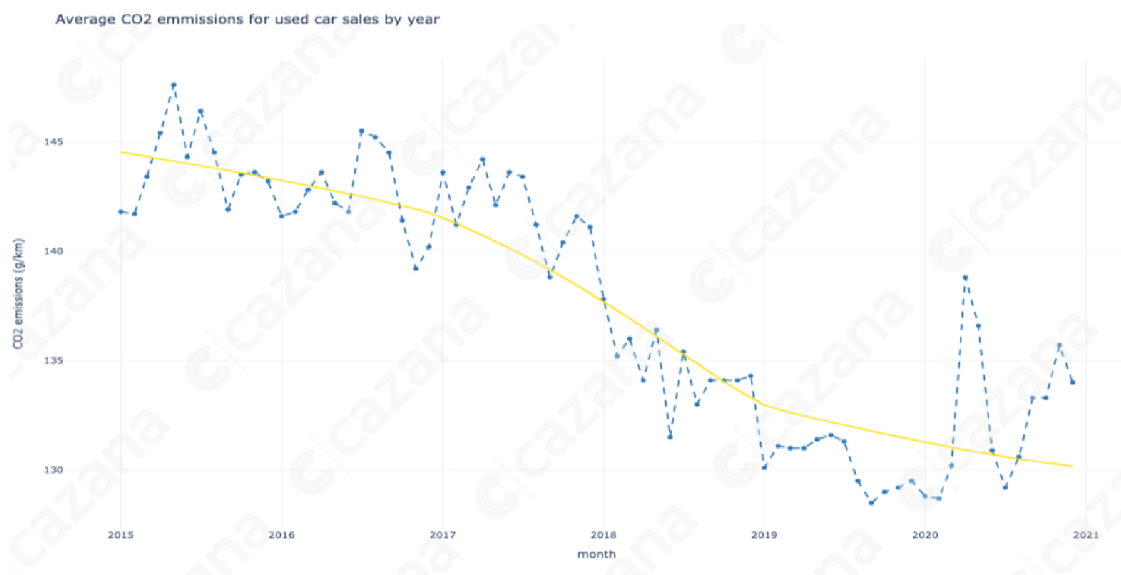


The Road to 2030 and Beyond

Much has been posted on this topic in recent weeks and there is a significant amount of somewhat speculative and often ill-informed commentary in the trade and national press. It is interesting that so many sources feel the need to make representation when there is often little detail given, although perhaps this is unsurprising as migration away from ICE cars to BEVs will be one of the most important events in transportation, engineering and infrastructure history and something everyone wants to lead.

By 2030 consumers will no longer be able to buy an ICE powered car, and by 2035 Hybrid vehicles powered in part by some form of ICE will also be banned. The reason is simple, and that is the survival of the human race and the longevity of the planet. A little extreme granted, but the cut in harmful emissions will have a significant impact on the well-being of people and the world as a whole. The chart below shows how CO2 emissions have been tracked in the UK in recent years: -



Data Powered by Cazana

This chart fairly represents the CO2 output for used cars as they are being sold year on year, and the downward trend whilst positive is not yet good enough. The more worrying aspect is that the average CO2 emission level of sold cars during 2020 started to increase. This data correlates to the increase in older car sales that became common as the retail consumer looked for a transport option that gave better protection from the risk of contracting COVID 19.

The OEMs know that the needle must move swiftly on this and on a global scale and not just in the UK. In the last two weeks Ford, JLR and Volvo have all issued press releases that profess they will be producing all cars with Hybrid options or confirming that they will have stopped ICE production by 2030. Very laudable except, as an industry peer highlighted, this is not news really, merely an acknowledgement of the journey ahead.

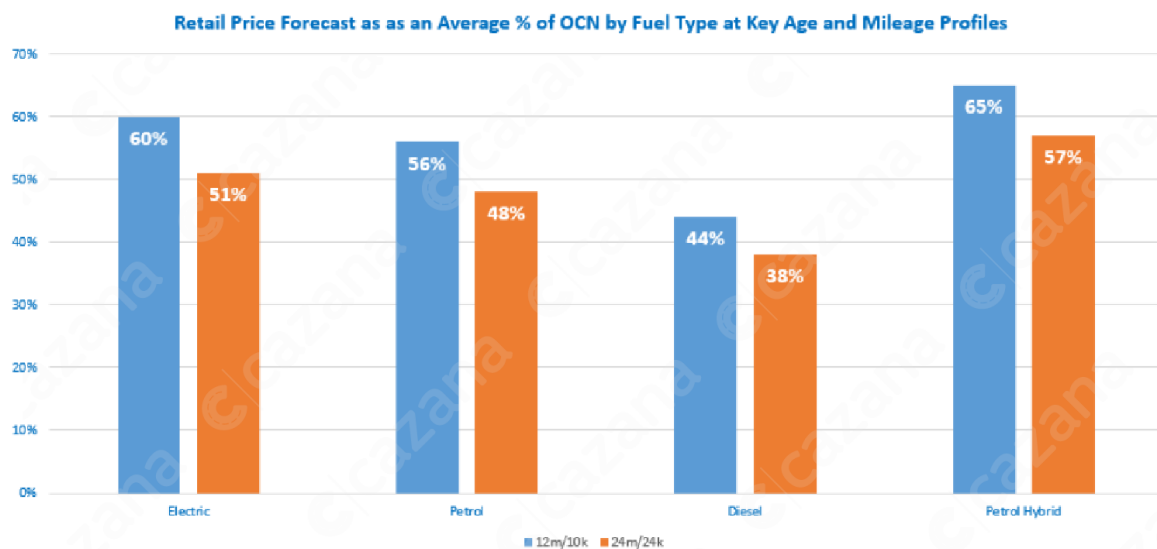
The industry can see what is happening to new car registrations even though the impact of COVID has distorted volumes somewhat over the last year. The February registration figures show the extent of the diesel-powered market devastation with a share of just 12.6% of new cars so far this year. This is

largely as a direct result of the VWgate scandal in 2015 and the subsequent press backlash against the fuel type, even though new petrol-powered cars are just as harmful to the environment. AFV's as a whole take 30.4% of all registrations, although BEVs have taken just 6.9% of the whole market thus far in 2021. This may be an improvement on the 2.9% achieved for BEV sales in the same period in 2020, but it is clear there is a very long way to go.

Some industry sources have released charts forecasting the rate of change between now and 2030, however, it is somewhat early and academic to make any judgement on how adoption may evolve. At the moment the global industry is still struggling with normal production let alone migration to a new propulsion type requiring components that are currently only available in small volumes from various parts of the world. As a further complication to this point, the Rules of Origin ruling off the back of Brexit will play an interesting part in the future development of both technology and the resulting supply chain for the UK.

Aside from the myriad of other issues that will affect both the production and adoption of BEVs and advanced hybrid technology, the industry needs to begin to understand what the future value of these cars will look like, and also the level of retail consumer interest. Without a realistic view of the level of future values, and one based on data and not human decisions steered by OEM market influencing teams, then it will be hard to understand what types of vehicles and technology will retain value, should be produced and therefore what the short and long term running costs will be.

The chart below shows a high-level residual value forecast by fuel type over the next 2 years: -



Data Powered by Cazana

Using the average retail price as a % of OCN across the whole market this chart gives a clear view of the future forecast by fuel type at present. It is interesting to note that despite the obvious shortcomings of the transient stepping-stone hybrid technology, the 12 and 24 month forecasts lead the market. This is since generally speaking the retail consumer understands they are buying an ICE with a small amount of battery power, and they still have the confidence in the engine to back up to whatever battery range the car may have.

BEVs come in second place and the rate at which they depreciate is currently swifter than hybrid to the tune of 5 percentage points in year one and 6 percentage points in year two. The current reason

for this is the rate at which the BEV ranges are changing from technological advantages, whether that be for the battery itself or the software management of the whole package. The total driving range is regularly increasing model by model and as such renders model variants out of date very swiftly and hence a triggering a quicker depreciation rate. This will change in the short term and it is therefore likely that the depreciation curves for BEVs will flatten in the mid-term.

It is only by having a clear and transparent view of the rate of depreciation that the OEMs and the wider industry will be able to properly plan the journey ahead to 2030. The development of sustainable and reliable vehicle solutions is critical to meet the target and reduce pollution. The government will continue to challenge the sector to move faster and it will not be long before taxation incentivization will help to encourage consumers to make the shift to BEVs sooner rather than later but the product, finance packages and running costs need to be there for that to happen. At the same time as understanding what the road to 2030 will become, the view of the following 5 years is also essential. It will be fascinating to see just how quickly the ICE engine completely disappears.

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