

Data extracted in December 2024
Planned article update: July 2025

Highlights

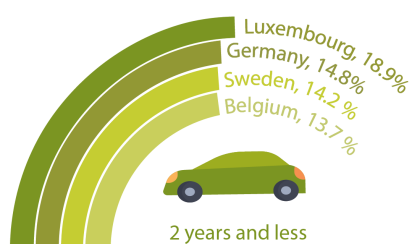
" Between the end of 2022 and the end of 2023, the number of battery-only electric passenger cars had increased by 47% and was on the verge of 4.5 million vehicles. "

" In 2023, Luxembourg had the highest share of 'youngest' passenger cars, with 18.9% of passenger cars being less than 2 years old. "

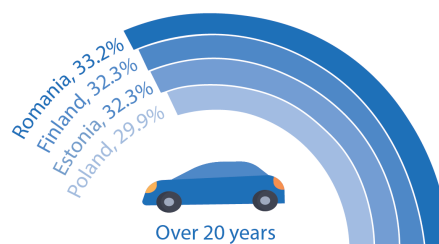
AGE OF PASSENGER CARS, 2023

(i.e. on 31 December 2023)

EU Member States with the highest shares of passenger cars younger than 2 years (% of total passenger cars)



EU Member States with the highest shares of passenger cars older than 20 years (% of total passenger cars)



eurostat 

This article describes developments in [passenger car](#) stocks and new registrations in the [European Union \(EU\)](#) , providing extended information on passenger cars powered by ' [alternative fuels](#) '.

Overview: car numbers grow with a rapid increase in electric but a low share of overall alternative fuels

Overall, the passenger car fleet in almost all of the [EU countries](#) has grown over the last 5 years, exceeding an EU total of 256 million cars (Table 2). The highest number of cars per 1 000 inhabitants was recorded in Italy, followed

by Luxembourg and Cyprus (Figure 3). In 2023, Luxembourg had the highest share of 'youngest' vehicles, while Romania had the highest share of passenger cars older than 20 years, followed by Finland and Estonia (Figure 5).

Despite an increase over the last years, passenger cars powered by alternative fuels only made up a minority of the new registration of passenger cars in the EU in 2023 (Table 1), still behind petrol and diesel (including hybrids). This is reflected by the share of cars powered by alternative fuels among the newly registered passenger cars (Figure 2), which in most countries is still below 20%.

However, in 2023 the number of battery-only electric passenger cars in the EU countries exceeded 4.4 million (Figure 1), which was about 88 times higher than in 2013 and 12 times higher than in 2018. The highest rates of increase were noted between 2019 and 2020 (85.2%) and between 2020 and 2021 (77.5%). Their share in the total number of passenger cars increased from 0.02% to 1.7%.

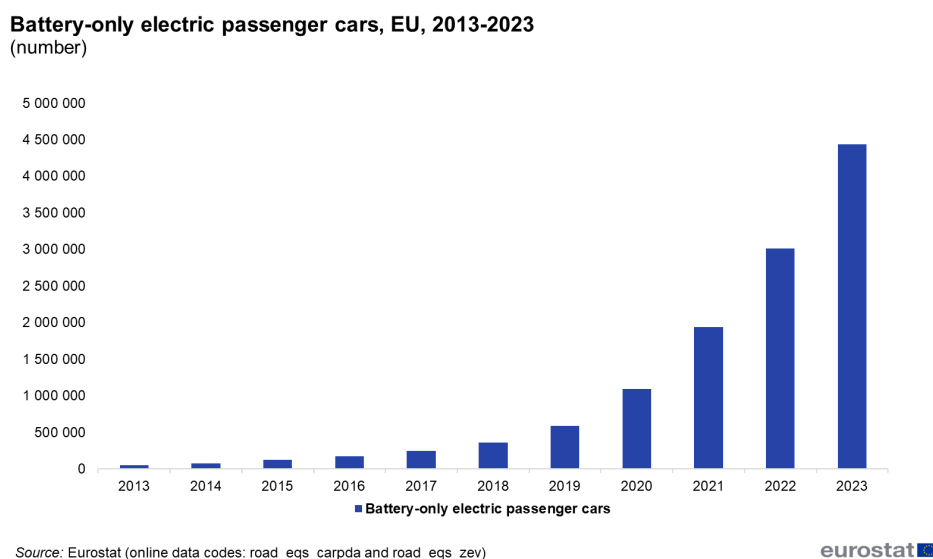


Figure 1: Battery-only electric passenger cars, EU, 2013-2023 (number) Source: Eurostat (road_eqs_carpda) and (road_eqs_zev)

New passenger car engine fuel: petrol popular, diesel declining, alternative rising, hybrids high

The preferences for whether a new passenger car should be powered by a petrol, diesel or an alternative fuel engine vary across the EU countries (Table 1). All the 27 EU countries registered a higher petrol share (including hybrids); this is a complete inversion of the phenomenon observed until 2015, when the majority of EU countries recorded a higher diesel share (in 2016 there was the same number on both sides).

New passenger cars by type of engine fuel, 2023
(number)

	Total	Petrol	of which:			of which:		Alternative energy	Battery - only electric	Hydrogen and fuel cells
			Plug-in hybrid petrol-electric	Other hybrid electric-petrol	Diesel	Plug-in hybrid diesel-electric	Other hybrid diesel-electric			
EU	10 654 663	6 775 363	767 733	2 294 919	2 014 887	41 136	492 213	1 863 476	1 547 679	738
Belgium	484 639	336 741	94 268	86 480	50 855	6 040	5 540	97 043	93 482	1
Bulgaria (*)	37 476	29 661	355	693	6 032	:	:	1 783	1 754	1
Czechia	212 662	147 244	4 781	27 412	54 687	470	4 119	10 661	6 567	16
Denmark	173 388	95 541	16 947	24 237	15 260	273	6 855	62 587	62 586	1
Germany	2 844 609	1 601 700	166 614	456 426	703 839	9 109	208 149	539 070	524 219	267
Estonia	22 986	17 357	535	7 908	4 114	20	1 227	1 515	1 448	1
Ireland	125 530	70 094	10 183	19 541	32 255	302	2 450	23 181	23 181	0
Greece (*)	134 465	104 526	:	48 267	19 785	:	2 094	10 154	6 377	0
Spain	983 721	714 633	61 038	263 300	186 368	1 742	40 815	82 720	55 388	8
France	1 841 326	1 251 289	158 373	420 146	223 258	4 463	21 958	366 779	303 590	306
Croatia (*)	43 866	32 234	783	10 411	9 219	:	:	2 413	1 125	0
Italy	1 581 156	1 014 551	60 219	498 069	357 239	8 789	72 697	209 366	65 800	2
Cyprus (*)	14 637	13 406	511	5 616	443	:	:	788	788	0
Latvia (*)	18 451	12 702	352	5 509	3 729	:	1 029	2 020	1 629	0
Lithuania (*)	26 866	20 520	787	9 767	3 684	:	945	2 215	2 210	0
Luxembourg	49 155	27 804	4 638	6 859	10 713	168	2 615	11 082	11 048	0
Hungary	107 860	81 654	4 804	39 039	19 836	738	5 993	6 370	5 807	0
Malta	7 464	5 218	962	1 731	724	16	85	1 522	1 516	0
Netherlands (*)	369 608	249 274	47 082	89 981	3 966	:	:	116 368	113 961	39
Austria	239 150	130 321	16 262	36 705	61 187	694	13 925	47 642	47 621	10
Poland	477 258	300 834	8 377	94 393	144 524	4 794	92 900	29 674	17 078	83
Portugal	200 237	123 422	25 942	25 199	29 010	1 320	3 790	47 805	36 456	0
Romania	144 609	91 118	2 648	37 436	20 455	273	3 860	33 036	15 367	0
Slovenia (*)	48 455	36 290	1 044	10 048	7 355	:	:	4 810	4 306	0
Slovakia (*)	86 812	68 592	2 997	24 183	15 253	:	:	4 329	2 517	1
Finland	87 509	52 225	17 867	19 097	5 277	220	1 167	30 007	29 537	0
Sweden	290 768	146 412	59 364	26 466	25 820	1 705	0	118 536	112 321	2
Iceland	17 543	5 852	1 692	2 325	2 905	64	566	8 787	8 783	1
Liechtenstein (*)	1 590	958	:	427	294	:	118	338	338	0
Norway	128 731	19 066	9 974	8 274	4 936	200	459	104 729	104 727	2
Switzerland	263 514	165 982	17 373	63 355	44 501	4	13 106	53 031	52 947	28
Bosnia and Herzegovina (*)	9 027	5 558	:	923	3 136	:	129	333	135	0
Montenegro (*) (*)	4 066	2 456	:	775	699	:	:	:	:	:
Moldova	46 033	10 793	:	:	26 266	:	:	8 974	1 012	:
North Macedonia (*)	28 018	:	:	:	:	:	:	:	:	:
Georgia (*) (*)	6 422	4 663	:	1 430	1 514	:	:	245	245	0
Albania	66 004	12 476	:	871	47 440	:	583	6 088	1 671	:
Serbia (*)	45 960	30 952	:	6 371	12 486	:	2 902	2 522	494	0
Türkiye (*)	945 768	704 254	0	78 753	162 855	0	9 180	78 659	65 558	0
Ukraine (*)	62 951	36 953	:	8 264	18 351	:	2 546	7 647	7 261	0
Kosovo (*) (*)	27 171	2 840	5	231	24 300	1	28	20	20	0

Note: (:) not available.

(*) Plug-in hybrid diesel-electric and/or other hybrid diesel-electric vehicles are included in plug-in hybrid petrol-electric and/or other hybrid petrol-electric vehicles.

(*) Plug-in hybrids (for both petrol and diesel) are included in other hybrids.

(*) 2022 data instead of 2023.

(*) 2021 data instead of 2023.

(*) This designation is without prejudice to positions on status, and is in line with UNSCR 1244/99 and the ICJ Opinion on the Kosovo Declaration of Independence.

Source: Eurostat (online data codes: road_eqr_carmot, road_eqr_carpda and road_eqr_zev)

eurostat

Table 1: New passenger cars by type of engine fuel, 2023 (number) Source: Eurostat (road_eqr_carmot), (road_eqr_carpda) and (road_eqr_zev)

In 2023, the highest shares of petrol-powered cars (including hybrids) among the new registrations were noted in Cyprus (91.6%), Bulgaria (79.1%), Slovakia (79.0%), Greece (77.7%), Lithuania (76.4%), Hungary (75.7%) and Estonia (75.5%), with high shares also recorded in Slovenia (74.9%), Croatia (73.5%), Spain (72.6%), Malta (69.9%), Belgium (69.5%), Czechia (69.2%), Latvia (68.8%), France (68.0%), the Netherlands (67.4%), Italy (64.2%), Poland and Romania (both 63.0%), Portugal (61.6%), Finland (59.7%), Luxembourg (56.6%), Germany (56.3%), Ireland (55.8%), Denmark (55.1%), Austria (54.5%), and Sweden (50.4%).

In the **candidate countries** and the potential candidate, most new passenger cars are powered by a petrol engine in Bosnia and Herzegovina, Montenegro (2022 data), Georgia, Serbia, Türkiye and Ukraine, while in Albania and Kosovo* (2021 data) the diesel engine is dominant.

Kosovo: This designation is without prejudice to positions on status and is in line with UNSCR 1244/99 and the ICJ Opinion on the Kosovo Declaration of Independence.)*

When it comes to "pure" petrol and diesel fuel types (excluding hybrids), the picture is somewhat different. Among EU countries, Denmark and Sweden appear now with more new passenger cars powered by alternative fuels than new cars powered by pure petrol. A total of 10 countries have more hybrid new passenger cars (petrol and diesel, plug-in and others) than new cars powered by pure petrol or pure diesel-powered new cars or alternative fuels: Belgium, Estonia, Finland, Hungary, Italy, Latvia, Lithuania, Malta, the Netherlands and Poland. A higher share of new cars powered by pure petrol concerns only 14 EU countries. At EU level, the total number of new passenger cars powered by pure petrol (3.7 million) is just above the number of hybrid new passenger cars (3.6 million).

In the EU countries, EFTA countries, candidate countries and the potential candidate for which recent data are available, an increase in the share of new registrations of passenger cars powered by alternative fuels can generally be observed in the last 3 years (Figure 2). In 2023, this share became majority in Norway (81.4%) and exceeded 20% in Iceland (at least 50.1% taking into consideration battery-only electric vehicles), Sweden (40.8%), Denmark (36.1%), Finland (34.3%), the Netherlands (31.5%), Portugal (23.9%), Romania (22.8%), Luxembourg (22.5%), Liechtenstein (21.3%), Malta (20.4%), Switzerland (20.1%) and Belgium (20.0%). For all these countries, the share of alternative fuels overtook the diesel share in 2023. This was also the case in France (19.9% vs. 12.1%) and in Cyprus (5.4% vs. 3.0%).

Contrary to EFTA countries, most candidate countries recorded much lower rates of alternative fuels than EU countries with only Moldova (19.5%) and Ukraine (12.1%) having a rate above 10%. Concerning battery-only electric vehicles, only Ukraine recorded a rate above 10%.

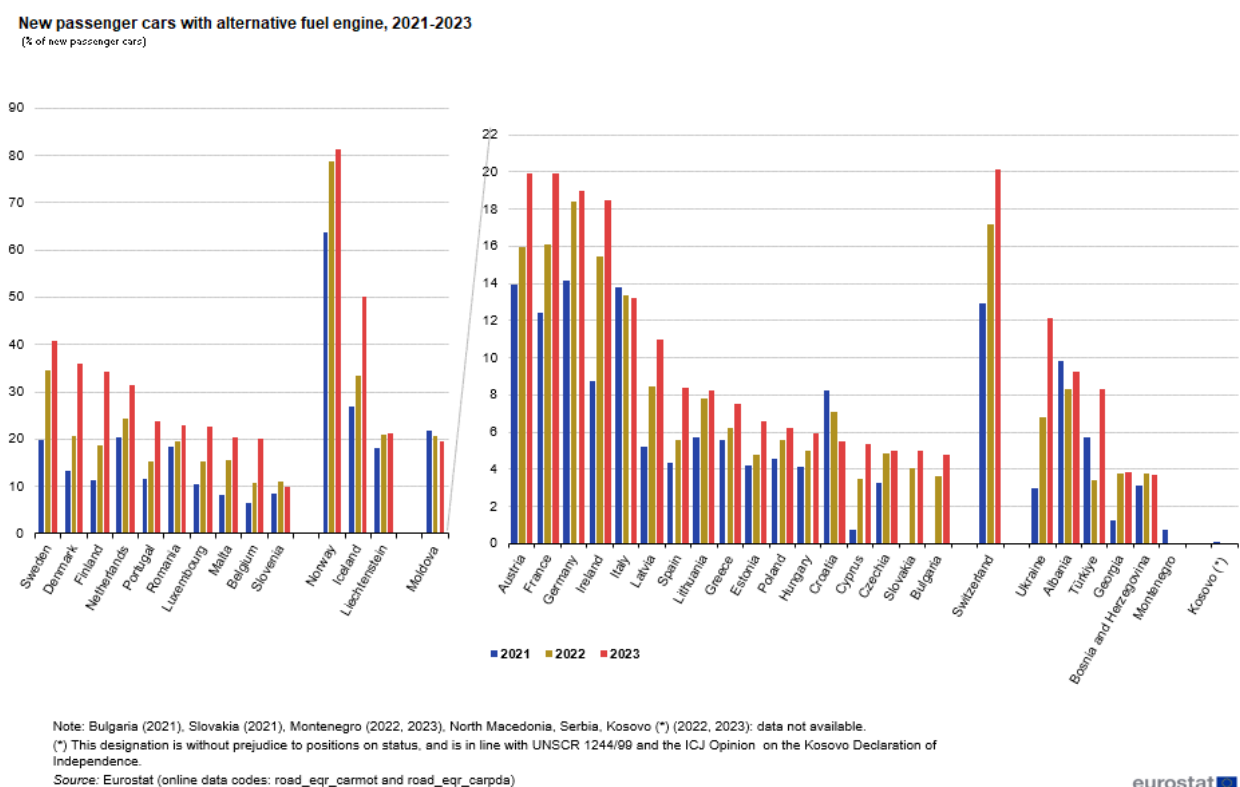


Figure 2: New passenger cars with alternative fuel engine, 2021-2023 (% of new passenger cars) Source: Eurostat (road_eqr_carmot) and (road_eqr_carpda)

The government incentives to stimulate the share of cars with lower emissions include, for example, tax reductions, subsidies or specific privileges such as access to lanes reserved for public transport and free parking. Other main reasons are the number and variety of passenger car models with alternative fuel engines offered, as well as the prices of such models.

A 6.5% increase in EU-registered passenger cars since 2018

In 2023, the number of the EU-registered passenger cars exceeded 256 million, corresponding to an increase of 6.5% as compared with 2018 (Table 2). The highest number of registered passenger cars was observed in Germany with 49 million cars. Followed by Italy (almost 41 million cars) and France (more than 39 million cars). Over the 5 year period from December 2018 to December 2023, there was a strong growth in the number of registered passenger cars in several of the EU countries. The highest growth over this period was recorded in Romania (26%), followed by Lithuania (19%), Estonia (16%), Croatia (15%), Hungary, Slovakia and Cyprus (all three 14%), Czechia (13%), as well as Greece and Portugal (both 11%).

Passenger cars, 2018-2023
(number)

	2018	2019	2020	2021	2022	2023
EU	240 409 941	244 850 251	247 656 045	250 246 879	252 612 228	256 129 947
Belgium	5 848 425	5 881 874	5 897 488	5 926 009	5 955 127	6 047 551
Bulgaria	2 773 325	2 829 946	2 866 763	2 830 464	2 896 777	3 006 215
Czechia	5 747 913	5 924 995	6 049 255	6 088 730	6 305 934	6 512 774
Denmark	2 594 482	2 651 741	2 723 612	2 787 553	2 801 076	2 827 864
Germany	47 095 784	47 715 977	48 248 584	48 540 878	48 763 036	49 098 685
Estonia	746 464	794 926	808 689	825 936	849 294	865 773
Ireland	2 182 920	2 253 210	2 291 940	2 309 760	2 335 130	2 404 140
Greece	5 282 695	5 406 551	5 492 176	5 604 192	5 726 012	5 877 759
Spain	25 304 190	25 836 586	26 034 347	26 293 882	26 605 478	26 778 142
France	38 229 305	38 421 218	38 467 643	38 814 659	38 856 492	39 258 632
Croatia	1 666 413	1 724 900	1 746 285	1 795 465	1 840 767	1 910 131
Italy	39 018 170	39 545 232	39 717 874	39 822 723	40 213 061	40 915 229
Cyprus	550 695	572 501	578 158	592 156	601 131	625 625
Latvia	707 841	727 164	739 124	758 688	769 723	781 690
Lithuania	1 430 520	1 498 688	1 565 465	1 611 143	1 650 384	1 700 524
Luxembourg	415 145	426 346	433 183	439 919	444 818	453 614
Hungary	3 641 823	3 812 013	3 920 799	4 020 159	4 094 129	4 168 651
Malta	300 140	307 130	308 358	313 177	317 234	323 852
Netherlands	8 442 982	8 584 391	8 686 419	8 827 709	8 917 107	9 067 393
Austria	4 978 852	5 039 548	5 091 827	5 133 836	5 150 890	5 185 006
Poland	19 911 107	20 544 344	20 985 865	21 356 007	21 458 101	21 796 947
Portugal	5 282 970	5 452 119	5 565 963	5 632 644	5 778 584	5 847 610
Romania	6 452 536	6 902 984	7 274 728	7 611 039	7 865 186	8 106 570
Slovenia	1 143 150	1 165 371	1 170 690	1 189 457	1 207 755	1 230 565
Slovakia	2 321 608	2 393 577	2 439 986	2 493 183	2 555 491	2 644 361
Finland	3 470 507	3 549 803	3 607 531	3 641 532	3 673 750	3 718 278
Sweden	4 869 979	4 887 116	4 943 293	4 985 979	4 979 761	4 976 366
Iceland	267 467	269 825	269 615	289 017	287 368	256 000
Liechtenstein	29 949	30 249	30 436	30 541	30 659	30 964
Norway	2 751 949	2 801 208	2 934 883	3 003 005	3 018 728	2 889 087
Switzerland	4 666 278	4 692 741	4 733 517	4 793 803	4 812 896	4 861 544
Bosnia and Herzegovina	919 226	939 283	936 417	983 077	1 006 142	1 044 950
Montenegro	206 453	217 959	210 113	221 405	227 716	242 599
Moldova	616 800	648 780	677 670	716 906	745 970	788 506
North Macedonia	415 062	426 045	429 196	477 820	483 482	:
Georgia	1 085 638	1 190 070	1 190 070	1 265 867	1 333 012	1 438 585
Albania	460 027	499 590	539 497	593 280	639 379	699 337
Serbia	1 999 771	2 083 753	2 164 818	2 235 794	2 337 498	2 389 105
Türkiye	12 398 190	12 503 049	13 099 041	13 706 065	14 269 352	15 221 134
Ukraine	:	:	:	:	:	:
Kosovo (*)	256 880	309 509	292 902	322 701	339 131	368 818

Note: (:) not available.

(*) This designation is without prejudice to positions on status, and is in line with UNSCR 1244/99 and the ICJ Opinion on the Kosovo Declaration of Independence.

Source: Eurostat (online data code: road_eqs_carmot)



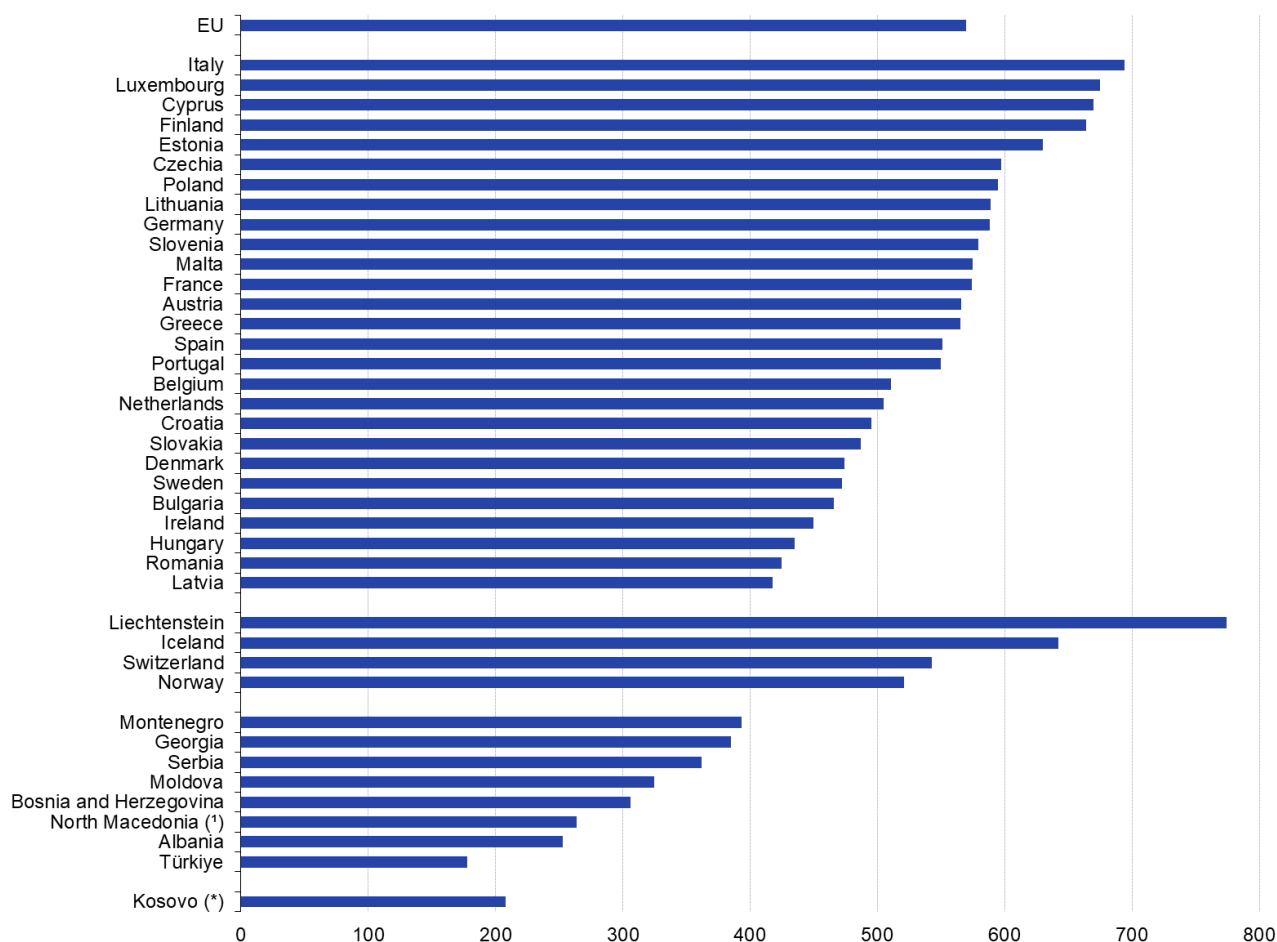
Table 2: Passenger cars, 2018-2023 (number) Source: Eurostat (road_eqs_carmot)

Amongst the EU countries with the highest motorisation rates, i.e. passenger cars per 1 000 inhabitants, there are several smaller countries (Figure 3). Italy heads the list (694 passenger cars per 1 000 inhabitants) and in second place follows Luxembourg with 675 cars per 1 000 inhabitants. Other countries with a high motorisation rate include Cyprus (670 cars), Finland (664 cars), and Estonia (630 cars).

These EU countries are overtaken by one EFTA country: Liechtenstein (774 cars), while the other two EFTA countries, Switzerland (543 cars) and Norway (521 cars), are close to the EU average (570 cars).

Motorisation rate, 2023

(number of passenger cars / thousand inhabitants)



Note: Ukraine: data not available.

(*) 2022 data instead of 2023.

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Source: Eurostat (online data code: road_eqs_carhab)

eurostat

Figure 3: Motorisation rate, 2023 (number of passenger cars / 1 000 inhabitants) Source: Eurostat (road_eqs_carhab)

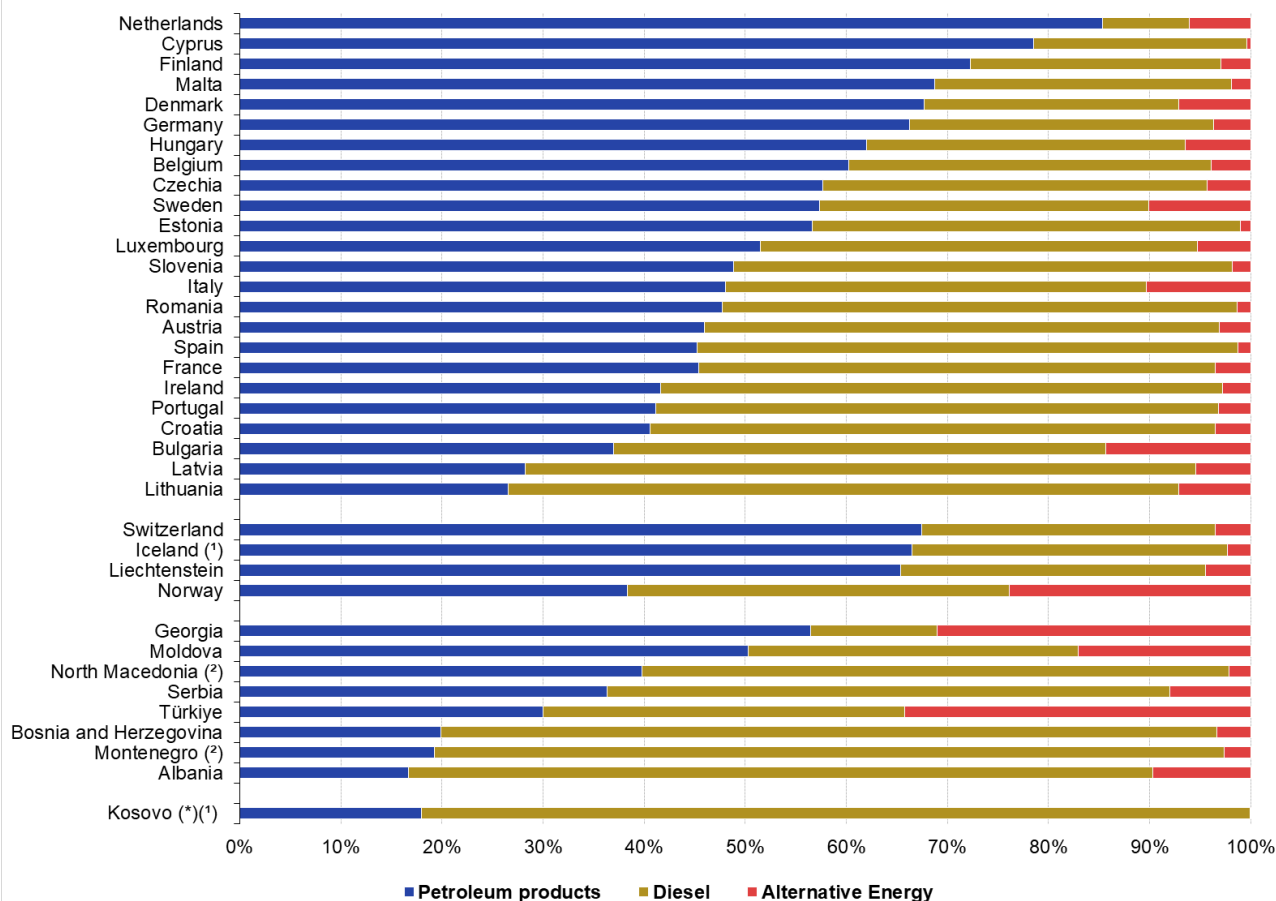
At the other end of the scale, a particularly low motorisation rate is recorded in Latvia (418 cars), despite a growth in the number of registered cars of 10% over the period 2018-2023. The motorisation rate in the EU candidate countries and the potential candidate for which data are available (Montenegro, Georgia, Serbia, Moldova, Bosnia and Herzegovina, North Macedonia, Albania, Türkiye, and Kosovo) is substantially lower than in the EU countries. The least value, 178 cars per 1 000 inhabitants, was recorded in Türkiye.

Small petrol engines more common than medium-sized and large engines

In 13 of the 24 EU countries for which information is available for 2023, there were more petrol cars than diesel cars (including hybrids), with the share of petrol cars ranging from 85% in the Netherlands to 48% in Italy (Figure 4). In the other 11 EU countries, diesel cars outnumbered petrol cars with their shares ranging from 66% in Latvia and in Lithuania to 49% in Slovenia. Despite efforts across Europe to increase the share of cars with low CO₂ emissions, the share of passenger cars powered by alternative fuels remained low in 2023 in most EU countries. In 2 out of 24 EU countries for which information is available, passenger cars using alternative energy represented less than 1% of the total passenger car fleet. The EU country with the highest share is Bulgaria, where the passenger cars powered by alternative fuels reached 14.3% in 2023. Other countries with notable shares of passenger cars using alternative fuels are Norway (23.9%), Italy (10.3%), Sweden (10.1%), Lithuania (7.2%), Denmark (7.1%), Hungary

(6.5%), the Netherlands (6.1%), Latvia (5.5%) and Luxembourg (5.2%). Among candidate countries and the potential candidate, the highest share of passenger cars of alternative fuels was registered in Türkiye (34.2%), Georgia (31.0%) and Moldova (17.1%). In Norway almost all (99.9%) of the passenger cars of alternative fuels are battery-only electric passenger cars while in Türkiye and Moldova the share of LPG cars is dominant among the passenger cars using alternative fuels.

Passenger cars by type of engine fuel, 2023 (% of all passenger cars)



Note: Ranking is based on petroleum products.
 Note: Greece, Poland, Slovakia and Ukraine: data not available.
 (*) 2022 data instead of 2023.
 (?) 2021 data instead of 2023.
 (*) This designation is without prejudice to positions on status, and is in line with UNSCR 1244/99 and the ICJ Opinion on the Kosovo Declaration of Independence.
 Source: Eurostat (online data code: road_eqs_carpda)



Figure 4: Passenger cars by type of engine fuel, 2023 (% of all passenger cars) Source: Eurostat (road_eqs_carpda)

In 16 out of 22 EU countries for which data are available, it can be noticed that the share of small petrol engines is higher than the share of the medium- and large-sized ones (Table 3).

In Malta, in 2023, more than half of all passenger cars had small petrol engines (55.4%), followed by the Netherlands with 51.6%. In Finland, medium-sized petrol engines powered 39.2% of the passenger cars. The highest shares of large petrol engines was found in Estonia (10.7% of all passenger cars) and Finland (9.1%); and in the EFTA countries, in Liechtenstein (16.4%) and Switzerland (10.8%).

Petrol-driven passenger cars by size of engine, 2023

	Petrol engine (number)			Share of all passenger cars (%)		
	≤ 1399 cm ³	1400 cm ³ - 1999 cm ³	≥ 2000 cm ³	≤ 1399 cm ³	1400 cm ³ - 1999 cm ³	≥ 2000 cm ³
Belgium	2 276 124	1 149 963	216 252	37.6	19.0	3.6
Bulgaria	:	:	:	:	:	:
Czechia	2 303 783	1 248 248	195 438	35.4	19.2	3.0
Denmark	:	:	:	:	:	:
Germany	17 381 697	12 416 863	2 712 087	35.4	25.3	5.5
Estonia	119 719	277 855	92 656	13.8	32.1	10.7
Ireland	675 020	286 900	38 660	28.1	11.9	1.6
Greece	:	:	:	:	:	:
Spain	6 883 863	4 459 161	759 942	25.7	16.7	2.8
France	13 421 799	3 774 530	616 246	34.2	9.6	1.6
Croatia	585 816	172 828	15 882	30.7	9.0	0.8
Italy	9 421 945	9 787 845	457 018	23.0	23.9	1.1
Cyprus	233 093	240 184	17 915	37.3	38.4	2.9
Latvia	60 727	128 341	31 276	7.8	16.4	4.0
Lithuania	117 198	246 724	87 728	6.9	14.5	5.2
Luxembourg	92 427	100 786	40 336	20.4	22.2	8.9
Hungary	1 616 164	884 931	82 370	38.8	21.2	2.0
Malta	179 432	36 341	6 867	55.4	11.2	2.1
Netherlands	4 678 691	2 614 024	448 985	51.6	28.8	5.0
Austria	1 546 775	647 599	189 433	29.8	12.5	3.7
Poland	:	:	:	:	:	:
Portugal	1 951 311	397 464	58 300	33.4	6.8	1.0
Romania	2 345 960	1 402 660	120 886	28.9	17.3	1.5
Slovenia	392 981	189 031	18 747	31.9	15.4	1.5
Slovakia	:	:	:	:	:	:
Finland	893 087	1 456 468	336 667	24.0	39.2	9.1
Sweden	1 402 586	1 139 170	313 626	28.2	22.9	6.3
Iceland	:	:	:	:	:	:
Liechtenstein	6 866	8 289	5 085	22.2	26.8	16.4
Norway	347 283	568 242	184 255	12.0	19.7	6.4
Switzerland	1 297 558	1 458 699	523 549	26.7	30.0	10.8
Bosnia and Herzegovina	136 515	64 049	7 443	13.1	6.1	0.7
Montenegro	:	:	:	:	:	:
Moldova	151 897	211 912	32 798	19.3	26.9	4.2
North Macedonia	:	:	:	:	:	:
Georgia	138 595	417 943	255 818	9.6	29.1	17.8
Albania	67 816	33 619	15 075	9.7	4.8	2.2
Serbia	609 630	246 571	12 460	25.5	10.3	0.5
Türkiye	2 682 129	1 697 030	183 270	17.6	11.1	1.2
Ukraine	:	:	:	:	:	:
Kosovo (*)	26 996	26 630	4 365	8.4	8.3	1.4

Note: (:) not available.

(*) 2021 data instead of 2023.

(*) This designation is without prejudice to positions on status, and is in line with UNSCR 1244/99 and the ICJ Opinion on the Kosovo Declaration of Independence.

Source: Eurostat (online data code: road_eqs_carmot)



Table 3: Petrol-driven passenger cars by size of engine, 2023 (number and % share of all passenger cars)
Source: Eurostat (road_eqs_carmot)

Overall, passenger cars with small engines generally use petrol as fuel; there are relatively few passenger cars with small diesel engines in the EU. Medium-sized engines dominated amongst the diesel-powered passenger cars in all EU countries for which data are available (Table 4). This was particularly the case for the group of countries with the highest overall share of diesel-powered passenger cars (Lithuania, Croatia, Portugal, Ireland, Spain, France, Austria and Romania). However, for Latvia, which had an even higher proportion of diesel-powered vehicles than the countries in the group, the share of large motor engines (> 2 000 cm³) was quite significant (25.9%).

Diesel-driven passenger cars by size of engine, 2023

	Diesel engine (number)			Share of all passenger cars (%)		
	≤ 1399 cm ³	1400 cm ³ - 1999 cm ³	≥ 2000 cm ³	≤ 1399 cm ³	1400 cm ³ - 1999 cm ³	≥ 2000 cm ³
Belgium	145 088	1 735 682	286 285	2.4	28.7	4.7
Bulgaria	:	:	:	:	:	:
Czechia	42 561	1 995 696	435 106	0.7	30.6	6.7
Denmark	:	:	:	:	:	:
Germany	175 411	10 700 495	3 894 966	0.4	21.8	7.9
Estonia	3 511	203 224	160 325	0.4	23.5	18.5
Ireland	74 490	1 141 590	120 250	3.1	47.5	5.0
Greece	:	:	:	:	:	:
Spain	745 687	11 253 491	2 335 037	2.8	42.0	8.7
France	2 725 836	15 735 476	1 610 780	6.9	40.1	4.1
Croatia	63 076	889 969	116 186	3.3	46.6	6.1
Italy	155 748	15 024 900	1 858 625	0.4	36.7	4.5
Cyprus	5 742	72 643	53 659	0.9	11.6	8.6
Latvia	10 005	306 524	202 067	1.3	39.2	25.9
Lithuania	23 235	735 303	362 954	1.4	43.2	21.3
Luxembourg	4 475	152 743	39 099	1.0	33.7	8.6
Hungary	69 618	970 676	275 028	1.7	23.3	6.6
Malta	6 983	72 728	15 222	2.2	22.5	4.7
Netherlands	73 360	448 317	254 765	0.8	4.9	2.8
Austria	65 501	2 157 405	417 622	1.3	41.6	8.1
Poland	:	:	:	:	:	:
Portugal	335 624	2 456 475	461 161	5.7	42.0	7.9
Romania	135 949	3 398 171	591 253	1.7	41.9	7.3
Slovenia	14 640	518 878	74 028	1.2	42.2	6.0
Slovakia	:	:	:	:	:	:
Finland	12 621	552 577	358 251	0.3	14.9	9.6
Sweden	42 127	1 216 843	360 861	0.8	24.5	7.3
Iceland	:	:	:	:	:	:
Liechtenstein	125	5 964	3 247	0.4	19.3	10.5
Norway	36 660	719 557	336 113	1.3	24.9	11.6
Switzerland	18 093	959 398	433 607	0.4	19.7	8.9
Bosnia and Herzegovina	31 126	674 227	96 443	3.0	64.5	9.2
Montenegro (*)	10 173	145 319	22 493	4.5	63.8	9.9
Moldova	38 769	159 871	58 414	4.9	20.3	7.4
North Macedonia	:	:	:	:	:	:
Georgia	6 682	54 596	118 795	0.5	3.8	8.3
Albania	38 444	277 611	198 910	5.5	39.7	28.4
Serbia	110 009	1 129 911	88 691	4.6	47.3	3.7
Türkiye	1 121 686	4 124 869	201 971	7.4	27.1	1.3
Ukraine	:	:	:	:	:	:
Kosovo (*) ^(?)	214	210 899	53 535	0.1	65.4	16.6

Note: (:) not available.

(*) 2022 data instead of 2023.

(?) 2021 data instead of 2023.

(*) This designation is without prejudice to positions on status, and is in line with UNSCR 1244/99 and the ICJ Opinion on the Kosovo Declaration of Independence.

Source: Eurostat (online data code: road_eqs_carmot)

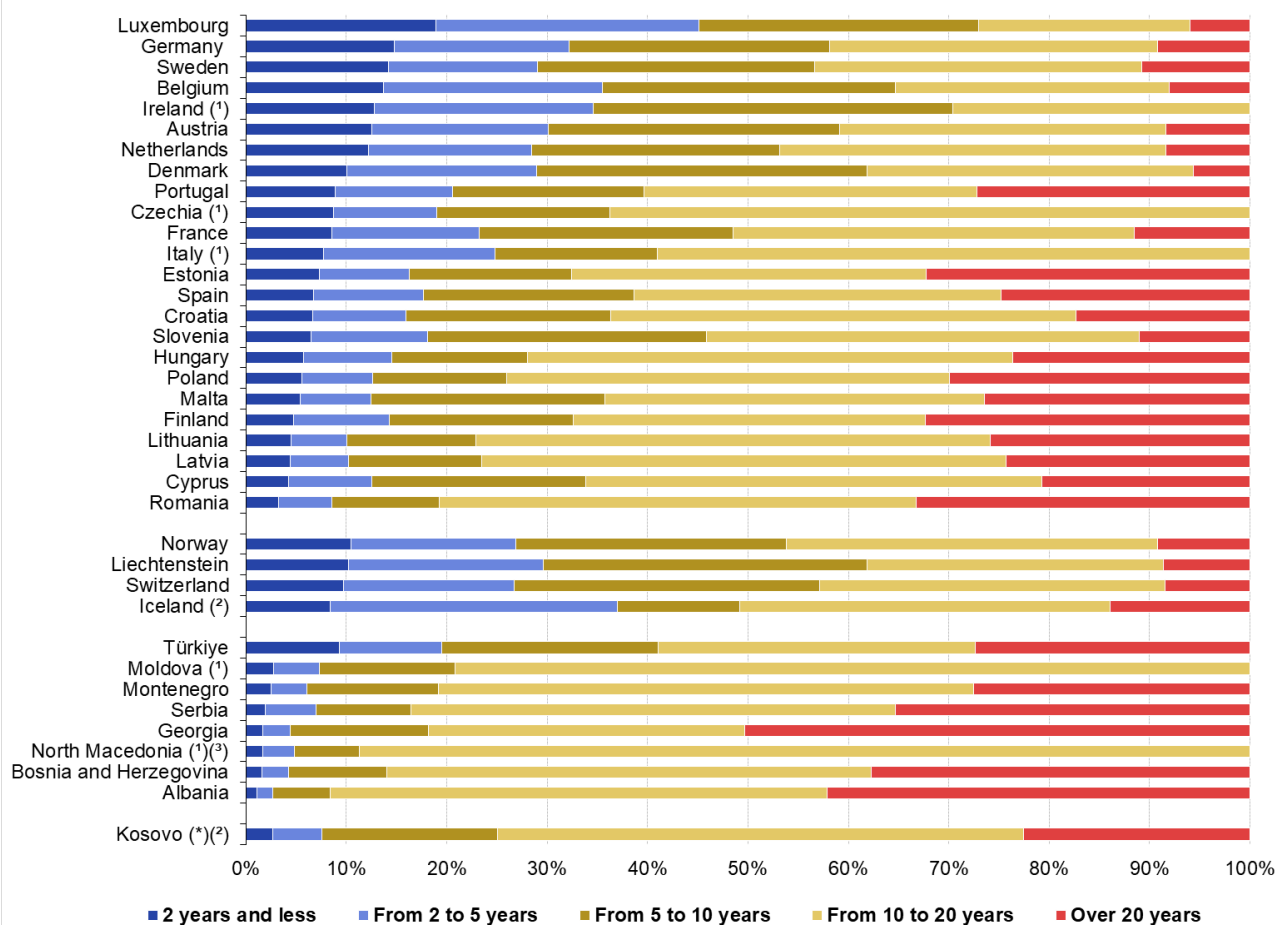
eurostat 

Table 4: Diesel-driven passenger cars by size of engine, 2023 (number and % share of all passenger cars)
Source: Eurostat (road_eqs_carmot)

Highest share of 'youngest' passenger cars in Luxembourg

The shares of the 'youngest' passenger cars (less than 2 years old) were highest in Luxembourg (18.9%), Germany (14.8%), Sweden (14.2%), Belgium (13.7%), Ireland (12.8%), Austria (12.6%) and the Netherlands (12.2%). By contrast, several EU countries reported a large share of 'old' passenger cars (20 years or older) in 2023 (Figure 5). The EU countries with the highest shares were Romania (33.2%), Finland and Estonia (both 32.3%), Poland (29.9%), Portugal (27.2%), Malta (26.4%), and Lithuania (25.9%).

Passenger cars by age, 2023 (i.e. on 31 December 2023) (% of all passenger cars)



Note: Ranking is based on 2 years and less

Note: Bulgaria, Greece and Slovakia: data not available.

(*) The "From 10 to 20 years" breakdown includes passenger cars "Over 20 years".

(*) 2021 data instead of 2023.

(*) 2022 data instead of 2023.

(*) This designation is without prejudice to positions on status, and is in line with UNSCR 1244/99 and the ICJ Opinion on the Kosovo Declaration of Independence.

Source: Eurostat (online data code: road_eqs_carage)

eurostat

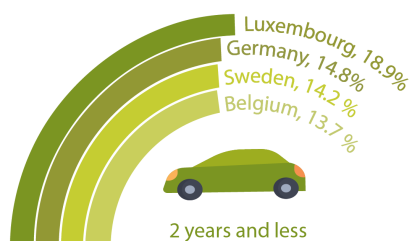
Figure 5: Passenger cars by age, 2023 (i.e. on 31 December 2023) (% of all passenger cars) Source: Eurostat (road_eqs_carage)

In recent years, several countries have been offering programmes supporting the purchase of new cars with low emissions while scrapping the owners' old cars. The general aim of these programmes has been the renewal of the passenger car fleet with lower emission cars, while simultaneously stimulating the economy. These programmes have had a certain influence on the age composition of passenger cars in individual countries. Figure 6 presents the EU countries with highest shares of the youngest and oldest passenger cars in 2023 (i.e. on 31 December 2023).

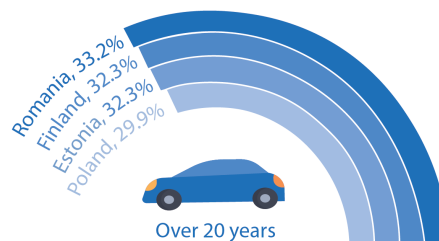
AGE OF PASSENGER CARS, 2023

(i.e. on 31 December 2023)

EU Member States with the highest shares of passenger cars younger than 2 years (% of total passenger cars)



EU Member States with the highest shares of passenger cars older than 20 years (% of total passenger cars)



eurostat 

Figure 6: Age of passenger cars, 2023 (i.e. on 31 December 2023) (% of all passenger cars) Source: Eurostat (road_eqs_carage)

Source data for tables and graphs

- [Passenger cars in the EU: tables and figures](#)

Data sources

The main source is the 'Eurostat/ITF/UNECE Common Questionnaire on Inland Transport Statistics'. Some gaps have been filled in with estimates of the European Alternative Fuels Observatory (EAFO) or of the European Automobile Manufacturers' Association (ACEA). Some public sources (NSI websites, Open data) have been used, too, particularly for the Ukrainian pilot statistics currently developed with the State Statistics Service of Ukraine (Derzhstat) from their national road vehicle register accessible in Open Data.

Coverage

The data in this article covers the [EU countries](#), the [EFTA countries](#) and the [candidate countries and potential candidate](#) ([list of countries and the corresponding country codes](#)).

Definitions

All definitions used are taken from the Eurostat/UNECE/ITF Glossary for Transport Statistics, currently in its 5th edition. This glossary can be found on Eurostat's website [Eurostat/UNECE/ITF Glossary for Transport Statistics](#).

Passenger cars

Road motor vehicle, other than a moped or a motorcycle, intended for the carriage of passengers and designed to seat no more than nine persons (including the driver).

Included are:

- Passenger cars
 - Vans designed and used primarily for transport of passengers
 - Taxis
 - Hire cars

- Ambulances
- Motor homes
- Micro-cars (needing no permit to be driven)

Excluded are light goods road vehicles, as well as motor-coaches and buses, and mini-buses/mini-coaches.

New motor vehicles registered during the year

The new motor vehicles registered during the year are those motor vehicles that are first-time registered as new in a motor vehicle register, irrespective of the nationality of the register. The imported second-hand vehicles are not first-time registered but should be regarded as reregistered vehicles. Thus, should not be included in the number of new motor vehicles registered first time during the year.

Motor energy

The principal type of motor energy used by the vehicle as certified by the competent authority of the country of registration. For hybrid or dual-fuelled vehicles adapted for using more than one type of motor energy (e.g. LPG and petrol, or electricity and diesel, etc.), the principal type of motor energy should be, where possible, an alternative fuel.

Alternative fuel

A type of motor energy other than the conventional fuels: petrol and diesel. Alternative fuels include electricity, LPG, natural gas (LNG or CNG), alcohols, mixtures of alcohols with other fuels, hydrogen, bio-fuels (such as biodiesel), etc. (this list is not exhaustive). Alternative fuels do not include unleaded petrol, reformulated petrol or city (low-sulphur) diesel, neither hybrid petrol-electric nor hybrid diesel-electric motor energy.

Motorisation rate

The number of passenger cars per 1 000 inhabitants.

Context

The Common Questionnaire on Inland Transport Statistics is a joint project of Eurostat, the International Transport Forum (ITF) and the United Nations Economic Commission for Europe ([UNECE](#)). The data are provided on a voluntary basis by a large number of countries, both within and outside the European Union. Data is collected from reliable sources, but data collection methodologies are not harmonised at EU level. Comparability across countries is restricted as the classifications used in the national vehicle registers are not harmonised. Vehicle registers may exclude taxis, pick-ups and "vans for passengers" from the definition of "passenger cars", and may also exclude very old vehicles. This article covers data provided by the EU countries, EFTA countries, EU candidate countries and the one potential candidate.

Explore further

Other articles

- [Transport statistics introduced](#)
- [Stock of vehicles at regional level](#)
- [Motor trades statistics - NACE Rev. 2](#)
- [Passenger transport statistics](#)

Database

- [Transport](#) , see:

Road transport (road)

Road transport equipment - Stock of vehicles (road_eqs)

Road transport equipment - New registration of vehicles (road_eqr)

Dedicated section

- [Transport statistics](#)

Publications

- [Key figures on European transport - 2023 edition](#)
- [Energy, transport and environment indicators — 2020 edition](#)

Methodology

- [Common Questionnaire for Inland Transport Statistics](#) (ESMS metadata file — rail_if_esms)
- [Eurostat/UNECE/ITF Glossary for Transport Statistics, 5th edition](#)

External links

- [International Transport Forum \(ITF\) - Statistics](#)
- [United Nations Economic Commission for Europe \(UNECE\) - Transport statistics](#)

Legislation

- [Roadmap to a single European transport area – towards a competitive and resource efficient transport system](#) (European Commission White paper: COM(2011) 144 final)
- [Handbook on statistics on road traffic - Methodology and experience](#) (UNECE, 2007)