



THE AUTOMOBILE INDUSTRY

POCKET GUIDE 2023/2024

acea

DRIVING MOBILITY FOR EUROPE



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FOREWORD

ACEA's Pocket Guide is the go-to fact book for everything related to the automotive industry and market – fresh with new data and statistics every year. This latest edition reaffirms the European automotive industry's steadfast global leadership in R&D investment despite the uncertain regulatory and economic climate. It also confirms Europe's burgeoning electric vehicle market, which with the right policy conditions, offers significant potential for the mobility transition. It also reveals a more concerning sign, as growing competition from third countries challenges European auto makers' competitiveness and domestic vehicle market share.

2022 saw EU production continue its rebound, hitting 13 million vehicles – 1 million more than the previous year. For cars, production grew at its fastest rate in the last ten years, reversing four consecutive years of decline. Despite this upswing, Europe still produces less than one-fifth of cars globally, with the region's market share dropping by 2% compared to 2021 – the third annual drop in a row.

On the bright side, the market share of battery-electric cars continued its ascent, recording a six-fold increase in just four years. Electrically chargeable vans and buses were not far behind, with EU sales quadrupling and trebling, respectively, in the same period. Electrically chargeable truck uptake was still far from optimal, especially as the EU moves ahead with ambitious CO₂-reduction targets for heavy-duty vehicles (HDVs). The comparatively low – but steadily growing – market share is a telling sign that EU member states must do more to boost electric CV purchases and infrastructure rollout. For instance, 22 EU countries currently do not provide any incentives for electric CV infrastructure.

Automotive trade is also booming, as EU vehicle exports jumped by 10% in 2022, with the UK remaining one of the top export markets. With current tariff-free rules on EU-UK vehicle trade set to expire by the end of 2023, questions remain if the UK can retain its place in next year's rankings. EU vehicle imports also rose by 10% in 2022, with China overtaking the UK as the EU's top country of origin for car imports. A noteworthy switch, following a five-fold increase in Chinese imports in five years, which could shake up the European auto market as we know it. Indeed, China's dominance of the global EV battery supply chain and vast government subsidies provide impetus to Chinese auto makers seeking to establish a foothold in the European market.

Despite regulatory uncertainty and increasing competition, the European automotive industry has yet again upheld its

commitment to invest in Europe as it retains its title as the EU's largest R&D investor. With R&D investment up again in 2021, European manufacturers now invest around a third of the bloc's total R&D spend. The EU auto industry's contribution to the EU economy also doesn't stop there. The European automotive value chain employs almost 13 million Europeans, around 200,000 more than it did in 2019. A noteworthy feat in a challenging economic context marred by record-high energy prices and supply disruptions. Major EU governments also raise significant revenues from vehicle sales and ownership – raking in almost €400 billion in 2022. This vital source of revenue for public coffers could (and should) be reinvested in roads, upgrading public transport networks, and accelerating the mobility transition.

There is also good news for emission reductions. CO2 emissions from new cars in the EU fell by more than 5% in 2022. Indeed, this comes on top of significant efforts by the industry to reduce its CO2 emissions from production, marking a 30% drop since 2005. Production energy consumption mirrors this trend, with a 30% cut in the same period, while production water use is down by more than half.

Finally, the EU retains its top spot for the global best road safety record. EU road fatalities dropped by 13% in 2021 (compared to 2019), with decreases recorded in 22 member states. European auto makers' leadership in vehicle automation and innovative safety features is set to save even more lives as newer models are deployed to the market.

Overall, this latest Pocket Guide edition gives a mixed picture of the European automotive industry, but there is certainly much we can be proud of. Trends indicate that our industry's mobility transition is well underway – and the question is no longer 'how to achieve the transition' but 'how fast can we get there' instead. A robust and coherent policy framework that matches our competitors' ambitions is vital if Europe wants to retain its place as the home of the world's most innovative and sustainable auto makers. We are committed to building on this success in Europe and stand ready to co-shape this journey with policy makers and civil society.



A stylized, handwritten signature in black ink, appearing to read 'Sigrid de Vries'.

Sigrid de Vries
ACEA Director General



Trends indicate that our industry's mobility transition is well underway – and the question is no longer 'how to achieve the transition' but 'how fast can we get there'.

KEY FIGURES

 EMPLOYMENT	Motor vehicle manufacturing (EU)	2.4 million jobs = 8.3% of EU manufacturing employment	2021
	Total (EU manufacturing, services, and construction)	12.9 million jobs = 6.8% of EU employment	2021
 PRODUCTION	Motor vehicles (global)	85.4 million units	2022
	Motor vehicles (EU)	13.1 million units = 15.3% of global motor vehicle production	2022
	Passenger cars (global)	68.7 million units	2022
	Passenger cars (EU)	10.9 million units = 15.9% of global car production	2022
 REGISTRATIONS	Motor vehicles (global)	81.7 million units	2022
	Motor vehicles (EU)	10.9 million units = 13.3% of global vehicle registrations	2022
	Passenger cars (global)	65.8 million units	2022
	Passenger cars (EU)	9.3 million units = 14.1% of global car registrations	2022
	New cars by fuel (EU)	battery electric 12.1%, petrol 36.4% of market share	2022
	New vans by fuel (EU)	electric 5.3%, diesel 86% of market share	2022
	New trucks by fuel (EU)	electric 0.6%, diesel 96.6% of market share	2022
	New buses by fuel (EU)	electric 12.7%, diesel 67.3% of market share	2022
 TRADE	Motor vehicle exports (extra-EU)	€171.4 billion	2022
	Motor vehicle imports (extra-EU)	€69.6 billion	2022
	Trade balance (extra-EU)	€101.9 billion surplus	2022



VEHICLES IN USE

Motor vehicles (EU)	286.2 million units	2021
Passenger cars (EU)	249.6 million units	2021
Motorisation rate (EU)	651 vehicles per 1,000 inhabitants	2021
Average age of cars (EU)	12 years	2021
Average age of vans (EU)	12 years	2021
Average age of trucks (EU)	14.2 years	2021
Average age of buses (EU)	12.7 years	2021



ROAD SAFETY

Road fatalities per million inhabitants (EU)	45 people	2021
Road fatalities (EU)	-32.8% since 2010	2021



ENVIRONMENT

Average new car CO2 emissions (EU)	110g CO2/km	2022
Car production CO2 emissions (EU)	-31.4% since 2005	2022



INNOVATION

Automobiles and parts sector (EU)	€59.1 billion = 31% of the EU's total R&D spending	2021
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TAXATION

Fiscal income from motor vehicles (major EU markets)	€392.9 billion	2022
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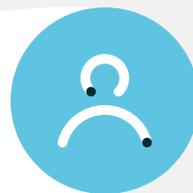


The data in this publication are presented as interactive maps, charts and tables on www.acea.auto/figures, where they are periodically updated throughout the year.



EMPLOYMENT

THE AUTOMOBILE INDUSTRY
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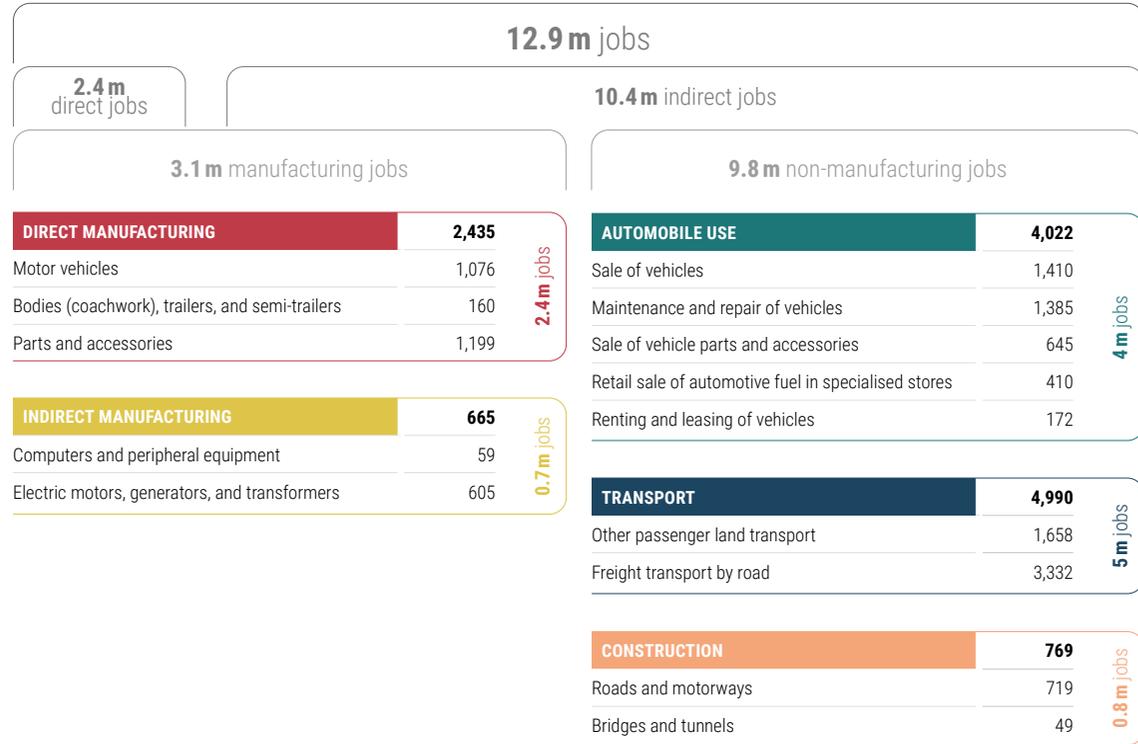
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DRIVING MOBILITY FOR EUROPE



The EU auto sector employs almost 13 million Europeans directly and indirectly

EU AUTOMOTIVE SECTOR: DIRECT AND INDIRECT EMPLOYMENT

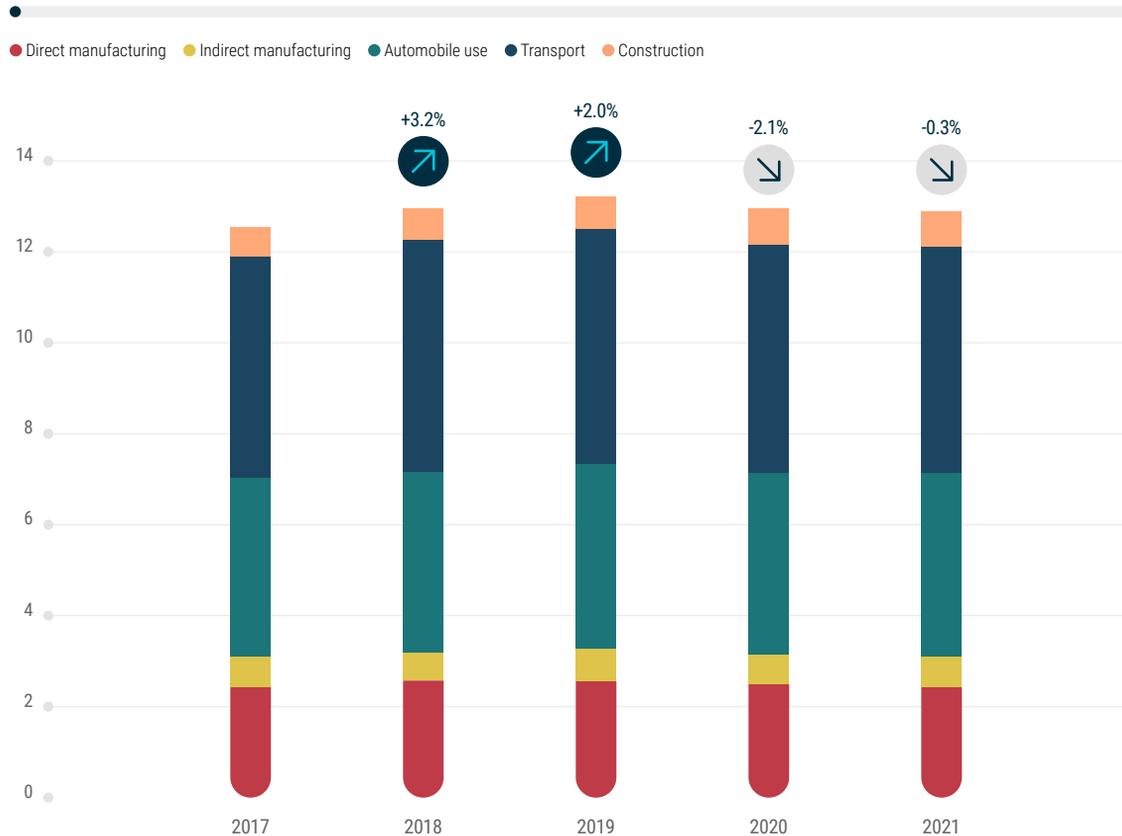
In thousands / 2021¹

1. Provisional



EU AUTOMOTIVE SECTOR EMPLOYMENT

In million jobs / 2017 – 2021¹



SOURCE: EUROSTAT

The EU auto sector accounts for around 7% of the bloc's jobs

¹ Provisional data for 2021. Eurostat can revise historical data in case of updates



**EU auto sector
employment
increased by
almost 3% over
four years**

EU AUTOMOTIVE SECTOR EMPLOYMENT

2017 – 2021¹

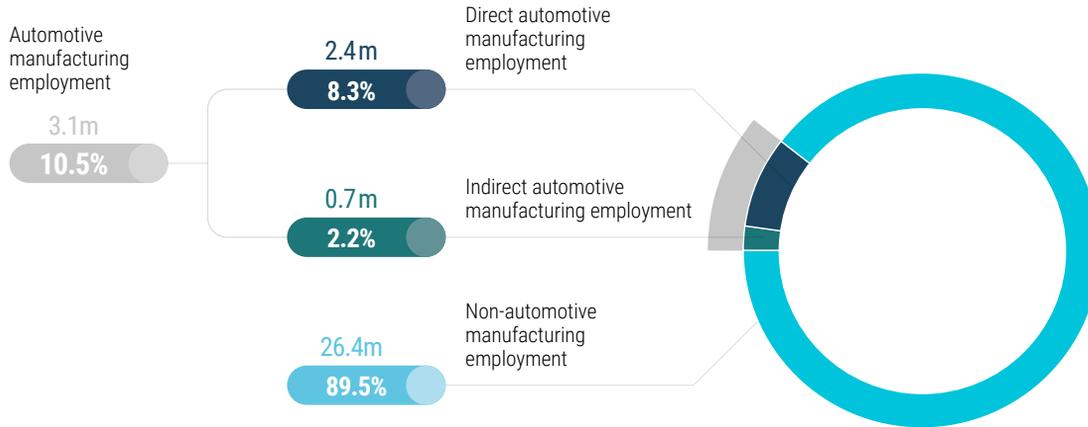
EU automotive employment	2017	2018	2019	2020	2021	% change 21/17
Direct manufacturing	2,440,817	2,574,384	2,558,450	2,486,650	2,434,862	-0.2
Indirect manufacturing	685,580	625,577	725,555	664,023	664,601	-3.1
Automobile use	3,895,863	3,973,070	4,045,496	3,995,144	4,022,111	+3.2
Transport	4,857,960	5,075,954	5,174,657	5,010,690	4,989,975	+2.7
Construction	662,852	694,767	692,931	767,826	768,650	+16.0
TOTAL	12,543,072	12,943,751	13,197,089	12,924,333	12,880,199	+2.7

1. Provisional data for 2021. Eurostat can revise historical data in case of updates



MANUFACTURING JOBS IN THE EU AUTO SECTOR

% share / 2021¹



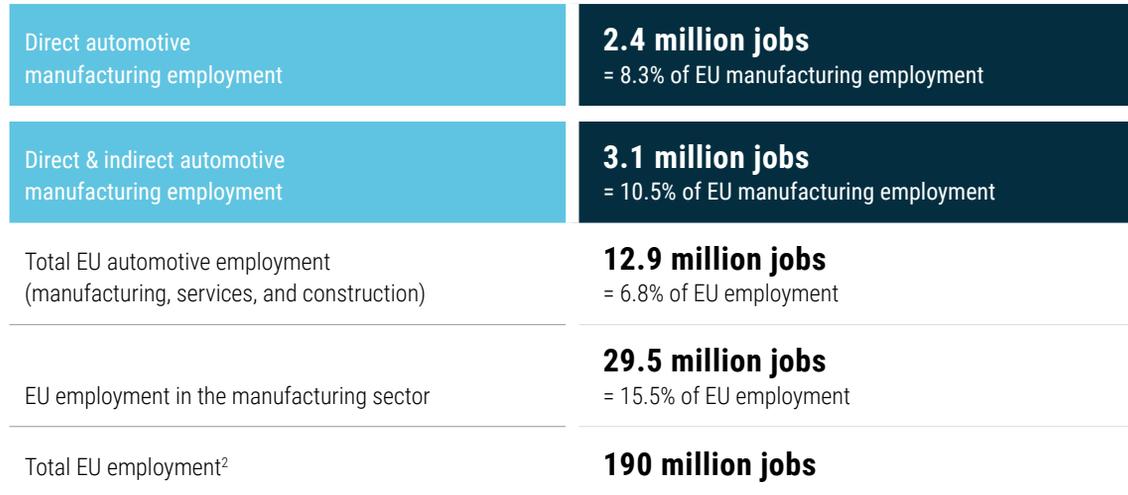
Over 10% of EU manufacturing jobs are in the automotive sector



More than 3 million people work in EU automotive manufacturing

MANUFACTURING JOBS IN THE EU AUTO SECTOR

2021¹



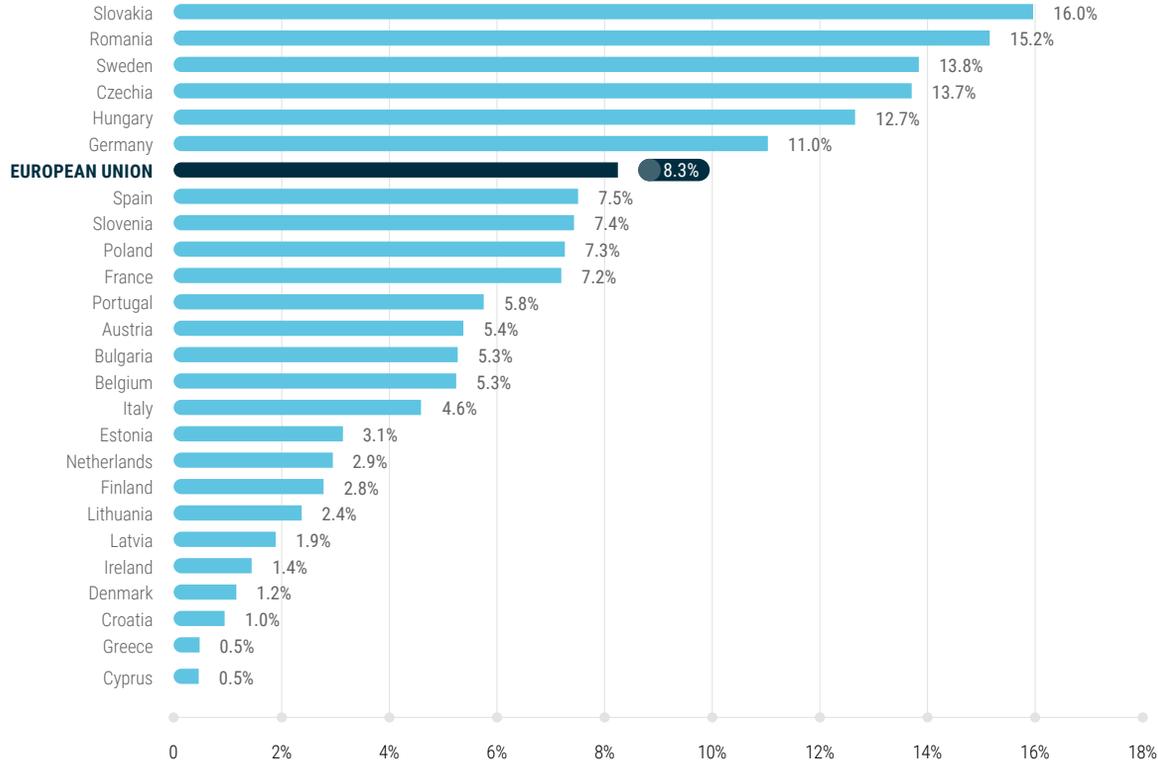
1. Provisional

2. Total employment from 20 to 64 years
(resident population concept - Labour Force Survey)



EU DIRECT AUTOMOTIVE EMPLOYMENT

Share of total manufacturing by country / 2021¹



SOURCE: EUROSTAT

The EU auto industry accounts for more than 10% of manufacturing jobs in six member states

1. Provisional



EU auto makers
directly employ
around 2.5 million
Europeans in
automotive
manufacturing

DIRECT EU AUTOMOTIVE MANUFACTURING EMPLOYMENT

By country / 2021¹

Austria	37,416	France	226,927	Malta	0
Belgium	26,271	Germany	868,870	Netherlands	21,131
Bulgaria	26,494	Greece	1,788	Poland	210,366
Croatia	2,590	Hungary	96,805	Portugal	41,862
Cyprus	169	Ireland	3,437	Romania	163,988
Czechia	175,791	Italy	175,810	Slovakia	77,510
Denmark	3,797	Latvia	2,309	Slovenia	16,246
Estonia	3,478	Lithuania	5,448	Spain	156,841
Finland	8,878	Luxembourg	0	Sweden	80,640

EUROPEAN UNION 2,434,862

1. Provisional



PRODUCTION

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DRIVING MOBILITY FOR EUROPE

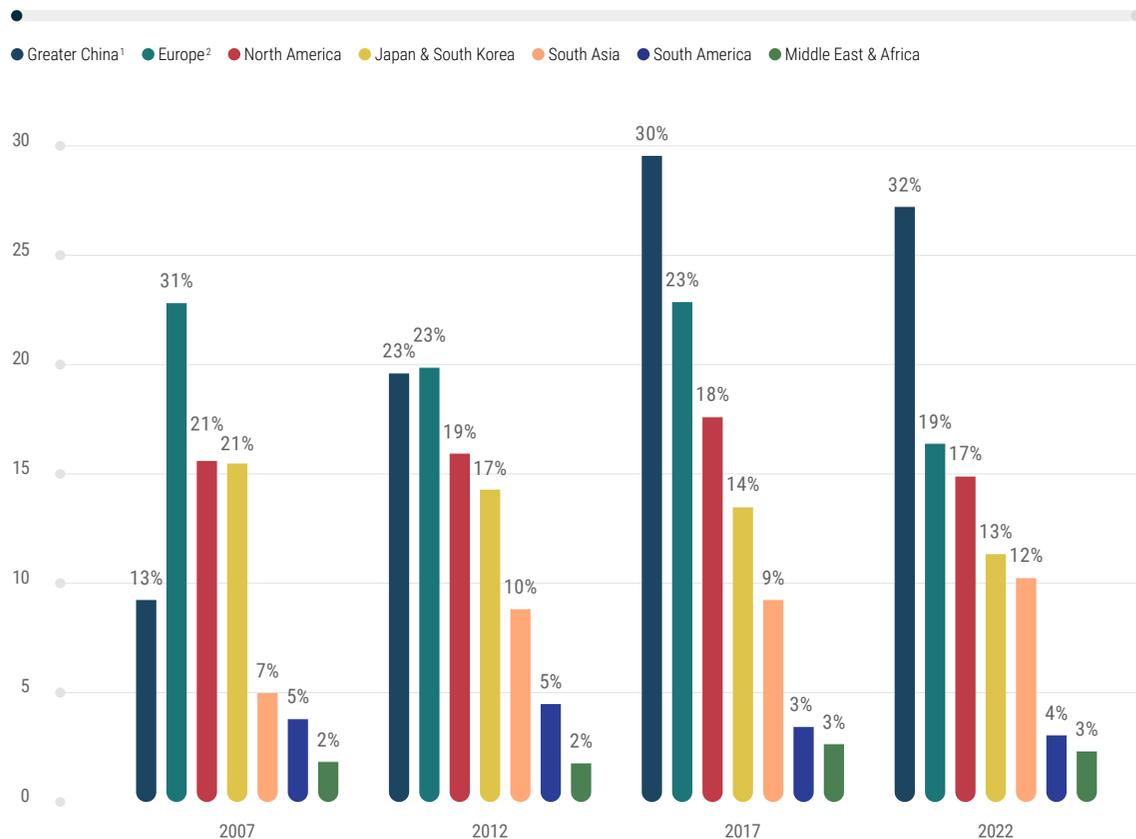


China is the world's top vehicle producer, manufacturing nearly one-third of vehicles globally

1. Includes Hong Kong and Taiwan
2. Includes Türkiye and the Commonwealth of Independent States (CIS)

GLOBAL VEHICLE PRODUCTION

In million units, % share / 2007 – 2022



SOURCE: S&P GLOBAL MOBILITY



GLOBAL VEHICLE PRODUCTION

In thousand units / 2022

	2022	2021	% change 22/21	% share 2022
Europe ¹	16,391	16,480	-0.5	19.2
Greater China ²	27,222	26,411	+3.1	31.9
Japan and South Korea	11,334	11,065	+2.4	13.3
Middle East and Africa	2,294	2,103	+9.1	2.7
North America	14,901	13,596	+9.6	17.4
South America	3,025	2,796	+8.2	3.5
South Asia	10,230	8,356	+22.4	12.0
WORLD	85,397	80,806	+5.7	100.0

Global vehicle production increased by almost 6% in 2022, with Europe the only region to record a drop

1. Includes Türkiye and the Commonwealth of Independent States (CIS)

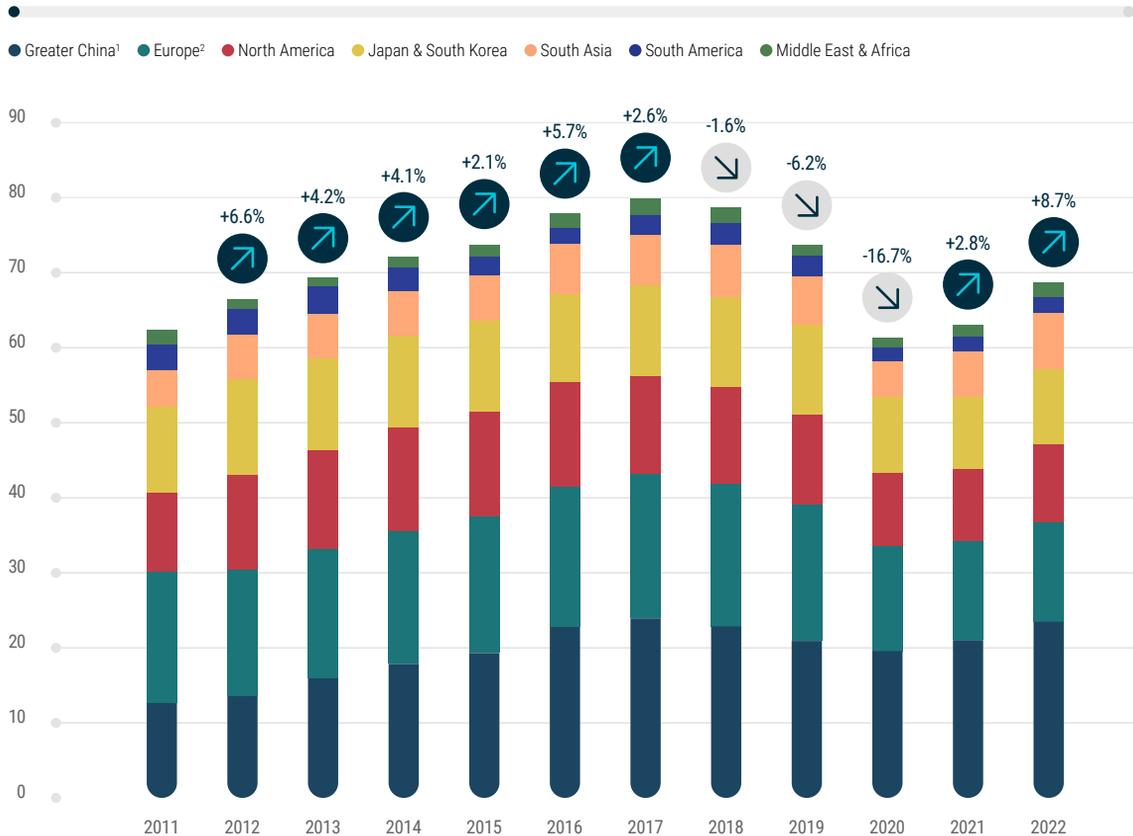
2. Includes Hong Kong and Taiwan



Global car production surged by around 9% in 2022, the highest year-on-year percentage increase since 2012

GLOBAL CAR PRODUCTION

In million units, % change / 2011 – 2022

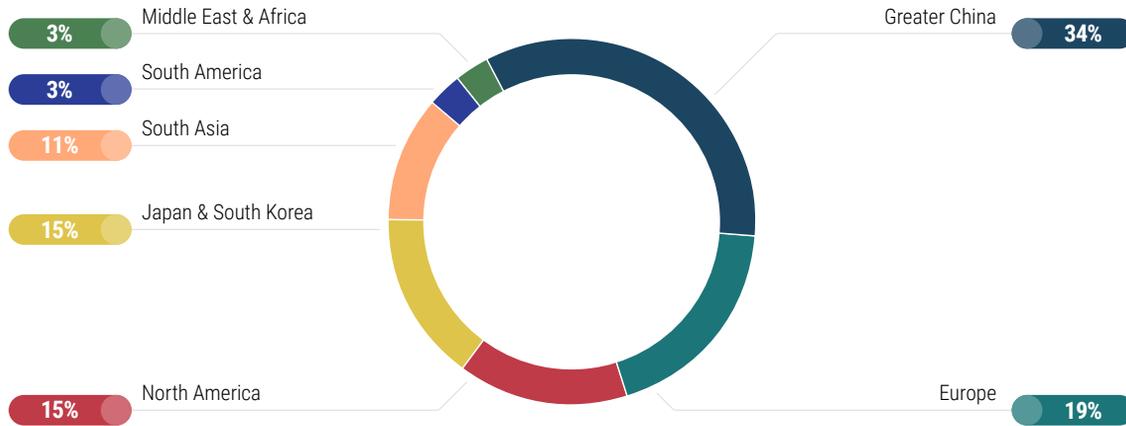


1. Includes Hong Kong and Taiwan
 2. Includes Türkiye and the Commonwealth of Independent States (CIS)



GLOBAL CAR PRODUCTION

% share / 2022



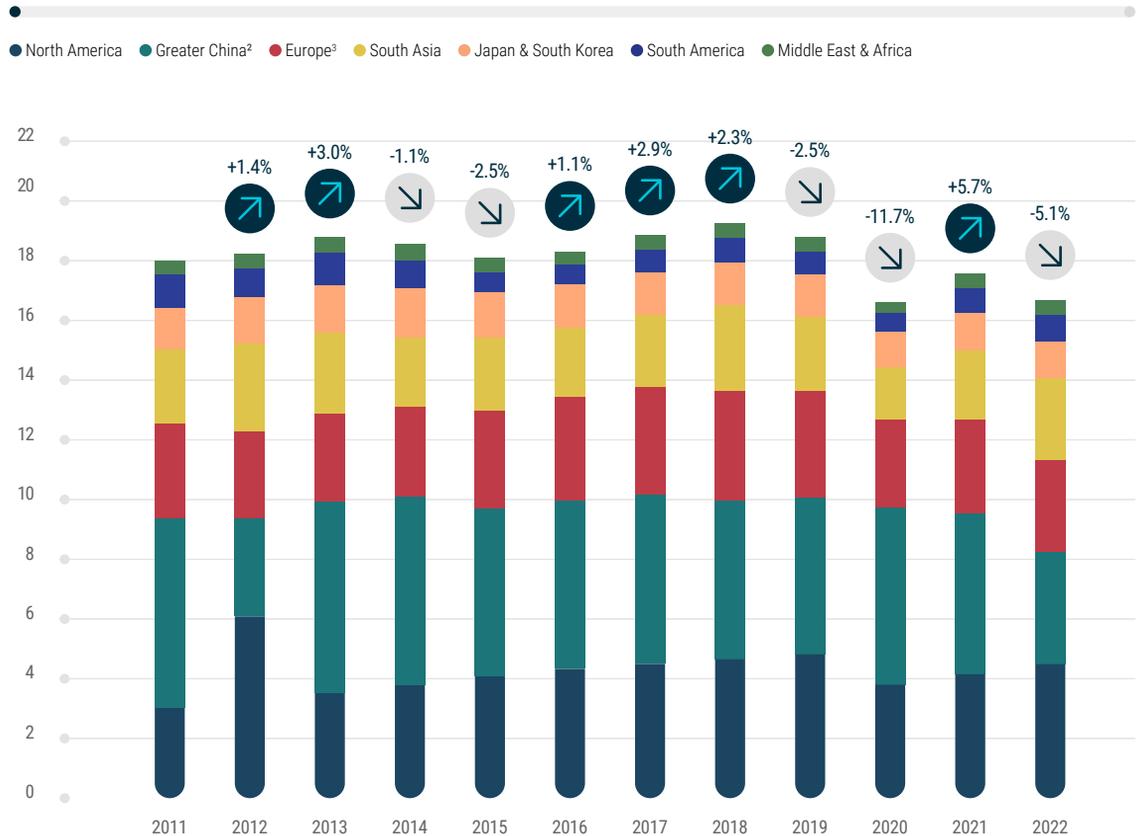
Europe produces less than one-fifth of cars globally, down two percentage points from 2021



Global commercial vehicle production retracted by over 5% in 2022

GLOBAL COMMERCIAL VEHICLE PRODUCTION¹

In million units, % change / 2011 – 2022

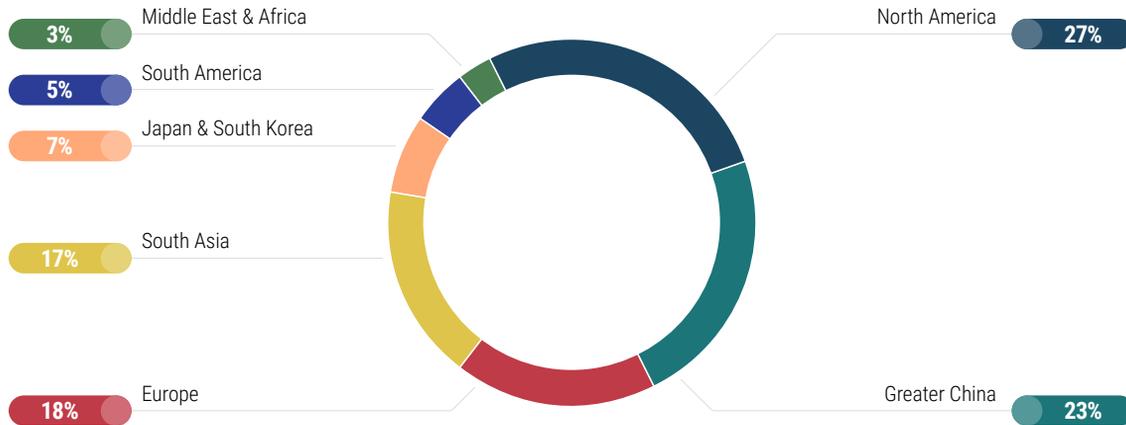


1. Includes buses
 2. Includes Hong Kong and Taiwan
 3. Includes Türkiye and the Commonwealth of Independent States (CIS)



GLOBAL COMMERCIAL VEHICLE PRODUCTION ¹

% share / 2022



Europe manufactures less than one-fifth of the world's commercial vehicles, trailing China and North America

1. Includes buses



**13 million
vehicles were
made in the EU in
2022, 1 million
more compared
to 2021**

EU VEHICLE PRODUCTION

By country / 2022

	Cars	Vans ¹	Trucks ²	Buses ³	TOTAL
Austria	107,482	–	11,561	11	119,054
Belgium	243,293	–	38,684	453	282,430
Czechia	1,214,746	–	1,260	5,240	1,221,246
Finland	73,082	–	38	–	73,120
France	950,188	428,675	65,673	2,500	1,447,036
Germany	3,332,609	210,047	156,204	3,818	3,702,678
Hungary	452,551	–	–	799	453,350
Italy	486,111	234,798	61,117	603	782,629
Lithuania	–	–	26	8	34
Netherlands	99,122	–	64,596	589	164,307
Poland	166,610	246,574	33,119	4,796	451,099
Portugal	230,974	85,436	4,556	105	321,071
Romania	509,465	–	–	–	509,465
Slovakia	970,275	–	–	–	970,275
Slovenia	67,897	–	–	21	67,918
Spain	1,734,272	436,591	33,751	968	2,205,582
Sweden	251,446	–	32,570	3,816	287,832
EUROPEAN UNION	10,890,123	1,642,121	503,155	23,727	13,059,126

1. Light commercial vehicles up to 3.5t

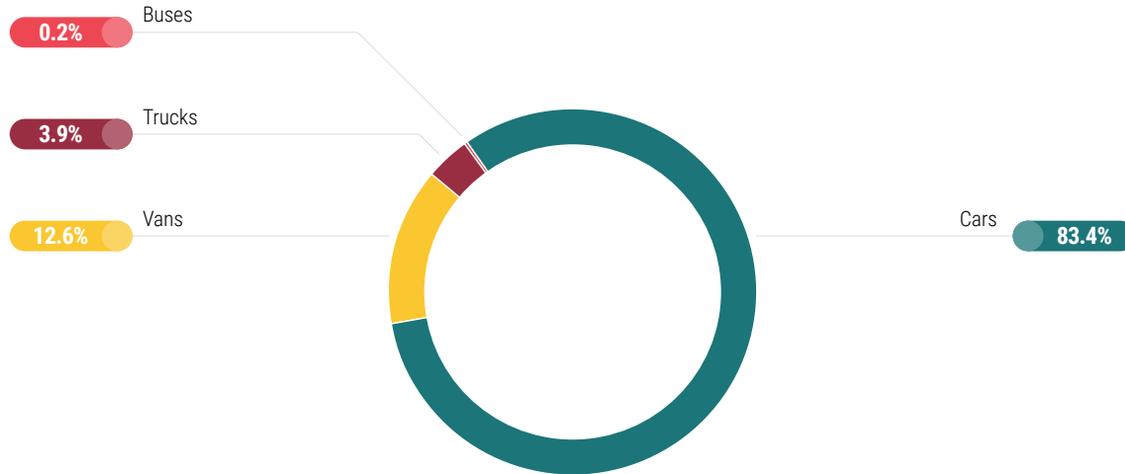
2. Medium and heavy commercial vehicles over 3.5t

3. Medium and heavy buses over 3.5t



EU VEHICLE PRODUCTION

By type, % share / 2022



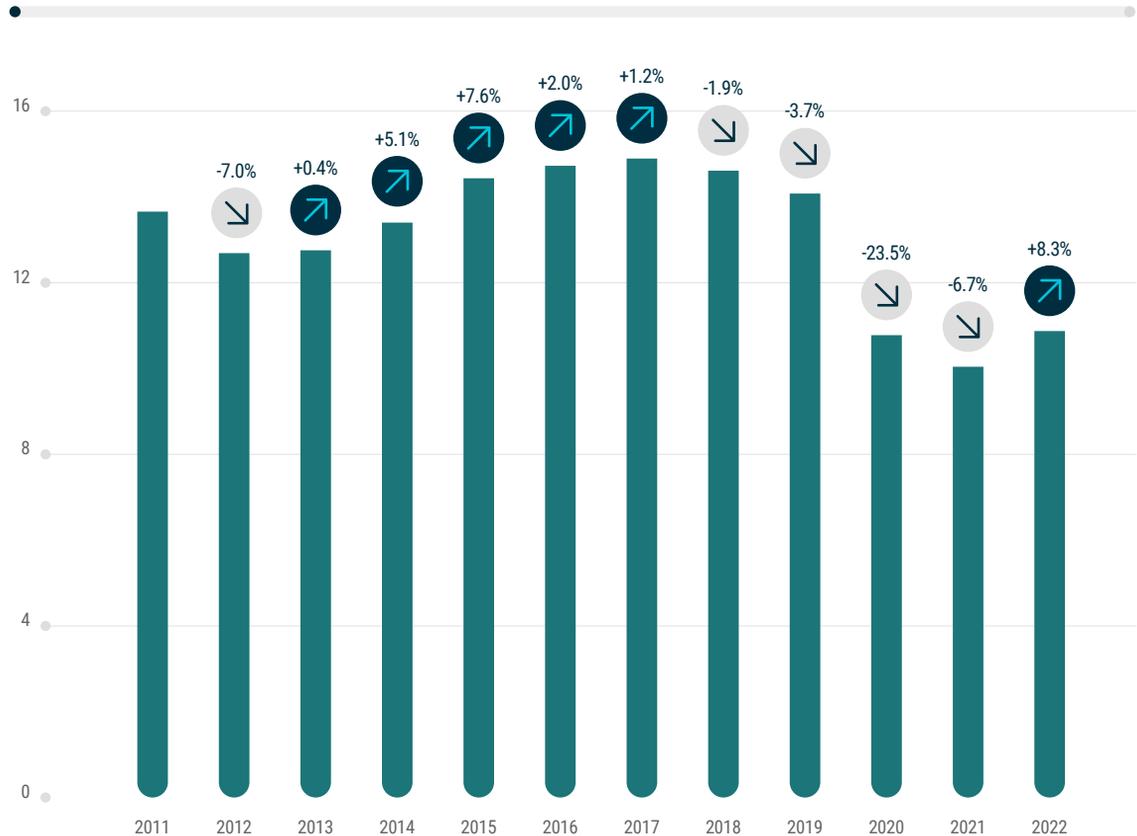
Cars account for around four-fifths of EU-made vehicles



EU car production grew at its fastest rate in the last ten years, reversing four consecutive years of decline

EU CAR PRODUCTION

In million units, % change / 2011 – 2022



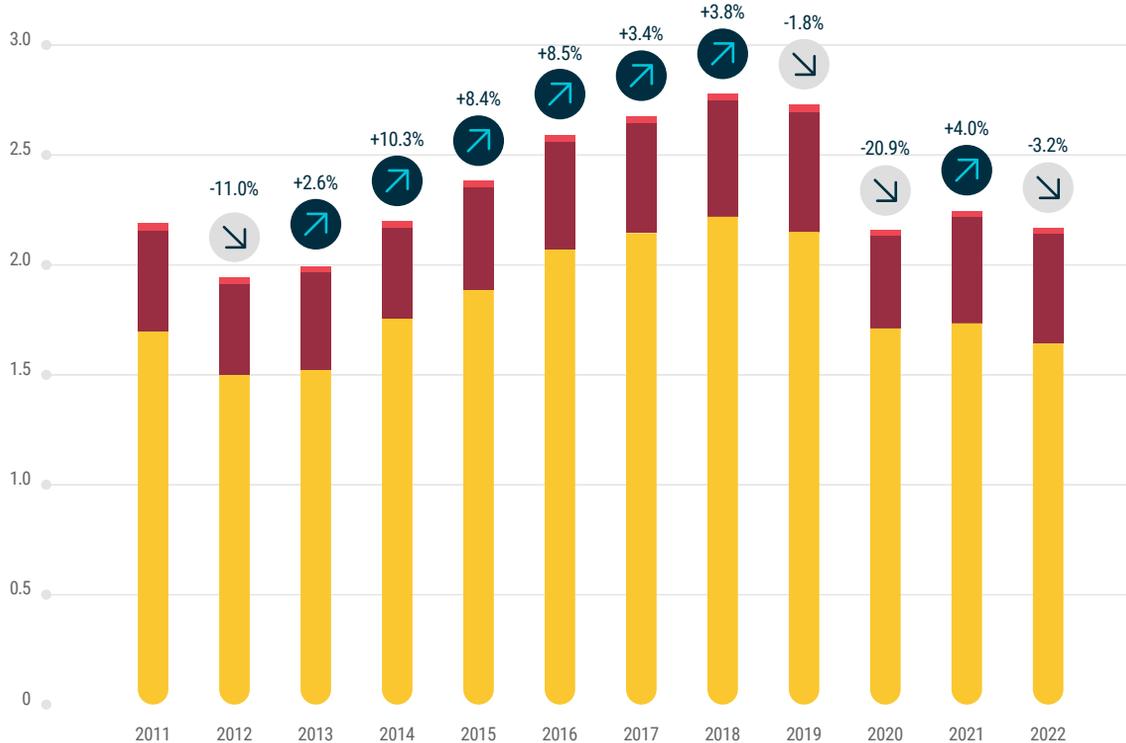
SOURCE: S&P GLOBAL MOBILITY



EU COMMERCIAL VEHICLE PRODUCTION

In million units, % change / 2011 – 2022

Vans¹ Trucks² Buses³



SOURCE: S&P GLOBAL MOBILITY

After a small increase in 2021, EU commercial vehicle production declined slightly in 2022

1. Light commercial vehicles up to 3.5t
 2. Medium and heavy commercial vehicles over 3.5t
 3. Medium and heavy buses over 3.5t

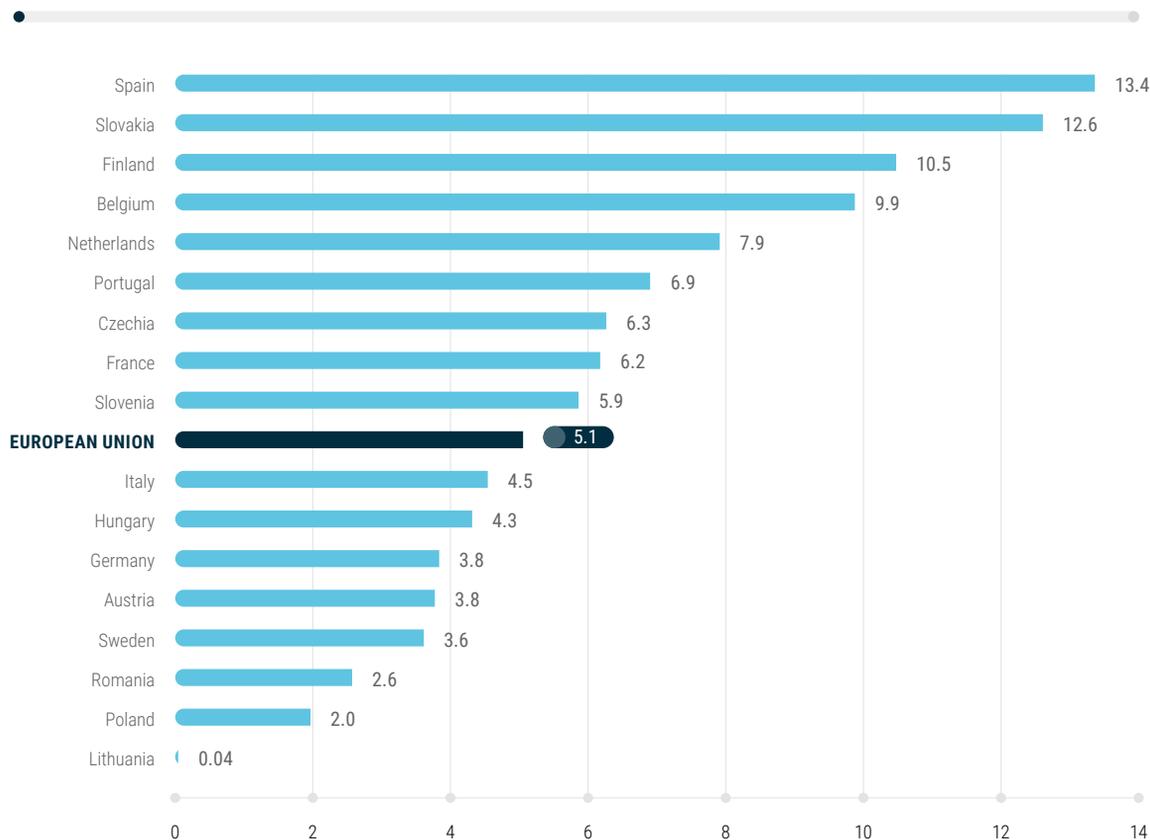


Each EU
automotive
worker produces
five vehicles
annually on
average

1. Based on the most recent employment data available

VEHICLE PRODUCTION PER DIRECT AUTOMOTIVE MANUFACTURING EMPLOYEE

By country / 2021¹

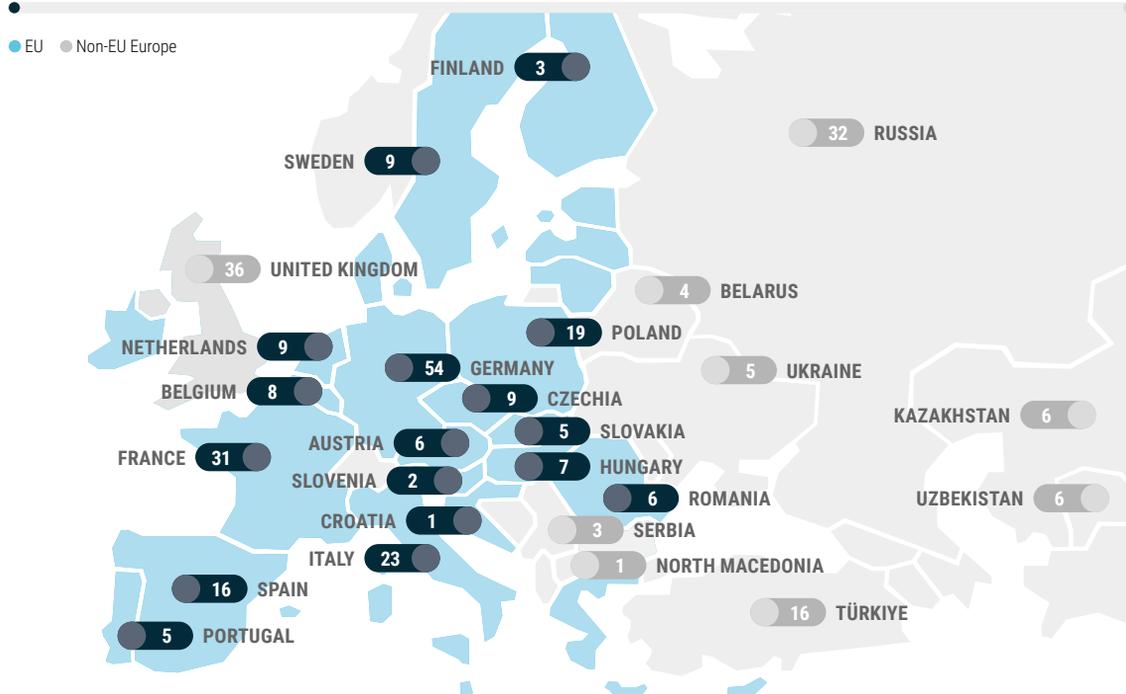


SOURCE: EUROSTAT, S&P GLOBAL MOBILITY



AUTOMOBILE ASSEMBLY, BATTERY, AND ENGINE PLANTS

2023



	CARS	VANS	TRUCKS	BUSES	ENGINES	BATTERIES	TOTAL
EU ONLY	80	28	28	38	52	37	213
EUROPE	127	46	56	71	71	41	322

SOURCE: ACEA

Auto makers operate 213 factories in the EU



REGISTRATIONS

THE AUTOMOBILE INDUSTRY
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Almost 82 million vehicles were sold globally in 2022, around 2 million less than in 2021

1. Data for Malta not available
 2. Includes Iceland, Norway, and Switzerland
 3. Includes Belarus, Bosnia-Herzegovina, Kazakhstan, Moldova, North Macedonia, Serbia, and Uzbekistan
 4. Includes Hong Kong, Taiwan, and all the other South Asian countries

GLOBAL NEW VEHICLE REGISTRATIONS

In thousand units / 2022

	2022	2021	% change 22/21	% share 2022
EUROPE	15,365	17,239	-10.9	18.8
European Union ¹	10,863	11,582	-6.2	13.3
EFTA ²	483	504	-4.0	0.6
United Kingdom	1,946	2,050	-5.1	2.4
Türkiye	823	770	+6.8	1.0
Russia	749	1,787	-58.1	0.9
Ukraine	45	120	-62.7	0.1
Others (Europe) ³	456	427	+6.6	0.6
AMERICA	21,053	22,328	-5.7	25.8
North America	17,036	18,335	-7.1	20.9
<i>United States only</i>	14,366	15,583	-7.8	17.6
South America	4,018	3,993	+0.6	4.9
<i>Brazil only</i>	2,096	2,118	-1.0	2.6
ASIA	41,132	40,462	+1.7	50.4
China	25,018	25,564	-2.1	30.6
Japan	4,741	3,820	+24.1	5.8
India	4,190	4,443	-5.7	5.1
South Korea	1,700	1,736	-2.1	2.1
Others (Asia) ⁴	5,483	4,899	+11.9	6.7
MIDDLE EAST & AFRICA	4,131	3,921	+5.4	5.1
WORLD	81,681	83,950	-2.7	100.0

SOURCE: ACEA, S&P GLOBAL MOBILITY



GLOBAL NEW VEHICLE REGISTRATIONS

% share / 2022



Europe accounts for around 19% of global vehicle sales, down from 20% in 2022



**EU and US
car markets
declined, while
sales in China
grew in 2022**

GLOBAL NEW CAR REGISTRATIONS

In thousand units / 2022

	2022	2021	% change 22/21	% share 2022
EUROPE	12,864	14,326	-10.2	19.5
European Union ¹	9,256	9,700	-4.6	14.1
EFTA ²	417	428	-2.5	0.6
United Kingdom	1,614	1,647	-2.0	2.5
Türkiye	593	562	+5.5	0.9
Russia	586	1,549	-62.2	0.9
Ukraine	38	106	-64.1	0.1
Others (Europe) ³	360	335	+7.6	0.5
AMERICA	15,570	16,695	-6.7	23.7
North America ⁴	12,766	13,965	-8.6	19.4
<i>United States only</i>	10,773	11,858	-9.1	16.4
South America	2,804	2,731	+2.7	4.3
<i>Brazil only</i>	1,573	1,558	+0.9	2.4
ASIA	33,952	31,959	+6.2	51.6
China	21,348	20,208	+5.6	32.4
Japan	3,804	3,117	+22.1	5.8
India	3,443	3,673	-6.3	5.2
South Korea	1,435	1,480	-3.1	2.2
Others (Asia) ⁵	3,923	3,481	+12.7	6.0
MIDDLE EAST & AFRICA	3,415	3,234	+5.6	5.2
WORLD	65,801	66,214	-0.6	100.0

1. Data for Malta not available

2. Includes Iceland, Norway, and Switzerland

3. Includes Belarus, Bosnia-Herzegovina, Kazakhstan, North Macedonia, Serbia, and Uzbekistan

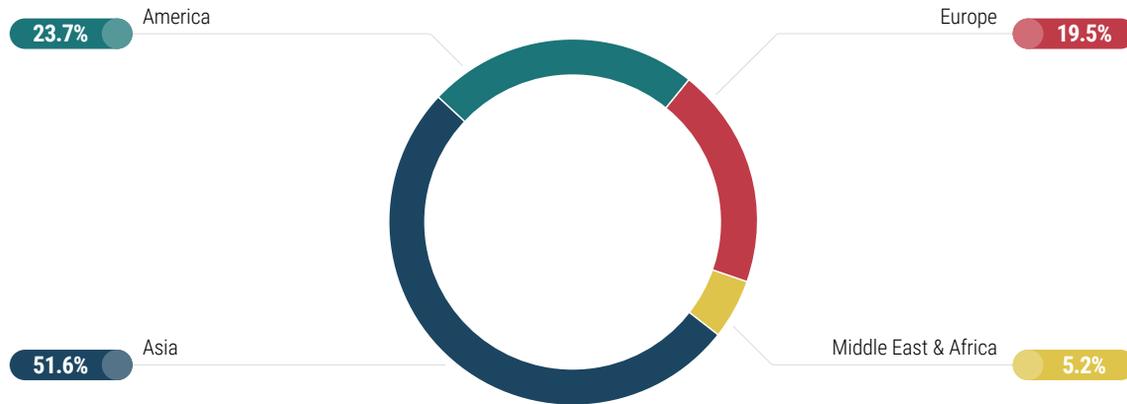
4. Based on production type

5. Includes Hong Kong, Taiwan, and all the other South Asian countries



GLOBAL NEW CAR REGISTRATIONS

% share / 2022



Europe accounts for less than 20% of global car sales, down from 22% in 2021



EU market share of global commercial vehicle sales remained stable in 2022 despite a decline in sales

1. Includes light, medium, and heavy commercial vehicles, and buses

2. Data for Malta not available

3. Includes Iceland, Norway, and Switzerland

4. Includes Belarus, Bosnia-Herzegovina, Kazakhstan, Moldova, North Macedonia, Serbia, and Uzbekistan

5. Based on production type

6. Includes Hong Kong, Taiwan, and all the other South Asian countries

GLOBAL NEW COMMERCIAL VEHICLE¹ REGISTRATIONS

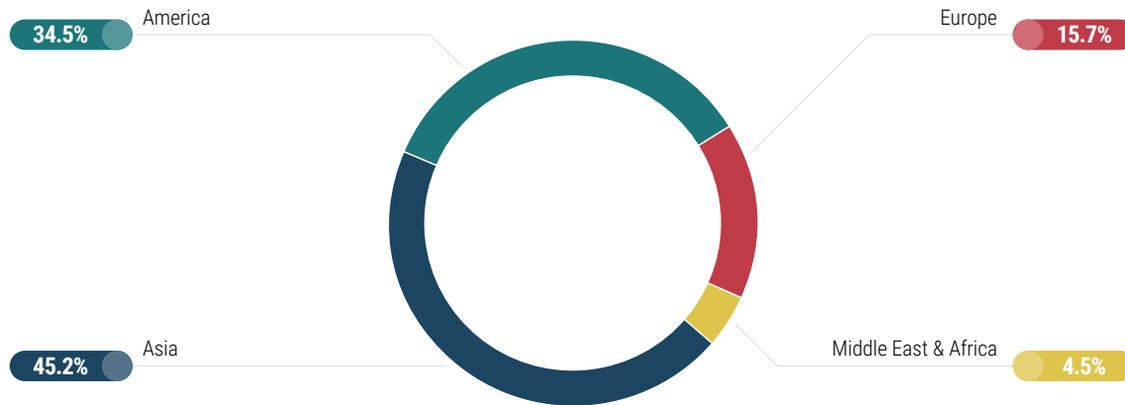
In thousand units / 2022

	2022	2021	% change 22/21	% share 2022
EUROPE	2,501	2,913	-14.1	15.7
European Union ²	1,607	1,882	-14.6	10.1
EFTA ³	66	76	-12.8	0.4
United Kingdom	332	402	-17.6	2.1
Türkiye	230	208	+10.4	1.4
Russia	163	238	-31.3	1.0
Ukraine	7	14	-51.7	0.0
Others (Europe) ⁴	95	92	+3.3	0.6
AMERICA	5,483	5,633	-2.7	34.5
North America ⁵	4,270	4,370	-2.3	26.9
<i>United States only</i>	3,593	3,725	-3.6	22.6
South America	1,213	1,263	-3.9	7.6
<i>Brazil only</i>	524	560	-6.5	3.3
ASIA	7,180	8,504	-15.6	45.2
China	3,670	5,356	-31.5	23.1
Japan	937	704	+33.1	5.9
India	748	770	-2.9	4.7
South Korea	265	256	+3.4	1.7
Others (Asia) ⁶	1,560	1,417	+10.1	9.8
MIDDLE EAST & AFRICA	716	687	+4.2	4.5
WORLD	15,879	17,736	-10.5	100.0

SOURCE: ACEA, S&P GLOBAL MOBILITY

GLOBAL NEW COMMERCIAL VEHICLE¹ REGISTRATIONS

% share / 2022



The EU accounts for around 16% of global commercial vehicles sales

NEW EU VEHICLE REGISTRATIONS¹

By country / 2022

	Cars	Vans ²	Trucks ³	Buses ⁴	TOTAL
Austria	215,050	22,069	6,363	934	244,416
Belgium	366,303	56,102	8,566	590	431,561
Bulgaria	28,684	4,889	3,705	212	37,490
Croatia	42,939	6,652	1,477	255	51,323
Cyprus	11,627	1,962	95	58	13,742
Czechia	192,087	16,908	8,988	1,215	219,198
Denmark	148,293	27,170	4,886	667	181,016
Estonia	21,571	3,910	976	306	26,763
Finland	81,698	11,192	3,341	417	96,648
France	1,529,035	347,069	44,567	5,883	1,926,554
Germany	2,651,357	231,290	76,218	4,883	2,963,748
Greece	105,283	9,664	676	261	115,884
Hungary	111,524	17,652	5,705	691	135,572
Ireland	105,253	23,653	2,207	287	131,400
Italy	1,316,702	161,094	25,341	3,255	1,506,392
Latvia	16,709	2,407	1,672	278	21,066
Lithuania	25,544	3,321	9,941	108	38,914

1. Data for Malta not available

2. Light commercial vehicles up to 3.5t

3. Medium and heavy commercial vehicles over 3.5t

4. Buses and coaches over 3.5t

NEW EU VEHICLE REGISTRATIONS ¹

By country / 2022

	Cars	Vans ²	Trucks ³	Buses ⁴	TOTAL
Luxembourg	42,094	4,004	1,088	301	47,487
Netherlands	312,129	59,186	13,289	237	384,841
Poland	419,749	62,238	34,905	1,156	518,048
Portugal	156,304	23,541	4,095	1,405	185,345
Romania	129,328	13,583	6,870	860	150,641
Slovakia	78,841	7,679	3,160	394	90,074
Slovenia	46,339	7,139	2,308	138	55,924
Spain	813,396	119,619	23,454	2,344	958,813
Sweden	288,087	34,516	6,024	1,241	329,868
EUROPEAN UNION	9,255,926	1,278,509	299,917	28,376	10,862,728
Iceland	16,683	1,599	287	25	18,594
Norway	174,329	29,484	5,605	591	210,009
Switzerland	225,934	25,038	3,449	391	254,812
EFTA⁵	416,946	56,121	9,341	1,007	483,415
United Kingdom	1,614,063	282,139	45,356	4,232	1,945,790
EU + EFTA + UK	11,286,935	1,616,769	354,614	33,615	13,291,933

SOURCE: ACEA

Auto makers sold just under 11 million new vehicles in the EU in 2022, more than half a million less than in 2021

1. Data for Malta not available

2. Light commercial vehicles up to 3.5t

3. Medium and heavy commercial vehicles over 3.5t

4. Buses and coaches over 3.5t

5. Includes Iceland, Norway, and Switzerland



NEW CAR REGISTRATIONS AND GDP IN THE EU

2013 - 2024



● New EU passenger car registrations (million units) ● EU GDP (annual % change)



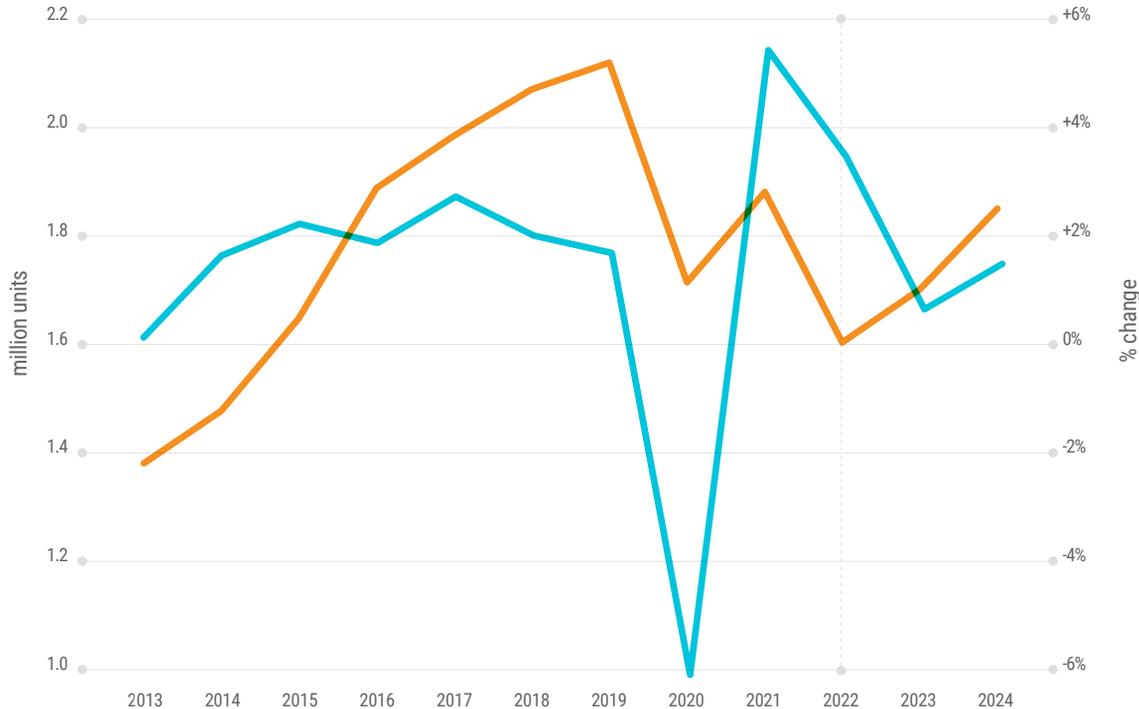
SOURCE: ACEA, DG ECFIN, S&P GLOBAL MOBILITY



NEW COMMERCIAL VEHICLE REGISTRATIONS AND GDP IN THE EU

2013 – 2024

● New EU commercial vehicle registrations¹ (million units) ● EU GDP (annual % change)



SOURCE: ACEA, DG ECFIN, S&P GLOBAL MOBILITY

**Vehicle sales
largely mirror
economic trends**

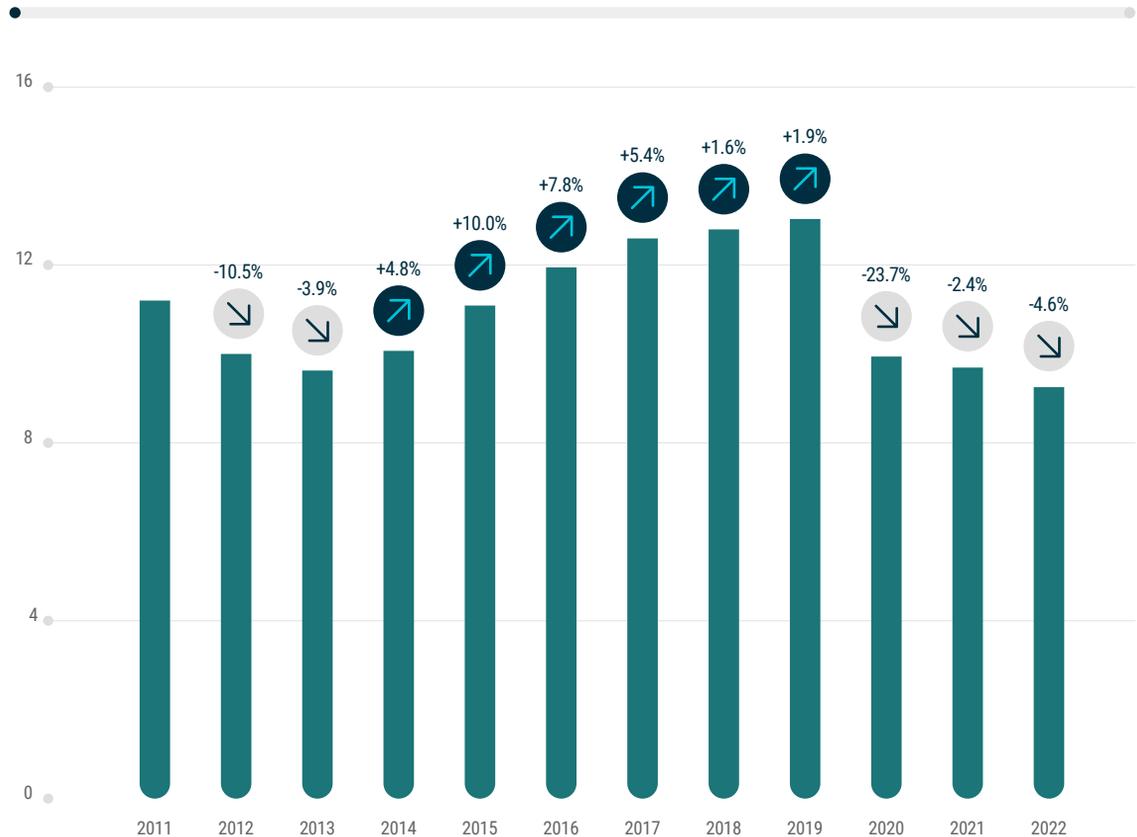
1. Includes light, medium, and heavy commercial vehicles, and buses and coaches



EU car sales fell for the third consecutive year in 2022

NEW EU CAR REGISTRATIONS

In million units, % change / 2011 - 2022

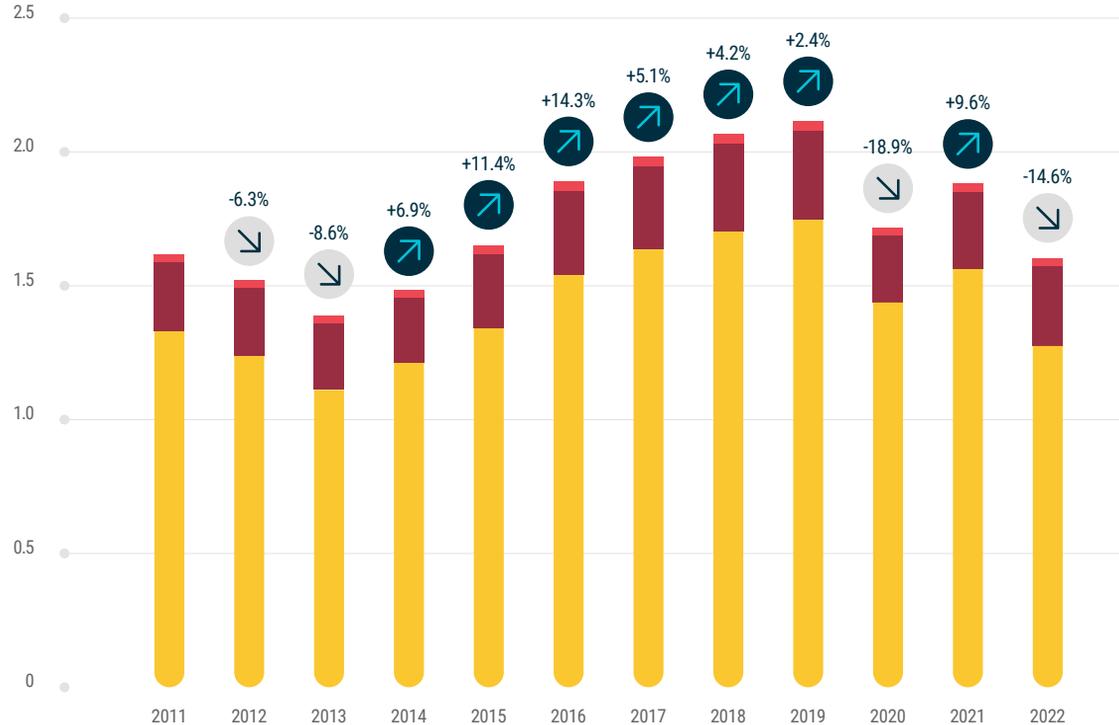


SOURCE: ACEA



NEW EU COMMERCIAL VEHICLE REGISTRATIONS

In million units, % change / 2011 – 2022

Vans¹ Trucks² Buses³

SOURCE: ACEA

EU commercial vehicle sales dropped by around 15% in 2022

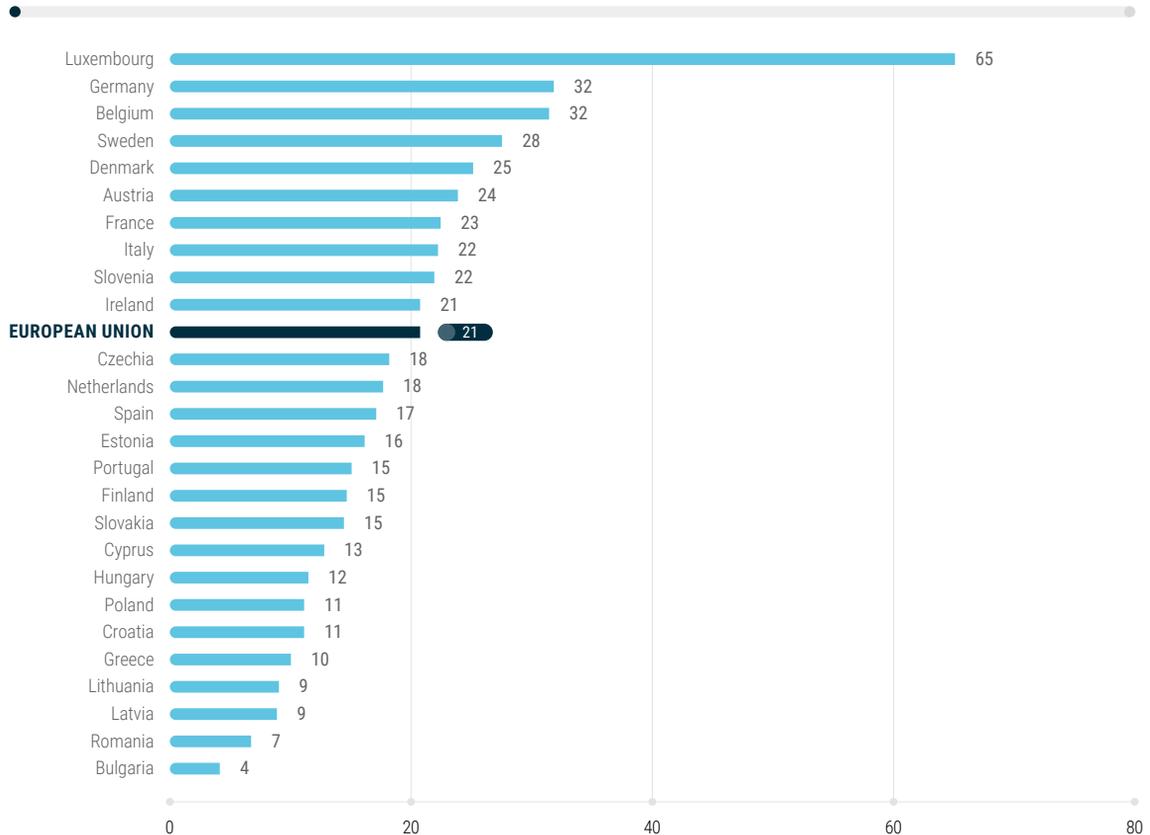
1. Light commercial vehicles up to 3.5t
2. Commercial vehicles over 3.5t
3. Buses and coaches over 3.5t



Two cars are sold for every 100 persons in the EU annually

NEW CARS PER 1,000 INHABITANTS

By country, in units / 2022

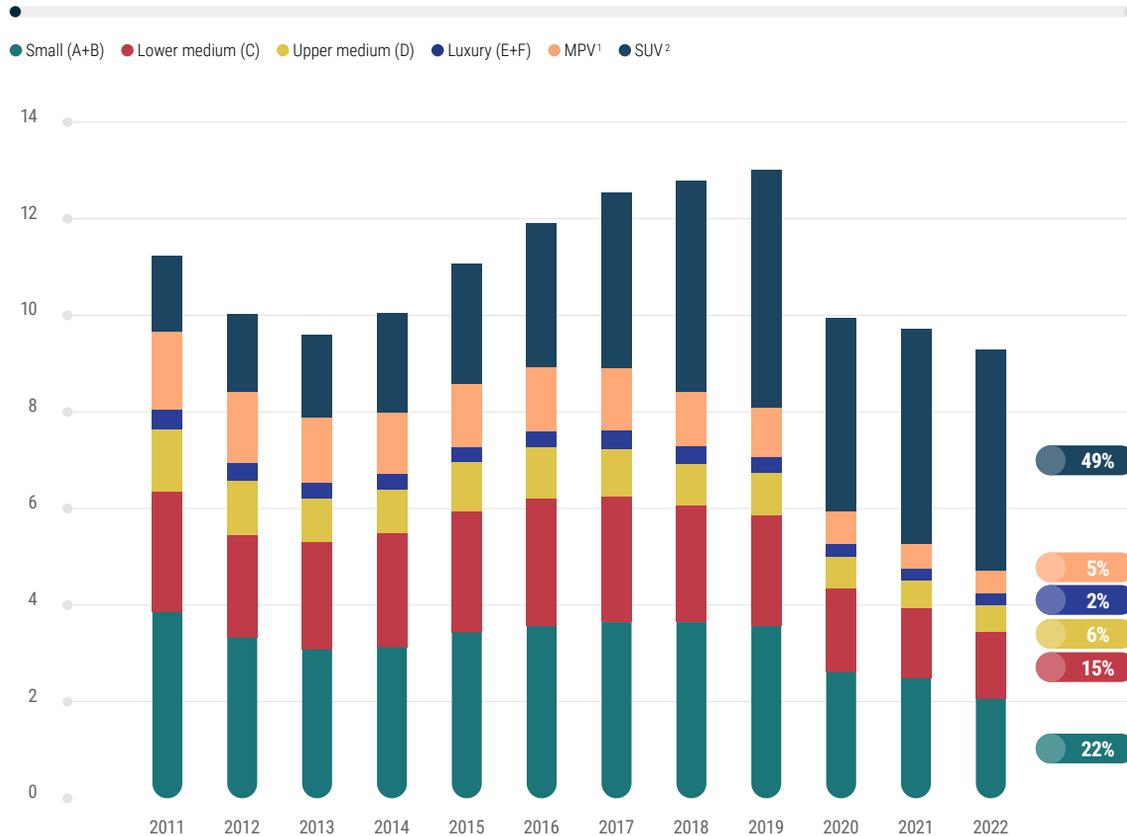


SOURCE: ACEA, EUROSTAT



NEW CARS IN THE EU BY SEGMENT

In million units, % share / 2011 – 2022



SOURCE: S&P GLOBAL MOBILITY

Small and medium cars make up around 43% of EU sales

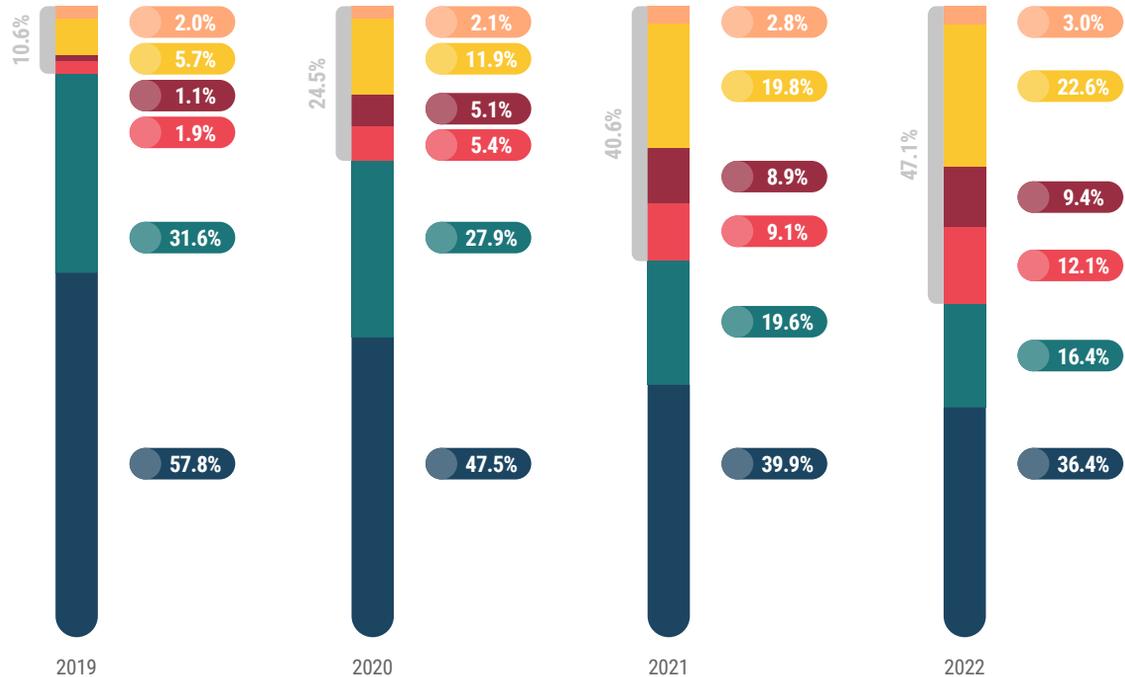
1. Multi-purpose vehicles
2. Sport utility vehicles



The EU market share of battery-electric cars has surged six-fold in four years

NEW EU¹ CAR SALES BY POWER SOURCE

Market share / 2019 – 2022



1. Data for Malta not available

2. Includes fuel cell electric vehicles

3. Includes extended-range electric vehicle

4. Includes full and mild hybrids

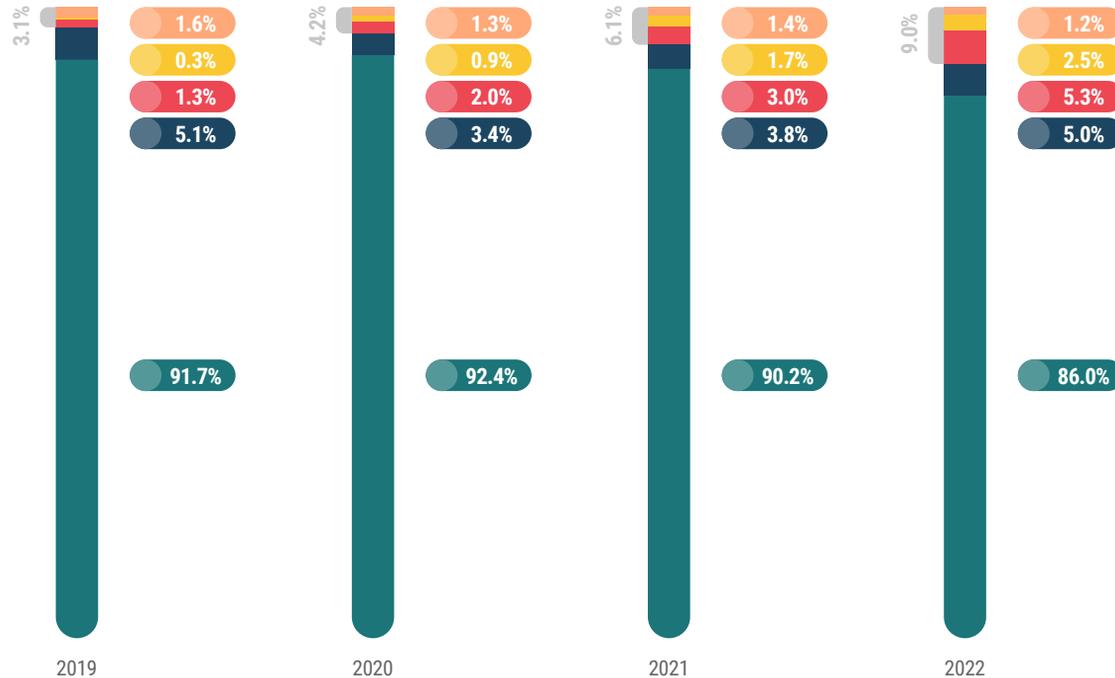
5. Includes natural gas, liquefied petroleum gas (LPG), and ethanol vehicles



NEW EU¹ VAN² SALES BY POWER SOURCE

Market share / 2019 – 2022

● Diesel ● Petrol ● Electrically chargeable ● Hybrid electric ● Alternative fuels ● Total alternatively powered vehicles



SOURCE: ACEA

The EU market share of electrically chargeable vans has quadrupled in four years

1. Data for Bulgaria, Lithuania, and Malta not available
2. Light commercial vehicles up to 3.5t



The market share of alternatively powered trucks stands at nearly 3.5%

NEW EU¹ TRUCK² SALES BY POWER SOURCE

Market share / 2019 – 2022



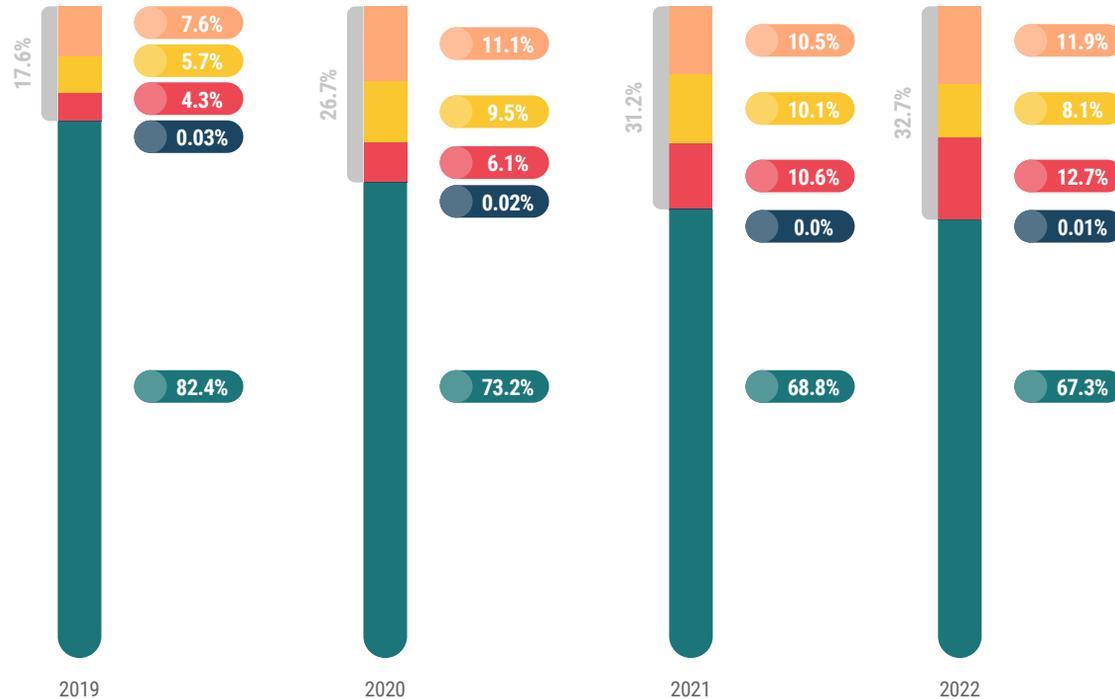
1. Data for Bulgaria and Malta not available
2. Commercial vehicles over 3.5t



NEW EU¹ BUS² SALES BY POWER SOURCE

Market share / 2019 – 2022

● Diesel ● Petrol ● Electrically chargeable ● Hybrid electric ● Alternative fuels ● Total alternatively powered vehicles



SOURCE: ACEA

The market share of electrically chargeable buses has trebled in four years

1. Data for Bulgaria and Malta not available
2. Buses and coaches over 3.5t



TRADE



THE AUTOMOBILE INDUSTRY
POCKET GUIDE 2023/2024



acea

DRIVING MOBILITY FOR EUROPE



The trade surplus generated by the EU auto industry rose almost 30% in 2022

EU VEHICLE TRADE

By type, in million € / 2022

Trade in value	Cars	Vans ¹	Trucks ¹	Buses	TOTAL
2022					
Imports	61,626	5,416	769	1,760	69,571
Exports	157,315	6,928	6,378	800	171,422
Trade balance	95,689	1,512	5,609	-960	101,850
2021					
Imports	53,413	5,144	816	1,240	60,613
Exports	126,475	6,562	5,763	644	139,444
Trade balance	73,061	1,417	4,948	-595	78,831
% change 22/21					
Imports	+15.4%	+5.3%	-5.7%	+42.0%	+14.8%
Exports	+24.4%	+5.6%	+10.7%	+24.2%	+22.9%
Trade balance	+31.0%	+6.7%	+13.4%	+61.2%	+29.2%

1. Commercial vehicles up to 5t
2. Commercial vehicles over 5t



EU VEHICLE TRADE

By type, in units / 2022

Trade in volume	Cars	Vans ¹	Trucks ²	Buses	TOTAL
2022					
Imports	3,243,811	334,387	308,057	13,067	3,899,322
Exports	5,552,244	434,783	256,726	13,837	6,257,590
2021					
Imports	3,112,073	334,270	82,281	47,330	3,575,954
Exports	5,039,234	473,089	166,804	18,040	5,697,167
% change 22/21					
Imports	+4.2%	+0.04%	+274.4%	-72.4%	+9.0%
Exports	+10.2%	-8.1%	+53.9%	-23.3%	+9.8%

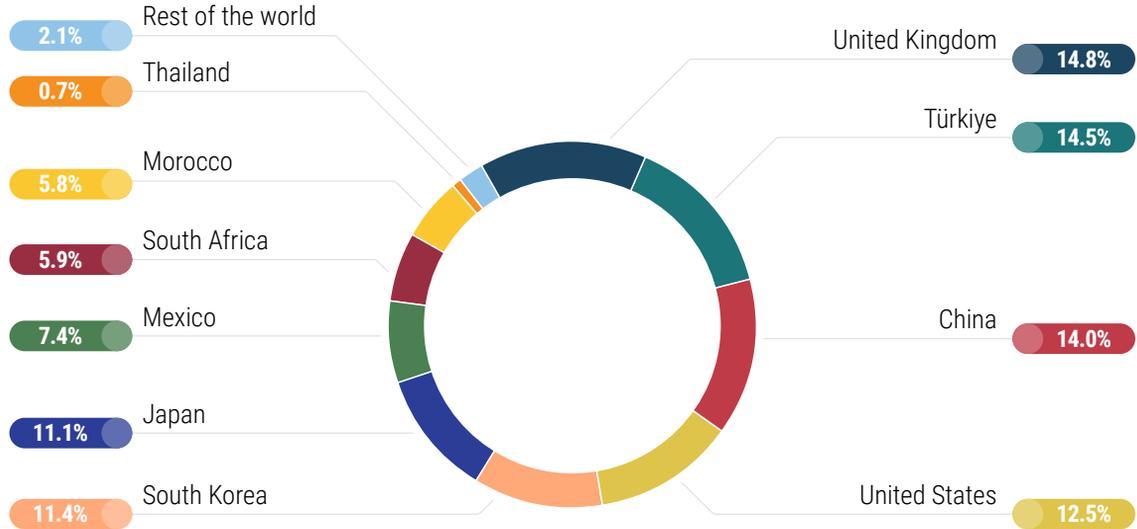
Both EU vehicle exports and imports grew by nearly 10% in 2022



The value of Chinese vehicle imports into the EU increased from a 10% to 14% share in 2022

EU VEHICLE IMPORTS: COUNTRIES OF ORIGIN

Value market share / 2022





EU VEHICLE IMPORTS: MAIN COUNTRIES OF ORIGIN

By value, in million € / 2022

	2017	2018	2019	2020	2021	2022	% change 22/21	% share 2022
United Kingdom	16,097	15,128	14,109	9,991	9,159	10,290	+12.3	14.8
Türkiye	12,237	12,694	13,022	9,775	9,491	10,089	+6.3	14.5
China	405	479	863	2,020	6,186	9,720	+57.1	14.0
United States	6,529	5,550	9,510	10,571	8,188	8,684	+6.1	12.5
South Korea	5,200	5,804	6,576	5,519	7,117	7,905	+11.1	11.4
Japan	8,348	8,808	10,737	8,135	7,143	7,695	+7.7	11.1
Mexico	4,622	5,214	5,006	4,141	4,616	5,120	+10.9	7.4
South Africa	3,586	4,422	5,675	3,486	3,235	4,107	+27.0	5.9
Morocco	1,974	2,357	2,542	2,362	3,271	4,007	+22.5	5.8
Thailand	863	711	782	443	636	471	-26.0	0.7
WORLD	63,226	63,833	71,264	58,016	60,613	69,571	+14.8	100.0

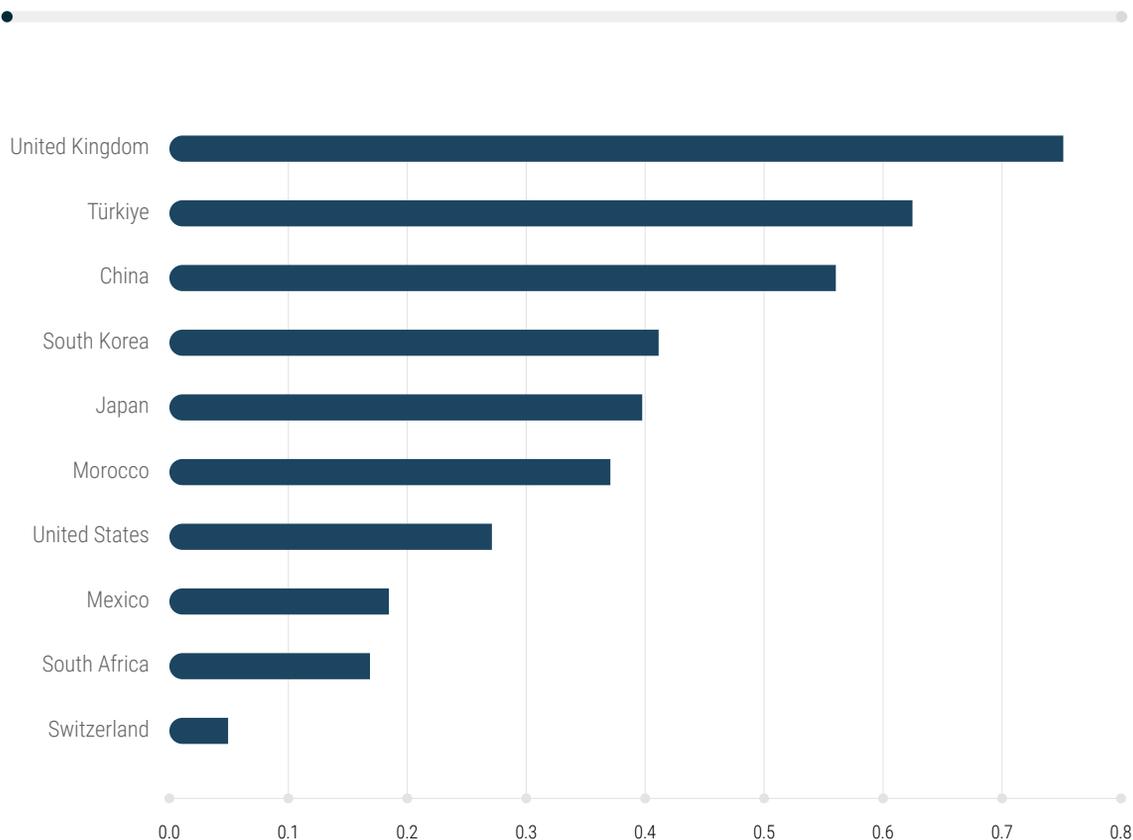
EU vehicle imports increased by 15% in 2022, the second consecutive increase since 2020



The UK remains
the EU's top
vehicle importer

EU VEHICLE IMPORTS: MAIN COUNTRIES OF ORIGIN

In million units / 2022



SOURCE: EUROSTAT



EU VEHICLE IMPORTS: MAIN COUNTRIES OF ORIGIN

In units / 2022

	2017	2018	2019	2020	2021	2022	% change 22/21	% share 2022
United Kingdom	952,151	918,899	956,051	875,240	490,094	752,566	+53.6	19.3
Türkiye	974,269	971,148	929,832	654,485	628,601	625,652	-0.5	16.0
China	113,658	157,428	154,325	196,476	499,221	561,070	+12.4	14.4
South Korea	412,882	436,693	443,441	318,931	378,146	411,925	+8.9	10.6
Japan	553,948	583,057	676,032	486,067	409,747	398,353	-2.8	10.2
Morocco	246,664	293,959	306,518	258,402	311,903	371,192	+19.0	9.5
United States	248,460	265,827	355,766	394,643	314,125	271,476	-13.6	7.0
Mexico	230,755	265,680	222,463	173,754	180,773	184,522	+2.1	4.7
South Africa	172,252	210,842	267,995	173,572	148,875	169,093	+13.6	4.3
Switzerland	71,508	73,085	65,099	54,165	60,390	49,442	-18.1	1.3
WORLD	4,318,539	4,468,412	4,620,589	3,716,671	3,575,954	3,899,322	+9.0	100.0

SOURCE: EUROSTAT

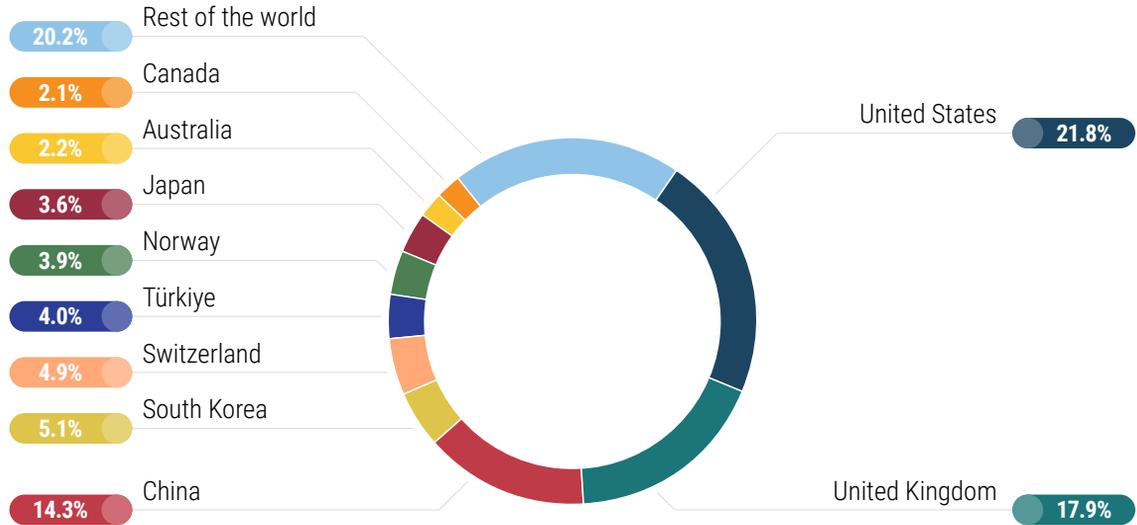
EU imports of Chinese vehicles have increased almost five-fold in five years



The US and the UK are the two most valuable markets for EU vehicle exports

EU VEHICLE EXPORT DESTINATIONS

Value market share / 2022





EU VEHICLE EXPORT: MAIN DESTINATIONS

By value, in million € / 2022

	2017	2018	2019	2020	2021	2022	% change 22/21	% share 2022
United States	31,297	29,659	29,195	23,961	25,784	37,402	+45.1	21.8
United Kingdom	42,295	39,993	41,713	32,015	25,575	30,603	+19.7	17.9
China	17,844	18,927	19,369	19,038	21,392	24,541	+14.7	14.3
South Korea	6,034	6,290	5,927	7,067	6,622	8,808	+33.0	5.1
Switzerland	7,969	7,651	8,088	7,271	7,418	8,408	+13.4	4.9
Türkiye	6,992	4,415	2,949	6,512	5,291	6,835	+29.2	4.0
Norway	4,539	4,343	4,712	4,100	5,397	6,691	+24.0	3.9
Japan	7,187	7,215	7,073	5,670	6,101	6,108	+0.1	3.6
Australia	4,284	4,233	3,450	2,458	3,072	3,802	+23.8	2.2
Canada	3,724	3,564	3,214	2,077	2,650	3,565	+34.5	2.1
WORLD	162,297	155,933	156,453	133,952	139,444	171,422	+22.9	100.0

SOURCE: EUROSTAT

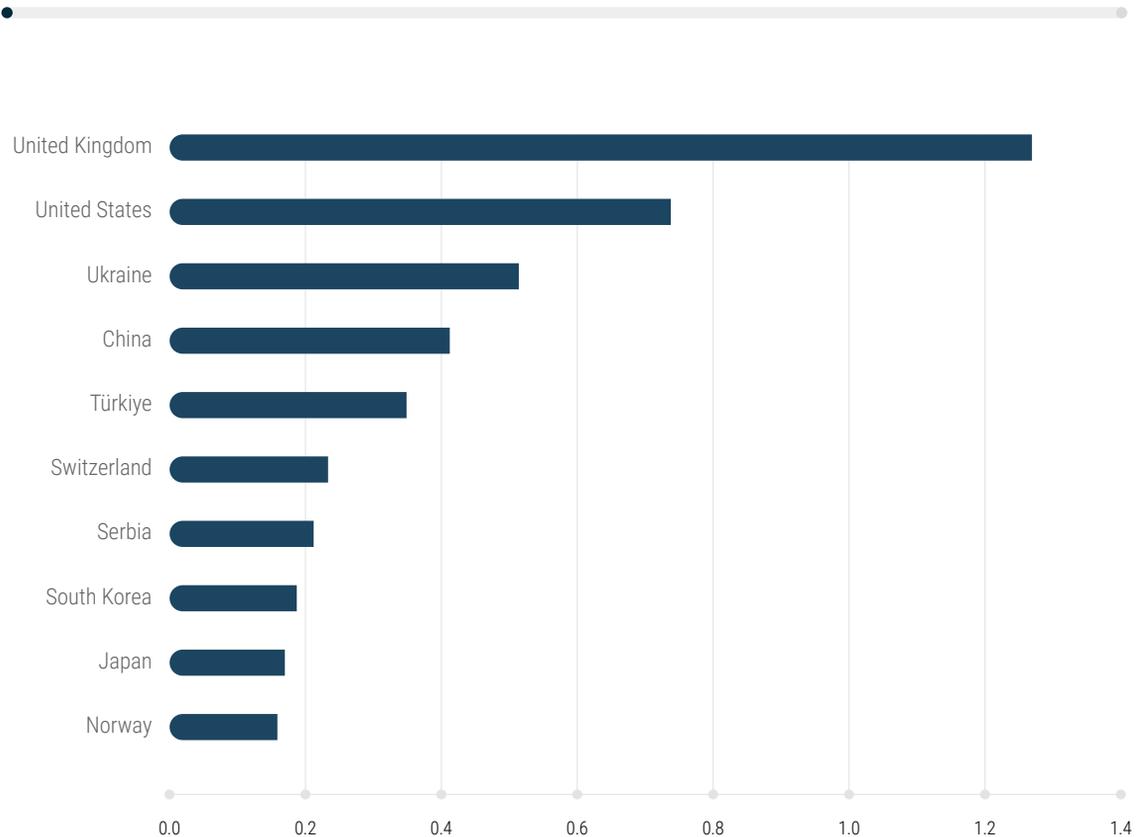
Over a fifth of EU vehicle exports went to the US in 2022



A fifth of EU vehicle exports go to the UK

EU VEHICLE EXPORT: MAIN DESTINATIONS

In million units / 2022



SOURCE: EUROSTAT



EU VEHICLE EXPORT: MAIN DESTINATIONS

In units / 2022

	2017	2018	2019	2020	2021	2022	% change 22/21	% share 2022
United Kingdom	2,304,480	2,157,010	2,164,388	1,489,133	1,174,995	1,269,356	+8.0	20.3
United States	965,929	933,491	827,616	702,599	664,557	738,436	+11.1	11.8
Ukraine	112,552	109,260	178,979	218,884	234,640	514,588	+119.3	8.2
China	472,592	473,201	412,044	405,594	412,498	412,990	+0.1	6.6
Türkiye	486,403	282,166	199,699	407,275	346,352	349,343	+0.9	5.6
Switzerland	294,394	283,619	312,820	233,116	245,429	233,583	-4.8	3.7
Serbia	131,193	155,509	150,696	134,665	141,890	213,123	+50.2	3.4
South Korea	169,021	169,828	162,494	193,397	150,476	187,934	+24.9	3.0
Japan	240,441	241,704	227,274	171,230	177,274	170,618	-3.8	2.7
Norway	164,611	207,255	164,819	125,391	150,397	159,702	+6.2	2.6
WORLD	7,448,598	7,240,219	6,979,954	5,705,711	5,697,167	6,257,590	+9.8	100.0

SOURCE: EUROSTAT

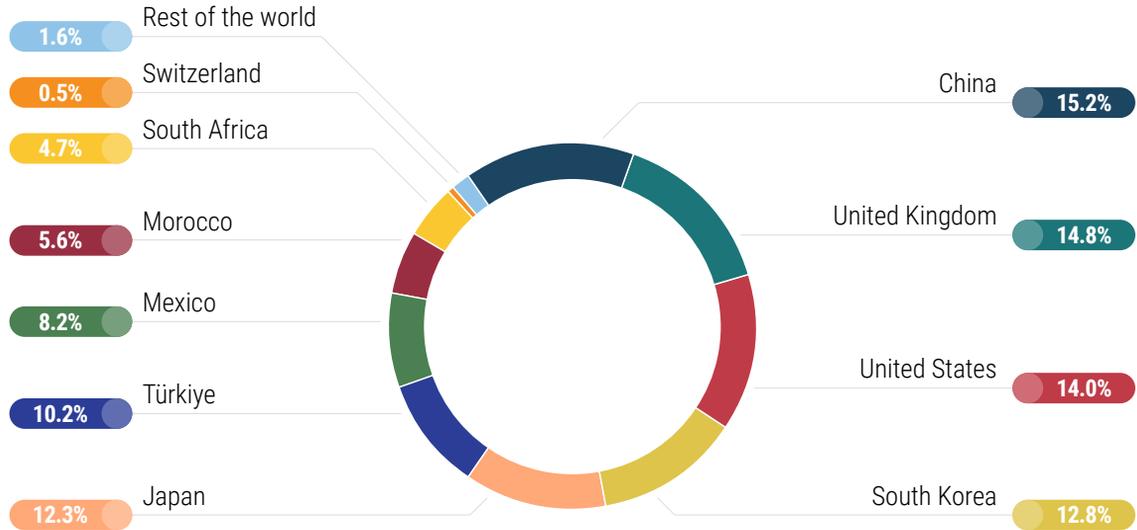
**EU vehicle exports
grew by 10% in
2022**



**China now
accounts for
the largest
share of EU car
imports by value**

EU CAR IMPORTS: COUNTRIES OF ORIGIN

Value market share / 2022





EU CAR IMPORTS: MAIN COUNTRIES OF ORIGIN

By value, in million € / 2022

	2017	2018	2019	2020	2021	2022	% change 22/21	% share 2022
China	329	393	717	1,766	5,896	9,369	+58.9	15.2
United Kingdom	15,214	14,206	13,267	9,308	8,278	9,103	+10.0	14.8
United States	6,380	5,450	9,435	10,480	8,140	8,624	+5.9	14.0
South Korea	5,186	5,789	6,549	5,511	7,111	7,871	+10.7	12.8
Japan	8,319	8,786	10,715	8,111	7,049	7,606	+7.9	12.3
Türkiye	7,900	8,147	8,283	6,330	6,139	6,304	+2.7	10.2
Mexico	4,600	5,179	4,962	4,109	4,588	5,081	+10.7	8.2
Morocco	1,773	2,124	2,308	2,191	2,840	3,472	+22.2	5.6
South Africa	2,930	3,631	4,562	2,380	1,916	2,914	+52.0	4.7
Switzerland	284	297	293	271	326	315	-3.3	0.5
WORLD	55,708	56,096	63,084	51,591	53,413	61,626	+15.4	100.0

SOURCE: EUROSTAT

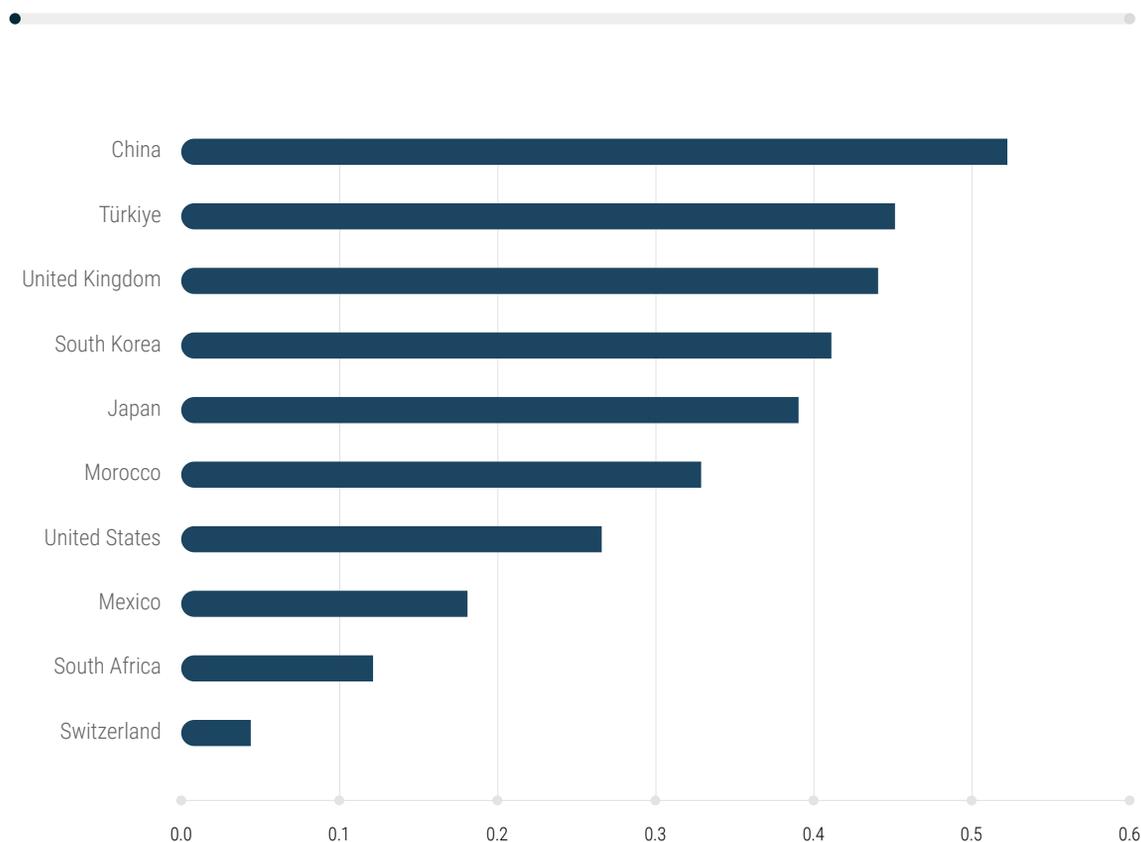
**In value terms,
most EU car
imports now come
from China**



**Most of the EU's
imported cars
come from China**

EU CAR IMPORTS: MAIN COUNTRIES OF ORIGIN

In million units / 2022



SOURCE: EUROSTAT



EU CAR IMPORTS: MAIN COUNTRIES OF ORIGIN

In units / 2022

	2017	2018	2019	2020	2021	2022	% change 22/21	% share 2022
China	99,854	133,280	133,390	169,803	435,492	521,881	+19.8	16.1
Türkiye	718,163	714,895	701,109	494,080	458,855	452,056	-1.5	13.9
United Kingdom	901,298	841,402	700,888	506,405	406,742	440,724	+8.4	13.6
South Korea	411,952	435,814	441,870	318,493	377,881	411,003	+8.8	12.7
Japan	552,017	581,385	674,336	484,337	401,459	390,514	-2.7	12.0
Morocco	222,965	266,276	280,731	240,488	271,030	329,049	+21.4	10.1
United States	239,786	256,411	349,089	387,720	308,508	266,053	-13.8	8.2
Mexico	228,668	262,147	218,077	170,600	178,213	181,241	+1.7	5.6
South Africa	140,966	172,407	213,438	124,886	93,456	121,142	+29.6	3.7
Switzerland	64,113	65,877	58,514	48,049	53,969	44,508	-17.5	1.4
WORLD	3,865,048	3,963,023	3,974,583	3,056,861	3,112,073	3,243,811	+4.2	100.0

SOURCE: EUROSTAT

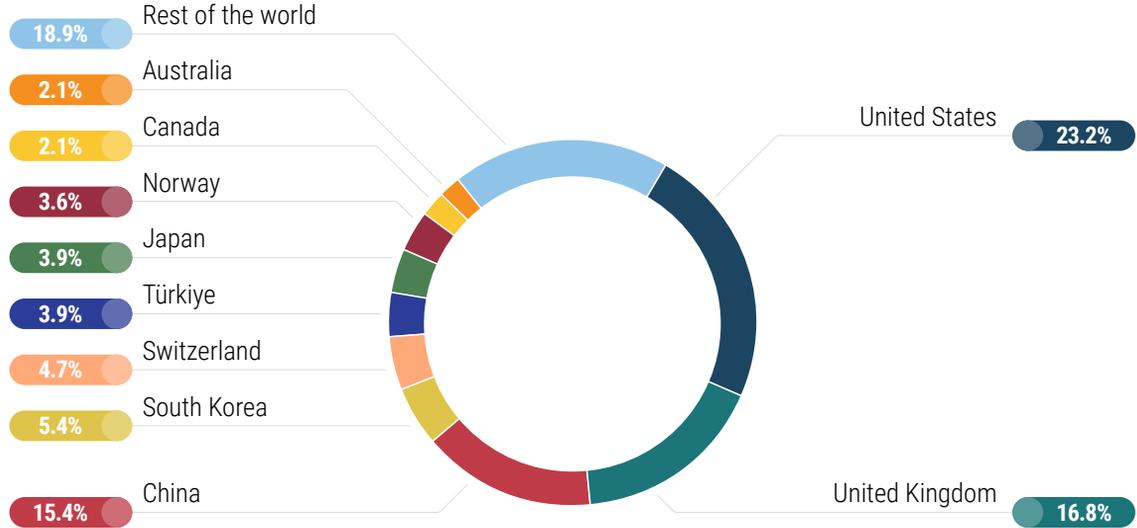
EU imports of Chinese cars increased by around 20% in 2022



The US is the most valuable market for EU car exports

EU CAR EXPORT DESTINATIONS

Value market share / 2022





EU CAR EXPORT: MAIN DESTINATIONS

By value, in million € / 2022

	2017	2018	2019	2020	2021	2022	% change 22/21	% share 2022
United States	30,664	29,010	28,727	23,372	25,375	36,424	+43.5	23.2
United Kingdom	37,854	35,516	36,460	28,086	21,717	26,480	+21.9	16.8
China	17,526	18,338	18,632	18,178	21,071	24,256	+15.1	15.4
South Korea	5,508	5,899	5,679	6,829	6,333	8,441	+33.3	5.4
Switzerland	6,973	6,601	6,990	6,278	6,402	7,460	+16.5	4.7
Türkiye	5,990	3,875	2,581	5,953	4,650	6,088	+30.9	3.9
Japan	7,170	7,189	7,040	5,630	6,083	6,085	+0.02	3.9
Norway	3,472	3,297	3,196	3,112	4,306	5,737	+33.2	3.6
Canada	3,545	3,316	2,887	1,900	2,478	3,377	+36.3	2.1
Australia	3,586	3,284	2,804	2,074	2,607	3,226	+23.7	2.1
WORLD	147,426	141,008	140,267	121,117	126,475	157,315	+24.4	100.0

SOURCE: EUROSTAT

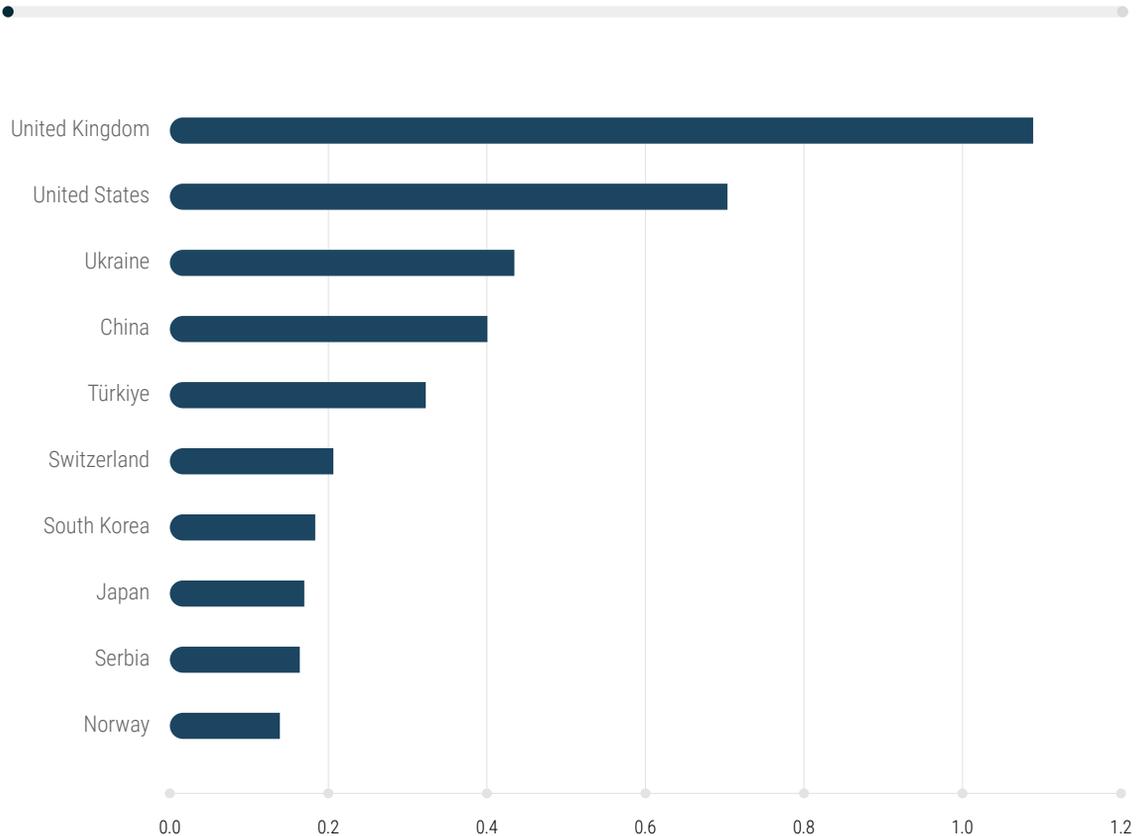
The value of EU car exports increased by almost a quarter in 2022



The UK is still
by far the top
destination for
EU car exports

EU CAR EXPORT: MAIN DESTINATIONS

In million units / 2022



SOURCE: EUROSTAT



EU CAR EXPORT: MAIN DESTINATIONS

In units / 2022

	2017	2018	2019	2020	2021	2022	% change 22/21	% share 2022
United Kingdom	2,077,829	1,922,532	1,865,578	1,307,320	980,114	1,090,261	+11.2	19.6
United States	952,965	919,264	819,653	684,393	645,699	704,404	+9.1	12.7
Ukraine	88,856	86,061	149,384	195,298	207,664	436,336	+110.1	7.9
China	467,684	465,177	402,883	395,338	408,882	401,817	-1.7	7.2
Türkiye	430,025	258,328	184,401	379,948	316,922	322,290	+1.7	5.8
Switzerland	265,898	252,446	249,754	205,641	204,322	207,213	+1.4	3.7
South Korea	163,182	164,978	155,776	187,698	146,140	183,175	+25.3	3.3
Japan	240,269	241,395	227,019	170,777	177,109	170,270	-3.9	3.1
Serbia	117,438	137,970	130,399	122,479	121,718	164,124	+34.8	3.0
Norway	131,917	124,356	111,772	98,677	122,854	138,614	+12.8	2.5
WORLD	6,768,781	6,444,182	6,155,087	5,098,589	5,039,234	5,552,244	+10.2	100.0

SOURCE: EUROSTAT

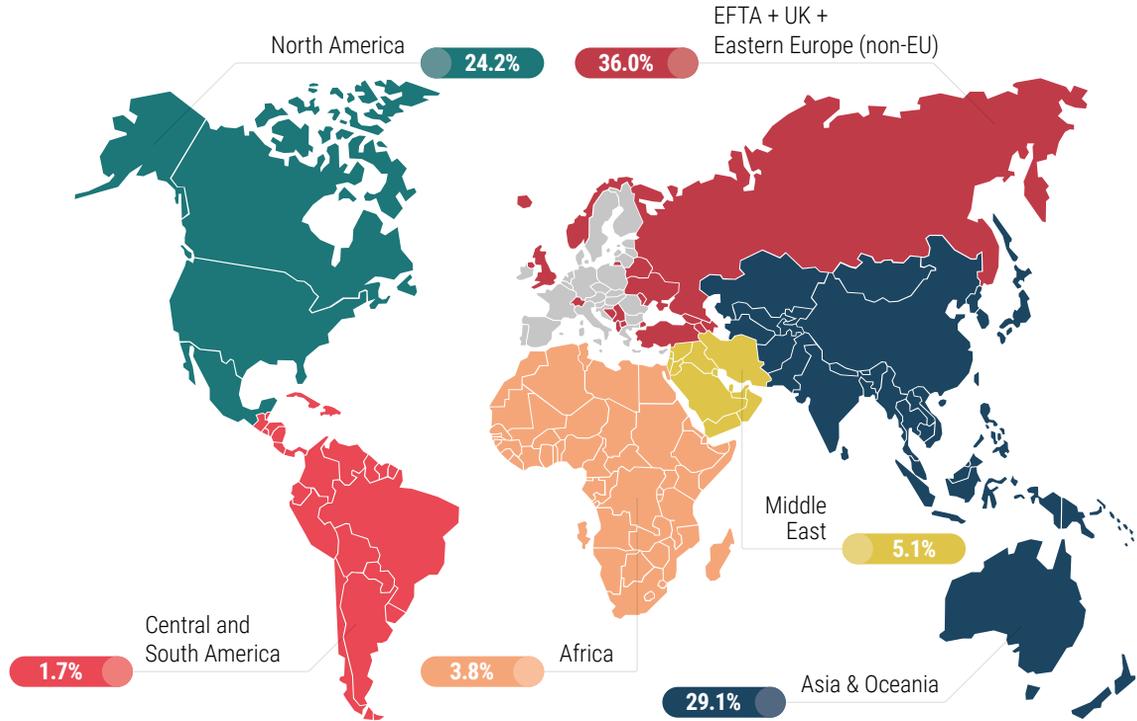
**EU car exports
increased by 10%
in 2022**



More than one-third of EU vehicle exports go to other European (non-EU) countries

EU VEHICLE EXPORTS: MAIN DESTINATIONS

Value market share / 2022





VEHICLES IN USE

THE AUTOMOBILE INDUSTRY
POCKET GUIDE 2023/2024



acea

DRIVING MOBILITY FOR EUROPE

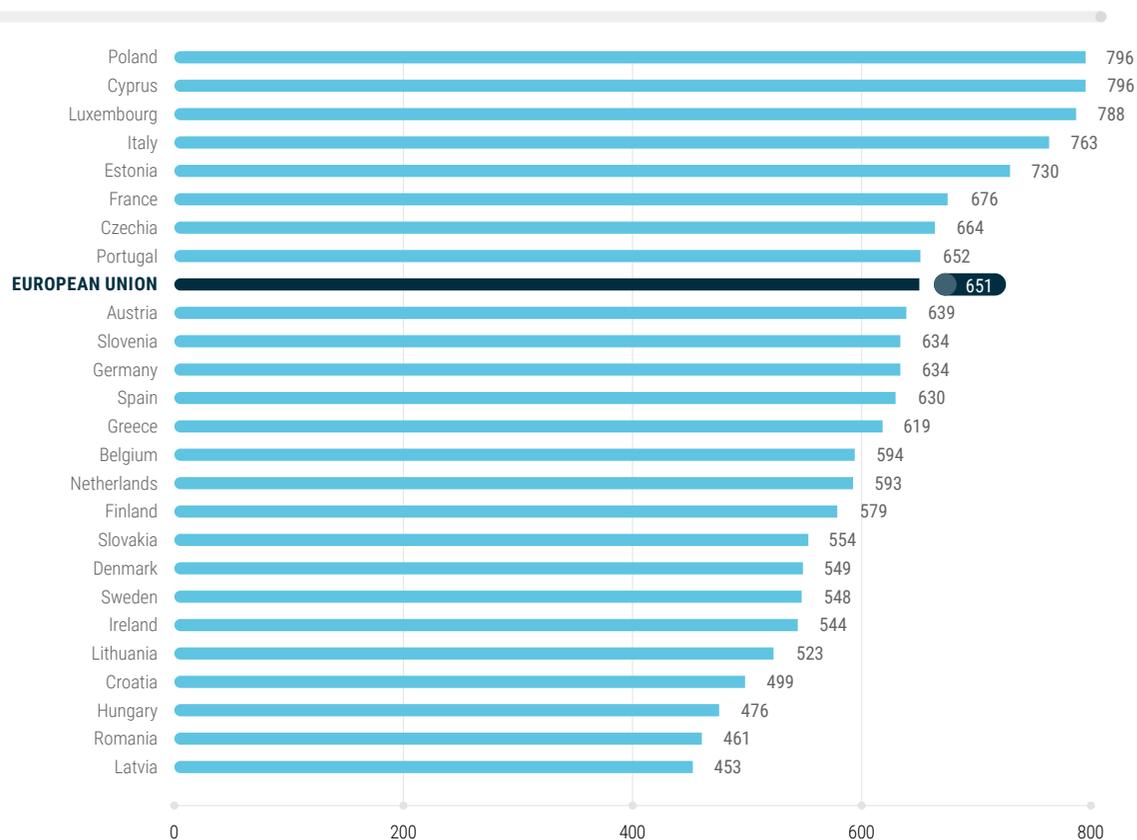




There are 651 vehicles per 1,000 people in the EU

VEHICLES PER 1,000 EU INHABITANTS¹

2021

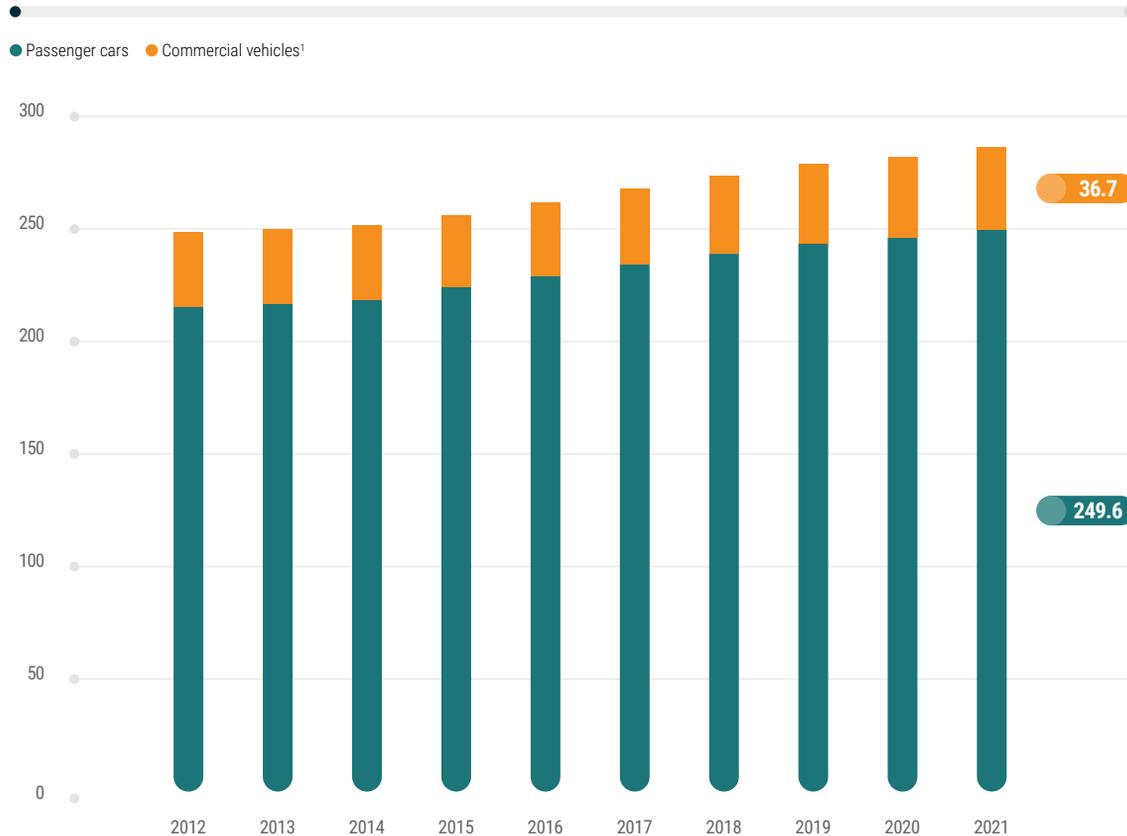


1. Data for Bulgaria and Malta not available



EU VEHICLE FLEET: SIZE AND DISTRIBUTION

In million units / 2012 – 2021



SOURCE: ACEA

There are almost
250 million cars
on EU roads

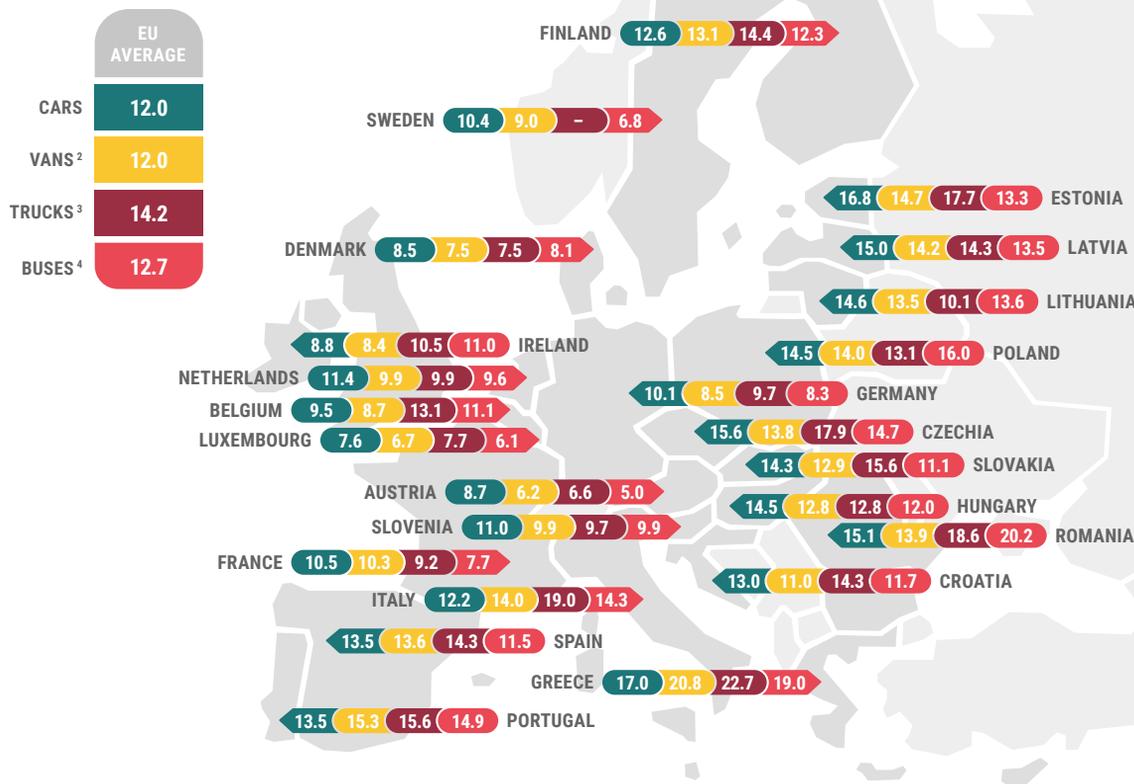
1. Includes light, medium, and heavy commercial vehicles, and buses and coaches



Trucks have the highest average age of all vehicle types

AVERAGE AGE OF EU¹ VEHICLE FLEET

By country, in years / 2021

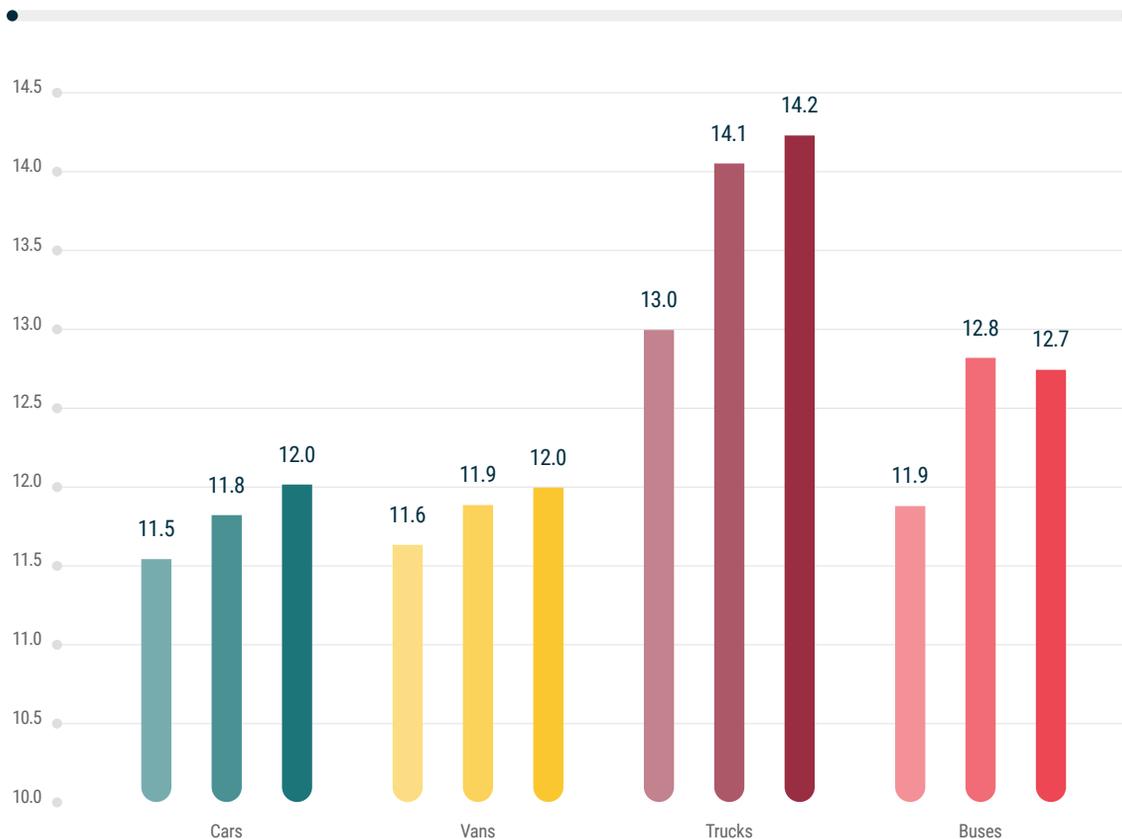


1. Data for Bulgaria, Cyprus, and Malta not available
 2. Light commercial vehicles up to 3.5t
 3. Medium and heavy commercial vehicles over 3.5t
 4. Buses and coaches over 3.5t



AVERAGE AGE OF EU¹ FLEET

By vehicle type, in years / 2019 – 2021



SOURCE: ACEA

The average vehicle age in the EU is rising for all segments

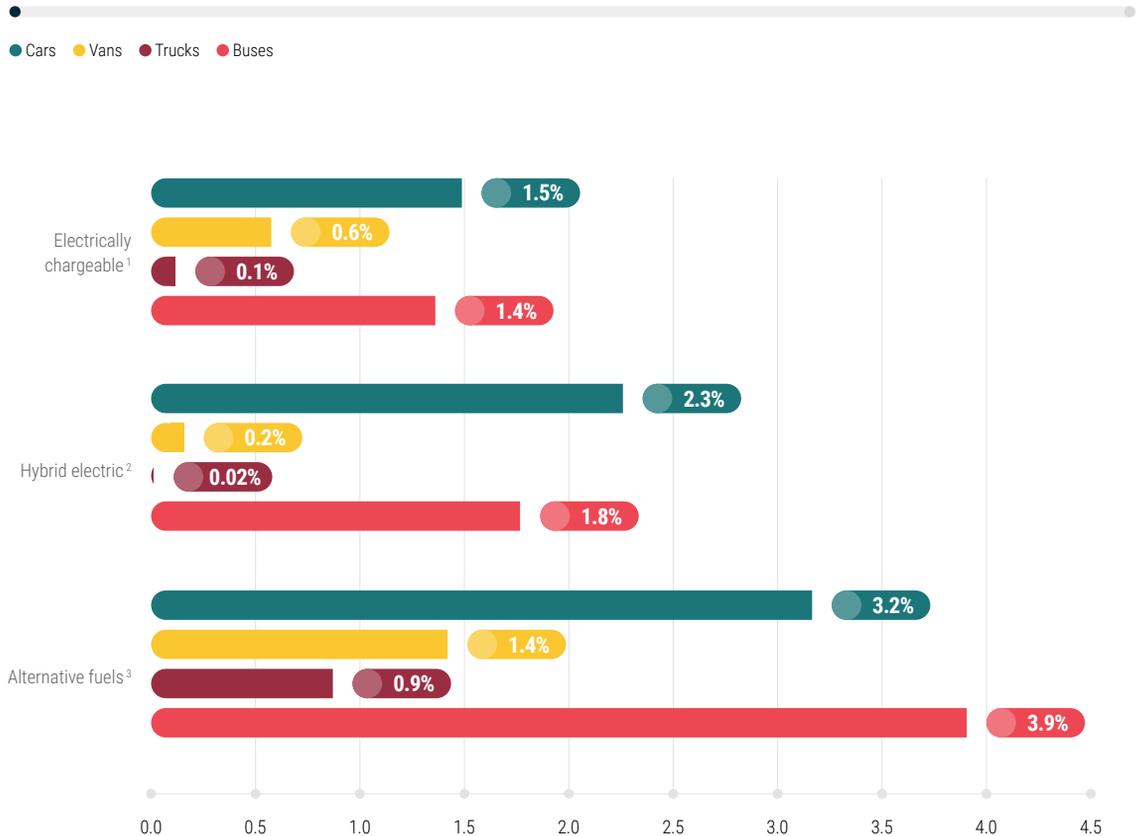
1. Data for Bulgaria, Cyprus, and Malta not available



1.5% of all cars on EU roads are electrically chargeable

SHARE OF ALTERNATIVELY POWERED VEHICLES IN THE EU FLEET

By segment, % share / 2021



1. Includes battery and plug-in hybrid electric vehicles

2. Includes full and mild hybrids

3. Includes natural gas and liquefied petroleum gas (LPG) vehicles



ROAD SAFETY

THE AUTOMOBILE INDUSTRY
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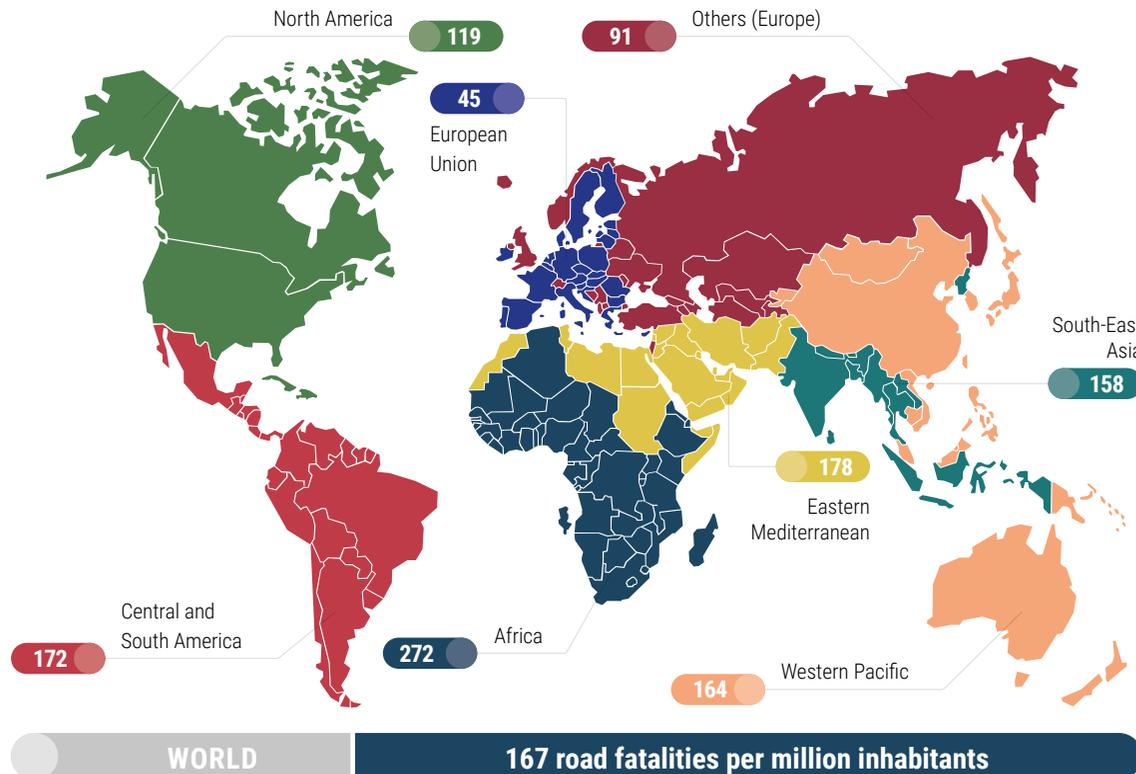
DRIVING MOBILITY FOR EUROPE



The EU has by far the best road safety record in the world

ROAD FATALITIES PER MILLION INHABITANTS

By region¹ / 2019, 2021



1. WHO regions

NUMBER OF EU VEHICLES AND ROAD FATALITIES

2010 – 2021



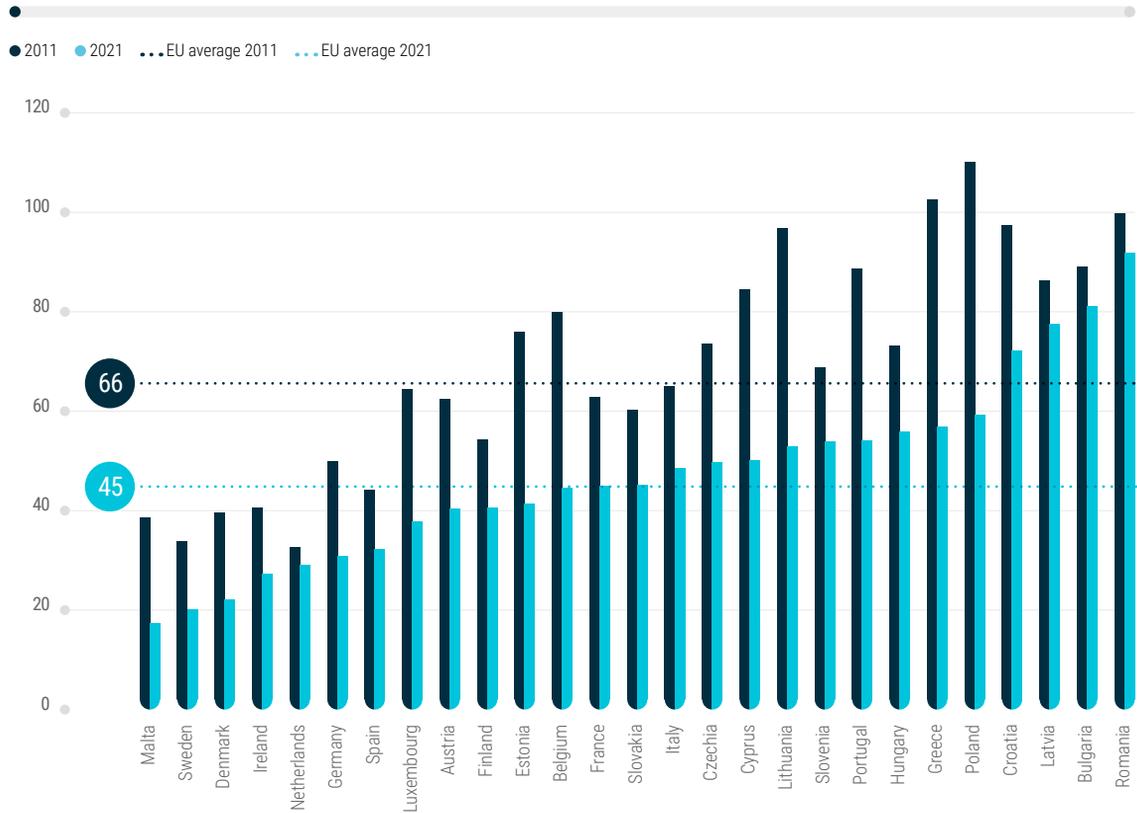
SOURCE: ACEA, CARE (EU DATABASE ON ROAD ACCIDENTS)

Road fatalities have fallen significantly since 2010 despite an increase in the number of cars on EU roads

Average EU road fatalities have plummeted by around a third since 2011

ROAD FATALITIES PER MILLION INHABITANTS

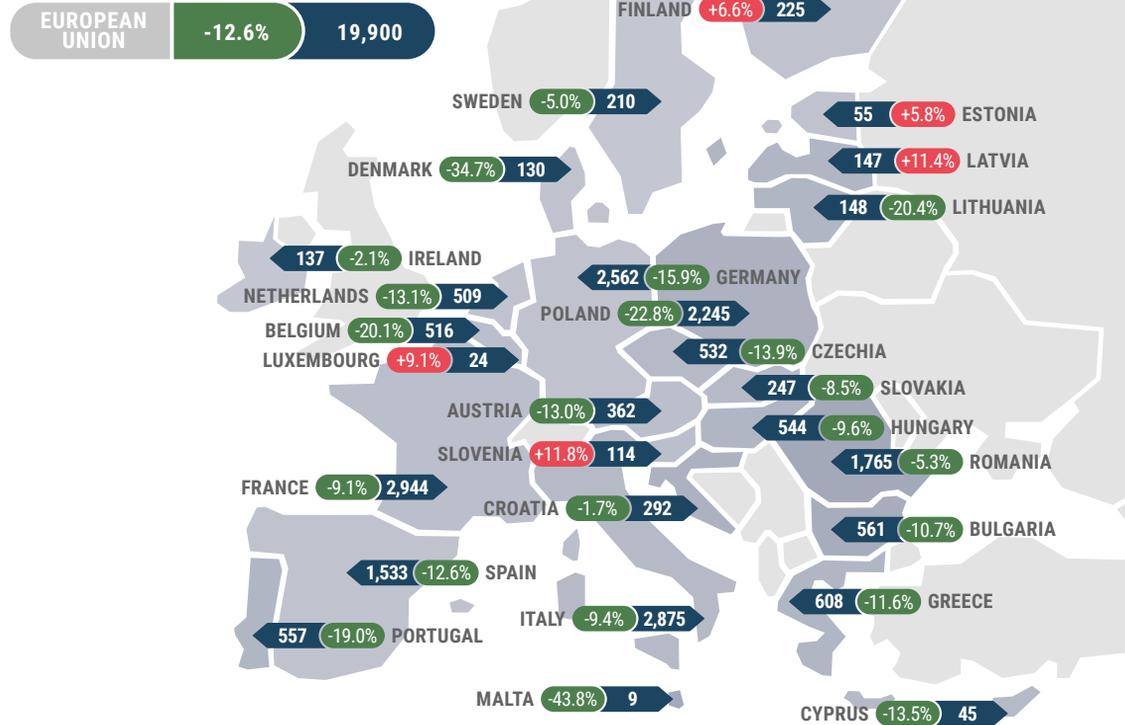
By country / 2011, 2021



ROAD FATALITIES IN THE EU

By country / 2021

● Road fatalities ● -% change 21/19¹ ● +% change 21/19¹



1. The reference year is 2019 as 2020's traffic levels were significantly impacted by the COVID-19 pandemic



ENVIRONMENT

THE AUTOMOBILE INDUSTRY
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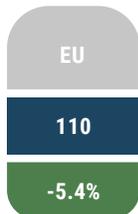
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DRIVING MOBILITY FOR EUROPE





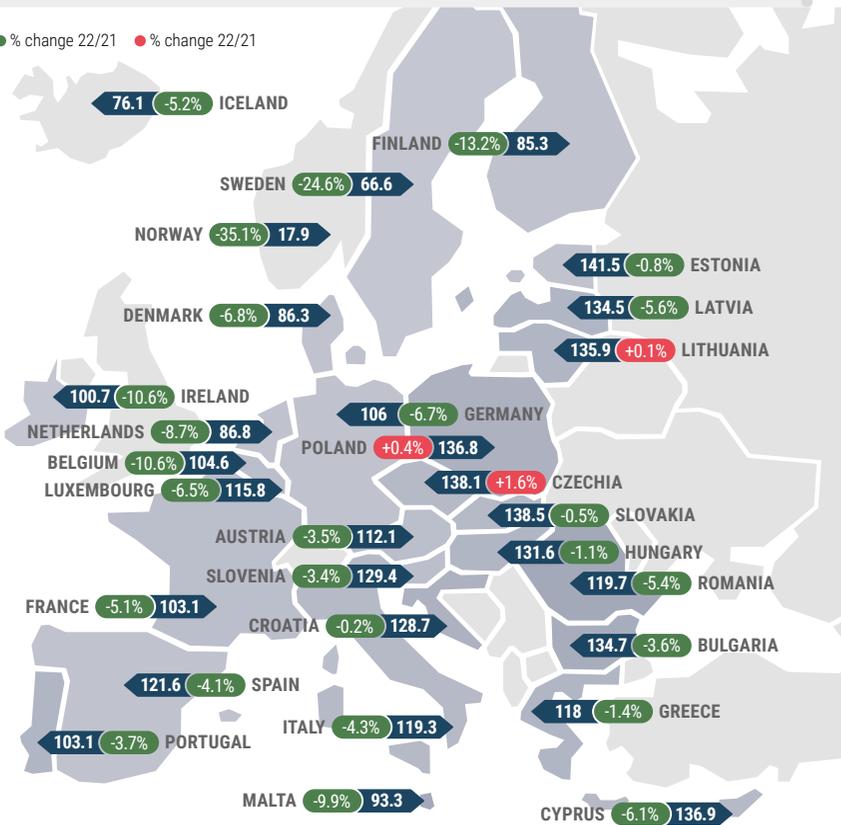
The average new car in the EU emits 5.4% less CO2/km than in 2021



NEW CAR CO2 EMISSIONS BY COUNTRY

In g CO2/km / 2022¹

● 2022 average emissions (g CO2/km) ● % change 22/21 ● % change 22/21

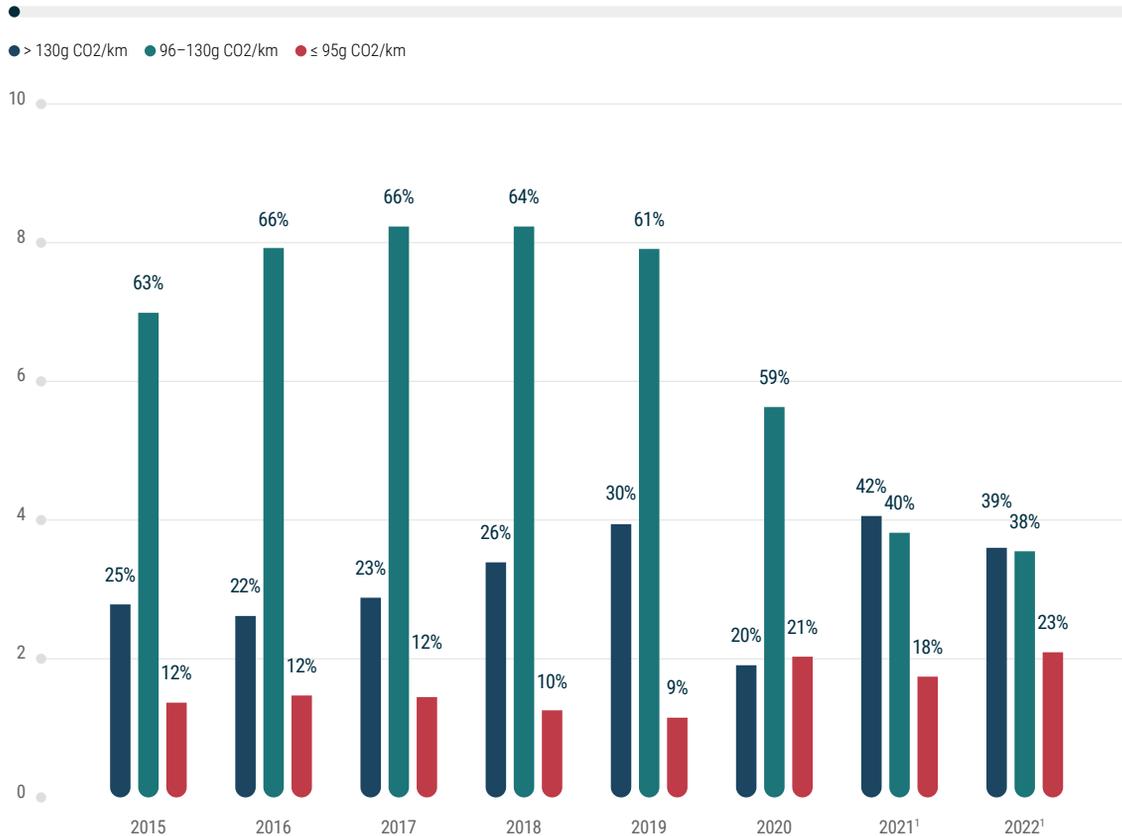


1. Provisional figures; from 2021, the Worldwide Harmonised Light Vehicle Test Procedure (WLTP) will replace the New European Driving Cycle (NEDC) as CO2 emissions standards



NEW EU CARS BY EMISSION CLASS

In million units, % share / 2015 – 2022¹



SOURCE: EUROPEAN ENVIRONMENT AGENCY (EEA)

Almost a quarter of new cars emit 95g CO2/km or less

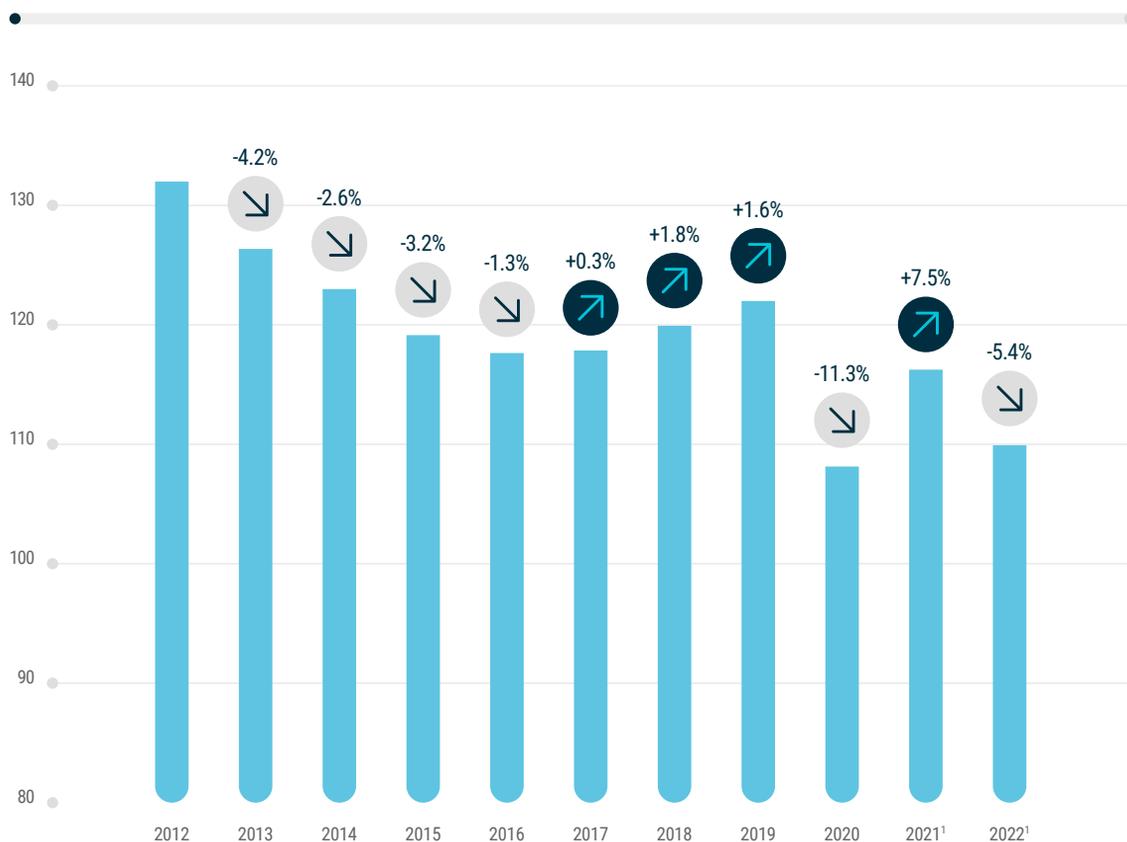
1. Provisional; from 2021, the Worldwide Harmonised Light Vehicle Test Procedure (WLTP) will replace the New European Driving Cycle (NEDC) as CO2 emissions standards



CO2 emissions from new cars are down by almost 17% since 2012

NEW CAR CO2 EMISSIONS IN THE EU

In g CO2/km, % change / 2012 – 2022¹



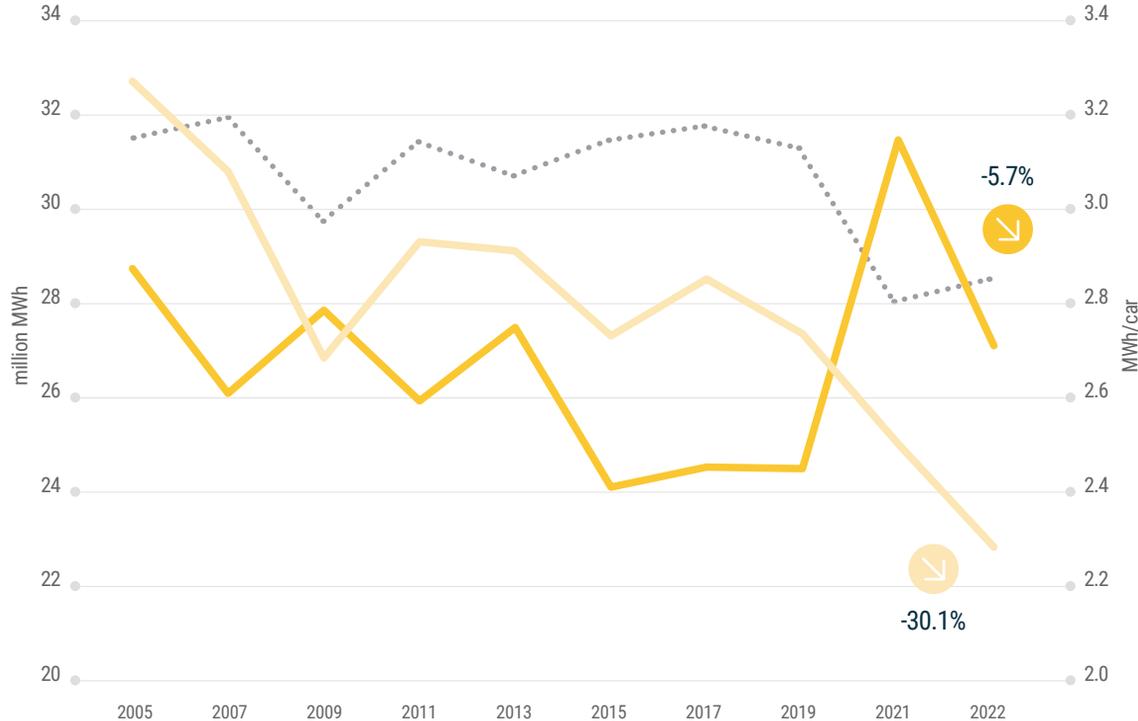
1. Provisional; NECD (2011-2020), WLTP (2021-2022)



CAR PRODUCTION: ENERGY CONSUMPTION

2005 – 2022

● Energy total (million MWh/year) ● Energy per unit produced (MWh/car) Car production trend



SOURCE: ACEA

Car manufacturers have slashed energy use from production by 30% since 2005



Car manufacturers have lowered CO2 emissions from production by over 30% since 2005

CAR PRODUCTION: CO2 EMISSIONS

2005 – 2022

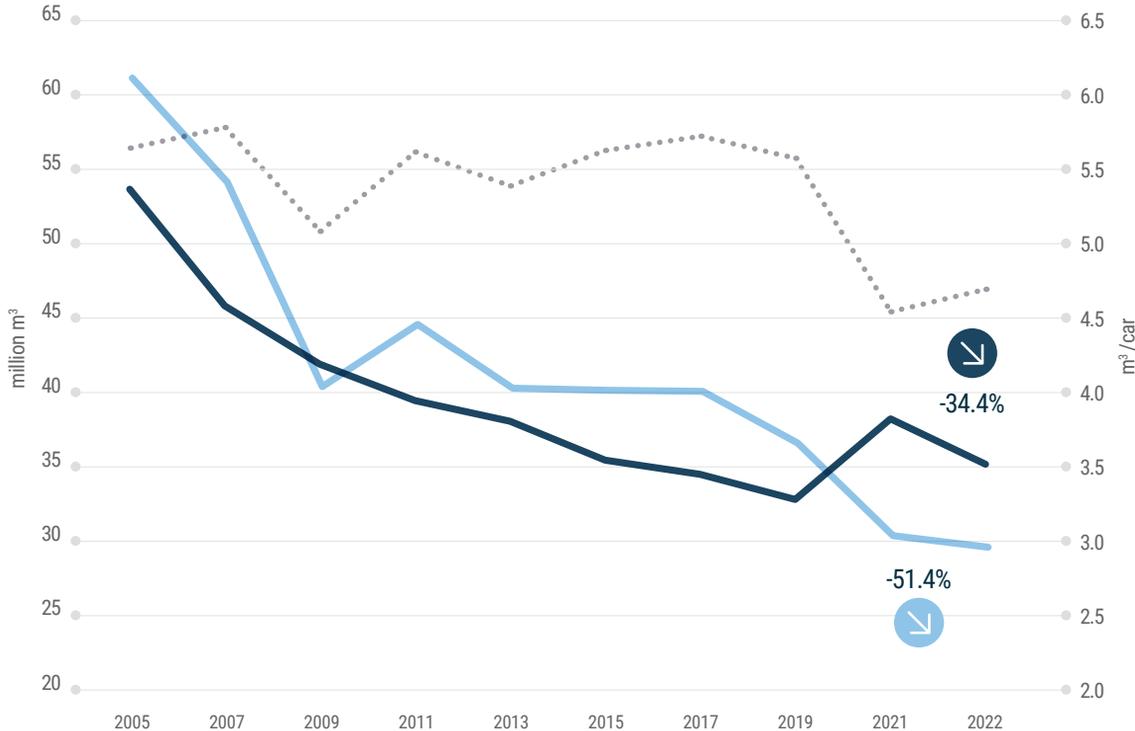




CAR PRODUCTION: WATER CONSUMPTION

2005 – 2022

● Total water (million m³/year) ● Water per unit produced (m³/car) Car production trend



SOURCE: ACEA

Car manufacturers have reduced water use from production by more than half since 2005



Levels of car manufacturing waste largely follow production trends

CAR PRODUCTION: WASTE¹

2005 – 2022



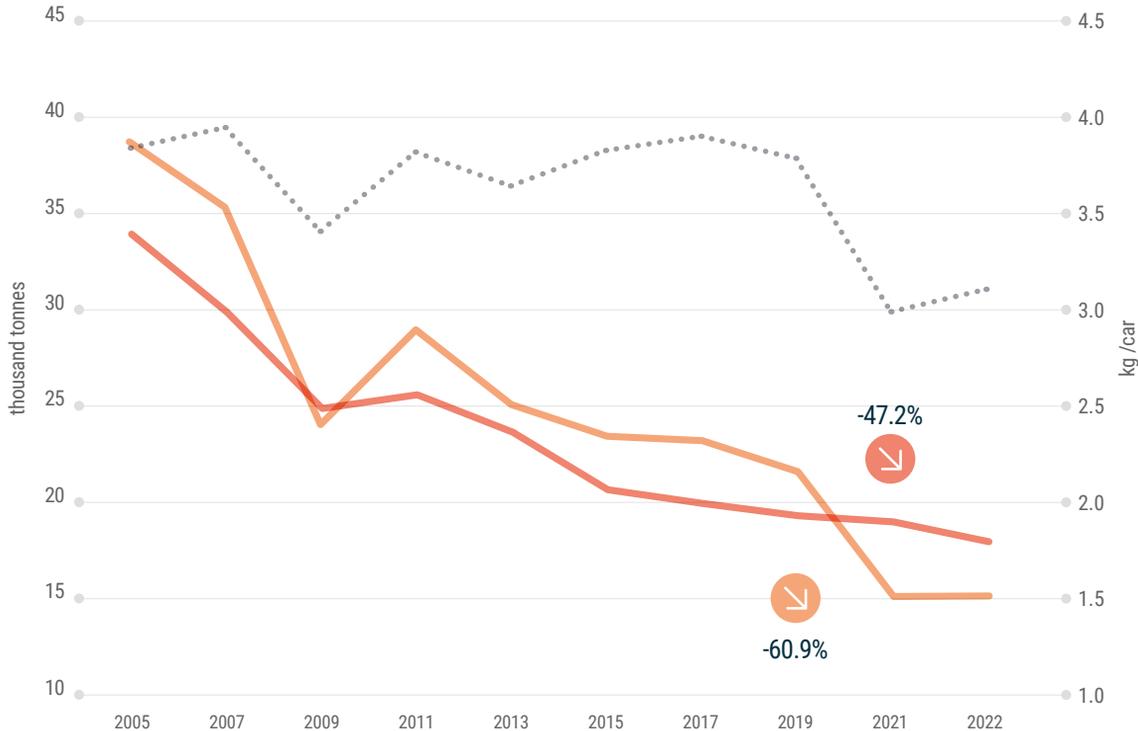
1. Excluding scrap metal and demolition waste



CAR PRODUCTION: VOC¹ EMISSIONS

2005 – 2022

● VOC emissions total (thousand t/year) ● VOC emissions per unit produced (kg/car) Car production trend



SOURCE: ACEA

Car makers have reduced VOC emissions by over 60% since 2005

1. Volatile organic compounds



INNOVATION

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DRIVING MOBILITY FOR EUROPE

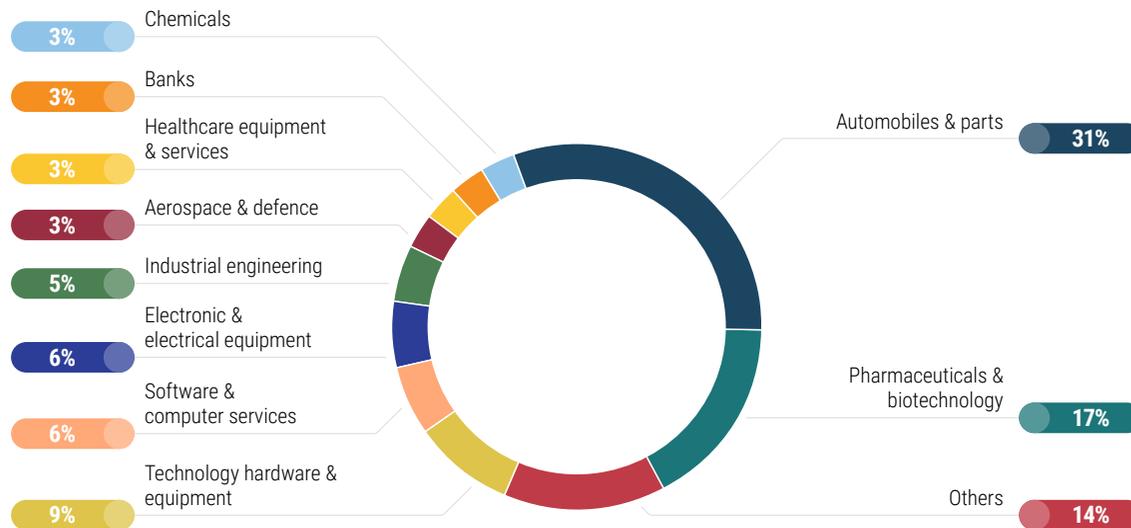




EU auto makers invest around a third of all EU R&D spending

SECTORAL R&D SHARE IN THE EU

% share / 2021





R&D INVESTMENT IN THE TOP 10 EU INDUSTRIAL SECTORS

In billion € / 2021

●		
●	Automobiles and parts	59.1
●	Pharmaceuticals and biotechnology	32.4
●	Technology hardware and equipment	17.9
●	Software and computer services	11.4
●	Electronic and electrical equipment	10.7
●	Industrial engineering	9.8
●	Aerospace and defence	6.4
●	Healthcare equipment and services	6.2
●	Banks	5.9
●	Chemicals	5.3

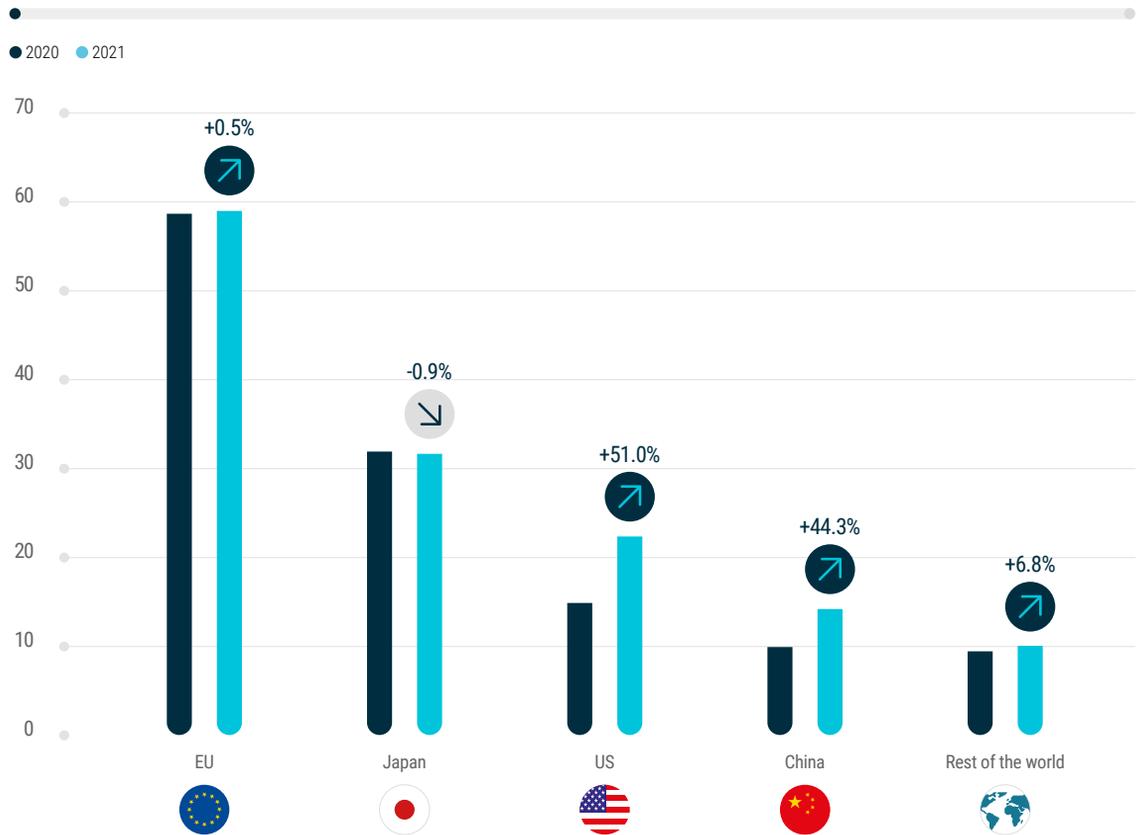
EU auto makers invest around €60 billion annually in R&D, twice the amount as pharmaceuticals and biotech



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

R&D INVESTMENT IN THE AUTOMOTIVE SECTOR BY REGION

In billion €, % change

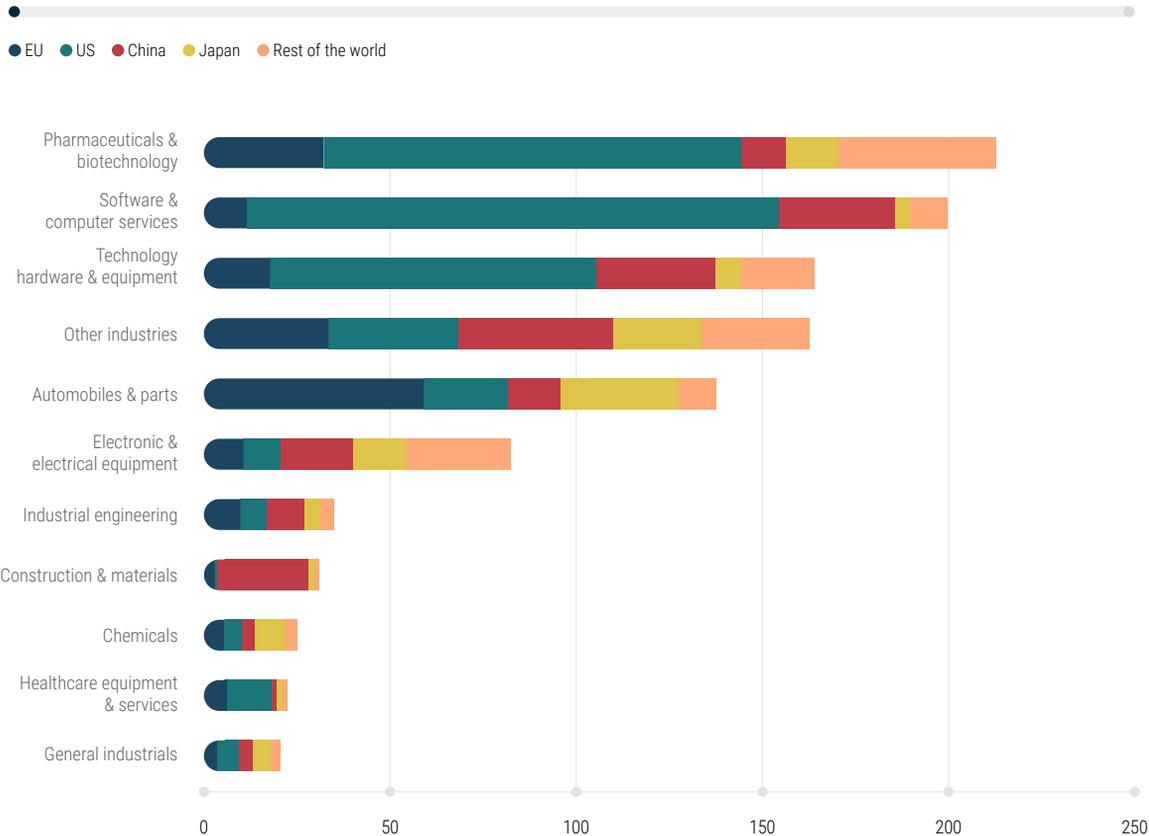


SOURCE: THE 2022 EU INDUSTRIAL R&D INVESTMENT SCOREBOARD



R&D INVESTMENT BY INDUSTRY AND WORLD REGION

In billion € / 2021



SOURCE: THE 2022 EU INDUSTRIAL R&D INVESTMENT SCOREBOARD

Automotive is the EU's number one investor in R&D



TAXATION

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DRIVING MOBILITY FOR EUROPE



TAX BENEFITS AND PURCHASE INCENTIVES:
ELECTRIC CARS

2022

	TAX BENEFITS			INCENTIVES	
	Acquisition	Ownership	Company car	Purchase	Infrastructure
 Austria	✓	✓	✓	✓	✓
 Belgium	✓	✓	✓	✗	✗
 Bulgaria	✗	✓	✗	✗	✗
 Croatia	✓	✓	✗	✓	✗
 Cyprus	✓	✓	✗	✓	✗
 Czechia	✓	✓	✓	✓	✓
 Denmark	✓	✓	✗	✗	✓
 Estonia	✗	✗	✗	✓	✗
 Finland	✓	✗	✓	✗	✗
 France	✓	✗	✓	✓	✗
 Germany	✗	✓	✓	✓	✗
 Greece	✓	✓	✓	✓	✗
 Hungary	✓	✓	✓	✓	✗

TAX BENEFITS AND PURCHASE INCENTIVES: ELECTRIC CARS

2022

	TAX BENEFITS			INCENTIVES	
	Acquisition	Ownership	Company car	Purchase	Infrastructure
 Ireland	✓	✓	✓	✓	✗
 Italy	✗	✓	✗	✓	✗
 Latvia	✓	✓	✓	✗	✗
 Lithuania	✓	✗	✓	✓	✗
 Luxembourg	✓	✓	✓	✓	✗
 Malta	✓	✓	✗	✓	✗
 Netherlands	✓	✓	✓	✓	✗
 Poland	✓	✓	✗	✓	✓
 Portugal	✓	✓	✓	✓	✗
 Romania	✗	✓	✗	✓	✗
 Slovakia	✓	✓	✗	✗	✗
 Slovenia	✓	✗	✗	✓	✗
 Spain	✓	✓	✓	✓	✓
 Sweden	✗	✓	✓	✗	✓

Three-quarters
of EU countries
offer purchase
incentives for
electric cars

TAX BENEFITS AND PURCHASE INCENTIVES: ELECTRIC COMMERCIAL VEHICLES

2022

	TAX BENEFITS		INCENTIVES	
	Acquisition	Ownership	Purchase	Infrastructure
Austria	✓	✓	✓	✓
Belgium	✗	✓	✓	✗
Bulgaria	✗	✓	✗	✗
Croatia	✓	✓	✓	✗
Cyprus	✓	✓	✓	✗
Czechia	✓	✓	✓	✓
Denmark	✓	✓	✗	✗
Estonia	✗	✗	✓	✗
Finland	✓	✗	✓	✗
France	✓	✗	✓	✗
Germany	✗	✓	✗	✗
Greece	✓	✗	✓	✗
Hungary	✗	✗	✗	✗

TAX BENEFITS AND PURCHASE INCENTIVES: ELECTRIC COMMERCIAL VEHICLES

2022

	TAX BENEFITS		INCENTIVES	
	Acquisition	Ownership	Purchase	Infrastructure
 Ireland	✓	✓	✓	✗
 Italy	✗	✓	✓	✗
 Latvia	✓	✓	✗	✗
 Lithuania	✓	✗	✗	✗
 Luxembourg	✓	✓	✗	✗
 Malta	✓	✓	✓	✗
 Netherlands	✗	✗	✓	✗
 Poland	✓	✓	✓	✓
 Portugal	✗	✓	✓	✗
 Romania	✗	✓	✗	✗
 Slovakia	✓	✓	✗	✗
 Slovenia	✓	✗	✗	✗
 Spain	✓	✓	✓	✓
 Sweden	✗	✓	✓	✓

22 EU countries do not provide incentives for electric commercial vehicle infrastructure development or installation

FISCAL INCOME FROM VEHICLES IN MAJOR EUROPEAN MARKETS¹

	 Austria	 Belgium	 Denmark	 Finland	 France	 Germany	 Greece
	€ bn 2021	€ bn 2020	DKK bn 2023 ⁴	€ bn 2021	€ bn 2021	€ bn 2021	€ bn 2022
Purchase or transfer							
1. VAT on vehicle sales							
servicing, repair & parts	2.9	7.6	–	1.6	19.5	34.2	0.8
2. Sales & registration taxes	0.4	0.5	16.9	0.5	2.2	–	0.4
3. Annual ownership taxes	2.7	1.7	10.8	1.1	0.9	9.5	1.2
4. Fuels & lubricants	5.0	7.3	17.2	4.0	41.0	38.2	4.8
5. Others:							
Driving license fees	–	0.0	–	–	0.01	0.2	0.0
Insurance taxes	0.4	1.0	1.4	0.4	5.5	5.5	0.5
Tolls	2.3	0.7	0.6	–	12.8	7.6	–
Customs duties	–	–	–	–	–	0.4	–
Other taxes	0.3	0.8	–	–	1.7	–	0.2
TOTAL (national currencies)	14.2	19.6	46.9	7.6	83.5	95.6	7.9
TOTAL (€)²	14.2	19.6	6.3	7.6	83.5	95.6	7.9
Average annual tax revenue per vehicle (€)³	2,521	2,896	1,964	2,381	1,838	1,829	1,196

1. Latest available data; only countries for which sourced data is available are listed

2. Euro foreign exchange reference rates on 19 April 2023 (European Central Bank)

3. Per country estimates based on the number of vehicles on roads in the corresponding year

4. Estimates

FISCAL INCOME FROM VEHICLES IN MAJOR EUROPEAN MARKETS¹

	 Ireland	 Italy	 Netherlands	 Portugal	 Spain	 Sweden
	€ bn 2019	€ bn 2019	€ bn 2021	€ bn 2021	€ bn 2022	SEK bn 2020
Purchase or transfer						
1. VAT on vehicle sales servicing, repair & parts	0.7	18.9	1.4	2.8	9.5	25.0
2. Sales & registration taxes	1.0	1.9	1.7	0.4	0.6	–
3. Annual ownership taxes	0.9	6.7	4.3	0.7	3.0	16.0
4. Fuels & lubricants	3.5	37.3	9.5	2.8	24.2	43.3
5. Others:						
Driving license fees	0.0	–	0.2	–	0.1	–
Insurance taxes	0.1	3.9	1.3	–	1.1	2.8
Tolls	–	2.2	–	0.2	–	2.8
Customs duties	–	–	–	–	–	–
Other taxes	–	5.4	1.6	1.5	0.7	–
TOTAL (national currencies)	6.2	76.3	20.0	8.5	39.2	89.9
TOTAL (€)²	6.2	76.3	20.0	8.5	39.2	8.0
Average annual tax revenue per vehicle (€)³	2,438	1,727	1,952	1,290	1,312	1,436

SOURCE: ACEA

Vehicles contribute more than €390 billion to major EU market budgets

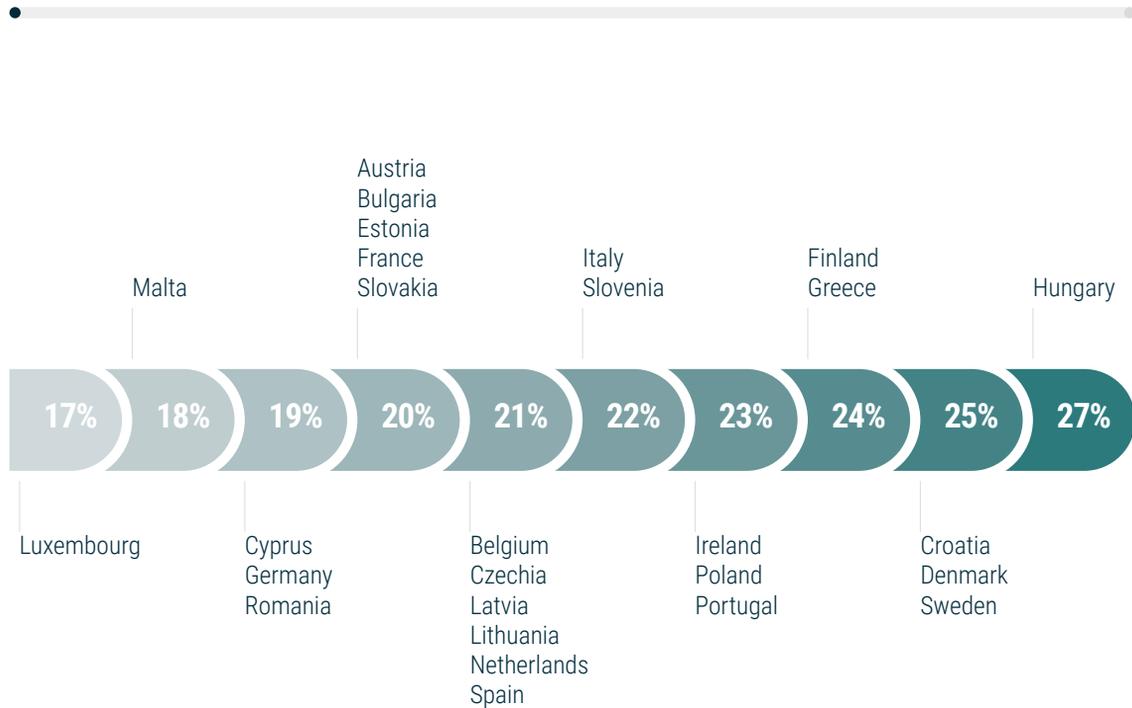
1. Latest available data; only countries for which sourced data is available are listed
2. Euro foreign exchange reference rates on 19 April 2023 (European Central Bank)
3. Per country estimates based on the number of vehicles on roads in the corresponding year
4. Estimates



Car VAT rates range from 17% to 27% in the EU

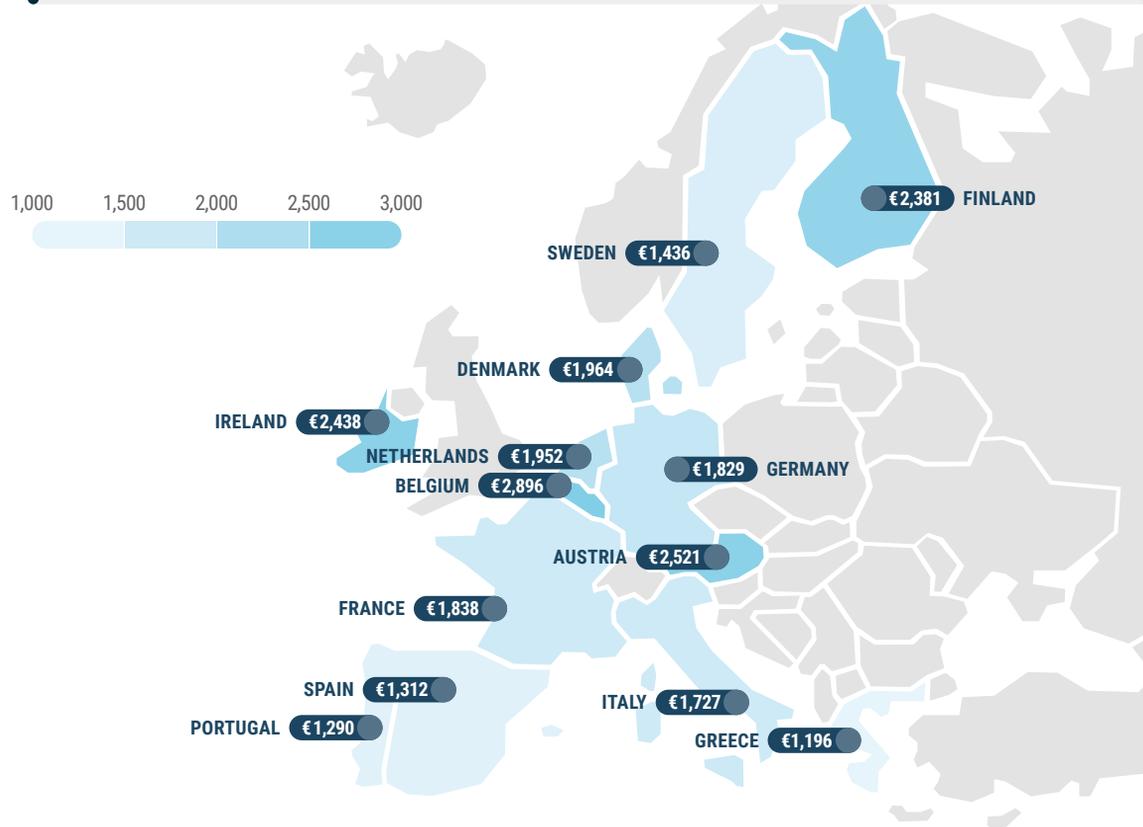
VAT SHARE IN NET CAR PRICES

% share / 2022



AVERAGE ANNUAL TAX PER VEHICLE IN MAJOR EU MARKETS¹

In € per vehicle / 2022



SOURCE: ACEA

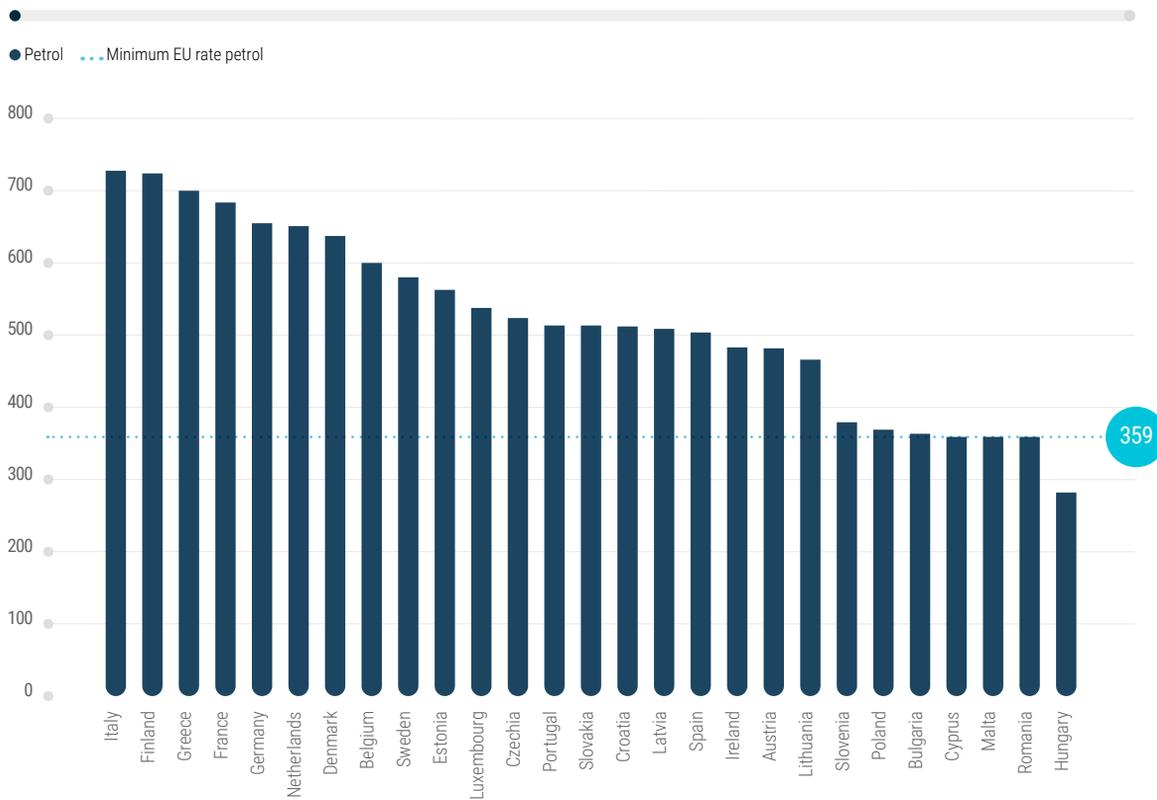
Annual tax per vehicle in major EU markets averages €1,900

1. Per country estimates based on total number of vehicles on roads



EXCISE DUTIES ON UNLEADED PETROL

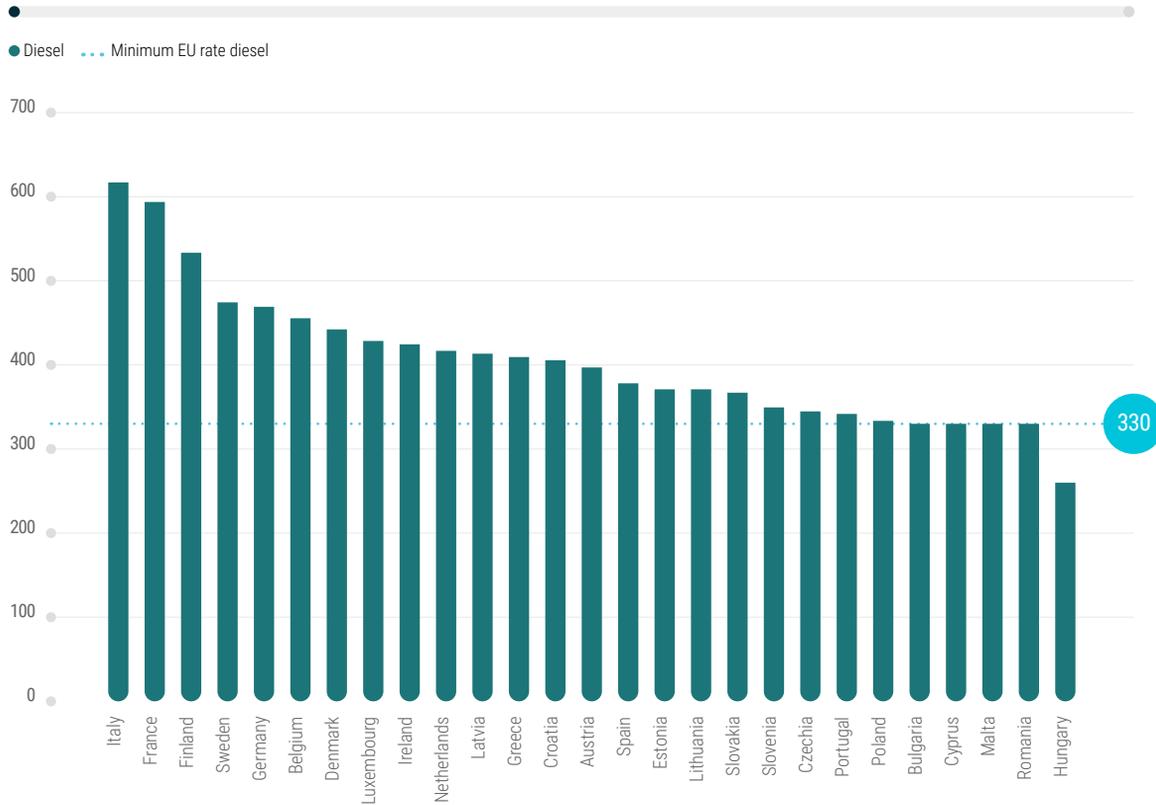
In €/1,000 litres / 2022



359

EXCISE DUTIES ON DIESEL

In €/1,000 litres / 2022



330

Italy has the highest excise duties on diesel and petrol in the EU, while Hungary has the lowest.

ACEA MEMBERS		BMW GROUP  	
DAIMLER TRUCK			HONDA The Power of Dreams
 HYUNDAI	IVECO • GROUP	JLR	
Renault Group	TOYOTA	VOLKSWAGEN GROUP	V O L V O



ABOUT ACEA

DRIVING MOBILITY FOR EUROPE

The European Automobile Manufacturers' Association, or ACEA, unites Europe's 14 major car, truck, van and bus makers.

We are the voice of the auto industry: a technological world leader and the backbone of the EU economy. Our members keep Europe on the move, providing diverse solutions for moving people and goods from A to B.

Together, we are progressing on the road to zero-emission and zero-fatality transport. We are addressing major technology shifts and the changing mobility needs of Europeans.

ACEA is working towards a new era of mobility, where all Europeans can access affordable transport solutions that are:

- **Green & Clean**
- **Smart & Efficient**
- **Safe & Reliable**

Our aim is to drive Europe's mobility transformation – while at the same time ensuring that the auto industry remains a strong **Global & Competitive** player.

WHAT ACEA DOES

ACEA acts as one with common industry positions that also reflect the overarching interests of European citizens, transport users and operators, and auto industry workers.

We bring our collective expertise to policy makers, sharing a wealth of factual information to enable well-informed decisions.

We foster a societal debate around mobility, and are open to working with all interested parties to advance the common aim of clean, smart and safe mobility.



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