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The Little Book of EV Myths



EV batteries don't last?
EVs pollute more than ICE cars?
Hydrogen will displace EVs?
EVs cost more to maintain?
and much more...

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The Little Book of EV Myths

There are more myths surrounding electric cars than Elvis Presley. That's the way it feels anyway. Everything from EVs pollute more than petrol cars, the batteries fail after three years, the electricity grid won't cope, they catch fire more than combustion cars and that hydrogen, not batteries, is the future. There's even a new collective noun for all these myths – Misinfo. Electric cars may not be for everybody, but with so many now on our roads, the technology works and has proved reliable for a million UK owners who drive EVs every day.

Many of the current EV myths have taken root on social media because of a lack of proper understanding of the technology of batteries, electrification, and renewables. Many people also see EVs as a threat to their freedoms and there are plenty of very well-funded vested interests who want us to carry on burning fossil fuels. But EVs have also become politicised – a very public, four-wheeled symbol of your personal politics. Both in the U.K and the U.S.A there's a cultural war over electric cars with political parties using them as a wedge issue to divide voters between left and right. Electric cars will be the biggest energy disruptor of this century, so we shouldn't be surprised why so many dislike the idea of such a profound transition.

This book is meant to settle some of the arguments. We've gathered together some of the most embedded EV myths and used factual and data to set the record straight once and for all. EVs have been on our roads for over a decade now with billions of battery-only miles already travelled so there's plenty of real-world data available. So, if you want to check out the myths, misinformation, and general moonshine that's been written, posted and broadcast about electric cars, this book should make a useful guide.

EVs are more expensive than combustion cars

This is certainly true on many models. But the price difference is narrowing now. A combination of anti-EV stories in the media, the Government's U-turn on the 2030 sales deadline and record high interest rates have dampened retail demand so much that manufacturers are discounting prices on new EVs by as much as 15%. According to research by Auto Trader in November 2023, the once £20,000 price premium between a new Tesla Model 3 and petrol BMW 3 Series has narrowed to just £950 between the base models. Tesla have cut their prices and BMW have raised theirs.

The difference between a new electric VW iD3 and a petrol Mercedes A Class is now down to £4,115. So the differential is narrowing. Second hand values between EVs and ICE are getting nearer to parity now. There's now no difference in price between a three-year old electric Renault Zoe and a petrol Renault Clio. A three-year-old petrol Jaguar F-Pace is now £4,000 more expensive than the equivalent electric Jaguar iPace. Auto Trader also report that electric cars are now the fastest selling fuel type on their site selling in 25 days compared to 31 days for combustion cars. In February 2024, the SMMT reported that sales of used battery electric vehicles almost doubled – up by 90%. In 2024, Market research firm, Gartner, said that by 2027, EVs will be on average cheaper to produce than combustion cars due to lower production costs. Pedro Pacheco, Vice President of Research at Gartner, said: “New technology means BEVs will reach ICE cost parity much faster than initially expected.”

EV batteries don't last

Many think the lithium-ion battery in their phone has the same chemistry as an EV. That's not so. To create confidence in the technology most car makers now offer eight-year, 100,000-mile battery warranties on EVs – that's a greater warranty cover than on an internal combustion engine. In 2023, a study of 15,000 EVs by Seattle battery analysis company, Recurrent Motors – How Long Do Electric Car Batteries Last - found that only 1.5% of batteries in the study had been replaced under warranty. In 2022, Tesla in its Impact Report stated that the battery degradation (loss of capacity) on its older S and X models after 200,000 miles is 12%. Cleevly EV Mobile, an independent electric car repairer in the UK, often shows high mileage EVs on their social media, notably a Tesla Model 3 taxi with 300,000 miles and a Model S with 290,000 miles – both still showing over 85% battery capacity. There's no data currently available anywhere to show persistent, premature, or unexpected failures of EV batteries. Industry experts now widely accept that EV batteries will generally outlast the chassis of the car. And if there was a widespread battery failure problem The Daily Mail would have told us all about it by now.

EVs regularly catch fire

The fire service estimate there are around 100,000 vehicle fires every year in the UK and records for 2022 to 2023 show only 239 EV fires – or 0.24%. The Swedish Contingencies Agency have reported that ‘Petrol and diesel cars are 20 times more likely to catch fire than EVs’. In 2022 611,000 vehicle fires were recorded in Sweden of which 23 were EV fires – or 0.004%. In 2022, the CTO of Thatcham Research – the organisation that tests vehicles for insurers – Richard Billyeald, said in an interview with Forbes Magazine: ‘Our latest research indicates that the risk from a fire from an EV is less likely than for ICE vehicles.’ In America, data from the National Transportation Safety Board reported that battery-powered vehicles suffer 25 fires for every 100,000 sold, compared to 1,530 fires for petrol vehicles. In 2023 US insurer, AutoinsuranceEZ, released a report ‘Gas vs Electric Car Fires (2023 Findings)’ noting that “based on this data electric cars don’t catch fire nearly as much as the news claims.”

EVs pollute more than ICE cars

A persistent myth that EVs aren’t ‘green’ has grown up around pollution from battery mining and manufacture, often in China, where coal-fired electricity grids power car and battery factories. But research by the International Council on Clean Transportation (ICCT) has shown that when driven in Europe, an EV will pay off its carbon debt after around 11,000 miles, after which the full life cycle CO₂ emissions are around three times lower than an average petrol car. A Carbon Brief analysis in 2023, showed that a Tesla Model Y, driven in the UK, would pay off its carbon debt after around 13,000 miles – less than two years’ driving. After 14 years of driving the average petrol car has a carbon footprint of 45 tonnes of CO₂. A Tesla Model Y driven over the same period in the UK would emit 14 tonnes of CO₂ – a saving of 68%. Transport & the Environment worked out that in its lifetime the average combustion car burns a tower of oil barrels 25 storeys high.

EVs shift emissions from roads to power stations

As we write in March 2024, 67% of power to the UK grid came from zero carbon sources. Wind accounted for 49%, gas 15%, nuclear 9%, and solar 9% - the rest a mix of biomass, imports, and hydro. Driving an EV in the UK, charged on a low-carbon grid, or better still on a low-cost evening tariff where only renewable electricity is used, means that the energy emissions produced for the electricity to charge the EV's battery are low. Even in coal intensive grids, Carbon Brief analysed that an EV in China would pay off its carbon debt at 22,000 miles and in Poland at 18,000 miles. In its latest report, The Intergovernmental Panel on Climate Change (IPCC) said: "even with current grids, EVs reduce emissions in almost all cases." Electric cars can reduce emissions even when being charged with electricity from fossil fuel heavy grids because they are roughly four times more energy efficient than combustion cars. Given that 80% of EVs are charged at home, at night on low-cost electricity tariffs from providers that supply certified renewable electricity, the claim that EV use in the UK is just moving pollution from one place to another, is factually incorrect.

Hydrogen will displace EVs

The IEA reports there are 27 million EVs in the world compared to 72,000 hydrogen fuel cell cars. There are only 11 hydrogen filling stations in the UK and just 265 across Europe. The UK Government's Lifecycle Analysis of UK Road Vehicles, says that EVs are 'much more efficient' than hydrogen cars, using only a third of the energy. It's also reported that the lifecycle emission from a hydrogen passenger car would be 60% to 70% higher than an EV, even if the hydrogen was 'green' and made from low-carbon sources. Barriers to widespread hydrogen adoption include a high pressure, low temperature infrastructure, five times more energy to produce than electricity, logistical and storage challenges, and a pump cost that would be significantly more than petrol or diesel if 'green' hydrogen were made at scale. Shell have closed all their hydrogen filling stations in the UK and in California. Car makers are rolling out more and more EV models yet there are just two hydrogen cars currently available to private buyers in the UK market - the Hyundai Nexo and Toyota Mirai. According to the DVLA there are 98 Toyota Mirai and 29 Nexo registered on UK roads. So, they haven't exactly flown out of showrooms. Hydrogen may have a place in heavy goods vehicles, trains, or marine transport, but most experts agree its application to passenger cars is very unlikely.

EVs cost more to maintain

With around 20 moving parts in an EV compared to more than 2,000 in a combustion car there are less friction facing parts and therefore less components to fail or replace. No spark plugs, oil, timing belts or chains, exhausts, particulate filters, or clutches means that the total cost of ownership of an EV is significantly less than an ICE car. Tusker Direct, a UK leasing company with 16,000 EVs, estimates that their EV maintenance costs are 30% less than ICE. Data from a survey by BookMyGarage.com in Feb 2023 showed that 'overall average maintenance bills (including MoT tests, servicing and repairs) cost up to 43% less for EVs compared to other fuel types.' According to a study by American auto media, Consumer Reports, in October 2020 the average cost of maintaining a U.S gas car over a 200,000-mile lifetime was \$9,200, while for an EV over the same distance it was \$4,600 – a 50% saving. The data we have now shows that EVs are cheaper to maintain than ICE

EVs have short ranges

According to EV charging provider, Gridserve, the average real-world range of an EV in the UK in 2023 is 219 miles “meaning that the average motorist will be able to drive for two weeks on a single charge”. The Society of Motor Manufacturers and Traders (SMMT) agree, with their average figure slightly higher at 236 miles. The latest models with improved battery chemistries have much higher ranges with the Polestar 3 claiming 379 miles, the Polestar 2 406 miles, and the latest Tesla Model 3 at 391 miles. The highest range EV in the UK is currently the Mercedes EQS. A large 107.8 kWh battery pack and low drag coefficient means that the EQS can cover a claimed 458 miles on one charge. It's important to say that these are all WLTP official battery range figures and – like combustion cars – will vary in real-world driving and colder temperatures. Research from data provider, Cap hpi, shows that EVs are now covering similar annual mileages as combustion cars. Just 743 miles separates the average annual mileage of the two fuel types. An average of 8,292 miles are driven annually by EV owners compared to 9,035 by petrol and diesel owners. Longer range batteries and better charging infrastructure are responsible for the increase in yearly average EV mileages.

There aren't enough critical minerals in the world for EV batteries

A 2023 paper in Sustainability by Numbers reported that the world has known reserves of 88 million tonnes of lithium: 'enough for our electric vehicles, decades into the future'. The report also noted that 'known feasible lithium reserves' have risen from 4m tonnes in 2008 to 22m in 2020, as more exploration identifies more commercially viable deposits. We still can't accurately say exactly how much available lithium there is in the world as its exploration has been relatively recent. The Energy Transitions Commission 2023 report stated that battery designs and improved electro chemistry have reduced future cobalt needs by 50% in just five years. 50% of Teslas now use no cobalt and nickel-free LFP batteries are now being used in 40% of EVs, up from 7% in 2019. The ETC also estimate that by 2040 over 50% of lithium used in batteries could come from recycling. It's also worth noting that cobalt has been used to refine petrol and diesel for the last 25 years – plus the batteries in phones, laptops, and tablets. Most of Europe and America's car, computer and chip manufacturers are members of The Fair Cobalt Alliance to ensure the cobalt they use comes from audited sources that never employ child labour. As battery chemistries improve – particularly solid state – and new materials like silicone are used instead of graphite, the need for critical or rare earth minerals will reduce dramatically.

EVs lose much more range than petrol cars in winter

EV batteries do lose driving range in freezing temperatures but so do combustion cars. In 2020 the Norwegian Automobile Association tested 20 EVs in winter conditions and found that on average EVs lose up to 20% of range at temperatures between 0 and 2 degrees. The Nissan Ariya performed best with a 16% loss of range. The latest generation of EVs now have heat pumps that speed up battery heating to reduce low temperature range loss. But, according to tests done by the US Department of Energy, in low temperatures the average gasoline car also loses 15% fuel efficiency and for shorter trips (before the engine has warmed up) the average increase in fuel consumption was 20%. Range loss in sub zero temperatures will also depend on driving style.

The mining of materials for EV batteries is very bad for the environment

While all mining and drilling for energy is bad for the environment, we need to put those global emissions and pollution into context. According to the Energy Transition Commission's latest report – Material and Resource Requirements for the Energy Transition – published July 2023 – the cumulative global emissions of CO2 and other greenhouse gases from battery mining and production of solar panels and wind turbines over the next 30 years will add up to between 15 to 35 gigatonnes of CO2. This should be compared to the 40 gigatonnes of CO2 from global fossil fuel energy extraction that's emitted every single year. In 2018 the Intergovernmental Panel on Climate Change (IPCC) reported that 89% of global emissions come from fossil fuels. Attempting to argue that emissions from mining for battery minerals could possibly exceed the global emissions from exploration, drilling, extracting, shipping, refining, transporting, distribution and burning of fossil fuels is a bit of a stretch – even for a very hard-core EV doubter.

Charging an EV from the UK grid where the electricity is created by burning gas makes no sense

According to the National Grid, in the first quarter of 2023, British wind farms created more electricity than was created by burning gas. Today, as we write this National Grid ESO shows that 64% of the GB generation mix coming into the grid was zero carbon. It's also worth remembering that according to Zap Map 80% of EV drivers charge at night on low-energy tariffs and most of the electricity used during low night-time tariffs is certified by electricity suppliers to be generated by renewables. Therefore, the majority of electric cars in the UK are charged not using coal or gas, but by electricity generated by renewable sources like wind, solar, biomass, hydro and nuclear.

Taking away the right to drive a diesel is a loss of freedom

Nobody has ever threatened to take away the right to drive a petrol or diesel car. There will be combustion cars on our roads for the next 50 years – possibly longer. You will still be able to buy, sell, swap, trade and drive used combustion cars as long as there's fuel to power them. What you won't be able to do is to buy brand new combustion cars and vans after 2035 (or 2030 if a Labour government reverses the cut-off date). A surprising number of people think that the end of the sales of new combustion cars and vans also applies to used ones and that they wouldn't be able to drive used combustion cars on public roads after 2030. In October 2023 Auto Trader ran a survey that showed that 7 out of 10 thought the 2030 sales ban wasn't only new cars but included used ones too. The Government got its messaging badly wrong on the 2030 new sales cut-off which confused many and helped create a culture war over EVs. So, here's the bottom line – don't worry. You can drive your petrol or diesel car for as long as you want. Nobody is going to take it away.

EV batteries run out of power and break down

In May 2023, the AA reported that the percentage of EVs 'out of charge' to which they were called out during the year was 2% – or a total of 135 EVs. AA President, Edmund King OBE, said "our data on 'out of charge' clearly shows that charging anxiety doesn't match the reality." Year to date in 2023 the AA has responded to 39,109 EV breakdowns of all types which is a total of 2.86% of their entire breakdown call outs – including petrol and diesel vehicles. They also report that 45% of breakdown calls from EV owners are for punctures and 12v batteries. This data would suggest that electric cars have significantly fewer roadside breakdowns than combustion cars. This is another of those counter-intuitive questions you need to ask yourself. If I'm being told that EVs break down often and are running out of battery regularly, how many have I actually seen in trouble on the roadside or hard shoulder?

The car in the Luton car park fire was an EV

Despite Andrew Hopkinson, chief fire officer at Bedfordshire Fire and Rescue Service, making a public statement confirming that the vehicle that started the Luton airport car park fire was a diesel and not a hybrid or electric car, this myth is still firmly embedded. Mr Hopkinson said on record: “It was not an EV. This was a diesel-powered vehicle”. There is even camera phone footage on the internet of a red 2014 Range Rover Sport actually in flames in the Luton car park and shows it as obviously the first car to catch fire, surrounded by fire extinguishers, and not in a parking space, but abandoned, burning in one of the car park lanes. Despite all this confirming evidence that it wasn't an EV, there have even been many comments on social media that the Range Rover was definitely a hybrid and that the Bedfordshire Fire and Rescue – and even the Government – are involved in a huge cover-up.

The choice of new EV models is very poor

Five years ago, there were only 20 electric cars on the UK market, now there are close to 100. The Society of Motor Manufacturers and Traders estimate that by 2024 there could be up to 120 plug-in battery cars on sale in the UK. Current prices of EVs range from £7,995 for the Citroen Ami to £98,480 for the Tesla Model X. The choice and cost of new mid-range models has improved with the MG 4 at £26,995, Jeep Avenger at £23,600 and Renault Zoe at £23,585 if paying cash. Experts reckon that prices on new EVs will become cheaper as battery raw material costs fall, car makers offer more discounts in a depressed global market and competition from Chinese automakers puts pressure on European EV list prices. The ZEV mandate will mean car makers must sell more EVs and Chinese companies are already building dealer and parts networks ready to sell and support their new EV imports into the UK. Choice will get better, and prices will fall.

EV tyres cause high levels of particulate pollution

All vehicle tyres wear and leave nanoparticles of rubber in the atmosphere and rubber particulates on road surfaces. The question is are EVs more prone to wearing out their tyres because of their increased battery weight? In 2021 the RAC commissioned a report by Dr Euan McTurk that concluded that tyre wear is determined more by driving style than weight and that fleets found that their EVs wore their tyres down at a 'broadly similar rate to ICE cars'. Anecdotal data from EV owners and high mileage EV taxi firms also report normal rates of tyre wear compared to combustion cars. A recent post by Michael Hamilton on LinkedIn said with some irony: "As someone working in a part of the tyre industry, I can only say that we are waiting to see the massive demand growth this drastic tyre wear will presumably generate...." The CEO of the Prohire Group in the UK said simply: "The tyre wear is the same as the equivalent diesel." Scientific research is certainly needed to properly establish EV tyre particulate pollution. But for context, a Range Rover weighs 2.7 tonnes, and nobody is complaining about the tyre pollution from SUVs.

The electricity grid won't cope

In a 2022 report the IPCC stated: "Decarbonising the transport sector will require significant growth in low-carbon electricity to power EVs." But National Grid ESO says that EVs could actually "support the grid by storing excess generation from renewable sources and giving it back to the grid in times of high demand". It says the UK could "comfortably handle" even an overnight switch to EVs, because of a fall of around 16% in electricity demand through technological efficiencies over the past two decades. National Grid also says that if the UK switched to EVs overnight "we estimate demand would only increase by around 10%." The company does agree that more work is needed with distribution companies, Government, Ofgem and others to ensure that "the wires, the connections to charge points" are in place to support EVs. The IPCC has also reported that widespread use of smart charging (as recommended by government and fitted as standard to many EVs) where EVs are charged at night during low-demand cycles could cut the impact of peak electricity by as much as 60%. It's also important to realise that peak demand from 80% EV penetration is still 11 years away (six years if Labour reverts to 2030), so National Grid, the Distribution Network Operators, Ofgem and the Government have time to build and improve electricity infrastructure.

‘Heavy’ EVs will collapse multi-storey car parks and bridges

A couple of UK newspapers are largely responsible for spreading this myth with headlines from The Telegraph like: “Heavy batteries in electric vehicles leave multi-storey car parks at risk of collapse.” At the outset it needs to be said that we can find no evidence that any bridge or multi-storey car park has collapsed (or even been damaged) because of heavy EVs. But if you read the articles closely there are lots of ‘ifs’, ‘could’, ‘possible’, ‘at risk’ and ‘the potential for’ but without providing any factual evidence. A major car park association told us that this myth originated when a journalist approached one of their engineers and asked the hypothetical question about EV weights in relation to older car park construction and his responses were in a hypothetical context with lots of qualifications. He categorically did not say that there had been any collapses. So, here’s another counter-intuitive myth when you consider how many heavy SUVs already park in multi-storeys (particularly 1960s ones in London) and how many multi-axle 44-tonne HGVs use UK roads and the damage their weight already does to road surfaces and infrastructure. Not many HGVs in multi-storey car parks, admittedly, but there are plenty of two-tonne SUVs that park in multi-storeys. The assumption is that when EV adoption grows the collective weight of EVs travelling across bridges could bring them tumbling down. But one 44 tonne articulated lorry is still the equivalent of around 22 EVs so that’s a lot of cars traveling across one bridge at a time. The Telegraph also ran a story about heavier EVs potentially causing more pothole damage on UK roads, citing research by the University of Leeds. The university rapidly distanced itself from the story saying: ‘In a poorly worded article, people are assuming the research about potholes is ours which is not the case.....The journalist has been told: “This is not a University of Leeds analysis, and we have requested a correction.”’

Old EV batteries will be an environmental hazard

Spent EV batteries are far too valuable to be chucked away. Look at the price of old EV batteries on eBay and you’ll be surprised how much they sell for. £3,000 for a Leaf battery and up to £10,000 for a Tesla Model 3 pack. EV batteries can be recycled again and again to make more for EVs and for static energy storage batteries. Cobalt, nickel, manganese, and lithium are all highly prized minerals and 95% of the minerals in EV batteries can be extracted in the recycling process ready for use as cathode-active materials by car makers. The global EV battery recycling industry is estimated to be worth \$6.8 billion by 2028, according to data provider, Statista. There are plenty of EV battery recycling companies both here and in the USA who

can't get enough spent EV batteries to satisfy demand. And there's another irony. EV batteries are lasting much longer than anybody expected which is another reason why their values are so high. So, don't worry: you won't be seeing any dumped EV batteries in landfill anytime soon.

Insurance for EVs is more expensive than combustion cars

There's definitely some truth to this, but Auto Express magazine did a study in 2023 and found that premiums for EVs were on average between 10.4% to 20% higher than combustion equivalents, but some Teslas cost significantly more to insure than a similar Audi or BMW ICE, due to their higher parts costs. According to the Association of British Insurers insurance for all cars, irrespective of fuel type, has increased in 2023/2024 by 25%. Vehicle theft is up, so is claim inflation and delays in part supplies (still a hangover from Covid) is increasing the costs of replacement car hire. We've spoken to insurance brokers and EV specialist repairers, and they tell us that the reasons for higher EV premiums is broadly a lack of understanding by insurers of battery technology, repairability, and a shortage of trained EV repairers. Used parts from damaged EVs sold by dismantlers can command high prices, so there's evidence of some insurers writing off EVs for relatively minor damage to the battery pack. The greatest irony of all, is that some insurers appear to have bought into some of the myths that we've been talking about in this book and are concerned over the incidence of EV fires, battery degradation and complicated repairs. A classic example of how misinformation about EVs is influencing perceptions among both industry and consumers and potentially holding back adoption. But we all agree that EV insurance premiums definitely need to come down in the future.

Synthetic fuels make more sense than EVs

Synthetic, or E-fuels, are made by combining CO₂ with hydrogen and can be used in conventional combustion engines. If they're produced with 'green hydrogen' they can reduce carbon emissions. But, according to the IPCC they are "up to three times more expensive than conventional fossil fuels" and would need as much as five times the electricity to produce compared to the amount of electricity used for EVs. Transport & Environment calculated that the lifecycle emissions from an EV in 2030 would be 53% lower than for a combustion-engine car powered by synthetic fuels. The IPCC said: "Given these high costs and limited scales, the adoption of synthetic fuels will likely focus on aviation, shipping and long-distance road transport segments, where decarbonisation by electrification is more challenging."

It's worth noting that in 2023 German automakers lobbied the EU on its consultations for a 2035 ban on the sale of combustion cars and insisted on an exemption for cars running on E-fuels for the legislation to pass. This was aimed as a legislative intervention for the industry to continue building ICE engines that could run on synthetic and liquid fuels. The ICCT suggests that with current cost data E-fuels could cost around 40% more than petrol and diesel with a potential pump price of £2.50 a litre. Transport & Environment calculated that filling a 75-litre fuel tank with synthetic fuels could cost up to £200. There is an argument that these fuels could help partly decarbonise the existing combustion car fleet without consumers having to switch to a more expensive EV, but until E-fuel prices come down, this appears an expensive, and only partly a low-carbon, option.

EV sales have slumped

According to the SMMT, in January 2024 the millionth battery electric car hit UK roads. 20,935 EVs were registered in January – a rise of 21% year-on-year. The market share for EVs also grew year-on-year to 14.7% with a total registered since 2002 of 1,001,677. Fleet and business demand for EVs grew by 41.7% in January. Private sales of EVs are down by 25.1% while private sales of all fuel types fell by 15.8%. The fall in private car sales shouldn't surprise us though. Consumers are struggling against multiple economic and geopolitical headwinds – a global recession, 14 interest rate hikes since 2021, declining disposable income and confidence. There's now a chasm between fleet and private new EV sales that's being made worse by a lack of subsidies or tax breaks for retail buyers, the change of the 2030 cut-off sales date for combustion cars and vans to 2035 and – as this book explains – a blizzard of anti-EV narratives across social media, print, web, and TV. No wonder private buyers have decided to wait.

The used EV market shows a different story. Sales of second-hand EVs almost doubled in January, up by 90.9% to a record 118,973 units. Auto Trader puts the rise in used EV sales down to attractive prices and a softening in the supply of electric cars coming on to the market that weakened prices in 2023 by too many EVs going through auctions. Richard Walker, Auto Trader's data and insight director, said: "For the moment we're seeing the stars align for second-hand EVs: greater affordability and rising prices at the pumps is helping make them a more viable alternative to their ICE counterparts."

Conclusion

EV myths and misinformation are out of control. In its 2024 report on EV strategy, The House of Lords Environment and Climate Change Committee noted that there had been ‘a concerted campaign of misinformation about EVs in recent months.’ And that ‘The Government’s concern at the scale of misinformation, however, has not been matched by commensurate urgency in tackling it.’ The use of the words ‘concerted campaign’ aligns with what most of us in the EV world have been saying for a long time, that this isn’t something that’s just happened naturally. It’s an unprecedented and deliberate campaign of misinformation.

We may never know the origins of all this misinfo - or if it’s being paid for - but it’s certainly destabilised the EV market, confused consumers, and frustrated car makers. So, our advice to you is that if you really want to know the truth about electric cars, how they perform and if they could suit your lifestyle (they might not) then don’t take all the myths and misinfo at face value. Talk to one of the million people who are driving around the country in their EVs. They will tell you the unvarnished truth - the positives and the negatives. And ask yourself one final counter-intuitive question: should you really take seriously information about why you shouldn’t buy an electric car that’s been posted, written or broadcast by those who have never owned, driven, or even charged an EV? Think about that one...

The Little Book of **EV Myths**

Useful websites

fullycharged.com, faircharge.co.uk, everythingelectric.show, octopusev.com, electrifying.com, justgoev.co.uk, ev-database.org, drive-green.co.uk, drive-electric.co.uk, insideevs.com, which.co.uk, zap-map.com, autoexpress.co.uk, autocar.co.uk, rac.co.uk/drive/electric-cars

Sources

We'd like to acknowledge the following organisations and companies for their data sources: Auto Trader, The Society of Motor Manufacturers and Traders, Zap Map, Tesla, Transport & Environment, Carbon Brief, International Council on Clean Transportation, Statista, Intergovernmental Panel on Climate Change, AA, Association of British Insurers, Auto Express, National Grid, House of Lords Environment and Climate Change Committee, RAC, Dr Euan McTurk, Energy Transition Commission, Bedfordshire Fire and Rescue Service, Norwegian Automobile Association, Consumer Reports, Recurrent Motors, Forbes Magazine, AutoinsuranceEZ, Sustainability by Numbers, Gartner Research, Tusker Direct, Bookmygarage.com, Edmund King OBE, Prohire, Gridserve, CAP hpi, Thatcham Research, National Transportation and Safety Board.



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