HOUSE OF COMMONS

Transport Committee

Oral evidence: Electric vehicles, HC 742

Tuesday 15 May 2024

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Watch the meeting

Members present: Iain Stewart (Chair); Jack Brereton; Fabian Hamilton; Paul Howell; Karl McCartney; Grahame Morris; Gavin Newlands; Greg Smith.

Questions 43–79

Witnesses

II: Gerry Keaney, Chief Executive Officer, British Vehicle Rental and Leasing Association; Quentin Willson, Founder, FairCharge; David Wong, Head of Technology and Innovation, Society of Motor Manufacturers and Traders; and Stephen Latham, General Manager, National Franchised Dealers Association.

Examination of witnesses

Witnesses: Gerry Keaney, Quentin Willson, David Wong and Stephen Latham.

Q43 **Chair:** Welcome to the second panel in our session today on electric vehicles. Again, for the purposes of our records, I invite each of the witnesses to state their name and position, please, starting with Mr Keaney.

Gerry Keaney: Gerry Keaney, chief executive of the Vehicle, Rental and Leasing Association.

Stephen Latham: Good morning. Stephen Latham, general manager of the NFDA, the National Franchised Dealers Association. We are a trade association with members. All our members are main dealers who sell and service new and used cars and commercials. Around 85% of the dealers in the UK are members, companies such as Sytner, Arnold Clark, Lookers, Brian Currie trucks. Most of my time is spent dealing with policy and operational issues.

Quentin Willson: Quentin Willson, motoring journalist, long-term EV driver and founder of the campaign group, FairCharge.

David Wong: David Wong, head of technology and innovation at the Society of Motor Manufacturers and Traders, SMMT.

Q44 **Chair:** Thank you. We are very grateful to all of you for giving us your time this morning. I will start by asking about the Government's phase-out dates for the sale of new ICE vehicles. Are they realistic and achievable? If not, what needs to be done?

Gerry Keaney: The phase-out dates are sufficiently far in advance today that, yes, we can say they are achievable. The real issue is not necessarily the phase-out date and moving towards that; it is what we do in the current market this year, next year and the year after.

Our members—we have 1,000 companies in our membership—run 4 million vehicles. We see all of the opportunities, working on all the opportunities that go with the transition to electric vehicles. In the same way, we see all of the challenges today. That is from a rental company perspective, from a leasing company perspective, or from a company like Motability that specialises in selling adapted vehicles. We see a lot of challenges in the market, as we look at 2024, 2025, 2026, which need to be addressed if we are to get on to a trajectory that will make the longer-term objectives achievable. We look forward to talking about some of those issues this morning.

Q45 **Chair:** I will come back to what that might be in a minute. First, I would like to ask the other members of the panel for their answers to the question.

Stephen Latham: Yes, 2035 is achievable, but unfortunately we have set the ZEV mandate to 2030, which is putting manufacturers under a lot of pressure to deliver more electric vehicles to the marketplace. As you know from the figures, around 16% of vehicles sold are electric. The majority of those are going to fleets because there is no incentive for the private buyer. That is what depresses residual values at the moment.

Quentin Willson: It is achievable but it is being held back and will be continually held back by misinformation and disinformation. We will cover those subjects, I am sure, in more detail as we go on. Consumers need to have confidence in electric cars. They need to want to buy them because, if they do not, manufacturers will not sell them. There is a self-fulfilling destructive circle where we do not get consumer interest to drive the market forward. As a campaign group, we encountered one tabloid newspaper that had 160 continuous anti-EV stories without a break. We see it also in the broadsheets.

In terms of the technology, the cars work. We have over a million electric, battery-only cars and plug-in cars on our roads. People have happily folded them into their lives. You see them strobing up and down the motorways. London is now full of them. Long-term, their viability as a technology is not in question. What is in question is how we manage consumer sentiment and awareness of the advantages and negatives of electric cars. I believe that by 2035, if we enact the right policies and the right information for consumers, it will be achievable.

David Wong: I concur with my fellow witnesses; 2035 is a sufficiently long time away. We think it is definitely achievable. Bear in mind that all major car manufacturers have already announced their commitment to going electric and for quite a lot of them in Europe, which includes the UK, it is before 2030. By 2030, their product portfolios would be electric. There is a real commitment from the industry side, so 2035 should not be a problem.

The more important question is how we get there between now and 2035, what the glide path is towards getting there and whether it will be a successful transition. Of course, the Government's glide path is the zero emission vehicle mandate, the vehicle emission trading scheme. In the context of the current softening of the market, there may be a bit of a challenge around the multiple steps towards getting to that. We certainly hope those challenges can be overcome. It is in everybody's interest to ensure the transition is a successful one.

Q46 **Chair:** Thank you. That neatly leads us to my next question about the ZEV mandate. There is always a balance to be struck in the setting of targets by the Government, between the certainty of the end point and the path to it, and having to deal with real-world circumstances. To what extent should there be some flexibility in that path, as you said, Mr Wong, to getting to the 2035 target?

Gerry Keaney: From our members' perspective there needs to be quite some flexibility. The ZEV mandate is in more danger of creating negative unintended consequences than of acting as a positive driver into the marketplace. The ZEV mandate was launched at almost exactly the time when the Government sent a significant signal to consumers and the marketplace on electric vehicle adoption moving from 2030 to 2035. On the one hand they put the ZEV mandate in place, forcing manufacturers to achieve penetration levels of a certain percentage, and at the same time they sent a very negative signal to consumers. That is clearly one of the key factors that has affected retail consumer confidence in the marketplace for new electric vehicles. It has definitely had a consequent impact on the used electric vehicle market.

The two changes together are not currently delivering what was intended. We now see feedback on that from the marketplace and from OEMs. With my membership in the rental sector we see the significant economic contribution made by the major rental companies: there is very little demand for rental customers to take an electric vehicle with all the issues around charging, infrastructure, confidence and whatever else. Clearly, our rental members are under a lot of pressure, in discussions with manufacturers, to take a share of electric vehicles alongside the petrol vehicles they want so that manufacturers can achieve their 22% penetration levels. That is pushing electric vehicles into a segment of the marketplace where there is no demand for them. That is negative overall and will certainly create a disorderly marketplace. The implications of the current ZEV mandate in isolation, operating as it currently does, are creating significant negative unintended consequences in the marketplace.

Q47 **Chair:** Okay. Mr Latham, what changes to the ZEV mandate, if any, would you like?

Stephen Latham: I very much concur with Gerry. The issue is that we have two messages: 2035, and for manufacturers 2030. We need to bring those in line, so that 2035 would be correct. The problem, as well, is that some big manufacturers do not have the product range, and do not get the customer demand, for EVs, so they will pay punitive fines. The way around that is simply to restrict the number of ICE vehicles available on the market. It is the same as Gerry was saying about the rental sector; if you want so many internal combustion vans, you have to take so many electrics, so you are forcing a market. That in turn could restrict the supply of vehicles and transport to British roads. We need probably to realign those ZEV mandates to take in the bigger picture.

You were talking about rental companies. We have a situation with vans. There is a much lower target, of 10%, with vans, but currently vans are sitting at around 5.5%. The private van driver and the guy on a lower income without a private off-road charging facility is reluctant to have an electric van. We must look at the social demographics of the people we

want to have electric vehicles and adjust our behaviour policy towards that.

Chair: Thank you. Mr Willson?

Quentin Willson: I think the mixed messaging from the Government has destabilised the market, absolutely. Car makers are finding it very hard to meet the targets. With the demand taken away, most consumers will say, "Well, I'll put it off for 11 years to 2035 before I even think about getting an EV." There is a real friction. We need to have the ZEV mandate to make sure that car makers produce electric cars. Otherwise, they will go back to doing what they have always done. We need flexibility. We must not fine them wholesale and restrict their profitability and investment in the UK. We need to re-examine the penalties and credits, and how they are affected by that. It is an important piece of policy to make sure that we get the supply of used EVs into the market for consumers to buy, so I would defend the ZEV mandate but it needs some work.

The van market is very different, and needs a different conversation from the one about passenger cars, but I take the point completely.

Chair: Thank you. Lastly, Mr Wong?

David Wong: The ZEV mandate could work, provided there are the right conditions, but, as you may have picked up from the previous session, the ZEV mandate is essentially a supply-side measure. It compels the supply of the vehicles, but there is nothing on the other side of the fence to compel consumers to purchase those vehicles. Pushing back the end-of-sale date from 2030 to 2035 doesn't help because, on the supply side, manufacturers are obliged to bring a certain percentage of vehicles to the market, in increasing measure, every year until 2030; but on the demand side the message that is being sent to consumers, unfortunately, is that they have a five-year stay of execution, so to speak, and they can delay their purchase for another five years, all the way to 2035. That misalignment between the supply and demand sides does not help.

From the industry perspective, vehicle manufacturers will comply with all regulations set before them, including the ZEV mandate. Industry will do its utmost. In the market today there are nearly 200 models of plug-in vehicles. At the last count there were 101 battery electric vehicles and 95 plug-in hybrids. If you cast your mind back to 2018 there were only 21 BEV models available. We have made great progress, but it is not solely in the gift of the industry to ensure that the transition works. We are all in it together and all stakeholders must play a part, including the Government, particularly in this challenging environment.

Since the ending of the plug-in car grant in June 2022, there have effectively been no private consumer incentives. The incentives that remain are with the fleet and business side of things. We support that and think it is a good thing—long may it continue. But the reason private

consumer demand has been falling away since last year is that there are no incentives. There is also what we think is a slightly perverse measure, under which from April next year EV motorists will be slapped with the expensive car supplement. We hope we will have a chance to discuss that afterwards. It would hit people in the pocket—£410 per annum for five years from the second year onwards. That is coupled with the perfect storm of the rising cost of living, high interest rates and energy prices that have not come down to pre-covid levels.

We were talking about the possibility of BEVs hitting parity at the sticker price level with internal combustion engine vehicles at about the middle of this decade. I think that most of the research houses that suggested that would happen are now back-pedalling and pushing it all the way back to the later part of the decade. We think that parity, if it is to be achieved, will come in the later part of the decade. There is a combination of factors. Rising supply chain and raw material costs really bite. That means parity will definitely not be achieved by the middle of the decade.

Last but not least, as Quentin mentioned just now, the market has not been helped by the misinformation in certain sections of the press. It has put off some consumers who were looking intently at buying an electric vehicle.

Chair: Thank you. You have neatly identified some of our follow-on questions for the rest of the panel.

Q48 **Gavin Newlands:** David tapped into a couple of the questions I am about to ask. In terms of sales of EVs, we have heard about the used sector, and about fleet versus private being in different places, for reasons that have been identified. To ask a simple question, and get a simple, quick answer if I can, are current sales of EVs in line with Government targets? Feel free to split that up between fleet and private, but it is essentially yes or no. Gerry, I will start with you.

Gerry Keaney: As ever, there is no yes or no answer.

Gavin Newlands: I thought you would say that.

Gerry Keaney: I represent the fleet sector, so my 1,000 members buy, on latest stats, 60% of all the new vehicles currently in the market. We are absolutely passionate about and committed to net zero targets, and we have completely bought into the electrification of vehicles. I think there is a lot to learn from the fleet sector. To answer your question, the fleet sector is absolutely on track, and we are absolutely committed to delivering the volumes. We are on track today in the commitment that our members are making by buying electric vehicles. Over 40% of the company car fleets that our members run today are BEVs, plus there are hybrids. We are absolutely on track and committed to delivering on the volumes despite any of the issues that are going on.

Then you have to look at the fleet sector and ask, "Why is that happening?" One of the key reasons is the continuity, predictability and stability of the programmes that are in place through benefit in kind taxation and salary sacrifice, and the commitment to maintain those programmes over a period of time, giving us confidence in the company car market not just for this year but for four years hence.

Retail, as one panellist mentioned, has no incentives and no forward signals about confidence in the marketplace. Retail as it sits today is way off track in delivering any sort of trajectory that would get to the 2035 target. That is clearly one of the issues that needs to be addressed.

Q49 **Gavin Newlands:** Do any of you disagree with that answer, or does anyone have anything substantial to add to it, rather than repeating it?

Stephen Latham: I concur with Gerry on the fleet side. I am very concerned that we do not understand the difference in the marketplace. Fleet people have a set agreement on what they do with the vehicles, and so on. The private customer has to buy a vehicle. He doesn't know whether today's technology will be outdated and the range of the vehicle that he buys today will be greatly increased in three years. He does not know how long he is going to keep it, or the depreciation—among all the other things—and he has no incentive. That is suppressing the retail market terribly.

Q50 **Gavin Newlands:** We are definitely going to come on to that. David, you have put your pen up.

David Wong: I will give a direct answer to your question. You were asking whether the current market meets the Government's trajectory. I interpret that to be 22% for cars and 10% for vans this year, as per the vehicle emission trading scheme. The simple answer, based on current figures, is no, we are below that trajectory. For the year 2023, BEV market share was 16.5%. It was 16.6% the year before, so we are a bit flat. In the first four months of this year—the year to date—the figure for cars is 15.7% and for vans it is 4.9%. That is why we have had to revise our outlook for this year downwards, and not for the first time; we have done it a few times already. This year our members feel that the market will be 19.8% for battery electric cars and 8.3% for battery electric vans. It is below the 22% for cars and 10% for vans. However, it is not all doom and gloom. There are some positives. In the first quarter of this year we registered the highest number of battery electric vehicles in the whole of Europe, beating even the likes of France and Germany.

Q51 **Gavin Newlands:** In terms of incentives and disincentives, you identified the expensive car supplement, but I will come to Quentin first. We have incentives for the fleet market and the business buyer. Clearly there are no incentives left for the private buyer. I presume that you would prefer there to be incentives in place. In Scotland, as has been referred to, we had interest-free loans, supplementary at-home charging grants and free public charging for a long time, until electricity prices made that

impossible. We can see a range of incentives across Europe and the world for the private buyer. What would you like to see brought in?

To wrap up the disincentive element that David brought up—the expensive car supplement—would you like that exemption to be extended or, if it is reintroduced, would you like the EV or BEV value to be much higher? Deal with incentives and disincentives, if you can, Quentin, and I will come to David.

Quentin Willson: There are a lot of policy levers we can pull. The expensive car supplement needs reworking, and we need to revisit why EVs have to pay road tax. Their contribution to the Treasury is not that huge, in absolute terms. We need to look at giving consumers a reason to buy these cars. We need to make sure that they are aware of the total cost of ownership, which is significantly less than for combustion cars. We should look at inexpensive incentives like free parking, as they have done in Norway, the use of bus lanes and things like that—stuff you cannot buy.

It is the misinformation that really puts people off. They are not even considering buying an electric car, or even inquiring about price, because they read this torrent of stuff from right-wing and vested interests. I see you nodding, Fabian. That would be a really important policy lever that we need. We have been talking to the DFT about myth-busting. We have published the book that I have here, "The Little Book of EV Myths", to make consumers aware that these cars are reliable. They don't catch fire. The batteries don't fail. They work. People are driving them happily.

I would not necessarily want to look at financial incentives, although we could, as you have been promoting, David, look at cutting VAT on new EVs, and look as well at the VAT on second-hand EVs, and reducing those costs for consumers. As the panel says, there is no financial incentive for them to change their behaviour. We need to recognise that they will not change their behaviour for environmental reasons. They will only change their behaviour for fiscal reasons.

Q52 **Gavin Newlands:** In terms of lifetime, there is still a massive disconnect between at-home and public charging costs. Do we need to address that, as part of it? You were speaking about things that are not financial as such, but I would have thought we needed to fix that as well.

Quentin Willson: Yes. It is a ridiculous situation that on some public chargers you pay more to charge your car than you would to fill it up with diesel or petrol. How have we got to that stage? Over 30% of people do not have driveways, so we need to understand that they have to charge their cars on public chargers at between 44p and 80p at the most expensive. According to Zapmap, 80% of the market at the moment charge at home. For you and me, it is 7.5p per kilowatt, so it works out at 3p a mile. For them, obviously, the savings are massive. It means reform of the electricity market. It means helping charge point operators to reduce their costs. I was talking to one the other day who pays £740 a

day in standing charges before anybody even plugs in. All that reform on electricity pricing needs to be done, and Ofgem needs to become much more vocal about how we lower the cost of electricity for charging electric cars, because it is far too high.

Q53 **Gavin Newlands:** I am on 5.5p overnight per kilowatt, so I am charging my car cheaper than you, Quentin. David, will you address the disincentive issue, first, in terms of the expensive car supplement, and what you suggest the Government should do?

David Wong: As we all accept, the future is EVs, but we need the future to be sooner, to give a chance for transition to be successful and to front-load some of the carbon savings. To ensure that we make the most of our opportunity and that the future is sooner, we propose three fiscal measures. The first, as Quentin mentioned, is halving VAT on battery electric vehicles—not forever, just for three years. With just a three-year halving of VAT, we are likely to put 270,000 extra BEVs on the road. Carbon savings during those three years, as a result of the addition of 270,000 BEVs, would be 750,000 tonnes, and would cost the Treasury only about £1,200. That is less than the last tranche of the plug-in car grant, before it was cut. That was £1,500, by the way. That would incentivise people to buy electric vehicles.

The second fiscal measure is the expensive car supplement. Because it is at £40,000 at the moment, it catches more than half of all the battery electric vehicles on the market, bearing in mind that BEVs are not necessarily toys of the affluent; they are the reliable runaround that people need every day to get them from A to B, for their mobility needs. At £40,000 more than half the market is hit. As I mentioned just now, we are looking at £410 per annum for five years, hitting people in the pocket. We suggest that the Government should consider either reviewing the £40,000 threshold or lifting BEVs out of the expensive car supplement altogether.

The third fiscal measure is equalising VAT on electricity for public charging to ensure that it is brought in line with VAT on electricity for home charging, at 5%. This so-called kerbside penalty is absolutely perverse. Just because people cannot charge at home, and perhaps do not have a driveway, they are hit in the pocket. That is not the right message to send to people wishing to make the transition.

Quentin mentioned Norway just now and we all know that it is the poster child for electric vehicle adoption. Currently, market share is about 90%. What is perhaps not widely known is that for 30 years the Norwegian Government exempted battery electric vehicles from sales tax—from 1991 to 2022. For 20 years, 2001 to 2022—two decades—they exempted battery electric vehicles from the 25% VAT in Norway. That is why they hit about 80% market share in 2022. Only then did they partially reintroduce those fiscal measures. The Norwegian Government decided to put their money where their ambition was.

Quentin Willson: Can I add to David's comments about the equalisation of the VAT cost on electricity? As you probably know, I have been into the Treasury far too many times, and written far too many letters, asking for that to be done. The cost to the Treasury, we have worked out with Zapmap, would be about £100 million at current rates of adoption, rising to possibly half a billion when we get to 80% adoption. That is a raindrop echoing in an ocean compared with the £5 billion that the Treasury has spent supporting the 5p cut on fuel duty. It is a great lever to equalise the cost and help people who cannot charge at home to pay less. It is not going to be a huge lever, but it is very important and it sends the right signal, that the Treasury is behind this. When I talk to the Treasury I say to the people in the room, "How many people here drive electric cars?", and no hands go up. "How many people have been in an electric car?" No hands go up. I really think, and I say this as a matter of record, that the Treasury needs to understand the technology and the constraints, advantages and disadvantages of charging at home versus on a public charger.

Stephen Latham: Can I come in?

Chair: Forgive me: I need to move on to other topics in a moment, but a very quick point.

Stephen Latham: Our members were somewhat concerned at the end of last year at the lack of demand, so we set up a YouGov survey, and 42% of people who had driving licences said they would not buy an electric car. The two biggest reasons were that 62% said electric cars were far too expensive and 57% said that they had no confidence in the charging facilities. This comes back to the fact that we have to reduce the price of the cars. The easy way and the fairest way is VAT. That brings the actual price down. It cannot be manipulated by the manufacturer's list price. It is a 10% cut on everything and that may make it easier for the supplement, as well, because it will bring more cars into that area.

Q54 **Fabian Hamilton:** Earlier in my career, 25 years ago, I did a lot of work on LPG fuels and hydrogen fuel cell vehicles. I wonder whether one or two of you would comment on sustainable and synthetic fuels as a complement, or, indeed, an alternative, to EVs. I never understood why the hydrogen fuel cell was not adopted instead of battery technology.

Quentin Willson: Okay, Fabian. The hydrogen thing: so many people say, "I'm waiting for a hydrogen car."

Q55 **Fabian Hamilton:** Forgive me for interrupting you. I don't mean hydrogen fuel-powered; I mean fuel cell. It is an electric vehicle powered by hydrogen.

Quentin Willson: Exactly.

Q56 **Fabian Hamilton:** Sorry, I just needed to make that distinction.

Quentin Willson: Most experts—correct me if I am wrong, David—will say that for passenger cars it is not really viable because of cost, and the fact that making green hydrogen at scale takes five times more electricity than it would to charge an electric car, so the lifetime emissions of a hydrogen car are 70% more than those of an EV. We have the Toyota Mirai in the UK. I looked on the DVLA website and I think 78 of them have been sold. In California, Shell have pulled out of hydrogen—and in San Francisco. We have 11 hydrogen stations here in the UK.

Delivering an infrastructure for hydrogen is going to be massively more difficult, complicated and expensive than an electric infrastructure, because of high pressure and low temperatures. In terms of consumer cost, Transport & Environment worked out that with a hydrogen car it would cost £200 to £300 just to fill your tank. Getting it to scale and cheap enough to compete with petrol and diesel and be green is an enormous challenge. It possibly has a role in maritime and heavy goods, but for passenger cars most experts say no.

Q57 **Fabian Hamilton:** What about sustainable or alternative fuels that are renewable?

Quentin Willson: Synthetic fuels give you a 58% improvement in carbon emissions. Porsche has done that in Chile and built a huge factory, and we have a few sustainable fuel manufacturers in the UK, but, again, you are still burning stuff. You are still producing hydrocarbons. It is a parallel technology that we need to look at, and for older cars. It would help to decarbonise the general fleet by 50%, without people having to buy electric cars, so we must not ignore it, but if you look at emissions and lifecycle, it is nowhere near as promising as EVs. The cost at scale will be difficult to get down to competitive levels. Carbon Brief worked it out to be, at current rates, £300 to £400 to fill your tank with synthetic fuels.

Q58 **Fabian Hamilton:** Thank you, Quentin. Can I direct my next question to Gerry or Stephen? Do you think the second-hand electric vehicle market is growing at the pace necessary to keep the transition to electric vehicles on track? I asked the previous panel this.

Gerry Keaney: Today, absolutely not. The used electric vehicle market today is very slow and very turbulent. That is reflected in the market and in some of the comments you got earlier. Residual values on electric vehicles declined last year by about 36%. That is a really good indication of a market that is fundamentally unstable. You have peaks and troughs of vehicles entering the market and flushing through it, and that instability has longer-term implications for how you set residual values on future contracts, and where it goes.

Part of the issue with used vehicles is that the retail consumer is the used vehicle market. I will say right at the start, if it is not obvious, that without a strong used car market for electric vehicles there will not be a strong retail market for new electric vehicles. The two are absolutely

interconnected. I don't think the market is there today to support the ambition we have. It needs support. It needs incentives. We need to learn from what is working in the market and what is not available in the marketplace. That is absolutely clear.

I completely agree with colleagues that a large part of it is that we need a really good, co-ordinated communication programme, involving Government, around this technology to reassure retail consumers, of both used and new, about the stability, the strength and the rationale as to why we are making this technology change, and we have not had that. There are lots of individual OEM initiatives, but it needs to be Government sponsored, it needs to be consistent, and all stakeholders need to get behind it and support it, because with that strength of communication we could send a very positive signal to the UK consumer, along with other things, about where the transition that we are making is going.

Stephen Latham: I concur. The issue we have is that in the last couple of years we have incentivised company cars. They generally live in the system for three years and then fall into the used market. They tend to be the more expensive executive cars and are coming in at a price that is somewhat above your lower-income or middle-income family's desire. Consequently, they stay there and they are not selling, which creates further depreciation and undermines the residuals and the price at which you can lease them at the front end.

We need to stimulate that market, and that probably means we need to reduce the new car price and put in some stimulus for the used car buyer and the new car private buyer. At the moment, there are cars parked on airports that have been released from their fleet contract, but the owners, to retain residual values, are holding on to those vehicles before they release them into the market because massive oversupply will bring all the residuals down further, undermining the residual values of the vehicles.

Q59 **Fabian Hamilton:** That comes back to the point that David made about VAT and tax incentives.

My next question is about whether the second-hand EV market is suffering because of the public's perceptions about lifespan and repair costs. We have already discussed this to some extent. How accurate are those perceptions and what can be better done to inform the public and educate them about the realities of the long-term viability and reliability of second-hand EVs? David, do you want to come in on that?

David Wong: I will say three brief things about that. Perception may not be reality in that sense. Our statistics show that the average battery range of a new EV—obviously, it has to be new before it trickles down to the used market—is 236 miles, and for the models launching this year it is closer to 300 miles. Most of us drive no more than 25 miles a day, and for 99% of people a longer trip is typically less than 100 miles on

average. In terms of battery range, we do not think there is really a problem.

What people may have glossed over—my second point—is that one of the requirements under the ZEV mandate is the Vehicle Emissions Trading Schemes Order. The VETS order mandates that vehicle manufacturers must provide a warranty for the vehicle for eight years or 100,000 miles. During that period, if the battery capacity falls below 70% for cars or 65% for vans, the manufacturer is obliged to replace the battery. By then, the car or the van would have gone into the second-hand market, mostly, so that is not reflective of reality.

My third point, very briefly, is a question about degradation. Perhaps the implied issue that you mentioned is battery degradation, which is the capacity or the state of health vis-à-vis when it was new. Battery degradation is a thing that depends on how the vehicle is being used and how it is being charged. If the original user of the vehicle typically charges their vehicle regularly using DC chargers—rapid and ultra-rapid chargers—statistics and evidence so far have shown that the battery degrades a little bit quicker than if you charge it regularly using AC, or slow and fast chargers. Evidence on the ground from EVs that have been on the road for about nine to 10 years, dating back to 2014 and 2015, shows that battery degradation is minimal; it is about 1% to 2% a year, and they are still going strong today, with a lot of them on the road.

Q60 **Fabian Hamilton:** Apart from the battery, which is the central core of the electric vehicle, is the cost of repairs of electric vehicles generally lower than ICE vehicles? Quentin first, and then I will come to you, Gerry.

Quentin Willson: It is significantly lower. Tuskerdirect, which leases 16,000 EVs in its fleet, says that it is 30% less than a petrol cost and 46% than a diesel cost in terms of maintenance. Servicing an EV is checking the pollen filter, rotating the tyres, checking the battery and just having a look over it. It is significantly cheaper.

Q61 **Fabian Hamilton:** And brakes, presumably.

Quentin Willson: Yes, but brakes are lasting for 90,000 or 100,000 miles. On David's point about battery degradation, there is no data whatsoever to suggest that the first-gen batteries are degrading. Tesla in its recent energy report said that degradation after 200,000 miles is between 10% and 12%, and Fully Charged Show tested a 2018 Model S with 414,000 miles on its original battery pack. This is something that we need Government and industry to tell consumers, because all we hear are the voices from the anti-EV narrative and we do not hear from the 1 million-plus people who are driving these cars every day about their experiences. It is something that we need to think about hard because the information is out there and it is empirical. We know that the technology in these cars works. Consumers don't know that.

Gerry Keaney: Quentin has the same sort of data that I have, so I agree totally. All of our data from the 40% of our fleets that are battery electric vehicles shows that the cars are cheaper to maintain and cheaper to run. The stories about battery degradation are widely overstated. Much of the stuff, unfortunately, that is covered in the press and some of the magazines—bad news gets more coverage—is typically, it seems to me, written by people who have no experience whatsoever of ever owning, using or driving an electric vehicle. When you talk to people who own them and drive them, as was said in the previous session, they love them. All of the issues that apparently are out there about why you should not buy an electric vehicle evaporate.

Stephen Latham: Regular maintenance of electric vehicles is so much lower. It is in line with an annual MOT test. It is brakes, wipers, screens and so on. The one element that they generally consume a little bit more is tyres because the acceleration is faster and the braking is faster, but on the whole the maintenance costs are less for electric vehicles.

Fabian Hamilton: That is very clear.

Q62 **Chair:** Thank you. I want to challenge what you have just said. We have had evidence from, I believe, an *Autocar* article quoting figures from the Association of British Insurers that insurance costs for electric vehicles are higher because there are longer repair times and a more expensive requirement for the safe storage of damaged electric vehicles. Is the evidence not in the fact that insurance costs are higher?

Quentin Willson: Maintenance costs are lower and insurance costs, absolutely, are higher. It is worth saying that the ABI said that all insurance for cars is up 58% and that the increase in insurance on EVs is about 25%. Part of that is claims inflation—the cost of parts, materials and energy—credit hire costs for a replacement car because the EV takes longer to repair, which swells the claim, and there are not enough trained technicians for EVs. Parts delays, particularly with Tesla coming from America, take much longer. My Tesla was rear-ended and it was out of circulation for two months and the claim was unusually high.

There is also data to suggest that the insurance industry is not looking carefully enough at how they repair batteries, and they will write cars off because they do not understand repairability and have few options. We need to look at how we build repairability into batteries at the manufacturer stage and make sure that we have enough trained technicians and that the insurance industry understands claims inefficiencies.

Chair: We will in a future session be looking more generally at the car insurance market. As well as the day-to-day maintenance and repair costs, I wanted to put on the record that there is an insurance issue.

Q63 **Greg Smith:** Good morning to the panel. I want to turn to the range anxiety point. Given that the last set of questions was very much about

data, I want to look at the data from the recent exposé, if I can put it that way, by *What Car?* on the differential between advertised range and practical out-turn. In the summer driving results, the best was the Merc at about 10% lower and the worst was a BYD at 17% lower than advertised range. There was a much bigger differential in the winter testing. Again, the Merc was best, but at 21% lower than advertised range and—Alan Partridge isn't going to be happy—it was 36% to 37% lower on the two Lexus models.

Accepting that it was ever thus, and even for an ICE vehicle the miles per gallon advertised are never what you actually get, those differentials are pretty severe, aren't they? What is really going on here, in your opinion, and how do the manufacturers, in the interests of selling electric vehicles to those who want to buy them, get a more honest appraisal on the table of what range actually will be in the vehicles?

Stephen Latham: For many years I was in the industry and I used to get lots of complaints that, "It doesn't do the miles per gallon that it said." Miles per gallon is about usage: acceleration, deceleration, speed, road terrain—whether it is flat or hilly—equipment operated on the vehicle, weather conditions and temperature, driving style and hard braking all affect that, as they do with all vehicles.

The manufacturers have had for a long time NEDC, the new European driving cycle, which they brought in in the '90s to give, generally speaking, the miles per gallon, and later moved that into electrics. More recently, we have moved to the WLTP, the worldwide harmonisation light vehicles test procedure, which is supposed to be fairer because the old system was just done in a laboratory. The new system is done with better information and better tests, but, yet again, we find that we have the same scenario for EVs as we had with internal combustion engines.

At the moment, I am told that some manufacturers and importers may be using the old system, which used to be way out. They have to use one or the other. There isn't a UK-approved system, and maybe that is something we could look at.

Quentin Willson: WLTP is woeful. It is the European standard and is hopeless compared to the American EPA. It is probably 30% out. We have campaigned to change it and have what we call real-world range, RWR, so that consumers can see what the achievable range of an electric car is. We need to have a new, valuable, worthwhile standard that stands up to scrutiny. Gavin will know that you can change your range, by driving more carefully, obviously, but with regen brakes you can change the setting. You can add 10% to the range. Your point is absolutely correct; this is going to cause problems down the line when consumers buy EVs thinking that they can do 400 miles when, actually, they will do 20% to 30% less. The Government need to do something about that.

David Wong: Vehicle manufacturers are not allowed to unilaterally publish any real-world range that they think would be relevant to the discussion. They have to publish—

Quentin Willson: But I can, David.

David Wong: You can. Manufacturers cannot. Manufacturers need to publish what is rated under the WLTP official test results. The WLTP, as my fellow witnesses have said, is a test under controlled conditions. When it is performed in laboratory conditions, it is 23°C, whereas real-world driving is impacted by quite a number of things: driving behaviour; opportunity for regen braking, particularly if you are driving a lot of urban miles with a lot of stop/start—of course, if you drive a lot of motorway miles, there is less opportunity for regen braking—weather; ambient temperature and road conditions. However, because all electric vehicles that are placed in the market, particularly in the UK and in Europe, will have to declare the same results under the same WLTP tests, at least, if it is any comfort at all, that provides the same yardstick to measure the official range of all vehicles, so consumers can compare using the same yardstick.

Q64 **Greg Smith:** That is very helpful. Perhaps I can just tease this a little bit more. I am not trying to say that there is a number that can be put on every car. I have driven a very long time. I know that different conditions, and whether you are powered by petrol, diesel, battery electric or indeed hydrogen, will affect what range you can get. How can the manufacturers try to find, not necessarily on the advertised figures but on that magic number that you get on your dash that tries to guesstimate how many more miles you will physically get out of your charge or, to be honest, in ICE cars, a more transparent and easily understandable figure around that to tackle range anxiety?

It worries me that too many people put too much reliance on that number and end up on the hard shoulder without any charge or petrol. How can the manufacturers get better at that? We seem to be able to do it in virtually every other walk of life with algorithms and AI and various other things. How can we get better at that?

David Wong: Generally speaking, the industry, specifically vehicle manufacturers, is working to fine-tune the artificial intelligence and the diagnostics and analytics that are being used to show the number on the dash, as well as making improvements in other areas, such as battery management systems. The underlying issue I detect here is range anxiety, as you suggested. Although I mentioned that range anxiety is not so much a problem now because of the average range of the vehicles, we think that if most people have a problem with range they do not necessarily realise that it is not so much range anxiety as charging anxiety, the ability to find a working, accessible and available charger at the point of need on demand, particularly if they are out and about and they do not have the luxury of getting hold of a private charger either at home or in the office.

Quentin Willson: Range anxiety is one of the older myths. I spoke to Edmund King at the AA about this yesterday, and he said that breakdowns of out-of-charge EVs are now down to 2%. You don't see them broken down on the hard shoulder—it just doesn't happen—because of longer ranges, better infrastructure and consumers managing to understand how far they can go, and the car gives you all those warnings before it runs out. You are absolutely right, David. With this technology—Tesla manage to do it really well—where your range is, within maybe 10%, going to hit that advertised figure, we need to help consumers get over that hurdle. Manufacturers also need to come up with information where there is an accurate range.

It is a combination of things: get rid of the WLTP figure, have a real-world range statistic, get the technology to make sure that what you see on the screen is accurate, and tell consumers that if you drive like you stole it you are going to get far less than if you drive like Gavin does, very gently.

David Wong: Quentin quoted a 2% figure from the AA of all EV breakdowns due to running out of juice. Just for perspective, in 2019 the same AA figure showed 8%. It has now come down to 2%.

Gerry Keaney: I would like to pick up on an important point that was made. Most consumers have moved on from range anxiety into charge anxiety, and this is particularly important in the fleet sector as well as in the vehicle rental sector. If you fly into Heathrow or any of our international airports and you jump off a plane, go to a car rental company to rent a vehicle and drive in a country you are not used to for the first time, you do not necessarily want a different technology in your vehicle. You do not want to jump into a vehicle when you do not know where you can charge it, how often it needs to be charged, whether the charge point will be working when you get there or whether you can book a charge point. All of those sorts of issues around charging are detractors and negatives for the fleet sector and rental consumers wanting to adopt or utilise an electric vehicle.

If you are running a fleet of vans today up and down the country on the motorways, servicing or whatever you are doing—we all know the typical white van man—and you buy an electric vehicle, you cannot generally book a charge point. You may be on a 200-mile journey because it is what you use for your day to day; it's a tool of your job. You want to know that you can get to a service station or somewhere similar and book your van in for a charge at a certain point in time. It is not possible to do that. That sort of charging anxiety is a real issue, and it is increasingly an issue, particularly in the fleet sector and particularly when we are talking about the adoption of vans. If we have challenges in terms of increasing vehicle adoption to hit our targets, we have much bigger challenges to hit our targets on van adoption with electric vehicles.

Quentin Willson: Vans and passenger cars are different. Rental cars are different as well. People rent electric cars when they have had experience of electric cars. If you put somebody from a combustion car straight into an electric car at an airport, that way disaster lies.

Stephen Latham: You were asking what the manufacturers can do. I don't think we can change unless we change the system, as Quentin suggests, on published figures. Maybe some of the cars could have better technology to work out quickly that that driver uses this amount of energy for this number of miles in the area where they live, and that could indicate the range better than just where the battery is sitting. There might be some artificial intelligence built into future cars to assist that.

The other thing that Gerry mentioned was that it is not range anxiety but charger anxiety. We have at the moment 60,000 charge points, and we have managed to get those in 12 years. The Government have stated that they want 300,000 charge points, and they are relying on private enterprise to produce the majority of those. That is a huge amount per year that we have to produce to be up to the point when we have total electric adoption. As you say, it is not range anxiety but charger anxiety that is the issue.

Quentin Willson: Charger builds are up 50% this year. It is the best year ever for chargers, but we need to incentivise CPOs and private enterprise to take away some of the barriers, particularly charging connections, costs and grid connections, and speed it up as critical infrastructure.

Greg Smith: Thank you. That is very clear.

Q65 **Grahame Morris:** We have a lot of new anxieties to think about, don't we, gentlemen? Charging and range. No one has mentioned smart motorway anxiety in electric vehicles as well.

Quentin Willson: Don't get me started.

Q66 **Grahame Morris:** That is another one on our list. You have touched on this in response to our earlier questions; my section is about electric vehicle battery safety and reliability. Mr Willson, as you rightly said, there have been many stories in the media—you quoted the number of consecutive stories—about the safety of EVs, particularly in relation to the risk of fire compared with petrol and diesel cars. Clearly, there are a lot of perceptions and misconceptions about the safety of EVs and of the batteries. Do you want to take this opportunity to set the record completely straight? Are EVs less safe than traditional petrol and diesel vehicles?

Quentin Willson: Absolutely not. As David will attest, the Tesla Model Y is the safest car in the world; it has the highest NCAP safety rating in crash. When it comes to vehicle fires, the accepted statistic is that you are 20% more likely to have a fire in an ICE car than you are in an EV.

The Luton airport car park fire was started by a diesel Range Rover. The Fremantle Highway ship fire did not involve an EV. The Liverpool car park fire was caused by a diesel Range Rover. Let me just tell you this. The fire service estimates that there are about 100,000 vehicle fires every year of all fuel types, and UK records for 2022-23 show that only 239 of those fires involved an electric car. Percentage-wise, that is 0.24%. The Swedish Civil Contingencies Agency says that petrol and diesel cars are 20 times more likely to catch fire. In 2022, 611,000 vehicle fires were recorded in Sweden and only 23 of those, or 0.004%, involved an electric car.

The CEO of Thatcham Research, which tests vehicles for insurers, said, "Our latest research indicates that the risk of a fire for all types of EV remains less likely than for ICE vehicles." In 2023, US insurer AutoInsuranceEZ released a report entitled "Gas vs. Electric Car Fires [2023 findings]", noting that, "Based on this data, electric vehicles don't catch fire nearly as much as the news claims."

Q67 **Grahame Morris:** I learned a long time ago not to believe everything I read in the newspapers, but it certainly has an impact. It becomes corrosive with the drip, drip, drip. It feeds people's perceptions and perhaps misconceptions about the safety of EVs.

Stephen Latham: When an electric car catches fire, it really burns and it makes good press coverage and people—

Quentin Willson: We don't hear about all the ICE car fires. We just hear about the EV fires. There is another debate to be had about what we do about that press reporting.

Q68 **Grahame Morris:** I was just going to ask you about that. You waved a pamphlet earlier about myth busters. Did you say you had made representations to the Department for Transport and the manufacturers about that?

Quentin Willson: Yes. In the driver's charter, it was something that they promised to address. The House of Lords Environment and Climate Change Committee has flagged it, particularly in their last report, as being a "concerted campaign"—their words. As a Government, you need to do something about it. We need to think about how we communicate the message to consumers. As an overarching view of this session, I want you to take away the fact that misinformation is destabilising consumer demand, destabilising industrial policy and destabilising the industry.

Grahame Morris: That is really helpful. Mr Wong?

David Wong: There is absolutely no evidence that EVs are more prone to fires than internal combustion engine vehicles. Electric vehicles have to be approved to UN regulation 100, which is the regulation that sets requirements for the safety of EVs, including resistance to thermal runaway and fire events. We all love a stat because with statistics we can brandish some facts that will, hopefully, dispel the myths, so I will add

one more stat simply because it appeared in a Government official guidance document. The Government were quoting the official insurance stats. It was shown that the percentage of claims from EV fires was just 0.001%, compared to 0.007% for petrol vehicles and 0.011% for diesel vehicles.

The last thing I want to say with regard to this is that comparing the more frequent sources of fires across all powertrains, not just electric vehicles, most vehicles do not combust by themselves. It is very rare. According to England fire statistics, 46.5% of all vehicle fires are from arson, across all powertrains.

Q69 **Grahame Morris:** I am not advocating that EVs are more prone. I am just asking you the question and giving you the opportunity to respond. That's all.

Quentin Willson: It is so embedded, and that is why we are on the defensive, isn't it?

Grahame Morris: I understand. Thanks.

Q70 **Jack Brereton:** I want to ask a bit more about the international situation in the market. Maybe we can come to Stephen first about some of the challenges we have seen. We talked about Teslas in the last panel and how they have impacted on price. What are the issues and what is the impact on the UK market of some of those international factors?

Stephen Latham: The price changes affect residual values. That has to be done by manufacturers. If their sales slow down, they have to stimulate the market somehow. Tesla is very committed to continually selling more and more cars, and it feels as if that is the thing to do. The problem is that most people, fleet particularly but also private people, buy on contract hire or PCP where you have to set what the vehicle will be worth in three years' time, and in theory you are paying the finance on that gap.

If within six months of having a new contract £10,000 is taken, of course it affects the residual value and that leaves a gap, generally for the customer to pick up or for the lease company to pick up. That destabilises business, but manufacturers will do it from time to time. At the moment, because they are chasing the ZEV mandate, quite a few manufacturers have introduced a lot of incentives on new cars to try to stimulate the market. In turn, that will have an effect on those vehicles and the lease price of those vehicles.4

Q71 **Jack Brereton:** Gerry, I visited one of your members recently, Central Contracts, which is based in my constituency, and we discussed some of these issues at length. Could you describe briefly what Stephen was just talking about, the impact on some of your members of that price volatility?

Gerry Keaney: Clearly, we are the vehicle rental and leasing sector, so many of my members were very early adopters of electric vehicles; 40% of the company cars that our members hold are battery electric vehicles. When you get volatility of pricing in the new car market—when prices are reduced by 10%, 20% or 30% over a period of time—that reduction flows through into the used car value. It is not necessarily automatic, but significant elements of it flow through into the value of used cars. The first absolute consequence is that, if you are a finance company and holding these cars on your books and you have a certain residual value, the reality between what you have on your books and what you are likely to realise when you sell that vehicle as a used car will be significantly less, so you are looking at a significant loss. That is in the leasing sector. There was discussion earlier about being in negative equity. That is also one of the consequences if cars are purchased on products like PCP. It is a risk for consumers.

It adds to the potential for what your neighbour says about your car. It becomes another potentially negative story about electric cars: "There's no point holding an electric car because you can't guarantee what they're going to be worth when you come to sell them for a second time or a third time as a used car." It undermines confidence in the market generally on used cars, where you need a level of confidence.

The consequence of having taken the hit in terms of the income statement, or the P&L or your personal P&L, is that when you look to write new business on electric vehicles there is a lot of evidence that you should be rather more cautious about what your residual values look like on the next contract, so you take a rather more pessimistic view. Taking a more pessimistic view means that the monthly rate is going to increase, so again we get the consequence that residual values or used car values are lower than the residual value forecasts and prices increase on the new vehicles, making them a little bit more unattractive again. It is a good example of the used car market being absolutely integral and interconnected to the new car market.

Q72 **Jack Brereton:** You said earlier that your members sometimes end up being forced to take EVs by manufacturers. What happens in those situations when they have a huge number of vehicles that, basically, they cannot get out of the doors and they cannot get them out to people who want to lease them?

Gerry Keaney: It is the same thing that happens in every market. When you force a market, when you put more into a market than consumers say they can cope with or are demanding, you create an unhealthy surplus in the marketplace, and eventually, whatever that surplus might be—in this instance, cars—they have to be forced into the next market, the secondary market or the tertiary market. If you have more supply than you have demand, which is where we are with electric used vehicles today, you end up with potentially disorderly marketing, reductions in prices and instability.

Q73 **Jack Brereton:** Surely, isn't that what we want to see? We want to make these things more affordable.

Gerry Keaney: Everybody wants to see affordable prices. That is what the market will do when you have a surge that comes through at any one point in time; the market will clear out those vehicles. For a long-term market and long-term stability, we all need predictability of pricing. If I buy a new car tomorrow, I have half an eye on what it is going to be worth in two or three years' time when I come to sell it or trade it in. I want some predictability about what it is going to be worth. If there is uncertainty and I don't know what it is going to be worth or it could be worth 20% or 30% less than I expect, it just makes me think twice, if not three times, before I commit to that particular product.

Q74 **Jack Brereton:** Quentin, do you want to come in particularly on what the Government might do to try to improve stability given the international factors and the values? What more could the Government do to try to stabilise this situation?

Quentin Willson: Globally, EV sales are up 25%, mainly because of China, but we should be under no illusion; consumers are not buying for a raft of geopolitical reasons. We have the highest interest rates on record and low consumer disposable income. That is not unique to EVs; sales of all cars are down, particularly private. What we need to do again comes back to understanding that you can save money if you drive an EV, and that is not being said. Your figures this month, David, for used EVs are up 70%, the highest on record, and 2.5% of the market.

We heard from an earlier panellist who said that there are dealers who sell you these very successfully because they are specialist, evangelical and trained to do it. With the greatest possible respect, some normal combustion car dealers are not equipped, trained and motivated enough to sell EVs with the passion that is needed and to explain to consumers the pros and cons. That is a barrier as well. To say that the second-hand EV market is collapsing is a great exaggeration.

Q75 **Jack Brereton:** Those results are very positive. Do you think that we will see that uptick in demand moving forward?

Quentin Willson: What happens with markets is that you get to a price point where you can buy a Model 3 Tesla 2020 with 50,000 miles on it for £15,000 or £16,000, and that becomes a very compelling opportunity. We are seeing this where cars such as a £5,000 Renault Zoe with 50,000 or 60,000 miles on it are being bought by consumers because they look at them and say, "That is really good value." They become a compelling proposition. We will see the market level off when pricing becomes irresistible, but we also need to educate consumers so that the opportunistic decision that, "This car looks cheap and it's electric," is reinforced by consumer awareness and any policy and fiscal levers that we can pull, even temporarily, to make them able to enjoy that car.

Look at the congestion charge cleaner vehicle discount exemption that is going in December 2025. Why is London doing that? It is important to incentivise the adoption and use of EVs. We need to extend simple policy levers like the expensive car supplement and the congestion charge exemption for a couple of years to help stimulate demand. There is a whole new conversation about what we can do to help consumers have confidence in the product.

Q76 **Jack Brereton:** David, is there anything further that you would like to add about some of those international influences on the market and how we can improve demand?

David Wong: Yes. Your question is about international factors. May I change track very slightly but still on international factors? Something that has not been touched on is the volatility in raw material prices in the supply chain as well as the security of supply, and potential risks with security of supply. Two years ago, around this time, the price of lithium went through the roof, with a more than 900% increase year on year. Thankfully, that has come down in recent times, albeit not to the prices of three or four years ago. None the less, that illustrates how risky it is, potentially, when it comes to the prices of raw materials and their impact on the battery pack.

That is because, if you look at all the good research from the prominent research houses, they all believe that around about the middle of this decade—tying into the point about parity that I mentioned earlier—we will see the price of the battery pack reaching $100 per kWh at the pack level. That is significant because it is the holy grail to usher in parity between a BEV and an internal combustion engine vehicle like for like. It is nowhere near $100 per kWh, not least because of the volatility in these prices, but also—

Q77 **Jack Brereton:** What figure are we at currently?

David Wong: It is about $130 per kWh. We still have a couple of years, but then again it is quite likely that we are going to see the $100 per kWh threshold being breached perhaps later this decade. That is the average, by the way. There are certain variations, some went below $100 per kWh, but on average that is where we are.

That ties in a lot with the question about security of supply. The largest supplier of nickel until recently was Russia. Of course, we can no longer source nickel from Russia. We have to look elsewhere. This is where perhaps the security of supply and the prices of raw materials are so important, and international factors are sometimes beyond the control of the automotive industry because they go a little bit more upstream in the battery supply chain.

The other point I briefly want to mention is that that emphasises the importance of onshoring the supply chain and production within the UK and the EU. Last year, thankfully, both sides came to their senses and

decided to delay the implementation of the rules of origin in the trade and co-operation agreement by three years, pushing it out to 2027, but there will be no more revision by 2027. That means it is critical for us to ensure that we have security of supply and onshoring of production and the supply chain in both the UK and the EU.

Q78 **Jack Brereton:** Do you think domestic capability is achievable in reaching, as you say, that aspiration of onshoring more of the sector?

David Wong: Certainly, we are on the right track, if I may put it that way, because last year alone we had private and public commitment of £24 billion—it is unprecedented—which is more than the previous seven years put together, and that is for the UK alone. Manufacturers and their key suppliers have all committed to building not just car factories but battery plants all over Europe. There is lots of commitment. We are on the right track. We need to ensure that, a little bit further up the supply chain, where we are not necessarily blessed with a lot of the critical minerals in the earth in either the UK or the EU, there is security of supply through strategic partnerships with friendly nations such as Australia.

Q79 **Chair:** I have one very last quick question for Mr Wong. It is the question I put to the previous panel about the industry's wishes on what America has done in the last 24 hours in putting tariffs on Chinese imports. The previous witnesses said the industry would not welcome that. Is that the position of members of the SMMT?

David Wong: First, we are following with great interest the repercussions of the decision yesterday from the White House. It is important to say that, first, China is fundamental to the automotive supply chain, not just the finished vehicles but in the battery and the critical minerals supply chain, particularly in processing and refining. The industry as a whole prizes free and fair trade. It is absolutely important to the industry. At the moment, there are no calls from SMMT members for the UK Government to take any action or to investigate, which is why we are following and monitoring the EU's investigation with great interest.

Ultimately, it is for Government and the Trade Remedies Authority to decide what, if any, course of action should be taken. About a third of all battery electric vehicles registered in the UK come from China, whether they are home-grown Chinese brands, or international brands, including European brands, manufactured in China.

Chair: Thank you very much. I am sure we could continue talking about this subject for a long time. We will inevitably return to it. For now, I thank you all again for your time and evidence to us this morning.