The Big Read Electric vehicles

Can European carmakers accelerate electric transition?

New EU emissions standards are designed to wean consumers off larger, petrol-fuelled cars

Peter Campbell in London DECEMBER 18 2019

When Blas Arambilet tried to buy an electric car in April, something strange happened. Months after ordering a white Kia e-Niro from his local Barcelona showroom, he received a call from the dealership.

Kia could not deliver the car this year, a salesman explained, because the company needed to book the sale in 2020 to help meet tough new targets for CO2 emissions.

While not illegal, this incident demonstrates the contortions carmakers are planning to perform to pass Europe's strict emissions rules, which come into force at the turn of the year and require them to lower average CO2 output to 95g per kilometre.

To hit the targets, they must sell a large number of electric cars that the vast majority of motorists — aside from Mr Arambilet — have so far shown scant interest in purchasing.

Kia e-Niro proceed model car at the Paris Motor Show at Paris Expo Porte de Versailles last year © Nurphoto/Getty

“There is going to be an imbalance between what consumers want and what manufacturers want to sell them,” says Robert Forrester, chief executive of dealership group Vertu, which operates 123 retailers and garages in the UK.

Despite Mr Arambilet’s enthusiasm, vanishingly few buyers are turning to electric cars, which accounted for less than 3 per cent of the cars sold in Europe in 2018, and are still clustered in countries that offer generous incentives.

Instead, consumers are shunning diesel in favour of petrol, and switching to heavier sports utility vehicles. The result is that, since 2017, CO_2 emissions from cars have been rising across the EU.

“The industry has been slow to accept the magnitude of the challenge,” wrote Max Warburton, an auto analyst at Bernstein. “It’s just stunning how much is going to have to be achieved in the next 18 to 24 months.”

If the industry sold exactly the same mix of vehicles in 2021 as it did last year, carmakers together would face penalties of €25bn, he calculates.

The Stadthalle venue on the first day of the model case proceedings in Germany against Volkswagen over its cheating in emissions tests involving diesel cars, in September in Braunschweig, northern Germany © Ronny Hartmann/AFP/Getty

The impact of the carbon clampdown will therefore be felt at forecourts across the continent, and by a wide body of consumers and businesses that will be encouraged to buy electric cars, whether they want to or not.

"The regulation is not aligned with what is happening in the market," says the head of compliance at one global carmaker. "To comply, we have to get out of step with the market."

The impact of the new standards runs deeper than the array of vehicles lined up on a forecourt. For Europe's carmakers, an industry that supports close to 14m jobs, the change also has profound, business-shifting implications.

The higher input costs of electric vehicles mean they make less profit than "traditional" ones — if they make any at all — leaving carmakers with less money to funnel into new models.

"Each time I'm selling an EV I'm making much less money than selling anything else," says Carlos Tavares, chief executive of PSA, the French carmaker behind Peugeot, Opel, Citroën and Vauxhall. "I would therefore like to limit the number of EVs to a certain level."

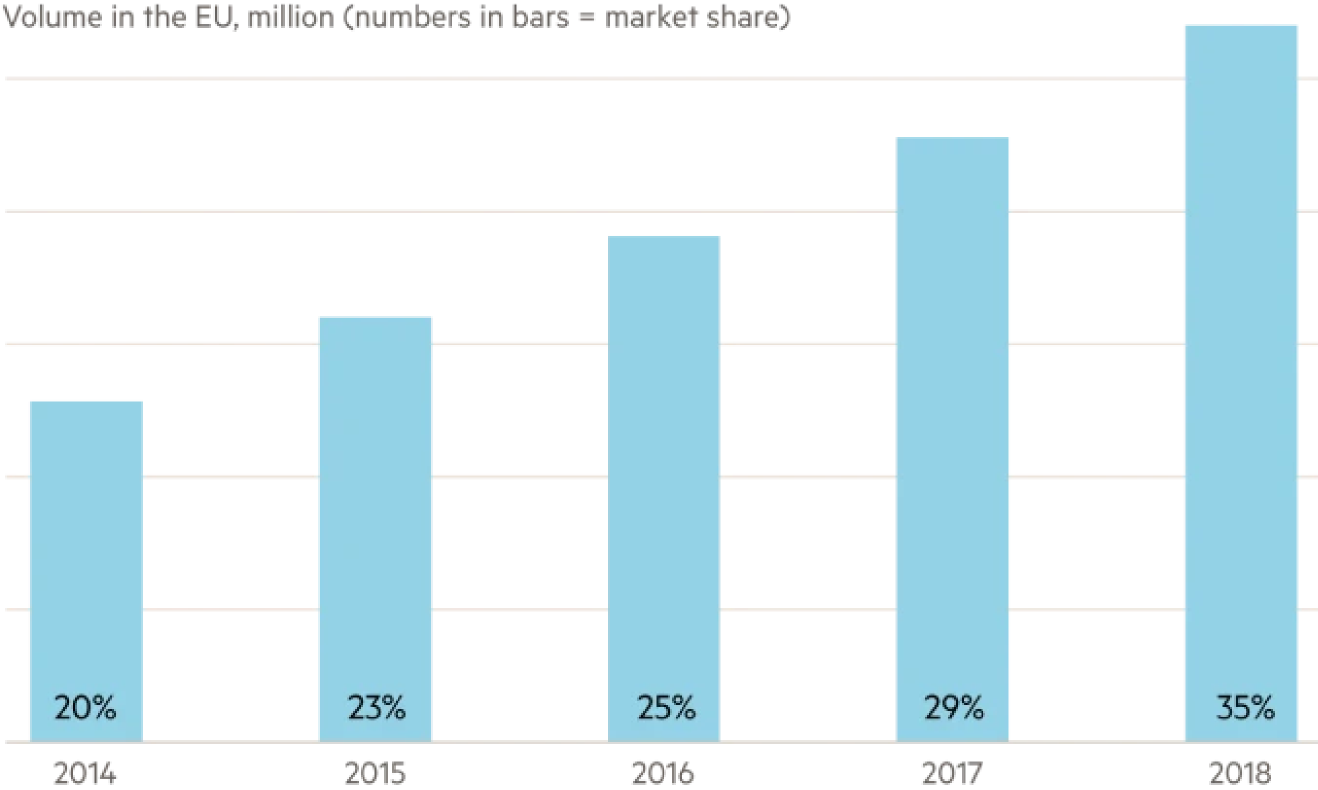
Theoretically, carmakers could meet the regulations simply by withdrawing their most polluting models and selling battery cars at exorbitant discounts.

But this would mire them in losses, at a time when manufacturers are already trying to cut costs in the region. Within Europe alone, Ford plans to axe 7,000 jobs, Daimler 10,000 and Volkswagen's Audi another 10,000.

As well as selling less profitable cars, carmakers are also seeing a reduction in their total sales, says Philippe Houchois, an auto analyst at Jefferies. He forecasts a 4 per cent decline in EU sales next year.

European consumers have become SUV enthusiasts

Volume in the EU, million (numbers in bars = market share)



Source: JATO Dynamics

"Unless there's a generalised support to the industry, you will probably have a volume recession because you are forcing consumers to buy cars they are not familiar with," he says.

Fears over additional electric spending and squeezed margins have already led to consolidation across the industry. PSA and Fiat Chrysler are merging to pool investments, while Ford and Volkswagen have formed an alliance to collaborate on new technologies, including some electric systems.

"For mass market carmakers, electrification looks an existential threat and may require a total redesign of industry structure," says Mr Warburton.

Each carmaker faces its own CO2 target, based on the weight of its vehicles. A business selling smaller cars such as PSA therefore has a lower CO2 target than a company with a heavier average vehicle, such as Mercedes-Benz owner Daimler. The targets for each company vary from around 91g/km to just over 100g/km.

Potential fines for missing these are punishing. Every gramme over the target incurs a penalty of €95 — multiplied by the number of cars sold in Europe. For leading groups such as Volkswagen or PSA, the bill could easily run to ten figures.

Industry leaders also fear that if they miss targets they will face a public backlash in European societies which take environmentalism seriously.

“Right now, we [the industry] are considered as being crooks,” says Mr Tavares. “I don’t think there is any long-lasting, sustainable position in the society if we just do not care about contributing to fixing the global warming issue.

He adds: “This is not a trade-off. This is a precondition to deserve to be in the market.”

Next year’s rules include some concessions, such as the exclusion of 5 per cent of sales from the calculations, and electric cars counting as double. In 2021 the rules tighten, with all sales counted and battery vehicles losing some of their added weighting.

Carmakers are also allowed to form “pools” where weaker and stronger players team up to submit a single score. Fiat Chrysler has pooled with Tesla.

(From L-R) Michael Lohscheller, CEO of Opel, Juergen Klopp, manager of FC Liverpool, and Carlos Tavares, CEO of Groupe PSA, stand next to an Opel Corsa E electric car at the 2019 IAA Frankfurt Auto Show © Sean GallupGetty

Carmakers have known about the rules since they were established in 2008. But the ground has shifted under the wheels of the industry, leaving manufacturers scrabbling for imaginative ways to meet the targets.

Diesel sales, a longtime pillar for many of the manufacturers because it emits a fifth less CO2 than petrol, have fallen swiftly after the exposure in 2015 of VW’s widespread cheating on diesel emissions tests, as well as bans in many cities on the fuel.

London has excluded most older diesel cars using a charging zone, while Bristol plans to ban all diesel cars in some central areas. Several German cities including Hamburg, Berlin and Stuttgart — the home of Porsche and Mercedes — have imposed limited bans.

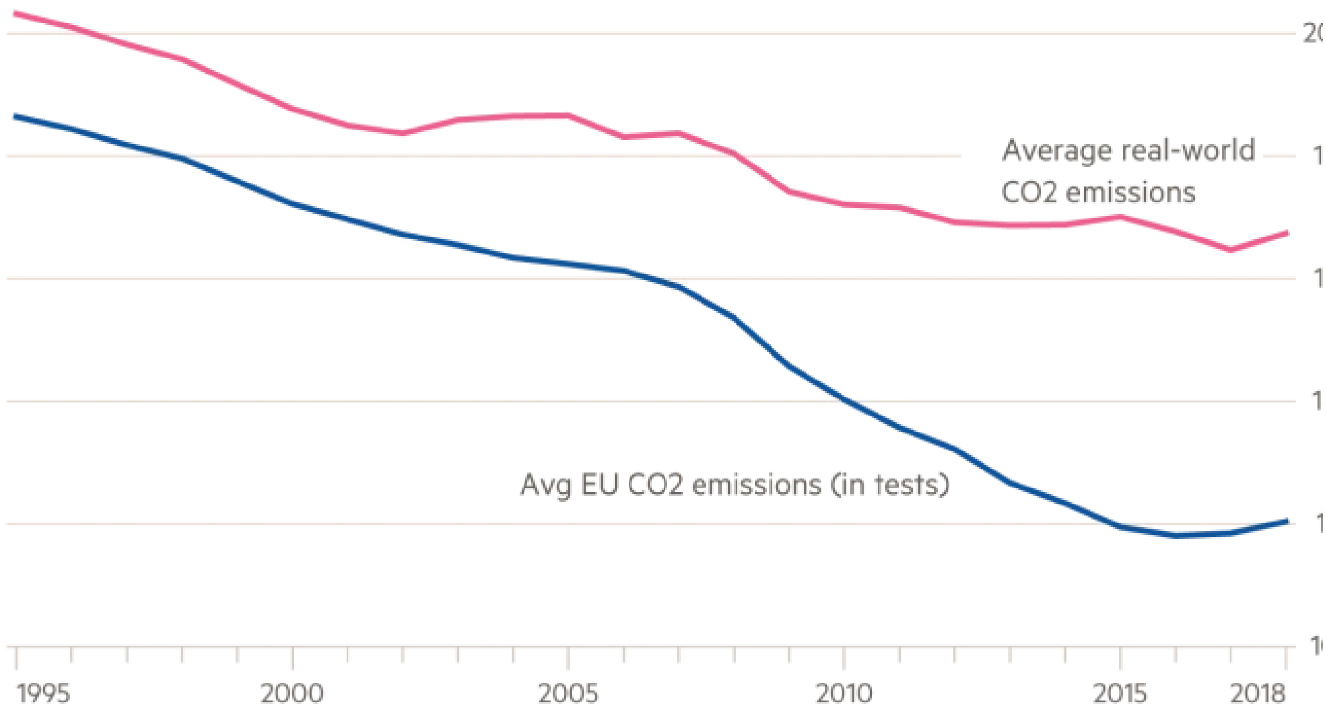
Even though many bans still permit the use of the latest diesel models, many confused motorists are shunning the fuel.

“Three quarters of searches by fuel type used to be for diesel,” says Ian Plummer, commercial director of UK-based online marketplace Auto Trader, which attracts 55m views a month. “That has fallen to a quarter within two years, and it's still falling fast."

Industry executives privately fume that green groups which espoused diesel for its climate impact now reject the fuel over air quality concerns. They also criticise governments and local authorities for being slow to install the electric charging stations needed to convince consumers to take the plunge and switch to battery vehicles.

Emissions from new cars have steadily declined

Grams of CO2 per km



Source: Transport & Environment

Yet the fuel mix is only part of the problem. The increasing popularity of American-style SUVs has led to family saloons being replaced by high-riding gas-guzzlers. They now account for 40 per cent of the market.

"Since 2013, SUVs' sales impact on CO2 emissions is 10 times that of the decline in diesel," says Julia Poliscanova, director of campaign group Transport & Environment.

She argues that carmakers pushed SUVs because they make more profit than traditional vehicles — while consumers have become used to their elevated seating positions and practicality.

All this leads carmakers to consider how they can negotiate the targets while keeping a profitable sales line-up intact. The first mainstream battery-powered vehicles from Audi, Jaguar, Mercedes and Ford are all SUV models, while they also aim to improve the efficiency of petrol-driven cars.

Two years ago, Mr Tavares told PSA technicians to consider diesel — at the time the centrepiece of the company's engineering arsenal — as "dead".

Sitting in his office at the carmaker's headquarters on the outskirts of Paris, Mr Tavares clasps his hands around his neck and emits a high-pitched squeak followed by a strangled choking noise, in an attempt to illustrate their reaction.

Shareholders look at cars during Volkswagen's annual shareholders' meeting in May in Berlin © Carsten Koall/Getty

"These are the most expert diesel powertrain engineers of the world — they would have hit me if they could."

In its worst-case scenario, PSA expects diesel sales to fall to 10 per cent of its mix, from around a third currently. Electric and plug-in hybrid cars will be at most 7 per cent.

It therefore needed large efficiency gains in its petrol engines.

The Opel Astra — a popular family car sold under the Vauxhall brand in the UK — has reduced its CO_2 output by 21 per cent by switching to a new three-cylinder PSA engine, replacing its four-cylinder forebear supplied by Opel's previous owner, General Motors. Social media adverts flag the car as "Astra light", as though marketing a low-calorie beer.

At the same time, PSA has reorganised its dealer bonus scheme from the number of cars sold to one based on the carbon impact of those vehicles.

The result of these changes is that the group, once regarded as a laggard, is now expected to clear the emissions hurdle without much fuss.

Other carmakers are planning to revamp dealer incentives. For years, Nissan dealers were incentivised not to sell its Leaf electric car — the model was the only car in the line-up that did not feed into their bonus targets. That deterrent is set to be dropped in the new year, according to several retailers.

For some manufacturers, the targets are still challenging, and cannot be met even by a big rise in electric sales or by gerrymandering dealer targets.

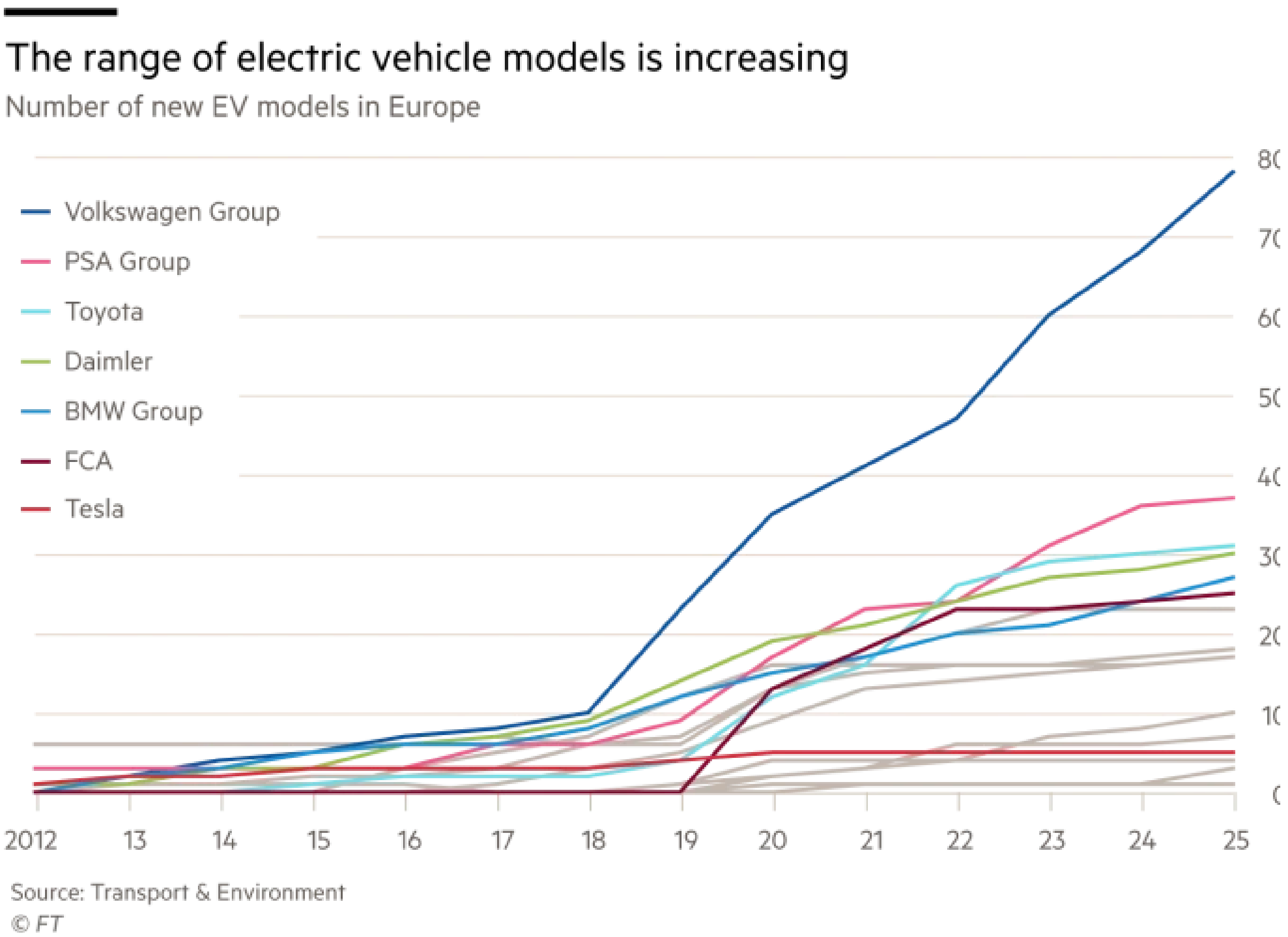
Last month Daimler revealed a gulf between its current emissions of 138g/km and its target of roughly 100g/km.

“What we can’t control is buyer behaviour, but we have the technologies within our portfolio to get within target range,” chief executive Ola Kallenius told investors in London last month.

The German group is expected by many dealers to cut production of its most polluting models. In its crosshairs is the Mercedes AMG range, its highest-specification models that have supercar acceleration and the body of a family saloon. A reduction of 75 per cent in the availability of some models within the AMG range is expected by several retailing executives, who spoke on the condition of anonymity.

This poses a serious profit risk. While it never breaks out the division’s earnings, AMG is believed by analysts to be a significant contributor to the bottom line. “If they kill off AMG it’s a catastrophe for profitability,” says Bernstein’s Mr Warburton.

Even among its mainstream line-up, the company is expected to restrict sales of 3-litre engines in its smaller and medium-sized vehicles, pushing consumers towards less powerful models. It has also delayed the US launch of Mercedes’ new electric SUV, the EQC, to help focus on European sales next year.



This still may not be enough. Several analysts do not rule out Daimler paying another manufacturer to join its pool, such as Toyota, the Japanese group that is on track to outperform its targets because of its high quota of hybrid cars.

Mazda, which is already pooled with Toyota, plans to axe some versions of its MX-5 sports car, while telling retailers to expect a 20 per cent reduction in sales in 2020, according to several dealers.

Another group playing catch-up is Ford, which is not due to begin selling any fully electric models in Europe until the end of next year.

Instead, it is installing small 48v batteries in its cars to turn them into "mild hybrid" vehicles that can make fuel savings of about 10 per cent, for significantly less cost than turning them into fully fledged electric vehicles, says Stuart Rowley, Ford's European president.

But EV advocates maintain that the market is nearing an inflection point, where demand for battery cars explodes. Every carmaker plans to launch a fully electric vehicle within the next 12 months.

"Most people tend to go with one brand," says Ms Poliscanova at T&E. "Once they see the company they trust selling electric cars, they will buy them."

The head of compliance at another carmaker agrees that consumers will dictate the direction of the market. "Manufacturers can invest in all the technology they like," he says. "At the end of the day, the wild card is always the customer."

EU makes concessions to smooth bumps in the road

While the new rules on carbon dioxide emissions are onerous, regulators have granted some concessions to ease the industry into the new regime.

During 2020, only 95 per cent of vehicle sales are included, giving a window for carmakers to keep selling their most polluting — and often most profitable — models. This window closes the following year, when all sales will count.

A "supercredit" scheme also sees electric vehicles count twice towards the fleet's average emissions during 2020, with their value falling to 1.67 in 2021, then 1.33 in 2022, and back to one in 2023. Many carmakers are expected to use as many credits as they can during 2020, when they count for most. Manufacturers can also only use up to 7.5g per kilometre of total benefit from the EV credits.

Unlike the US, carmakers cannot sell credits to rivals or bank them for the following year, although they can team up in "pools" that allow them to trade credits within the pool.