



DEPARTMENT FOR TRANSPORT

WHEN TO PHASE OUT SALE OF NEW, NON-ZERO EMISSION HEAVY GOODS VEHICLES

PUBLIC CONSULTATION: 14 JULY-03 SEPTEMBER 2021

The Builders Merchants' Federation is the trade association for the building materials' supply chain in the UK and Ireland. For 113 years, we have represented builders, plumbing & heating, roofing and timber merchants and manufacturers who make and deliver building materials, home improvement products and renewable energy systems. The BMF's 760 members have total annual sales over £39 billion, employ around 190,000 people and trade from over 5,600 branches.

OVERVIEW

The BMF represents a major supply chain that has existed for centuries. Our members perform a vital national function in distributing primary materials and value-added goods from quarries, brickworks, sawmills, factories and ports to where they are used. Merchants expertly manage the delivery of smaller, mixed or repeat loads, acting as local consolidation depots, breaking bulk loads down to provide the 'last-mile' link. Vehicles used are petrol & diesel lorries, trucks and vans.

The Government wants to end the sale of new petrol & diesel HGVs and this has serious, far-reaching consequences for our members. For decades, companies we represent have used diesel commercial vehicles to deliver materials & products, all year round, in all weathers. In the current circumstances, zero-emission HGVs are not a realistic option for most BMF merchants or manufacturers. This may change in future as vehicle manufacturers develop low- or zero-carbon vehicles capable of carrying our goods without a loss in range, performance or payload.

The 'ask' is for (a) clear, un-ambiguous and costed proposals with a timetable set out to define the policy end-point and (b) ways that government will help companies like ours to get there. The onus is on ministers to explain the proposals and what they eventually decide to legislate for.

1. INTRODUCTION

Addressing the Net Zero Challenge

Paragraphs 1.1 to 1.4: the BMF understands why the Government wants to set dates in legislation to end the sale of new petrol & diesel HGVs. But it is by no means assured that the proposed dates of 2035 and 2040 are feasible for many reasons, several of which we outline.

This ban should primarily aim to reduce carbon emissions - because central & local government are taking steps to improve air quality via Clean Air Zones, Ultra-Low Emissions Zones and such like. We are not convinced the proposed banning dates of 2035 and 2040 are achievable.

HGV Emissions

Paragraphs 1.5 to 1.7: if it is true that HGV carbon emissions increased by 8% between 2012 and 2019, the Department's efforts on (for example) modal shift away from roads to other transport methods are not working as intended. The Department for Transport has, for many years, had a poor record with the accuracy of its forecasts or projections.

Scope

Paragraphs 1.8 to 1.11: the BMF notes the types of fuels and vehicle purchases that fall within the scope of this consultation. But including low-carbon fuelled HGVs will unsettle companies that are looking to change their lorry fleet. Are HVO vehicles only an interim step to decarbonisation, knowing that such vehicles will have to be replaced sooner rather than later - or do they choose not to act now, knowing that they will be forced to buy zero-emission HGVs in due course.

The BMF is a long-established and reputable member-controlled organisation that is directly affected by several current Whitehall policies on net zero emissions by 2050 - and this is another. **The 'ask' is** that any ban should aim to remove the most polluting HGVs from roads. Ministers cannot be side-tracked by those seeking to ban specific vehicle types. We fully understand the Government has to listen to the public or pressure groups - but we urge the DfT to pay full attention to transport professionals like the BMF to arrive at balanced, realistic and defensible decisions.

Plans to Decarbonise HGVs

Paragraphs 1.12 to 1.19: the implication behind this consultation is that the Government favours battery electric vehicles to replace petrol & diesel engines. If these proposals become law, EVs will have to be the majority of new sales from 2035. That is a huge requirement. We urge ministers not to become fixated on one technology (battery electric) when others are valid and viable (fuel cell electric especially hydrogen). In the interim, low-carbon fuels like hydrotreated vegetable oil will be used as a direct drop-in alternative to diesel, which is logical.

Paragraph 1.15: the consultation outlines financial assistance available to help both citizens and companies make the switch. Keeping, extending and improving the attractiveness of current grants - notably the Plug-in Car & Van Grant, Plug-in Truck Grant, Electric Vehicle Homecharge Scheme, and Workplace Charging Scheme - is sensible and very welcome. The BMF wants to see them retained and tweaked, as necessary, as uptake increases, on the understanding that, over time, grant rates will become less generous in a planned, tapered way.

Paragraph 1.17: seeking views on increasing the maximum weights for certain alternatively-fuelled and zero-emission HGVs and other vehicles is logical for the reasons described.

Question 1: do you agree or disagree that introducing a phase out date for the sale of new non-zero emission HGVs will help us meet our legally binding net zero target ? Please explain your answer.

On balance, yes, with qualifications, as set out in this contribution.

UNCOP26

Paragraphs 1.20 to 1.23: the forthcoming UNCOP26 Climate Change Conference sets an unshakable deadline for the UK Government to make various policy and tax & spending announcements. It will be hugely embarrassing for ministers if delegates, businesses and protestors do not see firm government leadership and determined action to reduce emissions. Like others, we await the publication of an overdue UK Net Zero Strategy.

Developing Zero Emission HGVs

Paragraphs 1.24 to 1.29: the BMF agrees that the swift and efficient movement of goods is vital to local economies and national prosperity. As stated on page 1, BMF members perform a vital function in distributing primary materials and value-added goods from quarries, brickworks, sawmills, factories and ports to where they are used by end-customers all year round.

We note the developments described as to the HGV and LGV models in the N2 and N3 categories that are available to buy or lease - and are eligible for the Plug-in Truck Grant. We also note the points made about potential advantages - namely quieter engines, cheaper running costs, and air quality. But by definition, this does nothing to solve non-exhaust emissions released into the air from wear-and-tear of brakes, tyres and road surfaces.

Paragraph 1.27: the consultation says the first zero-emission HGVs over 26 tonnes, aimed at short-range use, are arriving on the market. This is good news but we believe it is incumbent on the Department to fully understand the barriers to uptake and the impacts for BMF members.

Price

The main barrier is the price. In today's fledging market, low- and zero-carbon HGVs are more expensive than conventional ones. Banning petrol & diesel lorries will not make alternatives cheaper. Only mass production and technological advances will lower prices over time. Among the factors that BMF members have to weigh up are:

- investment decisions - the normal life-span of vehicles and rate they are replaced;
- availability of suitable vehicles and making the correct choice of model and fuel type for everyday operations.
- overall cost to the business of replacing & disposing of existing cars or vans.

Range

After price, the range that vehicles can go without having to be recharged is the next most important barrier. Overnight parking with a reliable EV charge point is required for short, local deliveries. But a national network of reliable, fast and publicly-available charge points for long or repeated journeys is crucial - and a necessary precursor to wider uptake by commercial operators who have range, performance or payload to consider.

Availability of Compliant Vehicles

Some BMF members plan to buy electric vehicles when they become economically viable. But as stated earlier, BMF members have no choice but to use diesel commercial vehicles to deliver materials & products. The availability of compliant vehicles is the third barrier. **The 'ask' is** that by the time the ban begins, it may not have proved possible for firms to adapt - for good technical reasons - or no suitable vehicles were available to buy or lease - or there were insufficient vehicles made to meet demand. A lack of market capacity means that firms will be competing for a limited number of compliant vehicles, irrespective of fuel type.

Negative impacts

- price of each compliant HGV & LGV and choosing battery electric or fuel cell electric.
- overall cost to the business of replacing & disposing of existing HGVs & LGVs.
- lack of market capacity and competition for limited number of available vehicles.
- doubts about availability and access to charge-points and refuelling stations.

Positive impacts

- this ban hastens buying decisions by BMF members who already plan to replace vehicles.
- grants, tax reliefs and other fiscal incentives to help BMF members to modernise fleets.
- grants, tax reliefs and other fiscal incentives to help vehicle-makers to transform the market.

Unquantifiable impacts

- whether to start to replace HGVs & LGVs in the mid-to-late 2020s or nearer 2035.
- insufficient choice of alternatives - doubts over range, reliability payload or performance.
- different running costs - electricity bills, not petrol & diesel - servicing & maintenance costs.
- unknown government decisions like the start date and changes to transport taxes or charges.

Paragraph 1.28: the consultation says the Department's approach is technology neutral - and describes the 3 main options for decarbonisation as being battery electric, hydrogen fuel cell and catenary-enabled HGVs. We reiterate our earlier view that government policy shows bias in favour of battery electric. Ministers must avoid the temptation to pick winners. The renowned British

manufacturer JCB (a BMF member) is developing hydrogen-powered diggers and excavators using fuel cell electric technology.

The Road to Zero Emission HGVs - Manufacturer Commitments

Paragraphs 1.30 to 1.33: the BMF notes the developments and innovation being made by vehicle manufacturers described in the consultation. This is good news and will help to grow the market.

In the post-Brexit and post-Covid 19 economic recovery, the onus is on vehicle manufacturers to invest more in production lines and in advanced battery chemistry to improve the efficiency and performance of HGVs & LGVs. That is why a comprehensive Industrial Strategy is crucial and joint ventures between government & industry is even more vital.

The BMF notes the Government scrapped its Industrial Strategy in March 2021 after the Budget. Many other responses to this consultation will doubtless argue for it to be restored by the DBEIS and we can see persuasive reasons for a ministerial rethink. DBEIS and DfT ministers cannot let either Chinese or Californian businesses build a dominant position over UK or European manufacturers.

It is easy to say the Government should keep reassuring manufacturers on future policy to give them the confidence to keep investing in manufacturing ZEVs in the UK. But manufacturers must innovate & invest in their own operations to build market share, to advance battery chemistry to improve energy efficiency, and to make best use of scarce natural resources. Industry ought to set its own standards and targets on (amongst others) battery lifetime, materials like lithium, cobalt & nickel, and end-of-life reuse or disposal of batteries and fuel cells.

The Role of Low Carbon Fuels

Paragraphs 1.34 to 1.37: we note the contribution that low-carbon fuels currently make in reducing carbon emissions. If government policy is calibrated correctly, they can play a useful role in the step-change towards a zero-carbon transport industry. Several BMF members are using hydrotreated vegetable oil in their lorries. We note the DfT expects that long-haul HGVs will be a significant user of low-carbon fuels in medium-to-long term.

2. CONSULTATION PROPOSALS

HGV Categories and their Pathways to Zero Emission

Paragraphs 2.1 to 2.2: we acknowledge it may not be possible for all new HGVs to be zero emission on the same start date. It is sensible to stagger the proposed dates of the ban based on tonnage.

Question 2: do you agree or disagree with our approach to split the phase out dates for new non-zero emission HGVs into two weight categories ?

Yes.

Paragraphs 2.3 to 2.18: it is more difficult to make zero-emission HGVs because batteries or hydrogen fuel tanks take up a lot more space, size & weight on the vehicle than an equivalent diesel model. Consequently, it is logical to take another look at increasing maximum permissible weights for zero-emission HGVs to overcome space, size & weight issues. We further note that although seeking to compensate for the additional weight - thus removing a distinct barrier to wider uptake - the DfT will retain the existing maximum weight of 44 tonnes permitted on UK roads.

All the consultation proposals rely on government and industry getting right the national recharging and refuelling infrastructure necessary to bring these ideas, innovations & investments to life.

Grid Capacity

A switch to electric HGVs & LGVs will put great strain on energy generation & distribution companies. That is some way off but serious long-term planning & preparation for that day should not detract from the urgent need to invest in the electricity distribution network to meet projected need in 2030. By then, most electricity will come from renewables. Other respondents to this consultation are better placed to tell the Department what measures are required in this regard.

Charging Network

Using battery electrics means it is vital to be near an EV charge point. The BMF is aware of reports by others that there are not enough and the distribution of those that do exist is un-even around the country - notably rural & coastal districts - with some London Boroughs also poorly served. Other respondents are better placed to tell the Department what measures are required in this regard.

The DfT will know the range that vehicles can go without having to be recharged is a concern to potential buyers. Most drivers charge vehicles overnight in their workplace. Many more publicly-available or privately-owned reliable and fast charge-points are required including motorway service stations. **The 'ask' is** for high-levels of sustained public & private investment in the network to make it easy for companies to switch - starting within Clean Air Zones.

Refuelling stations

In addition to the above, a network of hydrogen refuelling stations is required to support fuel cell battery vehicles. There will be benefits in having both EV and hydrogen available at joint locations. In rural & coastal districts, it may be uneconomic or implausible to install EV charge points where such locations are better suited to hydrogen anyway. **The 'ask' is** for sustained public & private investment to develop a network of refuelling stations - starting within Clean Air Zones.

Question 3: Do you agree or disagree that 26 tonnes and under, and more than 26 tonnes, are the right categories ?

We agree that these categories are the right ones.

How this Consultation will Support our Environmental Targets and Ambitions

Paragraphs 2.19 to 2.21: energy, environmental and transport policies often overlap and can, on occasion, cause conflict with each other, for various reasons, in the pursuit of sensible, practical solutions to difficult problems. Banning the sale of new petrol, diesel or hybrid cars, vans and HGVs is a case in point.

The BMF urges ministers to be clear and straightforward about the primary policy aim: is it (a) reducing carbon emissions; (b) improving air quality; or (c) both ? Other contributors to this consultation will lobby for a ban earlier than 2035 - or go further than these proposals to include ideas that fall outside the scope of this consultation.

The BMF has been involved in Clean Air Zone policy for approx. 5 years. Reliable second-hand low- or zero-emission vehicles are much sought after and this will doubtless increase as towns & cities impose anti-pollution controls. Battery performance is improving that makes e-vans suitable for local trips and repeat deliveries. HGVs are a different story and in addition to movement, HGVs use cranes mounted on them to load/unload goods that also need power to operate them.

Key Proposals to be Consulted On

Paragraphs 2.22 to 2.23: the BMF understands why the Government wants to set dates in legislation - not least, because that is the opinion of (for example) the Committee on Climate Change and National Infrastructure Commission. An alternative view is that, in the early stages, it may be better not to become ham-strung by specific dates as the replies to this consultation exercise are studied and the policy proposals are formulated further. If technological advances do

not come as quickly as hoped for, it will be awkward and embarrassing for ministers to have to adopt more drastic measures and longer timescales.

Question 4: Do you agree or disagree with our proposal to end the sale of new non-zero emission HGVs, for vehicles weighing from 3.5 up to and including 26 tonnes, by 2035 ?

No because we want to see a more convincing case made.

Question 5: What do you consider the main challenges and barriers to meeting this target for HGVs 26 tonnes and under ?

The main challenges and barriers are set out on pages 3 and 5.

Question 6: How can these barriers be addressed ?

- government: grants, tax reliefs & other fiscal incentives to help BMF members to modernise.
- private enterprise: innovation and investment by (a) vehicle manufacturers to boost market capacity and increase the choice of compliant HGVs and (b) power companies and other businesses to develop a wider network of charging points & refuelling stations.

Question 7: Do you agree or disagree with our proposal to end the sale of new non-zero emission HGVs, for vehicles weighing more than 26 tonnes, by 2040 ?

No because we want to see a more convincing case made.

Question 8: What do you consider the main challenges and barriers to meeting this target for HGVs weighing more than 26 tonnes ?

The main challenges and barriers are set out on pages 3 and 5.

Question 9: How can these barriers be addressed ?

- government: grants, tax reliefs & other fiscal incentives to help BMF members to modernise.
- private enterprise: innovation and investment by (a) vehicle manufacturers to boost market capacity and increase the choice of compliant HGVs and (b) power companies and other businesses to develop a wider network of charging points & refuelling stations.

Question 10: Do you agree or disagree that these phase out dates should be extended to all non-zero emission HGVs, including those using low carbon fuels, in their respective weight categories ?

Paragraphs 2.24 to 2.26: we repeat our earlier comment about JCB and its subsidiary, Ryse Hydrogen, that is developing fuel cell technology using hydrogen.

Question 11: Do you agree or disagree that maximum permissible weights for certain zero emission vehicles (mainly HGVs) on both international and domestic journeys should increase by up to 2 tonnes (without exceeding 44 tonnes) ?

Yes.

Question 12: Do you agree or disagree that weight limits should increase by up to a maximum of 1 tonne for certain alternatively fuelled HGVs on both international and domestic journeys (without exceeding 44 tonnes) ?

Yes.

Question 13: Do you agree or disagree that weight limit increases should only offset any additional weight due to the alternatively fuelled or zero emissions technology ?

No, not necessarily, as there may be other emerging reasons not yet identified.

CONCLUSION

The Government's proposed ban on the sale of new petrol & diesel HGVs by 2035 or earlier is a huge challenge for everyone - and has serious, far-reaching consequences for BMF members.

In the government response to this consultation exercise, the BMF wants to see (a) clear, un-ambiguous and costed proposals with a timetable set out to define the policy end-point and (b) ways that government will help companies like ours. The onus is on ministers to explain the proposals and what they eventually decide to legislate for.

The BMF reminds the DfT while this policy is aimed at carbon emissions, it does not deal with:

- the rising number of vehicles on the road and traffic congestion.
- the increasing number & duration of journeys and the miles travelled.
- non-exhaust emissions from wear-and-tear of brakes, tyres and road surfaces.

With only 59 days until the UNCOP26 Climate Change Conference in Glasgow, the Transport Ministers should:

- explain and promote the benefits of switching from petrol & diesel to encourage citizens and companies to change attitude & behaviour and make low- or zero-carbon choices.
- use all available levers (inc. budgetary savings from under-spent government programmes) to re-invest in grid capacity and to pay for fiscal incentives.
- make convincing bids to the Chancellor and the Chief Secretary to allocate sufficient resources in the Comprehensive Spending Review for these policy interventions.

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