E.ON response to the 'Green Paper on a New Road Vehicle CO_2 Emissions Regulatory Framework for the United Kingdom'

1. E.ON has long advocated a 2030 phase out of ICE vehicles and we are delighted that the Government has now committed to this ambition, a move which will play an essential role in the decarbonisation of the surface transport sector. The speed of the transition in this sector will be significant and it is essential that consumers have the confidence to understand, engage with and benefit from decarbonised transport. We are therefore pleased that the Department for Transport has launched this consultation to ensure that the ongoing regulatory framework is sufficiently robust to deliver the rapid decarbonisation of the UK's road transport sector.

2. We welcome the Government's commitment to phase out the sale of new internal combustion engine passenger cars and vans by 2030. However, we strongly believe that the phase out for new hybrid vehicles should also be set for 2030 (instead of 2035). A five year extension for hybrids is detrimental to the UK's efforts to address climate change, will continue to negatively impact UK air quality and will do little to enhance investor and consumer certainty with respect to the urgent and necessary transition to a fully decarbonised surface transport sector.

3. E.ON fully supports the Government's preferred Option Two i.e. the introduction of a Zero Emission Vehicle (ZEV) sales target alongside an increasingly tightened CO_2 regulatory framework. Flexibility will be important to ensure a cost-effective technological transition, but it should be designed carefully with the environmental credibility and integrity of the regime being paramount. Flexibility within the ZEV sales target regime should be in the form of an ability to trade and bank zero emission credits. We believe that the logic behind a proposed super-credit for long range ZEVs or partial credits for hybrid vehicles with 'significant zero emission capability' is flawed. Offering anything other than a single credit for a ZEV will create confusion and reduce the certainty that the UK remains on track to phase out ICE vehicles by 2030. The two regimes, whist equally important for swiftly decarbonising the surface transport sector must be designed with simplicity in mind and should not interact for compliance purposes.

4. Finally, but of huge significance, E.ON believes that in the interest of social justice the rapid switch to new car and van ZEVs by 2030 (including the phase out of hybrid vehicles) will have a substantial impact on enabling lower income individuals to have swifter access to ZEV vehicles in the second hand market. Of those in the lowest income quintile who own a car, 42% of the cars are over ten years old (this compares to just 23% for those in the highest income quintile)[1]. The prospect of carbon lock-in for poorer car owning families and associated health implications for poorer neighbourhoods is a genuine one, and one which must be considered when determining the length of any transition. Therefore, in determining smooth glide paths for manufacturers in reducing emissions from internal combustion engines, Government must also consider the glide path for the health of vulnerable groups who will be unnecessarily exposed to higher levels of toxic air if the Government's ambitious ICE phase out bans are not delivered with urgency.

---

1 https://www.edf.org/sites/default/files/documents/EDFE%20EV%20electrification%20report%20Oct%202019%20FINAL.pdf

About E.ON

5. E.ON is one of the largest energy companies in the world. Across Europe, we have over 54 million customers and operate c1.5 million km of energy networks. E.ON in the UK is already leading the energy transition, whether that be in providing low and zero carbon energy solutions across electricity, heat, or transport. We now reach nearly a fifth of households and small businesses across Britain, which receive 100% renewable electricity on all tariffs, as standard, at no extra cost. Our focus is on personalised and sustainable customer solutions and we believe that the future of energy is low carbon, decentralised, digitalised, and local, with customers in control.

6. E.ON Drive provides EV charging in people's homes, at work destinations and in public destinations including our ultra-fast charging stations in Birmingham and Preston. Our charging posts have a 99 percent reliability and we operate a 24/7 contact centre to help customers. We've installed over 50 charging points across our estate and are currently undertaking a feasibility study to have EV charging at all our sites including V2G.

7. At E.ON we have made the decision that all future company cars for employees will be fully electric. We believe that not only does this reduce our carbon footprint and improve air quality, but it will also help to drive change in the business world and increase the volume of affordable EVs in the second-hand market to support a just transition for all.

Consultation Questions:

Significant Zero Emission Capability

Q1 - What metric, or combination of metrics should be used to set eligibility for cars and vans between 2030 and 2035?

8. New cars and vans should have 100% zero emission capability if they are to be sold beyond 2030. E.ON concurs with the Government entirely that there are significant difficulties in determining a metric or combination of metrics that can be deployed to identify vehicles with 'significant zero emission capability'. It is largely for this reason that E.ON continues to believe that the 2030 internal combustion engine (ICE) phase out date should be applied to all new cars and vans. New hybrid cars and vans must be phased out by 2030 at the latest.

9. A five year extension for hybrids is detrimental to the UK's efforts to address climate change, will continue to negatively impact UK air quality and will do little to enhance investor and consumer certainty with respect to the urgent and necessary transition to a fully decarbonised surface transport sector. Secondly, whilst we recognise that many vehicle manufacturers have invested substantially in developing hybrid technology, we do not believe that the societal impacts noted above are justified by the economic benefits of adopting a temporary exemption for hybrid technology. We do however note that there remains an important role for hybrids as a transitional technology in the Heavy Duty Vehicle (HDV) sector and this should help to facilitate a just climate transition for vehicle manufacturers.

10. A particular concern with the concept of cars and vans demonstrating 'significant zero emission capability' comes from evidence of driver behaviour, more specifically the charging

behaviour of many of those who drive plug-in-hybrid vehicles. Numerous studies show that many company car drivers of hybrid vehicles do not charge their cars regularly. The Green Paper rightly highlights, the fuel consumption and CO_2 emissions of a plug-in-hybrid can be significantly higher than type-approval values if they are not regularly charged. Going forward, policy makers should ensure that the tax regime and energy cost differentials between electricity and fossil fuels are sufficient to maximise the incentives on existing plug-in car drivers to recharge whenever possible.

11. In addition, the Guardian[2] recently reported that tests of plug-in hybrid electric vehicles (PHEVs) by consumer group Which? found that some hybrid cars achieved as little as a third of the fuel economy advertised in the official tests. In the interests of the environment, human health and consumer confidence, the Government must take all possible precautions to ensure that the regulatory regime does not inadvertently facilitate a new emissions scandal in the sector. Given the complexity of how to accurately define zero emission capability and the dangers of misrepresenting the environmental performance of hybrid vehicles to consumers, the Government should adopt a simple and clear 2030 phase out of all vehicles with an internal combustion engine of any sort.

Q2 – For your chosen metric, what threshold should new cars and vans be required to meet from 2030?

12. E.ON considers that the ICE ban should apply to all cars and vans from 2030. However, should government continue to believe that a five year exemption for certain hybrid technologies is justified, we believe that there should be no differentiation between cars and vans with respect to eligibility thresholds. Policymakers should adopt the strictest interpretation of 'significant zero emission capability' to ensure that the negative health and environmental impacts of the continued burning of fossil fuels in this sector are minimised. We do not believe that by 2030 a 'stepping stone' technology will be required for the vast majority of the new car and van market. However, Government may wish to retain some flexibility with a strictly limited derogation (lasting no more than 5 years) for new cars and vans within tightly defined subsectors, which must at least be capable of significant zero emission capability. All other new cars and vans must be zero emission vehicles by 2030.

Q3 - What other requirements could be introduced, if any, to maximise zero emission capability?

13. We believe that the five year exemption for hybrid vehicles with significant emission free capability should be removed. All new cars and vans with an internal combustion engine should be phased out from the UK market by 2030.

Q4 – What would the impact be on different sectors of industry and society in setting an SZEC requirement, using evidence where possible?

14. E.ON does not support the five year exemption being applied to hybrid vehicles in the car and van sector. We believe that the term 'Significant Zero Carbon Capability' has the potential to

[2] https://www.theguardian.com/business/2021/mar/02/plug-in-hybrid-cars-burn-more-fuel-than-tests-record-says-which

create confusion for consumers and investors alike, delay the electrification of new car and van sales, undermine the UK's efforts to rapidly decarbonise the surface transport sector and create unnecessary regulatory complexity for motor manufacturers. We are also concerned that an extended period for the sale of new hybrids may be considered by some as retaining a 'foot in the door' for fossil fuelled cars and vans, which could be used at a later date to further delay what is otherwise a necessary and ambitious UK government commitment for the decarbonisation of the sector. Finally, we would note that the continued sale of hybrid vehicles beyond 2030 would necessarily slow the sale of ZEVs and thereby delay the cost reduction trajectory that would otherwise make ZEVs affordable for the mass market by an earlier date.

Possible Future Frameworks

Q5 - Do you have any comments regarding Option 1, to replicate the current regulatory framework, albeit with strengthened targets, to meet our wider carbon reduction targets and phase out dates?

15. E.ON does not believe that Option One represents a sensible regime to cost effectively meet the government's decarbonisation objectives for the transport sector. In addition to the well understood shortcomings of the Worldwide Harmonised Light Vehicle Test Procedure (WLTP), which inadequately reflects real-world emissions, we would also urge caution when designing flexibility mechanisms to achieve net zero in sectors where the zero carbon solution is known, mature and increasingly cost-effective.

16. A trading element (such as those envisaged in the Climate Change Act) are legitimate in that they allow the offsetting of emissions that would otherwise be difficult or impossible to currently phase out. This is not the case for new cars and vans. Offsets, bubbles and trading schemes, to the extent that they are required for the achievement of net zero, need to be reserved for hard-to-treat sectors including industrial processes in order to buy time to transition to long term sustainable solutions e.g. large scale utilisation of green hydrogen, BECCS or the direct capture of emissions from the atmosphere. If policy design requires flexibility within the surface transport sector, we believe that such flexibility is best reserved to support the HGV transition to zero carbon fuel sources. In the context of new vehicle sales (passenger vehicles and vans) E.ON also believes that flexibility arrangements should be time limited in nature and not extend beyond 2029/2030.

Q6 - Do you have any comments regarding Option 2, to introduce a ZEV Mandate or sales target alongside a CO2 regulation?

17. E.ON strongly believes that introducing a Zero Emission Vehicle (ZEV) Mandate is a pragmatic and proportionate policy response that will provide the Government with the necessary legislative framework to ensure that the 2030 ICE phase out is achieved in a cost-effective manner. However, the inclusion of hybrid vehicles within the proposed credit system would significantly undermine the benefits of a ZEV Mandate.

18. Whilst ZEV vehicles should receive one credit, hybrid vehicles should receive zero along with any other cars capable of directly burning fossil fuels. Instead, hybrid vehicles will have their lower environmental impact recognised through the CO_2 regulatory framework. Cars

produced by manufacturers should only ever be captured and recognised by a single regulatory regime. Either they are zero emission and counting towards the clear and quantitative target which progressively moves towards 100% by 2030, or they should fall under the CO_2 production regime (hybrid and ICE) and be subject to progressively tightened CO_2 targets falling to zero by the phase out date. The creation of this twin approach with a shrinking CO_2 bubble for all cars/vans with an engine alongside a quantitative target based on volume of ZEVs, provides maximum certainty for manufacturers and investors, creates a credible framework which is easy for consumers to understand and most importantly ensures that government can hit the proposed phase out dates.

Q7 - Do you have any views on the government's initial preference for the regulatory approach set out in Option 2?

19. E.ON fully supports adoption of Option Two and therefore welcome the government's initial preference for the approach.

Q8 - Are there alternative approaches that could deliver on the government's carbon budget and 2030/2035 commitments?

20. **Yes.** We believe that the decarbonisation of cars and vans could be simplified by the adoption of a single phase out date for all new vehicles capable of burning fossil fuels. In other words, the 2030 ICE phase out should apply to all vehicles including those with Significant Zero Emission Capability. Such a move would enhance investor certainty and reduce the carbon lock-in that will otherwise accrue from new hybrids over a five year period (2030-2035). Our preference for the regime to achieve the phase out would be that put forward under Option Two, with a progressively increasing mandate for pure electric vehicle (EV) sales year on year, alongside ever tightening carbon standards for the remaining proportions of new car and van sales, such that they become zero carbon by 2030.

Q9 - Do you have any views on how either, or both, of the options could be implemented?

21. In advance of 2030 and in the interest of ensuring the most cost-effective technological shift, E.ON is supportive of distinct flexibility arrangements under both the proposed ZEV sales target and the CO_2 framework. Under the latter, the potentially lower emissions associated with SZEC vehicles will enable manufacturers to continue to sell ICE cars and vans up until 2030 (should they deem this to be a sensible strategy). With respect to the ZEV sales mandate, we believe that it would be appropriate to introduce a trading element to enable over-performing manufacturers to sell excess ZEV credits to under-performing manufacturers.

22. On the issue of fines, we would be concerned that requiring either additional credits to be purchased or a fine to be paid would cap the value of credits at the level of the fine. This could therefore produce a perverse environmental outcome, with under-performing manufacturers seeking to pay a fine rather than achieving their target in a manner which would encourage greater deployment of EVs. This would undermine the incentive for companies to over-achieve against the ZEV sales target and provide Government with less assurance that the ZEV 2030 target will be delivered.

23. E.ON therefore believes in cases where a manufacturer fails to either achieve their ZEV target or fails to provide to submit an equivalent level of ZEV credits within year, then a fine should be applied in addition to the requirement to make up the shortfall of credits or ZEV sales the following year. Precedents exist for such an approach including notably in the EU-ETS. Under the EU ETS, participants who fail to comply with their obligation to surrender allowances are fined €100 per tCO_2. Furthermore, the shortfall in compliance is then added to the compliance target of the following year. We would also note that the EU-ETS provides a further incentive to ensure compliance through the provision of a "name-and-shame" sanction. We believe that this approach should also be considered by policy makers to encourage delivery against a ZEV sales mandate.

Q10 - Do you have any further comments or evidence which could inform the development of the new framework?

24. We are concerned with the description of how a 100% ZEV sales target could apply post 2030. The consultation document appears to suggest that it may be possible to sell non SZEC ICE vehicles beyond 2030 subject to paying a fine (essentially suggesting a buyout type regime). We are strongly against such an approach, which undermines the overall goal of ending the sale of highly polluting fossil fuel cars and vans.

"an additional sales target could, hypothetically, also be deployed from 2030, requiring that 100% of all new vehicles sold meet the definition of 'significant zero emission capability'. This will ensure that new petrol and diesel ICE vehicles cannot be sold ***(without a fine being levied)*** *from 2030, while still allowing those vehicles that fall within the definition of 'significant zero emission capability' to continue to be sold"*

25. Policy makers must be clear with manufacturers from the outset that it will be impossible to sell new ICE cars and vans beyond 2030 and non SZEC cars beyond 2035 (albeit as previously stated E.ON would prefer a single 2030 phase out date for all types of ICE cars and vans).

Stringency of CO_2 Target

Q11 - If deploying a combined ZEV Mandate and CO2 regulatory framework, how should the CO2 element be set?

26. The CO_2 element should only include those vehicles which have an engine. Zero emission cars should not be included within the CO_2 framework and should only be captured under the progressively increased quantitative requirement. Hybrid cars should all be captured under the CO_2 framework and should not contribute in any way to the achievement of the Zero Emission Mandate (e.g. through a partial credit). To ensure continuity with the European Union and therefore to minimise regulatory divergence for car manufacturers, the CO_2 reductions should align with those required under the EU's regulatory framework (with the clear regulatory backstop that should require no new ICE cars or vans to be on sale in the UK post 2030). However, should the EU's carbon reduction targets for new cars and vans not keep pace with the UK's ambition, the UK must seek to put in place a progressively shrinking CO_2 bubble for all cars and vans with an engine, in the run up to 2030. An alternative might be a significantly sharper trajectory in the UK's proposed ZEV mandate to offset persistently high CO2 emissions from ICE vehicles.

Q12 - Should the focus be on delivering the largest possible CO2 savings, or the quickest possible switch to zero emission mobility?

27. Ultimately there are no scenarios whereby hybrid vehicles can provide certainty to policy makers that greater possible CO_2 savings can be achieved (as compared against a rapid switch to ZEVs). This is largely due to the well documented and significant behavioural factors at play with respect to recharging hybrid vehicles. Therefore, it is questionable that the government's decarbonisation strategy for cars and vans should target anything other than the quickest possible switch to zero emission mobility. In the context of cars and vans where electrification is relatively mature, it makes little sense to prolong a transitional period under the misapprehension that an approach which better incentivises hybrid technologies could deliver larger CO_2 savings. In contrast, ZEVs do provide certainty of the desired environmental outcome to Government and for this reason E.ON strongly supports a single 2030 phase out date for any car or van which is not a ZEV.

28. E.ON also believes that alongside the ZEV sales mandate, the CO_2 regulatory regime must be more ambitious than that in place today, with a reducing emissions bubble as we head towards 2030. We are entirely unconvinced of the argument within the consultation that maintaining a CO_2 target in the UK at current levels could allow manufacturers to focus all of their investment, research and development on the shift to zero emission vehicles. This may have some validity if vehicles were designed solely for the UK market, but this is clearly not the case. In effect, this approach could see the UK receive a larger share of dirtier vehicles (compared to the EU average) whilst potentially working to the minimum UK requirement to deliver EVs against the ZEV mandate. It is disingenuous to suggest that there could be any certainty that this lower level of emissions ambition for new cars and vans (compared against the EU regime) would do anything to speed up the deployment of EVs through increased investment in battery technology. The most likely outcomes from such an approach would be increased carbon lock-in from new cars and vans, which would be dirtier (than under a progressively tightened CO_2 framework) and the associated increase in toxic air across the UK.

Q13 - How do we ensure that the target allows for sufficient supply of low and zero emission vehicles; supports investment in the UK; and delivers our carbon reduction commitments?

29. The 2030 target obviously only addresses new vehicles, however, to the extent that the target can translate in to a rapidly growing second-hand ZEV market, it can have a tremendously important contribution to the UK's carbon reduction commitment. In their 2019 report *'Electrifying the UK: Ensuring the transportation revolution benefits everyone'* Frontier Economics and the Environmental Defense Fund rightly noted that lower-income individuals are simultaneously more likely to be harmed by high levels of transportation pollution whilst being least able to afford a clean alternative[3]. The ability of wealthier individuals to access attractive financing (or utilise existing savings) combined with the subsidies available for new EV purchases mean that currently the wealthiest individuals are best able to afford the upfront cost of a clean energy vehicle. In order to make the transition to EVs just and

[3] https://www.edf.org/sites/default/files/documents/EDFE%20EV%20electrification%20report%20Oct%202019%20FINAL.pdf

equitable, policy makers should seek to promote policies that offer opportunities for lower-income and/or disadvantaged communities to benefit from clean transport.

30. E.ON believes that there is a key role to be played here by rapidly switching to ZEVs by 2030 (including the phase out of hybrid vehicles) so that lower income individuals have swifter access to ZEV vehicles in the second-hand market and lower income neighbourhoods can benefit from a swifter transition to improved local air quality. This is particularly important given the potential financial savings that can be realised over the lifetime of the car in terms of fuel cost and maintenance cost reductions. The report also noted that of those in the first income quintile who own a car, 42% of the cars are over ten years old. This fact alone reveals that the prospect of carbon lock-in for poorer car owning families is a genuine one, and one which must be considered when determining the length of any transition. A significant number of dirty inefficient ICE and hybrid vehicles in use post 2045 (i.e. ten years beyond the proposed phase out date) does not feel ambitious for a subsector which can largely be considered as the low hanging fruit of transport decarbonisation. Neither could this outcome be considered equitable. Without a swifter transition to 100% ZEV only sales, the reality is that the poorest in our society often living within the most deprived neighbourhoods will face further unnecessary delays in being able to access the financial and environmental benefits of zero emission vehicles.

Derogations and Exemptions

Q14 - Should the new regulatory framework include exemptions or modified targets for certain specialist vehicles and/or niche and small volume manufacturers?

31. No. We believe that the proposed regulatory framework for CO_2 reductions and ZEV sales targets (under Option 2) contains sufficient flexibility in the years preceding 2030 to allow specialist vehicles and small/niche volume manufacturers to achieve a route to compliance. If Government wish to retain some flexibility for the use of hybrid vehicles with significant zero emission capability beyond 2030, we believe that this could be strictly limited via a derogation to certain niche sub sectors. However, E.ON's robust view is that all new cars and vans with an engine should be phased out by 2030.

Credit Levels

Q15 - Should credits be awarded to vehicles that meet the SZEC definition?

32. No. We believe that the SZEC approach is fraught with definitional complexity and will serve to undermine a ZEV Mandate. SZEC vehicles will still have a very important role to play as a transitional technology in helping manufacturers meet an increasingly tight CO_2 requirement in the years before 2030, but credits from SZEC vehicles must not provide additional flexibility with respect to manufacturers achieving the ZEV sales target.

Q16 - If so, should this be a fixed number of credits, or should there be a sliding scale that recognises the difference in CO2 efficiency of various SZEC-compliant vehicles?

33. Credits should only be permissible against the ZEV sales mandate and only genuinely zero emission vehicles (ZEVs) should be awarded a single credit. There should be no super-credits

and neither should a car or van with 'significant zero emission capability' (SZEC) receive either a credit or a proportion of a credit. Surplus credits within the ZEV sales regime should be tradable to facilitate a cost-effective transition within the industry (but failure to comply with the ZEV sales target should incur robust penalties). The availability of partial credits (awarded to hybrid cars/vans) would significantly undermine the credibility and certainty of outcome associated with the ZEV sales mandate.

34. We also consider the concept of 'super-credits' to be misplaced in so far as it suggests that a ZEV with a longer range is environmentally superior to a ZEV with a shorter range (e.g. a smaller battery). In the context of a rapidly growing EV charging network, recognising that the average daily distance driven in the UK is < 20miles, and acknowledging the resources required to create bigger vehicles with larger batteries, this logic is clearly flawed from an environmental perspective.

Credit banking and trading

Q17 - Should this be considered within the new framework?

35. Trading and Credit Banking should only be permitted in the ZEV sales target regime. However, we would absolutely be against the concept of borrowing against future delivery. We believe that the UK's proposed CO_2 regulatory framework for new cars and vans would be more ambitious if the ability to bank credit or indeed trade over-performance against permitted carbon intensity was prohibited. Nevertheless, should Government determine that credit banking and trading should be permitted between manufacturers for compliance under the CO_2 framework, the two regimes (ZEV sales and CO_2 regulation) must be fully distinct with respect to flexibility. Over achievement against the ZEV sales target must not reduce compliance requirements under the CO_2 framework. It is for this reason that E.ON believes the CO_2 regulatory framework must only apply to non-zero emission vehicles. Similarly, over achievement against CO_2 intensity targets must not reduce compliance requirements under the ZEV sales target. It is for this reason that E.ON believes that ICE or hybrid vehicles (whether considered SZEC vehicles or otherwise) should not be awarded any allocation of ZEV credit.

Q18 - If so, over what timeframe should they remain usable and should credits and debits be treated the same or differently?

36. For new cars and vans we believe that credit banking and trading should only be permitted up until 2029, with full compliance with the new ZEV sales target set at 100% from 2030. Any surplus credits post 2030 should be cancelled and not used for 'compliance' with any other vehicle sub sector. For HDVs, a similar approach should be taken with flexibility provisions ceasing ahead of the final compliance year (in advance of ICE phase out).

Q19 - Within the trading element of the new scheme, should there be limits on the number of certificates/grams of CO2 that can be bought or sold?

37. Provided that the Government are able to set a robust reducing emissions bubble from the start of the regime and that the price of the emissions is determined by the market, there should be no need to restrict the number of certificates/grams of CO_2 that can be bought or

sold. Any non-compliance however, must require both payment of a fine and the submission of any shortfall in credits in the following compliance year.

Q20 - Should such a market cover the whole of road transport or should there be some constraints imposed on trading across manufacturing sectors (e.g. cars and Heavy Duty Vehicles)?

38. The integrity of such a market relies entirely on the certainty of emissions reduction and the certainty of ZEV sales. If the CO_2 regulatory framework introduces a shrinking emissions bubble year on year, backed by appropriate test procedures alongside strict monitoring, reporting and verification (MR&V) and an associated penalty regime for non-compliance then it would be reasonable to allow trading across sectors. However, trading between regimes (e.g. ZEV sales target and CO_2 framework), must not be permitted in order to prevent a weakening of the Governments 2030 phase out date for new ICE cars and vans (and subsequent ZEV sales targets in other sub-sectors).

Levels of fines for non-compliance

Q21 - How, and at what level, should fines be set in the new UK regulatory framework and should this vary for different vehicle types?

39. We believe that the compliance and penalty regimes should be completely separate for each regime (both the ZEV sales target and the CO_2 intensity framework).

40. Under the regulatory framework we believe that the current fine setting process (as detailed within the consultation document) remains appropriate provided that the permitted carbon intensity gradually tightens through time up to 2030 (i.e. there is a continually shrinking emissions bubble permitted for cars and vans).

41. With respect to the ZEV sales target regime, we do not believe that it is appropriate for the fine to cap the price of traded certificates. Any fine for non-compliance must be in addition to making up the ZEV credit shortfall in the following compliance year. In other words, the price of ZEV certificates should be a market price. For the seller this price will be determined by their perception of the value of banking the over-achievement. For a buyer the price they wish to pay will be determined by their assessment of the cumulative cost of the fine (and associated negative publicity) and their ability to make up the ZEV sales credit shortfall at a lower cost the following year.

42. In terms of the methodology used to determine the ZEV sales target fine for non-compliance, we have no specific level of fine in mind. However, the principle should be that the fine reflects the additional carbon emissions associated with the volume of non-ZEVs that a manufacturer sold in the UK (over and above those sales permitted under the ZEV sales target regime). It would seem to be reasonable to align the CO_2 value with the UK Emissions Trading System.

Target setting process

In the future UK regulatory regime, we have the opportunity to determine how far ahead we set the targets, the lead in time for any change in targets and whether the option to amend targets at shorter notice is required. We would welcome views on each of these.

43. The new road vehicle CO_2 emissions targets should, in common with the ZEV sales target, be set on a reducing annual trajectory which are fully compatible with both the UK Government's 2030 ICE phase out and the Committee on Climate Change's carbon budgets. This continual reduction of a CO_2 emissions bubble within the road vehicle sector is essential, especially given the experience of the existing regime with a five year compliance period which resulted in a CO_2 performance plateau. Over achievement in 2015 (to get on track for the EU's new vehicle 2020 CO_2 emissions target) did not lead to over performance by the sector, but instead led to increasing average emissions from new vehicles between 2016 and 2019. Credibility in striving for net zero determines that the policy design must not result in a similar fall in performance as we move through the 2020's.

Real-World Emissions

Q22 - Would there be benefits in seeking to ensure any CO2 targets in the new UK regulatory framework take into account real-world emissions data alongside the lab-tested WLTP CO2 emissions figures? If so, how might the two be linked?

44. Yes, although the focus should be on the rapid phase out of ICE vehicles and so the accounting of CO_2 from such vehicles is of lesser importance compared to delivering on a ZEV sales mandate. It is also clear that it will prove to be extremely difficult to ascertain how drivers are using their hybrid vehicles in real life (even SZEC cars/vans) and so determining 'real-world' emissions will remain debateable.

Extending the Framework to All Road Vehicles

Heavy Duty Vehicles

Q23 - For vehicle sub-categories that are not yet covered by VECTO, could a ZEV Mandate/sales target be extended before VECTO is adapted?

45. Yes. We believe that a zero-emission sales target can operate alongside whilst being completely separate from an emissions reduction regulatory framework. We therefore see no reason why a ZEV sales target cannot commence in advance of VECTO being adapted/extended.

Q24 - Would there be any unintended consequences of establishing a ZEV Mandate for certain vehicle sub-categories before a CO_2-based regulation?

46. No. We believe the schemes to be mutually beneficial with respect to driving decarbonisation in the sector, but they should not be contingent on one another. We therefore see no unintended consequences of establishing the mandate for certain vehicle sub classes ahead of CO_2 based regulation.

Q25 – Do you have any views on imposing a CO2 regulation on vehicle types that are not yet covered by a CO2 test procedure, or existing regulation, particularly in light of the planned future phase out consultation for new non-zero emission buses?

47. We believe that the Department should prioritise the adoption of test procedures that can enable the creation of a holistic and robust regulatory framework across all categories of Heavy Duty Vehicles (HDVs). In the interim period, a ZEV sales mandate can be swiftly introduced as a test procedure is clearly not required to judge compliance against such a regime.

L-Category vehicles (Motorbikes, Mopeds, Quad Bikes etc)

Q26 - Should the preferred regulatory approach be extended to all L-category vehicles or should the diversity of the sector (motorbikes, mopeds, motorised tricycles, quadbikes, motorised quadricycles etc) necessitate different approaches?

48. Yes. We believe that this would be a sensible approach.

E.ON SEPTEMBER 2021