-in hybrid EVs, hybrids and other alternative fuel vehicles benefit from registration tax relief.
Italy	EVs exempt from annual circulation tax for five years.
Latvia	EVs exempt from registration tax.
Netherlands	EVs exempt from registration tax. Vehicles exemption from annual circulation tax (CO2-based).
Portugal	EVs exempt from registration tax and annual circulation tax. Hybrid vehicles benefit from a reduction of the registration tax.
Romania	Electric and hybrid vehicles exempt from registration tax.
Sweden	Five year exemption from paying annual circulation tax (CO2-based). Reduction of company car taxation for EVs and plug-in hybrid EVs. Super green car premium new cars (CO2-based).
Slovakia	EVs exempt from registration tax and annual circulation tax. Hybrid vehicles benefit from a reduction of the annual circulation tax.
United Kingdom	Purchase grant for EVs and plug-in hybrid EVs (CO2-based). EVs exempt from annual circulation tax.

SOURCE: ACEA TAX GUIDE

**Incentives for electric vehicles
are available in 18 countries**

Fiscal income from motor vehicles in the EU¹

	AUSTRIA	BELGIUM	DENMARK	FINLAND	FRANCE	GERMANY	GREECE
	€ bn 2014	€ bn 2012	DKK bn 2011	€ bn 2013	€ bn 2013	€ bn 2012	€ bn 2013
Purchase or transfer							
1. VAT on vehicle sales servicing/repair, parts, tyres	2.678	6.06	N.A.	1.461	13.306	26.319	0.156
2. Fuels & lubricants	5.338	7.534	16.97	4.256	35.899	39.304	3.774
3. Sales & registration taxes	0.52	0.408	13.8	0.933	2.039	–	0.052
Annual ownership taxes	2.1	1.512	9.872	0.866	1.047	8.991	1.304
Driving license fees	–	0.007	–	–	–	0.01	–
Insurance taxes	0.324	0.934	1.757	0.343	4.47	3.786	–
Tolls	1.688	–	0.37	–	11.052	–	–
Customs duties	–	–	–	–	–	0.535	–
Other taxes	0.312	0.759	–	–	1.666	1.01	0.055
TOTAL	12.959	17.214	42.769	7.859	69.471	79.995	5.341
EURO	13	17.2	5.7	7.9	69.5	80	5.3
	IRELAND	ITALY	NETHER- LANDS	PORTUGAL	SPAIN	SWEDEN	UNITED KINGDOM
	€ bn 2014	€ bn 2013	€ bn 2013	€ bn 2014	€ bn 2011	SEK bn 2013	£ bn 2012
Purchase or transfer							
1. VAT on vehicle sales servicing/repair, parts, tyres	0.478	14.25	1.418	1.503	3.6	21	12.5
2. Fuels & lubricants	3.038	37.46	7.631	2.301	17.868	47.5	26.7
3. Sales & registration taxes	0.583	1.36	1.495	0.536	0.31	–	–
Annual ownership taxes	1.159	5.93	3.55	0.52	2.886	12.3	5.88
Driving license fees	–	–	0.308	–	0.062	–	–
Insurance taxes	–	4.5	0.903	–	0.6	2.8	–
Tolls	–	1.75	–	–	–	1.5	–
Customs duties	–	–	–	0.034	–	–	–
Other taxes	–	5.25	2.553	0.143	0.39	4.2	1.5
TOTAL	5.258	70.5	17.858	5.037	24.354	89.3	46.58
EURO	5.3	70.5	17.9	5	24.4	9.6	64.8

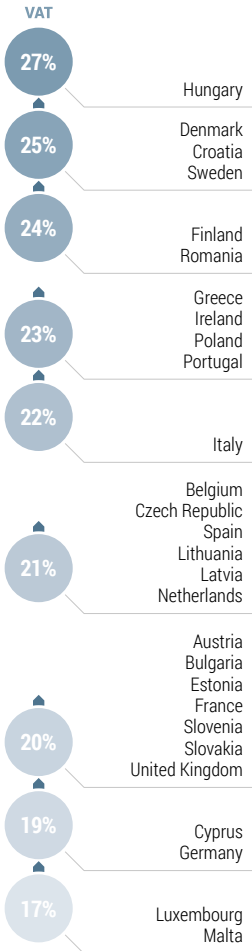
GRAND TOTAL = € 396bn

SOURCE: ACEA TAX GUIDE

1. Latest available data; no data are available for other EU Member States

**Motor vehicles account for €396 billion
in tax contributions in the EU15**

Share of VAT in net price of cars



SOURCE: ACEA TAX GUIDE

Excise duties on fuels in €/1,000 litres

	UNLEADED PETROL	DIESEL
Austria	515	425
Belgium	615	443
Bulgaria	363	330
Cyprus	479	450
Czech Republic	467	398
Germany	670	486
Denmark	608	414
Estonia	423	393
Spain	425	331
Finland	681	506
France	624	468
Greece	670	330
Croatia	479	374
Hungary	397	384
Ireland	587	479
Italy	728	617
Lithuania	434	330
Luxembourg	465	338
Latvia	411	333
Malta	519	422
Netherlands	766	482
Poland	399	349
Portugal	617	402
Romania	461	430
Sweden	646	602
Slovenia	596	495
Slovakia	551	386
United Kingdom	674	674
EU minimum rates	359	330

SOURCE: ACEA TAX GUIDE

Automobiles provide a vital source of government revenue

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