REA response to Phasing out the sale of new petrol and diesel cars from 2030 and Support for the Zero Emission Transition

The Association for Renewable Energy & Clean Technology (REA) is pleased to submit this response to the above consultation. The REA represents renewable electricity, heat and transport, as well as Electric Vehicle charging infrastructure, Energy Storage and Circular Economy companies. Members encompass a wide variety of organisations, including generators, project developers, fuel and power suppliers, investors, equipment producers and service providers. Members range in size from major multinationals to sole traders. There are around 500 corporate members of the REA, making it the largest renewable energy and clean technology trade association in the UK.

RECHARGE UK, formerly the REA EV Forum represents 108 companies operating across the electric vehicle charging infrastructure value chain, from public Charge Point Operators to energy suppliers, eMobility Service Providers, roaming hubs, installers, manufacturers, and financiers. The REA's EV Forum has been active since 2018 and in 2020 the UK Electric Vehicle Supply Equipment Association merged its operations into those of the REA.

RECHARGE UK summary of members views of this response

This consultation response focuses on the key issues of concern to RECHARGE UK members. Overall, RECHARGE UK is please to see the Government commit to a strong ZEV mandate that delivers higher levels of carbon savings. However, we note concerns regarding the inclusion of full hybrid vehicles with in the Government's plans and potential to increase flexibilities beyond 2026 which we would strongly oppose.

This consultation response therefore focuses on:

- The removal of HEVs from the Government's current plans, which we view as an enabler to keep on burning fuel. (Q's 1-3)
- Support for additional flexibility for the van market which is needed to lower the costs of production. (Q's 5-6)
- Additional fiscal and non-fiscal measures the Government could take to increase EV adoption and provide certainty for the EV charging sector. (Q8)
- The need for certainty in EV sales trajectories through no extension in existing flexibilities. Changes to flexibilities could result in a decline in EV sales and an increase in emissions. (Q's 13-15)

York House,
23 Kingsway
London, WC2B 6UJ

Tel: 020 7925 3570

http://www.r-e-a.net/

Part 1

Questions 1-3:

The REA sees the greatest emission savings coming from the inclusion of plug-in hybrid vehicles only and would be strongly supportive of Option E. Plug in hybrids have the lowest emissions on average vs full hybrid vehicles (HEVS). It is crucial that HEVs are not considered with in scope, as the CO2 emissions from HEVs have a significantly higher CO2 emissions range and ultimately their electric batteries are powered by petrol and diesel. The higher emissions range of HEVs of around 90-180 gco2 per km demonstrate that they are simply too higher a polluter and would also contribute to uncertainty due to their high range as to what emissions savings are achieved from this policy.

An impactful ZEV mandate should ensure that at all times policy is implemented that maximises emission savings, given the potential for flexibilities to be extended further which we would not be supportive of. This is crucially important with road transport contributing to the largest proportion of nitrous dioxide emissions in the UK, contributing to 28,000 and 36,000 deaths every year. It is estimated that between 2017 and 2025 the total cost to the NHS and social care system of air pollutants (fine particulate matter and nitrogen dioxide), for which there is more robust evidence for an association, will be £1.6 billion[1]. It is therefore crucial that the Government prioritises the removal of vehicles like HEVs that allow for a continued use of petrol and diesel burning without acting as a transitional vehicle towards an EV, only a plug in hybrid can do that.

We would therefore be supportive of a vehicle level CO2 cap. A vehicle level CO2 cap would ensure that the remaining PHEVs on the market achieve meaningful emissions reductions in the real world. This would need to be capped at 105gco2/km to ensure that manufacturers improve on their Phase 2 UF change, encouraging further innovation.

Question 4: Should a minimum range be required for new PHEVs and, if so, at what level should it be set? Please explain your answer.

Based off real world examples, an appropriate bench mark would be the Plug in Taxi Grant where there is a minimum requirement on at least 70 miles if zero emission driving. This has proven to be successful for taxis and believe sets a strong bench mark for vehicle manufacturers to hit. In the past it has been shown that low ranges encourage the use of the ICE component of a hybrid and so we must set a range that makes it easy to use for day to day drives and the occasional longer distance journey. 70 miles would allow for most journeys to be covered in a single charge. A plug-in hybrid could then be recharged on route or at a destination to allow the driver to return home

[1] https://www.gov.uk/government/publications/air-pollution-applying-all-our-health/air-pollution-applying-all-our-health#:~:text=The%20annual%20mortality%20of%20human,and%2036%2C000%20deaths%20every%20year

on the battery. With many short range EVs only having a range of 50 miles such as the Ami or the Microlino, which has even less, we should expect 70 miles to hold up as a more than reasonable number to provide confidence to drivers to better utilise the electric component of a plug-in hybrid.

Question 5 and 6:

We are supportive of the Government's decision not to provide a definition for non-zero emissions vans recognising the limited market demand for hybrid vans to date. This allows room for innovation in the space in a market which to date has not seen significant moves towards hybrid vans due to payload constraints. Our understanding from industry to date is that the van sector needs this additional flexibility to ensure that the number of vans sold in the UK does not fall below the number of vans required.

With fleet operators working on small margins of less than 3% in many instances there is a risk that any additional requirements beyond the sales targets will cause prices of vans to rise to meet the needs for year-on-year efficiencies which would impact on van sales more generally. So, we would not be in favour of CO2 targets being applied to non-zero emissions vans at this moment in time. Instead by not creating more expensive to manufacture ICE vans we would expect more electric vans to be sold year on year. Manufacturers would have certainty and stability to build an increasing number of electric vans rather than manufacturing new parts for ICE vans, where the cost of doing so could be put on the more popular market option of electric vans by 2030, which would have the potentially adverse impact of delaying the electric van transition.

Question 7: What would be the impact to the economy and to UK society of any new or additional non-ZEV CO2 requirements in the van sector from 2030? Please explain your answer and provide evidence where possible.

Not answered

Question 8: What are your views on current measures to support demand for zero emission vehicles? What additional measures could further support the transition?

There are 44,900 medium and large businesses in the UK[2] as of the end of 2023. It is crucial that these businesses adopt salary sacrifice schemes to encourage the uptake of EVs in the most affordable way to do so, through salary sacrifice. Government should

[2] https://www.gov.uk/government/statistics/business-population-estimates-2023/business-population-estimates-for-the-uk-and-regions-2023-statistical-release#:~:text=there%20were%2036%2C900%20medium%2Dsized,of%20the%20total%20business%20population

mandate salary sacrifice for medium and large businesses. Medium and large businesses employ over 50% of those employed in the UK (14.2 million people)[3].

On average in the UK, a car will travel around 11,265km a year[4] . Around 78% of households have access to one vehicle[5]. This would therefore mean around 11 million employees of medium and large businesses will be able to move to an EV under this scheme. At the point of 100% adoption this policy would achieve carbon savings of 18 MtCO2 per year (calculations in Annex 1). Such a policy would then allow for greater flexibility, should Government need it in extending flexibilities and still correspond with the required carbon budget targets.

Crucially residual values of EV's have also been flagged as a key concern to direct leasing businesses and salary sacrifice businesses alike with residual values estimated to have fallen by 50% in the last two years[6]. To combat this and provide greater certainty in the EV market, the Government must urgently work with the industry to establish battery health certificates as pledged in the Government's manifesto. This will provide confidence to insurance companies too, resulting in better rates of insurance for consumers. Ultimately this will result in better confidence in the EV market, meaning leasing and salary sacrifice businesses will be able to provide better savings to consumers, resulting in lower cost entry to driving an EV, resulting in less ICE cars on the road more quickly.

With the majority of EV sales to date being from fleet vehicle sales, there is a strong incentive to continue and strengthen existing grants for vans and HGVs, although the latter is not included in this consultation. With the Van Plug in Grant being extended until 2026, by the time this consultation response is analysed and responded too we would expect ourselves to once again be closer to the end date for this grant with rising calls for it to be extended. Government must proactively plan ahead and announce its extension as soon as possible, to allow fleet operators to make informed, long term planning decisions regarding the future of their fleet, with fleet operators making investment decisions in fleet up to 5 years in advance, long term certainty of the grant is required.

For the plug in HGV grant we also see a important opportunity for the Government to quickly intervene and grow this market by increasing the size of and duration of the grant to £50k up from £25k today to more closely reflect the cost difference between a

[3] https://www.gov.uk/government/statistics/business-population-estimates-2023/business-population-estimates-for-the-uk-and-regions-2023-statistical-release#:~:text=there%20were%2036%2C900%20medium%2Dsized,of%20the%20total%20business%20population

[4] https://www.racfoundation.org/motoring-faqs/mobility#a33

[5] https://assets.publishing.service.gov.uk/media/6781339100e3d719f19217f1/dft-car-ownership-evidence-review.pdf

[6] https://www.bvrla.co.uk/industry-campaigns/decarbonisation/happyevafter.html

battery electric truck and a ICE truck (around 2.5-3 times the cost, an ICE truck can cost around £100k).

Our members also see the Commercial Zero Emission Vehicle Implementation Hub as a key catalyst for low cost, high impact measures to increase demand for EVs by fleets. The hub could result in up to 22,000 additional commercial vehicle sales with an annual budget of £2m (or less than £100 per vehicle), leading to around 42,000 tonnes of CO2e saved per annum.

It is also crucial that Government does not inadvertently rise prices for consumers by responding to tariffs abroad with more tariffs. Tariffs will cause prices on some of the more affordable imported vehicles to rise, which will have an adverse effect on prices offered to consumers.

There is also strong evidence that other countries that have helped support EV adoption though Government backed, affordable loans have seen rising adoption of EVs in low in income households, which to date have been put off purchasing an EV due to the price tag. In France, a three-year leasing scheme at a cost of €100-€150 a month for a vehicle worth €47,000 or under was announced in December 2023 originally for 25,000 European-built BEVS, but this was doubled after massive demand.

The French government said it received more than 90,000 applications by the end of January 2024 and was paused. Demonstrating the success of the scheme in increasing demand for BEVS. The French Government is subsidising each vehicle up to a maximum of €13,000[7]. Government should strongly consider a similar scheme in the UK. It could like France set parameters to say that this is only eligible for UK manufactured EVs or European if it has concerns regarding support the vehicle manufacturing sector through this transition.

Charging infrastructure has to date come back in surveys as a key decision factor in purchasing an EV, although this should lessen as infrastructure rolls out across the UK at an increasingly quick rate. Government could make positive interventions in the charging sector to help speed up installations, bring down the cost of planning and regulation and provide confidence in the sector. One of the most obvious is highlighting where chargepoints already are, through good signage. We understand that some internal work is already going on at DfT and such signage should be included in the rapid charging fund when a decision has been made on its future.

At a local authority level our members have previously highlighted that local authorities currently decide where chargepoints are installed, despite CPOs having significant data and research to highlight where the most effective deployment will be. In Europe they use a lotting model, allowing CPOs to make the decision on where chargepoints are installed to increase their effectiveness. We would strongly urge Government to adopt a

[7] https://www.theguardian.com/world/2024/feb/13/france-halts-100-a-month-electric-car-leasing-scheme-after-surge-in-demand

right chargepoint in the right place approach, and to do this will mean moving to a lotting model, similar to Europe.

The rapid charging fund itself should be increased to reflect the need to include HGV charging with in it, and a response urgently published to the rapid charging fund consultation which closed in the first quarter of 2024. Government could also examine the feasibility of setting milestone targets for the fund to provide more market confidence for investors. This will then help bring in more investment to UK CPOs as more confidence in the market emerges.

It is also clear from the recent DCP420 consultation that a more streamlined process is also needed to review standing charges, which will have been reviewed over a 3-year period before a decision is made, at which point earlier market intervention would have resulted in greater cost savings for consumers.

Likewise to improve the speed of connections urgent reform to the wayleaves process is needed and the Government's decision to delay a decision until after another consultation is conducted was disappointing given the urgent need to modernise the wayleaves process to reflect the important role they play in allowing areas with poor grid connections to have high speed, quality charging infrastructure in place and avoid areas of the country with poor chargepoint coverage. Government must now urgently publish its next Wayleaves consultation and look to fast track a response to allow for increased rapid, destination, depot and near home charging coverage across the UK.

In addition, it is clear from surveys that we must provide more confidence to drivers that near home charging options are available and can easily support the 20-40% of drivers without a driveway (estimates vary). Field Dynamics, Cenex and Zap Maps latest insights clearly map out the availability of on street charging infrastructure across the UK in proximity to people's homes[8]. However, it is clear also that Government must urgently enact its decision to reform street works licencing by the end of 2025 at the latest to ensure that the second stage of LEVI is completed quickly and allow CPOs and local authorities cost and time savings from this reformed process, allowing for a quicker return on investment.

In addition, it is clear that the growth in popularity for cross pavement solutions have demonstrated the need for faster rollout. Some residents have so far reported over 9 months from initial application to approval due to the failure of Government to publish the cross-pavement guidance in line with the release of the cross-pavement grant.

The grant itself of only £350 must be extended and a decision made urgently in order to support this very early market. Currently residents are paying up to £1000 for a chargepoint and up to another £1000 for the installation of the cross-pavement solution once planning applications and street works licencing costs are factored in. It is therefore necessary for the Government to increase the size of this grant to reflect

[8] https://ig.ft.com/uk-electric-vehicles/

these costs, and we would recommend the grant to total £1000 to reflect these additional regulatory costs to the consumer.

Depending on calculation methodology, it can be demonstrated that there would be between 100k-200k more BEVs on the road right now, if drivers without off-street parking took them up at the same rate as those with driveways/off-street bays. That extra volume would have taken a lot of the pressure of the political position regarding the ZEV mandate – this is clear opportunity to provide stimulus for existing suppressed demand.

One of the key concerns and hesitancy around cross pavement adoption by local authorities is issues around earthing. Although industry best practice has to date demonstrated success in avoiding earthing issues, the distinct lack of a best practice document around it has caused concern in meetings the REA has held with local authorities. We are aware that OZEV have been approached previously about a joint to provide thorough guidance on this issue and would strongly recommend OZEV look to fund this research urgently to bring certainty quickly to the situation. This was first proposed as a solution last year at a relatively modest cost, given the scale of uncertainty and would unlock significant spending, so should be urgently reviewed by this new Government.

With the Government expected to be making decisions on which funds and grants are extended post March 31st we would strongly urge the Government to also consider the ZEBRA fund as another which simply must be extended in order to secure the transition to electric vehicles for buses.

Government must also use the Zev mandate to help consumers maximise the benefits from going electric. One of those is through reduced energy bills my maximising the potential of their EV to provide flexibility to the grid through Vehicle to Grid. As a minimum the Government should incentivise V2G compatible vehicles through rewarding additional credits or half credits for manufacturing a V2X compatible vehicle as it provides a dual benefit, lowering emissions and providing improved flexibility. Without such a measure, the slow progress on V2X will not be resolved, and we risk going towards a point of market failure, without the government intervening in this manner. If we do not act now, we will have to wait until the statutory review of the ZEV mandate for positive intervention in this crucial area.

Lastly, in a similar way, Government should consider incentivising tyre particulate capture on EV's to maximise the clean air benefits they already provide. The Tyre Collective have demonstrated through a number of trials with companies like Volvo and BMW how tyre particulate can be captured and upcycled. We believe that this consultation presents a unique opportunity for Government to incentivise tyre particulate capture and utilisation as part of the ZEV mandate through increased credits.

The Tyre Collective[9] have demonstrated their technology on fleet vehicles to date, and we see there to be a strong opportunity to maximise the benefits of zero emission vans through such increased credits for manufacturers fitting tyre particulate capture. This will in turn maximise the benefits of transitioning to an electric vehicle for fleet operators with a new and improved business case, as the captured tyre wear can then be sold on and reused. For fleet operators with low margins, often 3% or less, there is a common-sense business case for tyre particulate capture and utilisation.

Government should therefore seriously consider both V2X and tyre particulate capture additional credits. Providing these other routes to compliance, manufacturers will have new ways without increased flexibilities to hit their targets while maximising the benefits of any EVs manufactured.

To fund these additional measures, it is clear that the Government may need to find a way to bring in additional income. One way to do this is to make petrol/diesel vehicles more expensive to run. One way to achieve this is to finally increase fuel duty. A rise in fuel duty could then help fund additional financial support measures, such as those mentioned above.

Questions 9 -12

Not answered.

Part 2

Questions 13-15:

The current time limits on flexibilities have so far in 2024 been shown to be effective in encouraging a shift to a greater variety of EV's on the market and EV sales. We therefore do not think that there should be an extension of the flexibilities.

The 2027 statutory review will inform the sales targets from 2031-2035 and we must urgently have certainty over the data collected at that point. If flexibilities are extended, we would expect to see more manufacturers using these to a greater extent in the period from 2025-2026. This would result in a decline in growth of EV sales, which would then evidence the need for greater flexibilities, a self-fulfilling prophecy. Indeed, Cenex data suggests that extending the time limits on current flexibilities results in 39,659 less EV's on the road in 2025 and 890,555 EV's on the road in 2035 a 6.5% decrease. We see any move to extend flexibilities then as directly contradictory to the Government's mission to decarbonise road transport and challenging to justify given carbon budget constraints.

At a minimum, the Government should not make a decision on additional flexibilities until enough data is available from the 2025 and 2026 years to provide a clear projection of EV manufacturing and sales figures which would provide evidence of the

[9] https://thetyrecollective.com/impact

need for additional flexibilities. This is unlikely to be available until 2028. The latest data from New Automotive[10] suggest that last year (2024) the ZEV mandate targets were easily reached, which would suggest that change is not only unnecessary but potentially damaging, as it will change the behaviour of manufacturers unnecessarily and ultimately result in a 9-year deficit in emissions savings as all real world EV sales would be impacted from 2027-2035.

In principle we would also support a van – car transfer scheme in VETS as it ultimately reflects the need to achieve carbon savings and would not be able to be achieved through other flexibilities, which we see as a crucial condition of this arrangement. It is evident that encouraging greater emission reductions from vans which on average contribute around 100 gco2/km more than a car is a policy which should be explored, given that they tend to be used 5 days a week and travel longer distances. We would not be in favour of a two-way trading mechanism where over compliance in cars could compensate for underperformance in the van market as it becomes more difficult to understand the impact on CO2 savings due to driving behaviour of car driver's vs vans. If this policy was pursued it would need to reflect the greater carbon savings obtained from an electric van which would otherwise be on the market without such a mechanism being in place or likewise the carbon savings from an ICE van not being on the road.

Question 16: Do you agree that VETS should be amended to account for the UF change? If so, do you agree with the proposal set out? Please explain your answer.

Yes, the VETS should be amended to account for the UF change.

Question 17: Do you agree with the proposal to allow UK derived or EU derived WLTP specific emission reference targets to apply from 2021-2023 in the United Kingdom, and in 2024 in Northern Ireland? If not, why?

This policy will according to the consultation reduce carbon savings, and so if this was pursued this would limit the Government's ability to intervene elsewhere.

10 https://storage.googleapis.com/public_download_assets/ecc_pdfs/20250101%20ECC%20December%202024.pdf

Annex One:

Carbon savings calculation for the 74% of Medium – large business employees who have a vehicle.

- Total emissions=Number of drivers (11 000, 000) × Distance per year (11,265) × CO_2 per km (146)= =18,083,490,000,000 gCO_2.
- Convert grams to metric tons ($MtCO_2$):

1 $MtCO_2$ = 1,000,000,000,000 gCO_2 (1 trillion grams)

- 18,083,490,000,000 /1,000,000,000,000 = 18.08 $MtCO_2$