



House of Commons
Transport Committee

Zero emission vehicles: Government Response to the Committee's First Report

**Fifth Special Report of
Session 2021-22**

*Ordered by the House of Commons
to be printed 19 October 2021*

Transport Committee

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Fifth Special Report

The Transport Committee published its First Report of Session 2021–22, [Zero emission vehicles](#) (HC 27) on 28 July 2021. The Government response was received on 27 September 2021 and is appended below.

Appendix: Government Response

In welcoming this Report, the Government would like to thank the Transport Select Committee for undertaking its inquiry into zero emission vehicles.

Cars and vans represent one fifth of UK domestic CO₂ emissions and accounted for 71% of domestic UK transport emissions in 2019. Ending the sale of new conventional petrol and diesel cars and vans by 2030 is a key part of the answer to our long-term transport air quality and greenhouse gas issues. It will put the UK on course to be the G7 country that will decarbonise cars and vans fastest, creating a vast number of green jobs in the process, and will deliver savings equivalent to almost five million fewer cars on the road each year by 2035. We have recently consulted as part of the Green Paper on the CO₂ emissions regulatory framework for all newly sold road vehicles in the UK and plan to lay legislation in 2024 to help achieve our targets.

We acknowledge the urgent need to go further, faster to tackle emissions from across the transport sector. The Transport Decarbonisation Plan (TDP), published in July 2021, sets out a credible and ambitious pathway to delivering transport's contribution to carbon budgets and net zero by 2050. Alongside the TDP and underpinning its implementation of our phase out dates, we also published the 2035 Delivery Plan which sets out the actions that government will take to deliver these ambitions, by bringing together our commitments on investment, regulation and policy changes.

Finally, Government is leading the way with our commitment for 25% of the government car fleet to be ultra-low emission by December 2022 and 100% of the government car and van fleet zero emission by 2027.

The Committee made a number of specific recommendations, the Government's responses to which are set out below:

Recommendation 1

In order to achieve its 2030 and 2035 targets, the Government must introduce a ZEV mandate to incentivise manufacturers to sell an increasing proportion of ZEVs or to purchase tradeable credits year-on-year, reaching some 100% ZEV sales by 2030. (Paragraph 27)

The Government partially accepts these recommendations. The Government agrees that a new regulatory framework is required in order to deliver our net zero ambitions from road transport, and to deliver an increasing proportion of zero emission vehicles on UK roads. The Government has published a Green Paper on a New Road Vehicle CO₂ Emissions Regulatory Framework for the United Kingdom and leads with a preferred option of deploying a Zero Emission Vehicle (ZEV) Mandate, combined with a CO₂ regulation. We

believe that a ZEV Mandate is required in order to deliver the quickest possible transition to zero emission cars and vans, as well as to ensure that the required market conditions are in place to deliver the investment that is needed in other areas in order to support that transition, such as recharging/refuelling infrastructure. The additional CO₂ metric would ensure that the non-ZEV portion of the fleet would continue to remain regulated. The second framework considered uses a CO₂-only metric, which would essentially toughen the targets that already regulate vehicles in the UK.

The Green Paper seeks views on the two potential regulatory options but does not at this stage go into detail on target levels or potential uptake trajectories. Following the conclusion of this consultation, and publication of the government's response, we will bring forward specific proposals for the future regulation that is to apply to our new vehicle fleet. These will be the subject of future detailed consultations with all relevant stakeholders including industry, most likely starting in early 2022 with proposals for the regulation of new cars and vans.

Recommendation 2

The Government must define 'significant zero emissions capability' for the automotive manufacturing industry, while ensuring that only the cleanest possible hybrid technology is available until 2035. It should also maintain a technology-neutral approach to the transition to ZEVs and explore the potential of alternative fuels, such as hydrogen or other alternatives to petrol and diesel, where possible. (Paragraph 32)

The Government accepts this recommendation. We have recently consulted to define 'significant zero emissions capability' and we will respond in due course. The technologies on sale, and the market share of those technologies, must be compatible with achieving our 2050 net zero climate change target, long-term air quality goals and meeting our carbon budgets. Government is taking a technology neutral approach to meeting our ambitions, but we are not outcome neutral, the end goal must be zero emissions from the tailpipe. Government is supporting the use of hydrogen where the market favours its use. The Government's £23m Hydrogen for Transport Programme is increasing the uptake of fuel cell electric vehicles (FCEVs) and growing the number of publicly accessible hydrogen refuelling stations. Hydrogen is likely to support a zero-emission future especially for heavier vehicles, such as buses and HGVs. We've also recently announced our intention to increase targets under the Renewable Transport Fuel Obligation (RTFO) by 5% by 2032. The RTFO supports the supply of renewable transport fuels, including hydrogen.

Recommendation 3

As part of its electric vehicle charging infrastructure strategy, the Government must explain:

a) how it will support all regions and local authorities to deliver sufficient and wellmaintained charging infrastructure solutions tailored to local needs, so that no area is left behind; and

b) how it will ensure that the roll-out of charging infrastructure keeps pace with the increase in EVs and that the right types of chargers are in the right locations.
(Paragraph 45)

The Government accepts these recommendations. We are committed to ensuring that no areas are left behind as the country transitions to electric vehicles. We believe it is vitally important that no matter where you live you have access to charging infrastructure which meets your needs. The Electric Vehicle Infrastructure Strategy, to be launched this Autumn, will outline the roles and responsibilities for stakeholders across central and local government, the market and the energy sector to ensure well developed local planning and deployment of public chargepoints.

We have seen significant increased investment in the chargepoint market since the announcement of the 2030 phase out of new diesel and petrol cars and vans. Across the market, there has already been £500 million worth of investment commitments this year. To date the chargepoint market is delivering and keeping pace with new demands on the network. With over 24,000 chargers already available, around 700 chargers are being added to the public network every month (Zapmap stats) of which around 100 of these are rapid chargers. However, we agree with the Committee that rate of the deployment must accelerate to meet our ambitions. We will be monitoring market activity and local access closely and will be ready to intervene further should the need arise. We will reflect on this in the Electric Vehicle Infrastructure Strategy which will be published in the coming months.

Recommendation 4

To facilitate the roll-out of charging infrastructure, the Government must:

- a) use the upcoming Planning Bill to make public charge point provision a requirement of local plans;***
- b) make funding for the on-street residential charging scheme dependent upon local authorities having detailed charge point plans in place which support rapid charging options; and***
- c) ring-fence a portion of the £90 million local charging scheme to allow local authorities to employ dedicated 'charge point champions' to deliver local charging infrastructure strategies.*** (Paragraph 46)

The Government partially accepts these recommendations. For a successful transition to mass market EV uptake holistic, joined up thinking is required at both a local and national level. In the Electric Vehicle Infrastructure Strategy, we will set out our expectations for local authorities to consider EV infrastructure in their local plans. Alongside this in the Future of Transport Regulatory Review consultation, we are consulting on whether there should be a statutory requirement on local authorities or another body to undertake local planning and provision of EV charging infrastructure. We will also continue to work closely across Government to ensure that reforms to the planning system will be beneficial to chargepoint rollout.

There is unlikely to be any one ideal solution appropriate for all areas. Instead, local areas will need a tailored mix of charging infrastructure, which may include some rapid charging provision in addition to kerbside on-street charging. We committed £90m to the new Local EV Infrastructure (LEVI) Fund to support the roll out of larger on-street charging schemes in England, potentially including local rapid charging projects. Whilst

the On-street Residential Chargepoint Scheme does not fund rapid charging, we will be ensuring it dovetails with the LEVI Fund to provide a holistic funding support package for local authorities.

The LEVI fund is a capital only fund and cannot be used to pay for chargepoint champions directly. We are procuring a body to support LEVI and one of its roles will be to help LAs to develop their EV charging infrastructure project proposals. We also currently support LAs through the Energy Savings Trust's Local Government Support Programme which the government funds.

Recommendation 5

The Government must work with National Grid to map the electricity network to assess potential weak areas, especially in rural locations, and to develop a plan to prevent 'not-spots' from emerging similar to those during the roll-out of broadband and mobile coverage. (Paragraph 47)

The Government partially accepts these recommendations. The Electric Vehicle Infrastructure Strategy will set out as part of its vision that no region or demographic should be left behind in the rollout of EV charging infrastructure and will outline the roles and responsibilities necessary to ensure this is realised.

Ensuring the electricity networks in both urban and rural areas are able to cope with current and future demand from EVs is the responsibility of electricity network operators, and they are incentivised to do so through the regulatory framework set out by Ofgem, the independent regulator. Ofgem use price controls, known as RIIO, to determine the revenues network operators recover, investment they make and performance standards they must deliver. As part of the RIIO process, network operators forecast likely take-up of EVs, in order to shape investment plans for reinforcing the network in areas where it is needed.

For EV chargepoint rollout, mapping of the electricity network is most useful at distribution network level, led by Distribution Network Operators (DNOs), rather than transmission operators such as National Grid. We have been working with the Energy Networks Association (ENA), who have committed to produce a National Energy System Map (NESM) to increase visibility of network infrastructure and allow investment to be optimised. The prototype of this map is scheduled for public release in October 2021, with a full production version in 2022. Along with regional network capacity heatmaps already produced by all DNOs in their areas, the map will provide prospective EV chargepoint operators with useful information on where network capacity is available for siting their projects.

Recommendation 6

The electric vehicle charging infrastructure strategy must set out:

a) how the £950 million rapid charging fund will be spent to facilitate the implementation of charging infrastructure; and

b) the measures that the Government is taking to identify and address under-provision at locations outside the strategic road network, where grid connection costs and grid upgrades are expensive and the business case for investment is weak. (Paragraph 59)

The Government partially accepts these recommendations. We agree that the public charging network needs to include both a reliable network of high powered chargepoints along major roads, and well-maintained local charging provision. To ensure the private sector can continue to expand the charging network at pace in the 2020s, the Government will invest £950 million in future proofing grid capacity along the Strategic Road Network and major A roads to prepare for 100% uptake of zero emission cars and vans ahead of need through the Rapid Charging Fund. This will be focused on sites where upgrading to this level of future-proofed infrastructure would be uncommercial. The Government has already engaged closely with industry on the plans for this fund and will continue to do so as the fund's design and implementation is finalised. Details of the fund will be announced separately to the Electric Vehicle Infrastructure Strategy, though the Strategy will refer to the important role of en-route charging for ZEV drivers, particularly for combatting consumer range anxiety about long-distance journeys.

Our Electric Vehicle Infrastructure Strategy will define our vision for the continued roll-out of a world-leading charging infrastructure network across the UK, including outside of the Strategic Road Network. The strategy will focus on how we will unlock the chargepoint deployment needed to enable the transition from early adoption to mass market uptake of EVs and will clearly establish government's expectations for the roles and responsibilities of key stakeholders.

Government understands that grid connections for charging infrastructure can be costly and we are working with network companies to ensure that those seeking a connection are supported to find the most cost-effective solution. To facilitate this, we have worked with industry and consumers to create a central source of guidance for fleet and commercial EV customers on how to secure grid connections in a timely, easy and affordable manner, which we have now published on <https://www.gov.uk/government/publications/connecting-electric-vehicle-chargepoints-to-theelectricity-network>.

The energy regulator, Ofgem, is considering reforms to the current grid connection charging regime, and has recently proposed to remove the cost of wider electricity network reinforcement from the connection costs faced by electricity demand customers, such as those installing EV chargepoints. Any proposed changes, if agreed, would come into effect in April 2023 and would significantly reduce connection costs for some EV charging infrastructure projects.

Recommendation 7

The Government must amend the wayleave regime for installing charging infrastructure to ensure that that regime does not act as a barrier to roll-out. (Paragraph 60)

The Government partially accepts these recommendations. Government agrees that certain land rights processes, such as wayleaves, can increase the timescales and costs associated with electricity connections for EV chargepoints. We are keen to ensure that these processes do not act as a barrier to the rollout of EV charging infrastructure. We have therefore launched a Land Rights and Consents project, working closely with

industry, to explore these issues further. We are currently gathering evidence to inform our recommendations for improving the processes and are not in a position to prescribe specific solutions at this stage.

Recommendation 8

In the charging infrastructure strategy, the Government must explain how it will improve the consumer experience at public charge points and ensure that

- a) drivers can seamlessly access any charging network in any location at any time***
- b) charge point operators are not disincentivised from investing in charging infrastructure.*** (Paragraph 70)

The Government accepts this recommendation. We agree that access to the public charging network should be seamless. We have proposed, in the Consumer Experience at Public Chargepoints consultation, that consumers and fleets should not have to download an app each time they reach a new chargepoint operator, that consumers should be able to easily understand the pricing offer to charge and be able to compare costs across the entire UK network, and that consumers should be able to easily locate a working chargepoint that suits their needs. We recognise that the market is in a relatively early stage of development and so we have conducted an impact assessment to ensure that the impact of legislation is proportionate whilst giving consumers the confidence they need. We will be publishing our government response to the consultation in Autumn and we will lay legislation in early 2022.

Our Electric Vehicle Infrastructure Strategy will set out roles and responsibilities for Chargepoint Operators (CPOs) and other key stakeholders. This will provide clarity to industry on what we expect from all actors in the EV charging space and further incentivise chargepoint operators to invest in charging infrastructure. Government will set out the right framework, through the Electric Vehicle Infrastructure Strategy, to give market confidence to take forward investment and to continue to work with CPOs and local stakeholders to ensure private investment is harnessed.

Recommendation 9

The Government must explain how it plans to tackle the potential price differential faced by people who cannot charge their vehicles at home and are compelled to rely on on-street public charge points. It could do this by:

- a) protecting the consumer from excessive costs where there are risks of local monopolies emerging; and***
- b) addressing the discrepancy between the 5% VAT incurred on electricity at home compared with the 20% VAT incurred at public charge points.*** (Paragraph 72)

The Government partially accepts these recommendations. We recognise the difference in prices between those who can charge at home and those who charge on-street. We believe that EV drivers should be able to use fairly priced and accessible charging whether they have access to off-street charging at home or not. As recognised by the Competition and Market Authority in their study of this market, it is important that there is competition in

the market and we will continue to encourage this as part of our framework, which will be outlined in the forthcoming Electric Vehicle Infrastructure Strategy. New technology, such as smart public charging, could reduce costs for consumers who do not have access to off-street charging and associated tariffs. As the market is still in its infancy, we are continuing to keep a close eye on how it evolves. While equalising VAT rates would reduce the differential, it would not bring about parity in overall price between private and public charging.

Recommendation 10

The Government must mandate industry to:

a) use price as a lever to shift consumer behaviour away from conventional refuelling habits towards 'a little but often' approach; and

b) incentivise consumers to charge at times when there is less demand on the electricity grid. (Paragraph 79)

The Government partially accepts these recommendations. We are confident the electricity system can accommodate the increased demand from electric vehicles, through the robust processes in place for bringing forward new generation and network upgrades. In order to reduce the need for new capacity and therefore costs for consumers, Government agrees that consumers should be incentivised to charge at times of low electricity demand, and that price will play an important role in driving this consumer behaviour. Whilst it is not our current intention to mandate that industry must deliver both of these recommendations in full, Government is taking several steps to achieve a similar outcome.

Government welcomes the Committee's support for our intention to mandate that private chargepoints must be smart. Government has committed to bringing forward legislation in Autumn 2021 which will mandate smart functionality for all new home and workplace EV chargepoints sold in Great Britain. The legislation will also include a requirement for chargepoints to be pre-set to charge at off peak times by default. However, consumers are able to change or override the smart charging function to charge when they need to at any time. This default setting will be an important way of encouraging consumers to charge at times of low demand.

In addition to ensuring that chargepoints have the necessary functionality to facilitate smart charging, price signals should incentivise consumers to smart charge – for example, by offering cheaper electricity at off-peak periods, with some industry estimates suggesting that consumers could save £230 a year simply by charging their car off-peak. The Government is encouraging industry to bring forward more smart electricity tariffs, and we expect that the introduction of market-wide half-hourly settlement in the mid-2020s will act as a significant incentive for suppliers to do so.

The Government is also working to ensure that EV owners can access trusted information about the benefits of smart charging. We are already working with the Electric Vehicle Energy Taskforce and industry stakeholders to improve consumers' access to information and advice on smart charging, including on how to set up and use products in a way that suits their needs. All publications from the Committee are available on the publications page of the Committee's website.