

Transport Committee

Oral evidence: [Supercharging the EV transition](#), HC 1593

Wednesday 29 April 2026

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Members present: Ruth Cadbury (Chair); Steff Aquarone; Dr Scott Arthur; Mrs Elsie Blundell; Olly Glover; Alex Mayer; Baggy Shanker; Rebecca Smith.

Environmental Audit Committee member present: John Whitby.

Questions 147–170

Witnesses

I: Nigel Topping CMG, Chair, Climate Change Committee, and Dr Eoin Devane, Team Leader, Carbon Budget, Climate Change Committee.

Examination of witnesses

Witnesses: Nigel Topping and Dr Eoin Devane.

Q147 Chair: Welcome to this morning's evidence session—the final session in our inquiry into the transition to electric vehicles. We are hosting two panels today. During our first panel we will hear from the Climate Change Committee, and during our second panel we will hear from the Minister and the Office for Zero Emission Vehicles. Will the first panel please introduce themselves?

Nigel Topping: Good morning, Chair. My name is Nigel Topping, and I am the chair of the Climate Change Committee.

Dr Devane: Morning, Chair. My name is Eoin Devane. I am head of carbon budgets in the committee's secretariat.

Q148 Chair: Welcome. How confident are you in your assessment that the EV transition will outpace the projection of the SMMT—the Society of Motor Manufacturers and Traders—and the Government's ZEV mandate?

Nigel Topping: We stand behind our modelling. A lot of it requires us to be very thoughtful about the development of costs in new technologies. In the case of EVs, as you know, 30% to 40% of the price of a low-level, sub-compact car is based on the cost of the battery, so we follow the battery price evolution very carefully. We see battery prices evolving in pretty much the way we would expect, and I might ask Eoin, who actually does the modelling, to say a bit more about how we model that.

I can give a couple of snapshots. You will have seen the headline on Autotrader last week about price parity being reached on average, and another energy price shock that puts up the cost of petrol will of course further tip the consumer economic case in favour of a transition. It will be interesting to see what happens the longer this goes on.

We expect an acceleration in adoption. We are pretty confident that the basic logic of that learning effect driving down the cost of batteries will flow through into the price of electric vehicles. A much bigger range is now available; what started as very much a high end-only transition now has models available across the whole range.

Dr Devane: Let me add a little on how we approached our modelling and how we came to those projections. First, we look at how the costs of new technologies tend to evolve. If you look at most new technologies historically and currently, their prices follow S-curves: they decrease slowly at first and then quite rapidly as the market matures. If you look from that perspective at the prices we have seen in EVs since around 2010, you see very much that dynamic being followed: we have had relatively slow reductions, and now we are clearly at the point of quite rapid reductions, as Nigel says, due to rapid reductions in battery prices, which are currently at their lowest level ever, and to manufacturers

committing to the EV transition, building their supply chains and offering that range of new models. We are at that steep point on the transition.

We use that, along with other data on the running cost savings that EVs offer. For almost all households—certainly for households that can charge at home—there are significant savings to be had from running an EV, compared with a petrol car. We also look at things like charging infrastructure. We have seen big growth in charging infrastructure. There are almost four times the number of charge points available in public locations today than there were five years ago.

We put all that into a consumer choice model, which models the behaviour you might expect to see, based on those factors. We calibrate that model based on the behaviours that we have seen in the market to date. That gives us confidence that we will hit the price parity point this year for the largest cars, through to about 2028 for the smallest cars. That puts us on the cusp of a tipping point where the EV becomes the natural choice for someone buying a new car. That gives us confidence that we will begin to accelerate beyond the ZEV mandate.

Q149 Chair: Obviously, Government action—or inaction—is crucial to the surface transport sector of the UK economy decarbonising. It is such a big sector and such a crucial policy area. Would any further flexibilities in the ZEV mandate put the Government's climate targets at risk?

Nigel Topping: As you say, Chair, road transport is a very important sector of the economy in terms of decarbonisation. It is actually the single biggest sector for emissions—it is 24%—whereas the power sector is the sixth biggest. Often when we talk about decarbonising the economy, the attention is on power, but the road transport sector is now the biggest and most important.

From our perspective, consistency of policy signalling to the market is crucial. We are going through such a big change and so many people are having to invest. The charging infrastructure companies and a lot of the destinations—the big offices and supermarkets—are having to invest, and they are doing that on an expectation that the policy continues. Considering a dilution of the ambition would slow that down.

I have two other reflections. First, we know that hybrid electric vehicles do not achieve the emission savings they state on the tin, so there is a real risk that diluting more towards hybrid will slow down decarbonisation beyond the levels we need and will jeopardise hitting some of the legal targets. The majority of hybrids are also more expensive than their counterparts. That is not surprising, because it is not really a hybrid; it is a twin drive chain option, and you have to pay for both. They are more complicated to build and maintain.

I spent the first half of my career working in the automotive sector, and when creating a policy environment that makes the UK a good place to invest in manufacturing electric cars, there is a fine balance between going too fast and putting the costs up, and going too slow and losing to the

competition. It feels like we are in the sweet spot now, with the market naturally developing as the costs come down with the support of the mandate. We might think that claims that we are going too fast are a little overstated, so our recommendation would be to stay the course.

Q150 Chair: That is helpful. In your 2025 report, you recommended measures to increase public awareness of the benefits EVs. Is the Government's "Get that electric feeling" campaign sufficient, or is further work needed in this area? Are there other things that are key to getting potential buyers to switch from an IC vehicle to an electric vehicle?

Nigel Topping: We did make that recommendation, and we are pleased to see the Government move forward with a public awareness campaign. We are still in a relatively early stage. Although about a quarter of new sales—it was a third in December—are EVs, the vast majority of the cars people are driving are combustion engine cars. A very small proportion of fleet consumers and owners have lived experience of an electric vehicle, so there is still a lot of misunderstanding. So these measures are really welcome. Of course, market growth increases the number of people who have a neighbour, friend or colleague with an electric vehicle, so word of mouth is important.

Eoin mentioned the continued growth of off-street parking. A lot of local authorities have recently concluded RFP processes and awarded contracts for significant installation of kerbside parking, which obviously addresses one of the challenges right now, which is people who do not have off-street parking themselves.

It is one to watch, because these consumer transitions are difficult to predict. It is good that the Government is leaning in to make awareness, but there are other factors as well.

Dr Devane: The modelling I described gives us confidence that it is possible to see this tipping point happen quite quickly but, critically, it depends on consumers having confidence to make that switch. From the surveys we have seen, the concerns people have lie around cost, so it is good that a lot of the focus of the campaign is on the fact that costs have fallen a lot more than people may realise—in particular, if you have a driveway, you have the ability to save hundreds of pounds from the get-go, compared to the cost of fuelling your petrol car.

However, there are also concerns around battery range, battery health and charging, as Nigel described. Interventions to reduce the cost of public charging, where people have to rely on it, are particularly important. We are pleased to see the Government commit to looking into ways to do that, and the intervention on pavement gullies, which I think was last week. But there could be more to do around giving people confidence in the health of a battery, for instance. There has been talk of battery health certification schemes, and things like that would be helpful to the majority of people who buy their vehicles not on the new market but on the used market.

Q151 Chair: One of our previous witnesses said that, in terms of policy interventions in this area, it feels like the Government has one foot on the accelerator and the other foot on the brake. In terms of the transition, are there good examples of policy interventions from other countries, particularly in Europe, that we could learn from?

Dr Devane: We have not done a detailed review of different policy options abroad. I am aware that, in France, they have looked at social leasing schemes; I talked about the used market, and those have value in supporting people to get used cars, maybe with low-interest loans and things like that. That in turn has value in supporting residual values for people who buy their cars new on leasehold and things like that.

There is obviously a range of other types of policies in terms of incentives. We have the EV grant that came in, which I think the witness you were talking about was referring to as the accelerator piece, versus the e-vehicle excise duty being the brake piece. A lot of other countries have seen success with grants as well, but also with softer incentives in terms of priority for lower rates for parking, tolls and the like. I think a lot of Scandinavian countries have looked at those sorts of schemes but, as I said, we have not done a detailed assessment of their value.

Nigel Topping: One interesting observation, from a conversation with some Chinese counterparts who provide advice to the Chinese Government on the transition, is that we are actually in a much better position with regard to the flexibility of our electricity market and the ability for retail time-of-use tariffs to be made available. That is perhaps an advantage and a part of the transition to an electrified future that, once people understand it, could significantly increase their incentive. This ability when you start to electrify to move—

Q152 Chair: When you say “flexibility”, do you mean time of day?

Nigel Topping: Yes, time-of-use tariffs. You can buy electricity for 5p overnight, which, if you have a combustion engine car, is not much use to you, because there is not much you can do between—

Q153 Chair: Again, that is fine if you have domestic charging, but unless we get some kind of battery technology, that is not going to be applicable in public parking.

Nigel Topping: Interestingly, if you speak to the public charging providers, some of them are now starting to invest in small batteries. If you are drilling a hole in the ground to put in your kerbside parking, it does not cost you much extra to make the hole a little bigger so that you can put in a battery. You can then start to offer better rates overnight, because you can use that battery and some of the pricing arbitrage that is available.

I think it is something to watch. Yes, the capability is already there domestically, but the charging providers are starting to realise that they are really competing with domestic charging, so they have to be able to do something to bring that tariff down.



Q154 Rebecca Smith: Listening to what you have been saying, a couple of things have been highlighted that lead into my question. Effectively, you are describing a postcode lottery at the moment. Are you near off-road parking that has charging? Has your local authority invested in large-scale charging areas? Are they doing the gullies? If somebody has just invested in a charge point on a pavement, but it does not have that battery technology, you are going to have to wait until they replace those charging points. That highlights the differential you have between some big urban centres and areas that have not had the same level of investment, or perhaps residential areas that do not lend themselves to it in the same way. There is also the big question of the differential between urban areas.

Obviously, your modelling shows the trajectory going in the way you want, but how reflective is that of different regions in the country, or the differentials between urban and rural areas? What can you say to the public about that postcode lottery? While it is great that the trajectory is going in the right direction, people's lived experience will perhaps be different, which also plays into their confidence levels.

Dr Devane: You are right that the distribution of charging devices is very uneven at the moment, and it is something that we have flagged in our progress reports for the last couple of years. It is worth noting that there is also an uneven distribution in the level of off-street charging. One challenge you might face in more urban areas is that more homes are flats or terraced houses, which do not have the ability to charge domestically. At the moment, the big win is having a driveway, so you have the ability to plug in and charge overnight, as Nigel said, sometimes for very little or even no money, making significant savings.

We are very keen to see that extended to people who do not have that ability. Running gullies across pavements is a good news story, in terms of being able to do that without getting planning permission, but I do not think it is the only thing, and it will not work for a lot of people; if you cannot park your car straight outside your house, it will not work for you. So we definitely need to look, as Nigel said, into innovative solutions, with chargers on lamp posts, and things like that, that are connected to batteries, which can bring those costs down. There is very good practice in lots of local authorities, but you are right that it is patchy at the moment. We need to try to learn from what is working well in places that are doing better.

Q155 Chair: Is that geographical patchiness partly to do with market confidence? In other countries, is there more state intervention in ensuring a more even geographic spread of public charging?

Dr Devane: I do not know, I am afraid, about the state intervention point, but you are right that market confidence is key. To circle back to the ZEV mandate, one of the things it is really good for is giving private businesses that might want to invest in charging infrastructure confidence in the level of demand they will see. I am sure they have detailed models, based on the national-level mandate targets, of what that might look like



HOUSE OF COMMONS

in different rural and urban geographies, and at different scales. At an aggregate level, at least, it gives them confidence that they can expect to see this level of demand for their service.

Nigel Topping: It is something to watch. A lot of local authorities are now rolling that out. Uber is an interesting source of information—I do not whether you have spoken to it. Its drivers are predominantly from lower-income, urban areas that have historically been charging deserts. They have been very active in advocating for this provision, and they have working with some of the charging companies to address it.

It might be worth drawing a parallel with, and pointing out the differences from, another important piece of infrastructure, which is broadband and fibre. Left to its own devices, the market will look for where it thinks it can get maximum utilisation, and for the biggest bang for its buck in broadband, it will go urban. A fibre cable that goes past thousands of houses is going to be more profitable than one that goes to one house at the end of a country lane. That is why the Government, in that case, have had to intervene to create the conditions to make sure rural infrastructure is invested in—

Olly Glover: Sometimes it does, yes.

Nigel Topping: Sometimes—but there is clearly an attempt to do that. That is slightly different, in that the lack of off-road parking is much more of an urban phenomenon. In that sense, there is a better match between what the market would like to do and the problem.

Chair: But lots of destinations are away from urban areas, which affects people's range of confidence.

Q156 **Rebecca Smith:** The question I asked was, does your modelling account for those regional differences? I appreciate it is great that local authorities are doing things, and we know that, because we have had them come in and we all have experiences of that, but my key question was about your data and your mapping. Does your data take into account regional disparity, or is it aggregated across the entire country? Because if it does not take that into account, it is not serving us as well as it perhaps could, because it does not highlight the rate of change in other places. If that is not something you do, might you be able to start doing it to further the cause of developing these things?

Dr Devane: It does in part, in terms of trying to model where you might need more or less charging provision, but we do not have the full data to do a full model of uptake by postcode or local authority area.

Q157 **Rebecca Smith:** Even regions? Do you have it for the south-west, the south-east or the north?

Dr Devane: Currently not—

Chair: I think Autotrader might—

Rebecca Smith: Not in terms of policy.



Chair: No, not in terms of policy. That is useful; thank you. As there are no more questions on the overarching area, we will go on to vans and trucks.

Q158 Baggy Shanker: Electric vans are selling at only about half the rate required to meet the original ZEV mandate targets—last year, I think that 9.1% of new registrations were electric. What is the biggest barrier to electric van adoption? Is a new policy required to accelerate take-up?

Dr Devane: We are having a bit of a look at this. You are right that the market is starting from a lower base, but we have confidence that there is still time to make up the ground. Interestingly, if you look at the modelling I described, you might, purely economically, expect the market to be going more quickly. It does appear to be the non-financial side of things where the big barriers are.

A couple of years ago, the Government commissioned a survey of van users and operators, and they found a range of barriers. The biggest ones seemed to be, first, understanding and confidence in the vehicle—understanding how you operate an EV, or having confidence in how it might be used for your business. There were also concerns about range of the vehicles—whether they have enough range to not have to stop and recharge during a full working day, for example.

Then there were concerns about charging, which came from two perspectives. One was simply that vehicles that are not charged at a depot would have to be charged either at a driver's home—which might not be possible if they do not have a driveway, or might not be desirable—or on the public network, which comes back to the problems about the cost of charging that we discussed earlier.

Also, there are added problems for vans, in that some charge points might not be designed to have quite the space a van requires. If you are running a busy business, you might also be a bit concerned about risking needing to queue for a charge point, for example. Finally, businesses that operate depots have seen issues—this applies to HGVs as well—with getting grid connections to have 10 chargers in their depot, with either the cost or the priority of that.

Those were the issues raised two or three years ago. Earlier in this inquiry, I think you had evidence from fleet operators who said some of the same things. The committee is very keen to figure out whether the interventions the Government has taken in this area, such as the workplace charging scheme and the depot charging scheme, are helping to mitigate that, and also whether the fact that there are now a lot more models on the market than there were two or three years ago is helping alleviate concerns about range or confidence in the technology.

One of our priorities on the committee for the next six to eight months is to try to speak to some of the fleet operators, van owners and so on to understand whether progress is being made towards resolving those barriers.



Nigel Topping: The 36% growth year to year in uptake is encouraging, but as Eoin says, we are keen to make sure we understand whether that is the beginning of sustained exponential growth, or whether there are non-financial barriers that persist. We should remember that, although it is below target, it has started to show the beginnings of that exponential growth that we would expect.

Q159 Baggy Shanker: Moving on to HGVs, the Government has launched a consultation on the new regulatory framework for HGVs and plans to publish two new strategies—the coach infrastructure strategy and the zero emission HGV strategy. What measures need to be included in these strategies to make them work?

Dr Devane: The HGV market is at an even earlier stage, but there are some quite promising signs. There are lots of manufacturers moving into this space. In the last five years, since we gave our advice on the sixth carbon budget, the technology options have narrowed in this space, and it has become a lot clearer that electric is likely to be the solution for the majority of operations. That is really positive news.

We welcome the Government's consultation in this space. It is important to try to give confidence and certainty to that market. In fact, the consultation reaffirms the commitment to phase out the sale of new non-zero-emission HGVs under 26 tonnes by 2035, and by 2040 for all new non-zero-emission HGVs.

There are two strands to what they are proposing. One is an infrastructure strategy, which is really important. As I touched on earlier, the cost and timeliness of getting grid connections will be crucial for operators. The ability to share grid connections and use shared charging in places where you are dropping things off will also be critical, but it is not always happening currently.

There is then also the question of regulation. I think the Government proposed three potential approaches. One is CO₂ emissions targets, essentially extending what we currently have, the second is something akin to a ZEV mandate, and the third is fleet adoption requirements. We have not assessed the relative benefits of each of them, but we do think that the ZEV mandate for cars is working very well. I wanted to point out earlier that, despite claims to the contrary, the ZEV mandate for cars was achieved last year by all manufacturers without paying fines, within the flexibilities allowed. So the ZEV mandate is working well and is prompting growth in that market, and we feel that that would be the most reliable way of stimulating growth in that zero emission market.

Q160 Alex Mayer: In your answer, you talked about HGVs. The strategy is also about coaches. The coach sector often feels that it is part of the bus and coach sector, and now it is part of the HGV and coach sector in this respect. Are there any specific remarks you might have about the coach industry?

Nigel Topping: Eoin referred earlier to the fact, for a long time in the HGV sector, there has been a question about whether it will be fuel cell or



HOUSE OF COMMONS

battery. It is common in the early stages of a transition that there is competition—some of you may be old enough to remember the VHS/Betamax thing when videos came along, with two competing technologies and then one. We tend to get this technology lock-in.

Until very recently, it has been unclear with heavy goods vehicles. In China, now, which leads technology in so many cases, more than 50% of heavy goods vehicles being sold are electrified, so we can be pretty confident that the technology is locking into electric. In coaches, it seems to have got there earlier. You will be aware that we are at nearly 40%, by sales of buses and coaches in the UK. All the major coach operators have committed to zero carbon fleets. The evidence is that that sector is more comfortable with the transition already. Of course, by definition, they have more repeatability of routes. It is interesting that the three biggest operators have all committed to being 100% electric by 2030 or 2035 and are well on the way to doing that.

Q161 Alex Mayer: On repeated routes, I absolutely get that for the bus sector, which is working to a timetable. But coaches often do many different things, such as excursions, and they go to completely different places; one day they might be a bus replacement service. So it is not necessarily to a standardised timetable.

Nigel Topping: No. That is a good distinction to make. I was thinking of the National Express and Stagecoach coaches, which run long distance. I forget the name, but there is also a Scottish electric-only coach company that has launched recently. You are right that there is a subsector where the charging infrastructure is more of an issue in terms of being confident you will be able to deliver your tour party. You would expect that to transition more slowly than the more predictable subsector.

Dr Devane: I note your observation that it is HGV and coach. It is important that it is “and coach”; if it were just HGV, it would be missing consideration of how that infrastructure works for coach fleets as well.

Q162 Chair: With a very different destination profile.

Nigel Topping: Yes.

Q163 Dr Arthur: You suggested that we should rejoice that the ZEV mandate was met last year, but am I right in understanding that the reason it was met was that manufacturers bought lots of credits from manufacturers? Am I right that people like Elon Musk and Chinese manufacturers have benefited substantially from this?

Dr Devane: It was met through the way it was designed, which is trading within the market. You are right that, by default, effectively, Tesla, for instance, have a 100% BEV share and are achieving more sales.

Q164 Dr Arthur: And people are buying credits from Tesla?

Dr Devane: That still means that there are that number of electric vehicles entering the fleet. It is not just Tesla and the Chinese companies. We have seen a lot of the major European manufacturers make strong



HOUSE OF COMMONS

progress. I think Renault are at about 29% battery electric vehicle sales. The major German manufacturers are all somewhere around 20%—the low 20s. There is progress across the whole market.

Q165 Dr Arthur: Interesting. What we are really talking about is reducing transport-related emissions. Many of our towns and cities are congested. If we replace all those cars with electric vehicles, our towns and cities will still be congested. Should we not be talking more about getting people out of cars and walking—hopefully not tripping over cables on the footpath—cycling and perhaps even using the bus, if the focus is reducing transport emissions, as it should be?

Dr Devane: We should do both—I agree. If you look at our analysis, our pathway includes both a transition to electric vehicles and a transition to more walking, cycling and bus use. I note, though, that it is challenging to deliver sustained modal shift, and the evidence is slightly patchy. We looked at a review of interventions that have worked in cities and towns across Great Britain and Europe. We really tried to focus not on theoretical ideas of what might be possible, but on practical solutions of what is possible. That led us to the conclusion that about 7% of car kilometres could be shifted on to those alternative modes by 2035.

That might not sound like a lot, but you should remember that most of the trips you are shifting are going to be shorter trips, mostly in urban centres, so that is quite an ambitious target. It would bring us more in line with some of the leading countries in Europe. In 2022, which was the latest evidence we had at the time, the public transport share of distance travelled was about 14% in England; in Germany and Switzerland, it is more like 19% or 20%. Active travel was about 5% in England; in the Netherlands, the leading player in this field, it is 11%. I am not suggesting we can get all the way there, but there is definitely scope to go further.

Q166 Dr Arthur: In terms of the use of public money, we are investing all this money in electric car grants and other things. A lot of that money is just going straight to the wealthiest people in society. Would it not be better spent on modal shift, which benefits a wider range of people in our country?

Dr Devane: Again, I come back to the fact that it is both. The grants going to incentivise electric vehicle purchase get vehicles into the fleets. Most people do not buy their vehicles new; they buy them either second hand two or three years down the line when a fleet sells them, or third or fourth hand. The more electric vehicles we can get into the stock today, the earlier those become available across society.

However, we need to see both. You made the point that there are a lot of non-emissions-related benefits to active travel, in particular, but also to public transport. We made that point in our advice. Our advice has a lot more of this than the Government's pathway relies on. We want to see more use of the potential for modal shift towards meeting the emissions plans than currently, but the big ticket is still EVs. That 7% is the equivalent of getting about 2.5 million EVs into the fleet, which sounds like

a lot, but it is about the number of EVs we will be selling each year by 2030. It is not something that can be used instead of the EV transition; it should be alongside.

Q167 Chair: The Government are working to a forecast that vehicle mileage in this country will increase by 10% over the next five years. We heard about that from Highways England last week. Are your projections on transport emissions taking that into account?

Dr Devane *indicated assent.*

Chair: They are.

Dr Devane: It is a really important question. Our projections are relative to the level of baseline growth. I think our assumption on baseline growth is slightly lower than the Government's, particularly on the van side of things, but they start from that growing baseline.

Q168 Chair: So you are saying that 7% of car mileage in this country could be shifted to active travel and public transport? I do not know to what extent that is in your advice. If the 10% projection is right—we cannot see any policy interventions of any significance that will change that—that is still an increase in overall congestion on our roads.

Dr Devane: I think our pathway would be roughly flat in terms of actual aggregate kilometres, but that is in the context of a growing population, and potentially a growing level of car ownership. To answer your other question, that 7% is in our advice.

Q169 Dr Arthur: Vans are a huge challenge, as you have highlighted. I spoke to a retailer last week who said that he just could not sell second-hand vans. He had put his vans on Autotrader at the lowest possible price—below everybody else—and still had no interest in them after a month. You spoke earlier about what the French Government are doing to try to prop up the second-hand market. Should the Government be doing more to support people who need vans, particularly in the second-hand market? A lot of our small independent businesses thrive on the second-hand market. If electric vehicles are not attractive to them, that is a real challenge.

Dr Devane: It is a very good question. As I said, we are keen to get more into the van market this year. We are definitely aware that there is a level of instability in residual values on both cars and vans in the used market, which feeds through to uncertainty, higher lease costs and so on for people buying those vehicles up front. To some extent, that is a feature of a growing market with prices falling, but we certainly want a market where people have confidence that, in buying the new vehicle, they will be able to sell it at the end of its life, and in buying that second-hand, third-hand or fourth-hand van to use for small businesses.

Nigel Topping: This may be an anecdote, but anecdotes are important to generate hypotheses about what might not be working. I remember that when London started to introduce charging, seven or eight years ago, a lot of small traders wanted to buy electric vans but found that they could not buy them for love nor money. It was like, "Okay, you're penalising us but



HOUSE OF COMMONS

there's no way get out of jail." That triggered some of the main van manufacturers to start to develop UK-based models and sell them here. Your anecdote suggests that it is not the economics but something infrastructural if you can't sell it, even at a very low price; you would normally expect the market to clear at a low price. That goes back to the point about needing to understand the infrastructural challenges.

Dr Arthur: It is an anecdote, but there are general issues that we know about: load, range, reliability and so on. We have similar issues with cars, but although I am not in the mindset of a van owner, I think it is a real challenge if we want broader acceptance right across the economy.

Q170 **Chair:** I am conscious that the Minister is waiting, but I have one other question. Much of your advice on policy interventions has been around carrots. That is where a lot of the policy interventions are. Do you think that there is a role for more sticks, in a balance, to support the shift of buyers into EVs?

Nigel Topping: Generally speaking, we are quite policy neutral. We are advising on technology pathways and saying that there needs to be a policy environment set up. We are very pro the creation of market mechanisms that drive a transition automatically, but those can be a combination of sticks and carrots. Both are valid. Getting the balance right is really a matter for the policy makers.

Chair: Thank you very much for your time and for your evidence. If there is anything you want to add, please write to us. That concludes our first panel.