

Eliminate – Minimise – Offset

The next steps to decarbonise the commercial vehicle fleet

Executive summary

Decarbonisation is coming. The journey to achieving Net Zero by 2050 is exciting, and the RHA is committed to facilitating the introduction of zero tailpipe emission HGVs and coaches.

To ensure CO2 emissions are reduced from commercial vehicles successfully, we seek to inform and influence policy makers and industry on the needs of haulage and coach operators and the practicalities to be addressed. Getting this right over the short, medium and long term is in the interest of the environment, the economy and society more broadly.

Whilst zero tailpipe emission vehicles are developed, low carbon fuels allow commercial vehicle operators to slash their CO2 emissions now. Hydrotreated vegetable oil (HVO) and gas trucks are available options which, whilst not completely zero emission, can reduce emissions by up to 90%. We also believe the Government should move long-term to reducing carbon emissions across the whole vehicle lifecycle.

What are we asking for?

We ask that:

- I the UK Government:**
 - I supports unequivocally the use of low carbon fuels such as HVO as a positive interim step towards Net Zero;**
 - I looks again at the whole carbon lifecycle of a vehicle as we believe a focus solely on zero tailpipe emissions distorts accountability;**
- I commercial vehicle manufacturers work with the RHA and its members so that zero emission vehicles can be trialled in real-world conditions;**
- I fuel providers work with our sector to ensure the infrastructure is in place to power low and zero tailpipe emission commercial vehicles.**

Why are we asking this?

Decarbonising the commercial vehicle sector is complex. Transport is an essential function of any economy. It allows people and goods to move, lives and livelihoods to flourish and society to prosper. The UK logistics and road passenger sectors are highly-advanced and specialised, enabling the public to enjoy exceptional levels of service.

We are focused on how commercial vehicle operators can switch to clean vehicles whilst sustaining the same high levels of service their customers demand. Much is underway to achieve this. We welcome the development of first-generation battery electric commercial vehicles. To address their operational limitations, we support the £200m investment by the Government into the research and development of zero tailpipe emission lorries – including the potential offered by hydrogen-powered vehicles.

We will encourage our members to invest in these vehicles where they can. As the new technologies develop, we will work with our industry partners such as the vehicle manufacturers to ensure subsequent generations of vehicles can replicate the same range, payload and operational flexibility of the diesel vehicles they will replace. However, the risk of “stranded assets” is significant, and the Government must ensure that subsequent regulations allow operators to realise their return on investment in these vehicles.

We also seek to resolve the difficult policy and commercial decisions on how we phase out the existing diesel fleet fairly. Lesson should be learned from the well-intended but flawed Clean Air Zone policy so that small and medium-sized enterprises (SMEs) are not disadvantaged. Ensuring the existing fleet is phased out rationally whilst ensuring an adequate supply of new vehicles is essential.

Driving this should be a national UK approach underpinned by clear vehicle and emission standards; by contrast, a patchwork of different and confusing local regulations that distort the vehicle market must be avoided.

Together with policies that recognise the distinct decarbonisation needs of coaches from buses, the Government must also recognise that measuring the reduction of carbon emissions by the “tailpipe” only does not achieve “zero emission” outcomes. The policy framework must evolve to measure CO2 reductions in the manufacture, transportation and disposal of vehicles plus production of fuel.

Meanwhile, action can be taken now to reduce carbon emissions from the commercial vehicle fleet. Supported by a lower fuel duty to incentivise uptake and reduce the price differential relative to diesel, appropriately sourced and regulated low carbon fuels such as HVO enable operators to reduce their emissions substantially. They also provide resilience where zero emission solutions can not be found.

In that spirit, we ask that our partners in government and across industry support our members as they plan their vehicle replacement strategies.

The task ahead

Decarbonising the United Kingdom affects every person and every sector of the economy. How the change is managed to achieve Net Zero by 2050 is one of the most important tasks politically, socially and economically facing the UK over the next three decades.

During the transition, transport will remain an essential service. The effective movement of goods and people is vital to economic and social well-being – this applies whether we are dealing with a pandemic, cost-of-living crisis or the drive to achieve Net Zero.

However, whilst the ambition is clear and the technological innovation needed to decarbonise is underway, sustainable implementation is not evident – in particular, how expensive new vehicle technologies can be phased in equitably. We therefore welcome the Net Zero Review commissioned by the new Prime Minister that will consider how the costs borne by businesses and consumers can be minimized.

The need for a strategic “roadmap”

To inform outcomes from the Review, we renew our call for the UK Government to develop a national decarbonisation “road map” to chart a way forward to 2050. The detail which accompanies that plan is essential to support the decisions of businesses, authorities and people to achieve sustainable decarbonisation outcomes. It must:

- I** create the certainty needed so that commercial vehicle operators (HGVs, vans and coaches) can invest with confidence in options to decarbonise;
- I** reflect that the UK economy depends on goods and coach vehicles existing in all areas to meet all market needs;
- I** recognise that the market is best-placed to drive the innovation required to deliver decarbonisation;
- I** support the use of low carbon fuels as an interim step to drive down emissions and provide resilience in circumstances where zero emission solutions are not possible;
- I** assure the vital role SME businesses play by:
 - I** recognising how SMEs handle the many niche economic functions that enable customers to enjoy high levels of service;
 - I** upholding the residual values of all vehicles (diesel, low carbon and zero emission) to prevent “stranded assets”.

Done well, transport decarbonisation is achieved through natural vehicle replacement programmes at minimum cost to the taxpayer and includes SME businesses.

To support the direction-of-travel, we welcome the Government’s £200m Zero Emission Road Freight Demonstrator Programme. Over the next 5-10 years, we anticipate it answering the many practical issues our sector has and allow Ministers to signal which technologies they are willing to back via future regulation. This will give industry the confidence and certainty it needs to start planning investments in vehicle procurement and infrastructure provision.

Meanwhile, we ask that the Government unequivocally supports the use of low carbon fuels which, whilst not completely zero emission, can reduce emissions by up to 90%.

Our approach to Net Zero

The RHA strongly supports the aim to decarbonise commercial vehicles. Our approach is guided by:

- the three pillars of sustainability which recognise that environmental, social and economic well-being are all essential;
- a hierarchy of action that, where we can, we eliminate carbon emissions from commercial transport. Where this is not practicable, we minimise carbon emissions. Finally, we offset any remaining emissions;
- a neutral stance on the emerging technologies to allow Net Zero outcomes to be achieved. We believe all technologies should be in scope, including low/zero carbon fuels used by internal combustion engines;
- the market being best-placed to develop and invest in the Net Zero solutions needed for all applications. Industry can do the “heavy lifting” to develop and phase in the new vehicles if, to drive the investment necessary, it has clear vehicle and fuel standards;
- an understanding that:
 - a healthy vibrant economy depends on freight transport and coach sectors meeting all customer needs;
 - a transport operator does not define what, where or when goods or passengers move – this is determined by the customer;
 - vehicle lifespans are typically 12 years for HGVs and 18 years for coaches (and longer in many cases). This reality is fundamental as lifespan residual values underpin the ability to invest in decarbonising solutions;
 - commercial transport markets are highly-competitive. This incentivises operator efficiency and a keen focus on customer requirements (including demands for more effective environmental stewardship);
 - different business models exist within haulage known as “own account” and “hire-and-reward”. Typically, “hire-and-reward” operators have slimmer operating margins and more exposure to risk than “own account” operators (e.g. retailers). In addition, SMEs have limited buying power which can slow the introduction of new vehicles.

Our focus is to de-risk the transition for our members. This helps ensure a level-playing field emerges so that all commercial vehicle operators can invest in decarbonisation fairly.

What has been done so far

To guide the decarbonisation of transport, the Government has published:

- The Ten Point Plan for a Green Industrial Revolution – Nov 2020
- Transport Decarbonisation Plan – July 2021
- Future of Freight Plan – June 2022

At COP26 in November 2021, the Government announced its intention to stop the sale of new diesel HGVs below 26 tonnes from 2035 and above 26 tonnes from 2040.

We welcome the signals the Government have sent so far to the market. The headline date for stopping the sale of new diesel HGVs from 2035 starts the process of certainty operators need to plan their vehicle replacement programmes.

We will promote an approach where industry phases-in the new technologies through natural vehicle replacement cycles. We believe this is the most efficient and rational way to decarbonise commercial vehicles.

However, we recommend the phase-out weight thresholds are:

- from 2035, at 18 tonnes and below;
- from 2040, 32 tonnes and below;
- from 2045, over 32 tonnes.

This is principally because phasing out at 26 tonnes overlooks the ability of HGV operators to replate their vehicles for specific operating needs. In turn, this generates many permutations of usage to be exempted, creating unnecessary bureaucracy that slows decarbonisation. With the threshold set at 18 tonnes and applying to 52% of the fleet, the plating issues fall away whilst still allowing decarbonisation to progress.

For coaches, we have proposed to the Government:

- ! less than 25 seats, new diesel sales stopped from 2030 & hybrids from 2035
- ! less than 35 seats, from 2035
- ! over 35 seats – 3 axle coaches, from 2040
- ! over 35 seats – 2 axle coaches, after 2040

What can we do now

Whilst much is underway to prepare the groundwork for Net Zero, a clear and agreed technological pathway to replace diesel vehicles in all applications is not in place.

We will encourage our members to invest in zero tailpipe emission vehicles where it is operationally and commercially viable to do so. However, the current limitations of these vehicles must be recognised:

- ! battery electric vehicles do not yet replicate the same operational flexibility of diesel vehicles;
- ! many unknowns exist over how these vehicles perform reliably in real-world conditions which account for:
 - ! the UK and EU's geography and climate,
 - ! the second-hand market on which SMEs depend for their vehicles;
- ! the commercial promise offered by hydrogen is still some way off;
- ! the infrastructure for powering zero emission HGVs/coaches, including any "electric road system", is yet to be implemented.

As we resolve these issues with our partners, there are positive steps haulage and coach operators can take now to reduce CO₂ emissions. Hydrotreated vegetable oil (HVO) and gas trucks powered by renewable biomethane are readily available options which, whilst not completely zero emission, can reduce emissions by up to 90%.

We recognise the sensitivities over the land use needed to grow the crops that Manufacture low carbon fuels (LCFs). Phasing in LCF-powered vehicles must also be handled sensitively as, currently, there is insufficient supply to handle expected demand.

Nevertheless, we believe that appropriately regulated and sourced LCFs have a legitimate role to decarbonise the commercial vehicle fleet. Supported by a fuel rebate to incentivise uptake by reducing the cost differential to diesel, they also provide resilience for situations where zero tailpipe solutions are not found beyond the 2035 and 2040 phase-out dates, or when prolonged power outages (e.g. Storm Arwen) prevent electric vehicles from re-charging.

We welcome the Government's commitment to develop a Low Carbon Fuels Strategy later in 2022 to address these issues.

What can we do next

The RHA will do all it can to facilitate the adoption of zero tailpipe emission commercial vehicles. As prototype vehicles are developed, we offer our services to get these vehicles into the hands of operators. This is so their performance can be thoroughly tested and data used to inform future investment.

We will also address the difficult policy and commercial decisions on how we phase out the existing diesel fleet fairly. Issues include:

- ! developing a clear understanding on the meaning of "sustainability";
- ! moving to a policy framework that drives down carbon emissions across the whole vehicle lifecycle rather than just at the "tailpipe";
- ! promoting a clear decarbonisation pathway for coaches;
- ! scoping how offsetting will work where zero tailpipe emission solutions are not found;
- ! ensuring devolved, regional and local authorities align with the strategic "road map".

The "sustainability" debate must be appropriately balanced to consider economic as well as social and environmental needs. Sensitive SME-inclusive policies that reduce decarbonisation costs are vital.

The Government must also recognise that measuring the reduction of carbon emissions by the "tailpipe" only will not achieve a "zero emission" outcome. The current approach distorts accountability, and the policy framework must evolve to measure carbon emissions reduction in the manufacture, transportation and disposal of vehicles plus production of fuel.

The development of coherent national and international standards to guide this journey will be essential – the absence of which creates confusion, adds cost and bureaucratic burdens, undermines investment resulting in poorer, counter-productive outcomes.

Policymakers must accept that the time frames for interventions against each type of transport operation will vary. The market should be empowered to innovate but, where it cannot meet the phase-out deadlines specified by Parliament, exemptions will be necessary.

In dealing with these issues, government and industry will need to consider what is feasible, economically viable and environmentally sustainable, and promote it within the framework of eliminate, minimise and offset.