Green Paper on a New Road Vehicle CO_2 Emissions Regulatory Framework for the United Kingdom: A response by Bentley Motors 22/09/21

Overview

Bentley Motors is the world's leading manufacturer of luxury vehicles, based in Crewe in the North West of England. Although a small volume manufacturer, we employ around 4000 people, producing over 11,000 cars per year and export around 85% of them to 67 markets. Our goal is to be the leaders in sustainable luxury mobility and we have started that journey with two Plug in Hybrid models (PHEVs) already on the market and produced in a certified carbon neutral factory.

By 2026, we will produce purely PHEVs and battery electric vehicles (BEVs) in Crewe. By 2030 we aim to be purely BEV orientated. A radical shift in just a few years as we strive to do our part to tackle the climate crisis we face. We believe the UK has the potential to be a pioneer in BEV & PHEV manufacture but must rapidly invest in the supply chain, green energy and infrastructure to ensure its world leading competitiveness. The UK already leads the world in the manufacture of luxury vehicles but it must ensure they have the operating conditions to transition to the new electrified future.

We welcome the opportunity to respond to this vital consultation to find a way to transition to 2030 and 2035 end of sale as you state 'as seamlessly as possible.' We also fully support your ambition when creating the regulation to 'seek definitions that can be easily implemented and understood, and that are based on existing and recorded characteristics of vehicles.' Consumer awareness and confidence is vital to achieve the transition to 100% electrified mobility in just a few years.

With that criteria in mind, we believe that the best measure of significant zero emission capability is all electric range. It is understood by customers and it is assessed as part of WLTP certification. Also there must be one definition of a significant zero emission capable vehicle for the whole UK, including potential clean air zones. This measure will support the move to electrification which you have rightly set out is a national priority.

In terms of the future framework we would argue that a fleet CO2 target will be effective. As above it is widely understood and would result in the least additional administrative burden on the industry. The CO_2 regulated fleet must be comprised of all vehicles registered by the manufacturer, ensuring investments can be focused on

executing the move to 100% zero emissions. A ZEV mandate is not required alongside a robust CO_2 fleet target to meet the 2030 / 2035 targets.

A future CO_2 regulatory framework needs to set clear targets and be conditionally linked with the right EV framework, green energy and a comprehensive, integrated and interoperable EV infrastructure. The regulation must mandate other impacted sectors such as the energy providers and the charging operators to act and not add further regulatory burden. At present it seems unequitable. The current proposals seem to indicate that only the automotive sector will be held accountable for any failure to meet the 2030 and 2035 targets. These targets can only be achieved together as one ecosystem.

Overall, owning and using an electric vehicle must be convincing and effortless for customers.

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?

We believe that the best measure of significant zero emission capability is all electric range. It is understood by customers and it is assessed as part of WLTP certification. Also there must be one definition for the whole UK, including potential clean air zones.

The average vehicle journey in the UK is 8.4 miles. Plug-in hybrids (PHEV) allow for zero emission driving most of the time, but also where charging infrastructure is not available, the vehicle remains fully operational. These vehicles remain an essential transition to full battery electric vehicles. Our customer research shows most people do charge their PHEVs to get the benefits of electric mode use in cities and towns. This can only get better as charging infrastructure rolls out at pace.

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

It is too early to state a specific range at this stage. However consideration needs to be given to cross-segment vehicle masses and certification limits when setting a target.

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

We see a potential future role for geo-fencing PHEVs to EV mode within city centres, which would require a standardised V2B infrastructure in place in UK cities.

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

A SZEC definition is vital for the period 2030-35. As it is for a short period and different to the EU Fit for 55 Package it should be appropriate; proportionate; not complicated for consumers; flexible and should not distort the market.

We are transitioning swiftly to electrified products and PHEVs are vital on that journey. We have and continue to invest in PHEV R&D and manufacturing in our home in Crewe. We will be producing solely PHEV and BEV in just 4/5 years time. These products can have a reduction of 75% vs a V8 ICE equivalent horsepower vehicle. They therefore offer real world reductions now. Battery technology is advancing and in a few years we believe it will be able to meet our customer expectations of luxury performance while also ensure zero tailpipe. Our first BEV will be ready in 2025. However at present PHEV is the only way to meet these requirements while also providing dramatically lower CO_2 at the tailpipe.

Without a SZEC definition that enables PHEVs would harm customer confidence in PHEVs, and jeopardise our ability to reach our bold ambitions in the timeframe stated. So it is great news PHEVs are to be included.

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?

Any framework should be simple and appropriate, embodying the principles of better regulation. Although we recognise the UK's ability to set its own regulation we would hope that the UK would aim to achieve maximum regulatory consistency with the EU in this area, wherever possible.

We would support option 1 i.e. base future UK CO_2 emissions regulations on the current framework, with more ambitious efficiency targets. We operate in a range of markets around the world and retaining similarities with other regulatory regimes will enable us to continue to offer a full range of choice to UK consumers. This format is also familiar to consumers whose support in this rapid change is vital.

The CO_2 regulated fleet must be comprised of all vehicles registered by the manufacturer so investments can be focused on executing the move to 100% zero emissions

A future CO_2 regulatory framework needs to set clear targets and be conditionally linked with the right EV framework, green energy and a comprehensive, integrated and interoperable EV infrastructure. Rapid charging must be integral to the roll out of charging infrastructure.

Q6 - Do you have any comments regarding Option 2, to introduce a ZEV Mandate or sales target alongside a CO_2 regulation?

The current CO_2 regulation has been effective. It delivers on efficiency improvements and promotes and includes the best technology, PHEVs and BEVs. The current CO_2 regulation is known and established.

A zero emission vehicle mandate as well as CO_2 regulations mean the implementation of a new system which will lead to additional administrative requirements.

A ZEV mandate could force us away from producing a high mix of PHEV but would not speed up BEV investment.

Continuing with a CO_2 fleet based approach towards 2030 will permit manufacturers who have already been planning to meet such a regulation to continue to do so, using the technologies and resources at their disposal, with the strategic goal now firmly in sight of meeting the UK's leadership position of a 100% ICE ban by 2030, and a 100% ZEV fleet by 2035.

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

We would support option 1 i.e. base future UK CO_2 emissions regulations on the current framework, with more ambitious efficiency targets

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

The current CO2 regulation has been effective. It delivers on efficiency improvements and promotes and includes the best technology, PHEVs and BEVs. The current CO_2 regulation is known and established.

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

Either option would need to have a full regulatory impact assessment and be accompanied by appropriate enabling measures such as charging infrastructure and green energy. Vehicle manufacturers must not risk penalties for failing to meet their objectives if the market failure is

due to lack of infrastructure for example. It should also be noted that without that conditionality, vehicle manufacturer targets may be met but over a substantially reduced new vehicle fleet, thereby slowing fleet renewal.

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

The current CO_2 regulation has been effective. It delivers on efficiency improvements and promotes and includes the best technology, PHEVs and BEVs. The current CO_2 regulation is known and established.

Additional Issues for Consideration

Stringency of CO_2 Target

Q11 - If deploying a combined ZEV Mandate and CO_2 regulatory framework, how should the CO_2 element be set?

We do not believe that ZEV mandate is required to meet the end goal.

Q12 - Should the focus be on delivering the largest possible CO_2 savings, or the quickest possible switch to zero emission mobility?

The transition to end of sale in 2030/35 is already ambitious. The future regulation and SZEC should support investment in electrified vehicles, PHEVs and BEVs and not making small improvements to ICE models.

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?

The UK should aspire to be a pioneer for PHEV and BEV production and sales beyond just maintaining existing production and sales levels This needs to be underpinned by world leading infrastructure, a new supply chain and world leading affordable green energy.

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?

The SVM derogation has worked well to date. In the future, Bentley will continue to provide for our customers' expectations of products in the luxury segment, but with zero

tailpipe emissions. In light of the lack of information of what requirements may be placed on these vehicles in the future we cannot currently commit to meeting potential targets set for the industry at large. We look forward to engaging further on this and other topics as regulation proposals develop going forward.

Credit Levels

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

This would be dependent on the nature of regulations leading to the removal of ICE vehicles from the market. In terms of a SZEV/ZEV mandate, which we do not support, any vehicles on sale earlier than their respective 100% implementation date should be incentivised. Within a robust fleet average CO_2 target, an SZEC's low CO_2 should be benefit enough in adding it over an ICE vehicle.

Q16 - If so, should this be a fixed number of credits, or should there be a sliding scale that recognises the difference in CO_2 efficiency of various SZEC-compliant vehicles?

Including CO_2 efficiency in the definition of a ZEV credit scheme further complicates the potential regulations. Any potential scaling should either be applied flat across any vehicle that meets SZEC definition, or be based on SZEC defining parameters, e.g. all electric range.

Credit banking and trading

Q17 - Should this be considered within the new framework?

We do not believe that a combined parallel ZEV mandate and CO2 regime would be a workable solution. A new regulatory framework based on the current CO2 regime should encourage credit banking and trading. Credit banking and trading should be included in the new framework as it allows an increased flexibility in how individual vehicle manufacturers achieve their targets, while ensuring that the overall new vehicle fleet meets designated targets at specified times. It is the performance of the whole fleet which will have the biggest impact on carbon budgets.

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

Considering the short timeframe over which the regulations will run, credit banking and trading should be usable throughout the life of the regulations. Credits and debits should be treated the same from the start of the regulations until 2030 when a review should be made of the new vehicle market to assess whether a change in approach is necessary.

Q19 - Within the trading element of the new scheme, should there be limits on the number of certificates/grams of CO_2 that can be bought or sold?

There should be no limits on the trading scheme to allow maximum flexibility of the market transition while maintaining the desired performance across the overall new vehicle fleet.

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)?

N/A

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?

The penalties laid out in current regulation are a sufficient deterrent to manufacturers, and should remain in place.

Real-World Emissions

Q22 - Would there be benefits in seeking to ensure any CO_2 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?

We understand the link between real-world emissions and performance against carbon budgets. However, we should avoid trying to include real-world emissions in fleet average targets due to the variable nature of the operation of the vehicles by different consumers and the comparatively short period of time. Those variations are better addressed by continuously monitoring the data to identify any areas of WLTP which do not adequately reflect frequently seen usage patterns. We look forward to discussing a methodology for capturing that data.

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