

Supply bottlenecks continue to hamper overall vehicle sales: Global shortages of semiconductors, wire-harnesses (typically manufactured in Ukraine) and other components continue to restrict auto manufacturing and sales. The new string of Coronavirus lockdown measures in China are contributing to supply chain problems. Volkswagen has reportedly “sold out” of battery-powered models in the US and Europe due to acute supply chain issues, with an order backlog of 300,000 electric cars in Western Europe. We expect OEMs to continue to prioritise higher-margin and low-emission vehicles during supply shortages, but overall sales volumes across drivetrain types will remain well below pre-pandemic levels for at least the rest of 2022. This was reflected in the [SMMT's recent downgrade](#) of its 2022 new car registration forecasts to 1.72m, down from 1.89m in the January 2022 outlook.

EV penetration in Q1 2022 falls quarter-on-quarter: Most countries saw a decline in EV penetration in Q1 2022 vs Q4 2021 (further detail on page 3). UK BEV and PHEV registrations as a percentage of total declined from 28.2% in Q4 2021 to 22.5% in Q1 2022. A similar seasonal fall was seen between Q4 2020 and Q1 2021, as OEMs reportedly prioritise EV sales at the end of calendar years to meet emissions targets, leading to a spike in the final quarter.

UK government proposes more than half of new cars sold must be fully electric by 2028: [Proposals have been released](#) requiring a percentage of manufacturers' new car and van sales to be zero emission each year from 2024, starting at 22% and increasing to 52% in 2028 and 80% by 2030. This is a Green Paper at this stage, with an expectation to potentially vote into legislation in H1 2023. This follows an announcement in March 2022 for an additional £500m of funding to achieve the government's pledge of 300,000 public chargers by 2030. While supply chain problems and affordability are headwinds to faster EV adoption, we are seeing no evidence of a reversal government EV policy.

Office for Budget Responsibility (OBR) significantly increases EV forecasts: As mentioned in our [February Electric Vehicles Report](#), the impact of EV adoption will have a material impact on public finances, primarily through lower fuel duty and road tax. EV adoption is therefore something that the OBR closely monitors and forecasts. In the OBR's [March 2022 economic and fiscal outlook](#) it increased its forecasts for the share of EVs to 59% in 2026-27, up from 29% in its October 2021 outlook. This would put the UK on a similar path witnessed in Norway six years ago, which now has >90% EV penetration. This rapid increase presents significant opportunities across the automotive services and technology industry.

Quarterly focus Agency sales model for electric vehicles

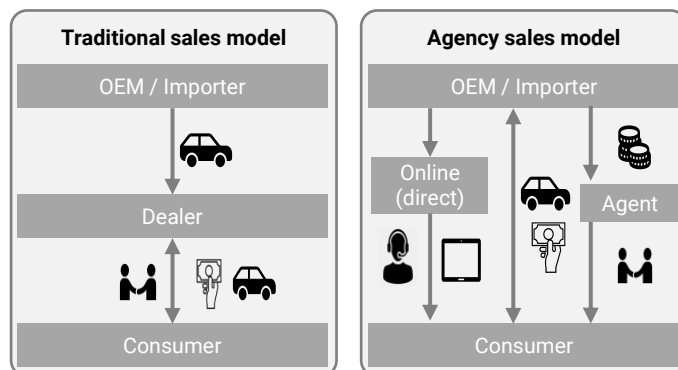
The increased penetration of electric vehicles is likely to increase the adoption of the agency sales model for motor retailers. Instead of ordering stock at wholesale prices and applying margins, dealers would act as an agent between consumers and manufacturers and collect a percentage fee for arranging the sale. Prices are uniform across online and offline platforms and are usually set by the OEM. In coordination with the OEM, the dealer focuses on customer acquisition and conversion, facilitating test drives, processing the transaction, and the handover of the vehicle.

Volkswagen is one of the major brands to utilise the agency model to sell its battery-electric vehicles. Initially this began with its ID.3 and ID.4 range, but it reportedly has plans to expand agency for electric vehicles to other brands within the VW Group (Audi, Skoda, Cupra and VW Commercial Vehicles).

For motor retailers, this sales model could lead to lower levels of stock investment and stock risk, offer price transparency to customers, and deliver higher margins. A drawback is there will potentially be higher competition on non-price factors.

Lookers plc is an example of a motor retailer that is adopting the agency model for some brands, including Polestar (pictured opposite). Agency presents an opportunity for new store formats and to add new EV-only entrants to its brand portfolio. In its FY21 results presentation it announced an expansion of the Polestar relationship, with a new site due to open in Glasgow.

Dealers will likely retail under both the franchise and agency model, depending on the brands in their portfolios. In any case, we expect the dealership to remain important for brand engagement, customer conversion, and aftersales services.



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UK new car registrations

- ◆ In April 2022, BEVs and PHEVs accounted for 16.2% of new car registrations, up from 13.2% in the prior year.
- ◆ BEVs registrations increased 40.9% YoY in April, but PHEVs decreased by 32.8%.
- ◆ Year to date, BEVs and PHEVs represented 21.1% of UK total new registrations, up from 13.6% in 2021.

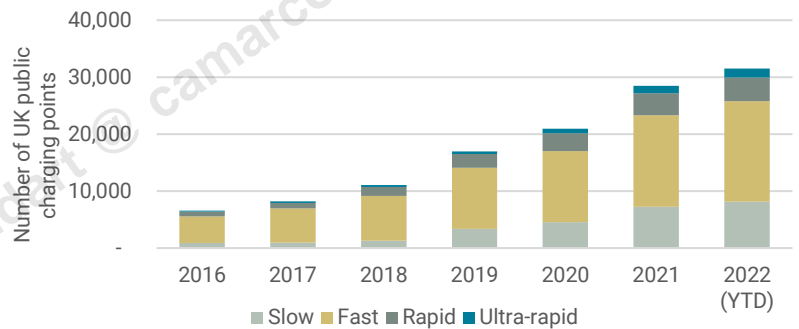
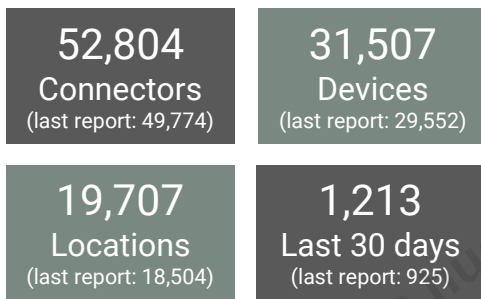
	Apr 2022	Apr 2021	Change (%)	Market Share 2022 (%)	Market Share 2021 (%)		YTD 2022	YTD 2021	Change (%)	Market Share 2022 (%)	Market Share 2021 (%)
Diesel	6,725	14,012	(52.0)	5.6	9.9	Diesel	30,391	62,586	(51.4)	5.7	11.0
MHEV diesel	5,920	9,335	(36.6)	5.0	6.6	MHEV diesel	70,839	80,269	(11.7)	13.2	14.2
Petrol	54,633	71,173	(23.2)	45.8	50.3	Petrol	186,686	241,703	(22.8)	34.8	42.6
MHEV petrol	18,590	16,518	12.5	15.6	11.7	MHEV petrol	73,474	62,009	18.5	13.7	10.9
BEV	12,899	9,152	40.9	10.8	6.5	BEV	77,064	40,931	88.3	14.4	7.2
PHEV	6,449	9,600	(32.8)	5.4	6.8	PHEV	36,210	36,213	(0.0)	6.7	6.4
HEV	13,951	11,793	18.3	11.7	8.3	HEV	62,063	43,397	43.0	11.6	7.7
TOTAL	119,167	141,583	(15.8)			TOTAL	536,727	567,108	(5.4)		

Source: SMMT

Source: SMMT

UK public EV charge points

- ◆ According to Zap Map, 1,213 public charging devices were installed in the UK in the last 30 days.
- ◆ This brings the total to 31,507 devices, with 52,804 connectors, across 19,707 locations.
- ◆ The UK government has set a new target to have 300,000 public charge points by 2030.



Source: Zap Map, as of 5 May 2022

Used EV residual values

- ◆ April 2022 data from Auto Trader showed that average prices in volume¹ EVs decreased 1.1% in the month to £25,848, but were up 29.0% year-on-year like-for-like.
- ◆ Premium² brand EVs prices were broadly flat in April at £50,511, but were up 19.7% year-on-year like-for-like.

Average volume¹ used EV price: **£25,848**
 Month-on-month: **-1.1%**
 Year-on-year: **+29.0%**

Average premium² used EV price: **£50,511**
 Month-on-month: **0.0%**
 Year-on-year: **+19.7%**

¹ Volume EV brands categorised as: Ford, Volkswagen, Vauxhall, Peugeot, Nissan, Citroen, Kia, Hyundai, MG, Renault, SEAT, SKODA, Honda, Toyota, Fiat, Suzuki, Mazda, Mitsubishi, Smart, Dacia, Jeep, Subaru

² Premium EV brands categorised as: Audi, BMW, Mercedes-Benz, Land Rover, Jaguar, Tesla, Volvo, MINI, DS Automobiles, Lexus, Abarth, Alfa Romeo

Source: Auto Trader

EV news headlines (click to follow link)

- [Half of all new UK cars should be electric by 2028, says government](#)
- [VW sells out of electric cars in Europe and US](#)
- [UK van registrations fall -29.1% YoY in April 2022 amid supply challenges as manufacturers continue green delivery](#)
- [UK targets tenfold increase in electric vehicle charge points](#)
- [Carmakers embrace greener vision in wake of Dieselgate](#)
- [High-speed charge point rollout keeping pace with electric vehicle sales in 2022](#)
- [Renault considers 2023 listing for electric vehicle unit](#)
- [Gridserve opens first compact electric forecourt for charging](#)
- [Volkswagen Group and bp launch strategic partnership to roll out ultra-rapid charging across Europe](#)

Global EV penetration

- Most countries saw a decline in EV penetration in Q1 2022 vs Q4 2021. A similar seasonal dip was seen between Q4 2020 and Q1 2021. OEMs reportedly prioritise EV sales at the end of calendar years to meet emissions targets and regulations.
- Norway comfortably has the highest EV share of total sales (90.1% in Q1 2022), with Sweden (53.6%), Finland (34.4%), and the Netherlands (28.5%) having the next highest EV penetration rates.
- The share of BEV and PHEV sales in the UK in Q1 2022 (22.5%) exceeded the EU (18.8%) and France (19.9%).
- Quarterly US data is not readily available. [ING estimates](#) that 4% of US car sales in 2021 were battery electric.

Source: ACEA, CAAM, IEA, BloombergNEF

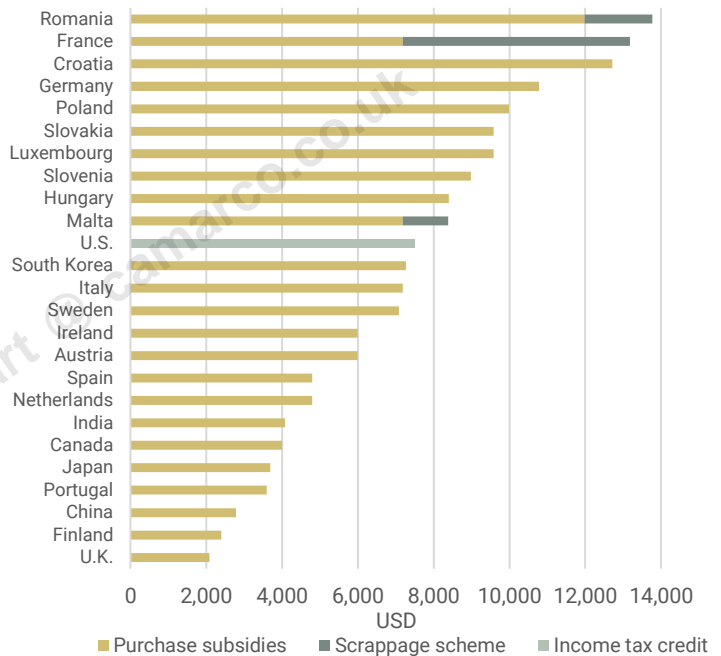
BEV and PHEV share of total new car registrations (%)

	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022
Norway	82.9	82.0	83.1	88.5	90.2	90.1
Sweden	42.0	35.6	44.7	47.0	55.9	53.6
Finland	22.6	25.9	30.8	28.7	39.8	34.4
Netherlands	46.1	13.6	24.1	28.9	47.9	28.5
Germany	21.7	21.8	23.1	26.4	33.7	24.2
UK	17.1	13.7	15.2	19.7	28.2	22.5
France	15.5	14.0	17.2	19.1	23.7	19.9
EU	16.5	13.9	15.9	18.9	24.5	18.8
China	8.3	9.6	13.0	18.7	19.5	18.5
Spain	7.8	5.7	6.6	8.6	10.4	10.8
Italy	7.2	6.6	8.8	11.5	12.7	9.1
US (est.)					4.0	

BEV purchase assistance

- The chart opposite is a summary of different countries' subsidies and tax credits (in US dollars) for people purchasing a BEV.
- After another cut in December 2021, the UK's plug-in car grant is now only £1,500 for vehicles under £32,000, ranking it lowest in the chart opposite.
- In the US, the current maximum tax credit of \$7,500 phases out for individual automakers once they hit 200,000 total EVs sold – i.e. it is not available on every make/model.
- This chart doesn't capture other incentives of EV ownership, such as the UK's exemption from London Congestion Charge or Vehicle Excise Duty.
- In Norway, BEV purchases are exempt from VAT and emissions taxes and drivers pay only 50% of road tolls and parking fees.

Source: BloombergNEF



Announced national ICE sale phase-out

- Norway will be the earliest country to ban the sale of new ICE vehicles, in 2025. Ten countries will impose a ban from 2030 onwards.
- The EU has no date for the bloc-wide ban of ICE sales. Certain European cities such as Rome, Madrid and Brussels will phase out diesel cars sooner, to improve air quality.
- The US has no announced national phase-out of ICE sales, although some US states and cities (such as California and Seattle) will be banning petrol/diesel sales from 2030.

Source: BloombergNEF

