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Facts and Figures

International Passenger Car Markets December 2022

New Passenger Car Registrations/ Sales

	Dec. 2022	+/- in %	Jan Dec. 2022	+/- in %
Europe (EU27, EFTA & UK)* 1)	1,091,100	14.8	11,286,900	-4.1
European Union (EU27)* 1)	897,000	12.8	9,255,900	-4.6
W. Europe (EU14, EFTA & UK) 1)	999,900	16.2	10,162,000	-4.1
New EU Countries (EU13)* 1)	91,200	1.9	1,124,900	-4.2
USA** 2)	1,263,300	4.9	13,734,200	-8.1
China 3)	2,231,000	-6.4	23,240,500	10.0
Japan ⁴⁾	284,300	1.5	3,448,300	-6.2
Russia** ⁵⁾		-	687,400	-58.8
India ⁶⁾	235,300	7.2	3,792,400	23.0
Brazil** 7)	202,200	4.2	1,960,500	-0.8

Source: 1) ACEA 2) Wards Intelligence 3) CAAM 4) JAMA 5) AEB 6) SIAM 7) ANFAVEA

* without Malta

** Light Vehicles

International automotive markets in 2022: Europe, Japan, and the US with declines; Strong growth in China; World passenger car market in 2022 at previous year's level

The international automotive markets were characterized by very different dynamics in 2022. While the markets in Europe (EU27, EFTA & UK), Japan and the US lagged behind the prior year level, sales in China increased significantly. In particular, shortages of upstream products and raw materials, significantly higher prices for energy and logistics, and uncertainty triggered by the Russian war of aggression prevented a better performance on the international automotive markets. Overall, the world passenger car market in 2022 remained at the previous year's level. 71.2 million passenger cars were sold. For 2023, the VDA expects the global passenger car market to grow by 4 percent to 74.0 million units.

In 2022, 11.3 million new vehicles were registered in the European passenger car market, around 4 percent fewer than in the previous year. This means that last year, too, there was no recovery from the pandemic-related declines of the two previous years. Compared with the pre-crisis year 2019, sales were down 29 percent last year. The five largest individual markets developed negatively for the most part in the past year: while new registrations increased by 1 percent in Germany, market volumes declined in the United Kingdom (-2 percent), Spain (-5 percent) and France (-8 percent). In Italy, the volume of new registrations even fell by 10 percent. In December, the European passenger car market grew by 15 percent year-on-year to 1.1 million new registrations. However, even this year-end spurt could not prevent a negative result for the year.

In the United States, light vehicle sales (passenger cars and light trucks) fell by 8 percent year on-year in 2022 to 13.7 million vehicles in 2021. Light truck sales (-6 percent) were less weak than passenger car sales (-15 percent) last year. In December 2022, there was slight growth of 5 percent year-on-year, with 1.3 million new light vehicles registered.

In the Chinese passenger car market, 23.2 million new vehicles were sold last year. This is 10 percent more than in the previous year. The declines from the spring, when lockdowns in key sales regions resulted in severely restricted business, were made up for in the second half of the year, thanks to a tax reduction on a large proportion of vehicles sold. At the end of the year, just over 2.2 million new vehicles were sold in China in December, 6 percent fewer than in the same month of the previous year.

In Japan, sales of brand-new passenger cars fell for the fourth year in a row last year. With just over 3.4 million passenger cars sold in 2022, the market volume was 6 percent below the previous year. In December, 284,300 passenger cars were sold, 1 percent more than in December 2021.

Elektro International November 2022

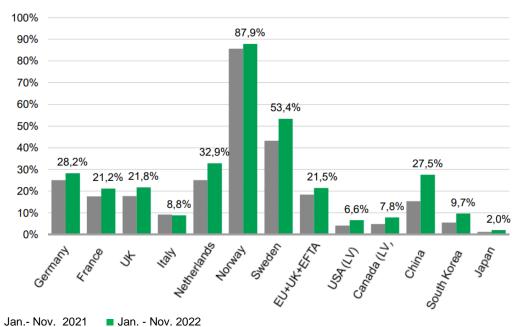
New Electric Car Registrations in the Most Important Markets Jan.- Nov. 2022

	Electric registra- tions / sales (YTD)	Change YTD vs. Previous year (2022 vs. 2021)	Change Nov. 2022 vs. Nov 2021	Cumulative new regis- trations / sales since January 2010	Electric proportion of 2022 YTD	Electric proportion of 2021 YTD	Electric market share of German Brand 2022 YTD	Electric market share of German Brand 2021 YTD	German Brand mar- ket share in the overall car market 2022 YTD
Germany	659.287	10%	51% 🚚	2.044.137	28,2%	25,1%	58%	67%	68%
France	290.809	10%	15% 🚚	1.006.954	21,2%	17,6%	25%	29%	26%
UK	323.156	18%	25% 🐬	1.079.853	21,8%	17,8%	40%	44%	47%
Italy	107.002	-14%	-4% 🐬	344.052	8,8%	9,1%	38%	40%	34%
Netherlands	92.525	28%	-7% 🐿	489.530	32,9%	25,1%	42%	45%	41%
Norway	118.552	-11%	25% 🐬	704.082	87,9%	85,7%	42%	38%	44%
Sweden	134.769	14%	45% 🐬	482.382	53,4%	43,3%	37%	39%	41%
EU+UK+EFTA	2.193.088	10%	27% 🐬	7.661.249	21,5%	18,4%	45%	50%	46%
USA (LV)	824.566	44%	37% 🖄	3.169.921	6,6%	4,2%	11%	11%	9%
Canada (LV)	111.303	48%	75% 🚚	396.523	7,8%	4,8%	9%	8%	10%
China	5.785.999	102%	71% 🖄	13.748.827	27,5%	15,3%	5%	6%	19%
South Korea	126.492	68%	85% 🐬	346.373	9,7%	5,6%	19%	27%	15%
Japan	62.878	54%	31% 🞕	435.285	2,0%	1,2%	18%	25%	5%

Source: KBA, Ward's, Fourin, S&P

In November, most markets in Europe (+27 percent) showed growth. The strongest growth was recorded in Germany (+51 percent), Sweden (+45 percent) and Norway (+25 percent) due to purchases brought forward. And the UK followed (+25 percent). Italy (-4 percent) and the Netherlands (-7 percent), which developed the weakest. The non-European markets were all clearly in the plus. South Korea recorded the biggest increase with 85 percent.

With 5.79 million newly registered e-cars (+102 percent) in the first 11 months, China remains by far the most important e-market worldwide. For comparison: Europe (EU+EFTA+UK) came at 2.19 million units (+10 percent) which was less than half. The USA ranked behind with 0.82 million sales (+44 percent).



Electric Share in the Overall Passenger Car Market (Jan.- Nov. 2021 vs Jan.- Nov. 2022)

Jan.- Nov. 2021 Jan. - Nov. 2022

When it comes to the electric share in the overall market, the e-share consolidated over the course of the vear in Norway at 88 percent. The second place is Sweden with 53 percent, which followed by the Netherlands (33 percent), Germany and China (28 percent each), UK (22 percent) and France (21 percent).

	BEV* New registrations / sales (YTD)	Change (YTD vs. 2 Previous year (2022 vs. 2021)	Change Nov 022 vs. Nov 2021	Share of BEV to electric YTD	PHEV* New registrations / sales (YTD)	Change YTD vs. Previous year (2022 vs. 2021)	Change Nov 2022 vs. Nov 2021
Germany	366.234	19%	44% 🐬	56%	292.292	0%	60% 🛖
France	177.974	28%	23% 🛬	61%	112.684	-10%	4% 🗊
UK	224.911	38%	35% 🐿	70%	98.237	-11%	6% 🐬
Italy	44.727	-27%	-26% 🐬	42%	62.268	-2%	24% 🗊
Netherlands	59.666	39%	-8% 🐿	64%	32.772	13%	-3% 🐿
Norway	105.547	6%	41% 🐬	89%	12.979	-61%	-43% 🗊
Sweden	76.836	62%	99% 🐬	57%	57.931	-18%	-4% 🐬
EU+UK+EFTA	1.299.069	25%	30% 🐬	59%	892.821	-6%	22% 🚚
USA (LV)	647.971	58%	42% 🐿	79%	174.216	9%	23% 🗊
Canada (LV)	90.327	66%	125% 🦣	81%	20.939	0%	-21% 🛬
China	4.459.271	90%	66% 🛬	77%	1.326.524	155%	93% 🌗
South Korea	104.872	117%	97% 🐿	83%	11.902	-36%	49% 🕋
Japan	27.455	47%	52% 🐬	44%	34.604	75%	10% 🎍

BEV and PHEV new registrations of cars in the most important markets Jan.- Nov. 2022

* BEV = Battery Electric Vehicle, PHEV = Plug-in Hybrid EV

Source: KBA, Ward's, Fourin, S&P

In November, all major BEV markets except Italy (-26 percent) recorded high double-digit percentage increases. The highest increases were in Canada (+125 percent) and Sweden (+99 percent) where after November 8, purchasing the e-car would no longer receive the climate bonus. South Korea (+97 percent) ahead of Japan (+52 percent), and Germany (+44 percent) where funding would be cut at the end of the year. The USA (+42 percent), and Norway (+41 percent) also recorded high growth where the VAT exemption for e-cars from around 50,000 euros will no longer apply at the end of the year.

Over the course of the year, the Chinese BEV market clearly dominated with 4.46 million (+90 percent). Europe achieved 1.30 million new BEV registrations (+25 percent). The USA, in third place with 0.65 million electric light vehicles (+58 percent) was catching up a bit. In addition to China, very high growth rates were recorded in South Korea (+117 percent), where production was expanded in 2022, as well as Canada (+66 percent) and Sweden (+62 percent) were recorded very high growth rates. There were declining figures in Italy (-27 percent), which was to be seen against the background of the halving of incentives for zero-emission vehicles at the end of May.

In November, there was a mixed picture for PHEVs in Europe (+ 22 percent). Germany recorded the greatest growth (+60 percent), where purchases were brought forward due to the end of subsidies. In South Korea (+49 percent), Italy (+24 percent) and the USA (+23 percent), where these markets were in double-digit growth. In Norway (-43 percent), new PHEV registrations have fallen significantly due to the abolition of the VAT exemption. Outside of Europe, PHEVs were only declined in Canada (-21 percent). However, this was more than compensated by the largest market, China, where PHEV dynamics were still outpacing BEV growth at +93 percent.

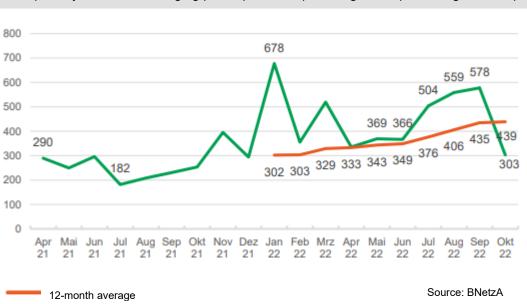
New registrations of PHEVs in China rose by 155 percent to 1,327 million over the course of the year and China remains the world's largest PHEV market, ahead of Europe (893 thousand, -6 percent). The most important European market is still in Germany, which was around the same level as the previous year at 293,000 units. The USA followed with 174 thousand (+9 percent) ahead of Japan with 35 thousand (+75 percent).

Elektro Germany December 2022

and Car	Registra	ations	German	У					
Dez. 2022	Dez. 2021	22/21 in %	JanDez. 2022	JanDez. 2021	22/21 in %	Anteil Dez. 2022	Anteil Dez. 2021	Anteil Jan Dez. 2022	Anteil Jan Dez. 2021
174.200	81.228	114%	833.487	681.874	22%	55,4%	35,7%	31,4%	26,0%
104.325	48.436	115%	470.559	355.961	32%	33,2%	21,3%	17,7%	13,6%
69.801	32.752	113%	362.093	325.449	11%	22,2%	14,4%	13,7%	12,4%
74	40	85%	835	464	80%	0,0%	0,0%	0,0%	0,0%
40.359	36.186	12%	465.227	429.139	8%	12,8%	15,9%	17,5%	16,4%
35.859	30.287	18%	394.478	368.181	7%	11,4%	13,3%	14,9%	14,0%
118	306	-61%	1.846	3.916	-53%	0,0%	0,1%	0,1%	0,1%
1.185	1.649	-28%	15.007	10.118	48%	0,4%	0,7%	0,6%	0,4%
215.862	119.369	81%	1.315.567	1.125.047	17%	68,7%	52,4%	49,6%	42,9%
314.318	227.630	38%	2.651.357	2.622.132	1%	100,0%	100,0%	100,0%	100,0%
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New electric car registrations in December 2022 increased by a good 114% compared to the same month last year and reached a volume of 174,200 units - a new record on the German market: Never before more e-cars have been registered in one month. The development suggests that purchases have been brought forward: State subsidies for PHEV expired at the end of 2022, and those for purely batteryelectric passenger cars (BEV) were reduced. The share of e-cars in total registrations rose to 55.4% in December.

For the first time, e-cars accounted for more than half of all new registrations on the German market. New registrations of BEVs rose by 115% in December compared to the same month last year. BEVs accounted for 59.9% of e-registrations. PHEV were able to increase by 113% in December compared to the same month last year and account for 40.1% of e-registrations. A total of around 833,500 e-cars were registered in 2022 as a whole. That is 22% more than in the previous year. The e-share of all registrations in 2022 will be 31.4%. That means: Almost every third new registration in 2022 has been an e-car. BEV will account for 56.5% of e-registrations in 2022, PHEV for 43.4%.



New publicly accessible charging points per week (including late-reported registrations)

Till November 1, 72,091 charging points (of which 11,862 were rapid charging points with an output of 22 kW and more) were registered with the Federal Network Agency (BNetzA) in Germany. For detailed info, please refer to Link.

With an estimated total of 1.725 million e-cars till November 1, there were 44 charging points left for 1,000 e-cars (or 23 e-cars per charging point). In October, the BNetzA reported an additional 1,340 charging points, which corresponded to 303 charging points per week, including late-reported registrations.

The speed of expansion increased the moving twelve-month average to 439 charging points per week. To reach 1 million in 2030 would require building around 2,000 charging points per week. To achieve this, the expansion rate would have to be increased fivefold.

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