Low carbon fuels strategy
Call for ideas

April 2022

About Logistics UK

Logistics UK is one of Britain's largest business groups and the only one providing a voice for the entirety of the UK's logistics sector. Our role, on behalf of over 19,000 members, is to enhance the safety, efficiency and sustainability of freight movement throughout the supply chain, across all transport modes. Logistics UK members operate over 200,000 goods vehicles - almost half the UK fleet - and some one million liveried vans. In addition, they consign over 90 per cent of the freight moved by rail and over 70 per cent of sea and air freight.

Overview

The logistics industry is firmly committed to achieving Net Zero and many of our members are already making investment and operational decisions to support the need to reduce their greenhouse gas (GHG) emissions. For those members operating light commercial vehicles (vans), battery electric powertrains are likely to replace the majority of petrol and diesel vans over the coming decades. For some larger vans, there may still be a role for low carbon fuels or hydrogen.

Our members see the greatest role for low carbon fuels in road transport to be for heavy goods vehicles (HGVs). Our members are keen to move away from fossil fuels as quickly as possible but larger HGVs are particularly challenging to decarbonise and there is not yet a commercially viable technology solution that is zero emission at the tailpipe. For smaller HGVs, battery electric vehicles could be adopted more rapidly but this is dependent on vehicles coming to market that are affordable for operators to acquire and run, as well having sufficient appropriate and supportive infrastructure in place.

For heavier HGVs, our members are awaiting the outcome of the Zero Emission Road Freight Trials to see which technology, or mix of technologies, offers the most commercially viable solutions and how and when the infrastructure to support the vehicles will be developed. Given this ongoing uncertainty and the need to urgently address transport GHG emissions, our members are keen to utilise and adopt low carbon fuels that can lower emissions from both new vehicles and those already in the existing fleet.

There are already many examples of Logistics UK members adopting low carbon fuels, such as hydrotreated vegetable oil (HVO) and biomethane. These have been demonstrated to offer excellent GHG emission savings and in the case of 'drop-in' fuel HVO, this can be easily used in current vehicle fleets without significant modifications. While our members also employ other strategies to reduce their current GHG emissions such as driver training and aerodynamics, other options for significant GHG reductions are limited due to the early stage of technology development.

A report by Zemo Partnership entitled '*Market opportunities to decarbonise heavy duty vehicles using high blend renewable fuels*' concluded that the greatest opportunity for deploying high blend renewable fuels was in HGV fleets using back-to-base 'depot' refuelling[1]. The study noted that the complete replacement of fossil fuels with RTFO approved renewable fuels such as biodiesel, HVO and biomethane can achieve more than 80% GHG emissions savings. It also determined significant savings could be achieved over the next decade with the HGV fleet adopting a 30% renewable fuel blend taking into account diesel and gas HGVs.

These findings highlight the GHG emissions savings that would be lost if low carbon fuels are not more widely adopted for use in HGVs. The low carbon fuels strategy can play an important role in giving logistics operators the confidence to adopt these fuels into their vehicle fleet, knowing there will be long-term Government support for their use.

[1] https://www.zemo.org.uk/work-with-us/fuels/projects/2020-high-blend-biofuels.htm

It is important the strategy is mindful of operators that may choose not to bunker their fuel or are unable to due to site restrictions, such as environmental, landlord & planning permissions. The strategy should provide clarity of public infrastructure development to enable all businesses to potentially benefit from low carbon fuels. For those operators that may consider investing in a fuel tank specifically for a type of low carbon fuel, this will involve significant costs to implement per location due to factors such as running power across a yard, barriers, line markings and security. When taking a cost decision related to such enabling works and fuel tank costs, businesses would welcome a strategy that supports such investment over the length of time that a tank may be deployed, alongside associated sustainability standards for the fuels.

Given air, water and rail freight are a crucial part of the logistics industry and supply chains, we recognise the overall need to decarbonise all transport modes and that low carbon fuels will be required by other transport modes other than road in the long-term. For aviation, we support the development and deployment of Sustainable Aviation Fuels (SAF). For rail and shipping, there is scope for the use of low carbon fuels provided confidence to invest is satisfied. However, this should not result in these fuels being restricted for the difficult to decarbonise parts of road transport in the short and medium-term.

Logistics UK has responded to some of the specific questions in the call for ideas below.

Response to call for ideas

Chapter 1 – Introduction

How can the low carbon fuels strategy best improve certainty about the deployment of low carbon fuels to support the decarbonisation of the transport sector and the growth of this industry in the UK?

The low carbon fuels strategy can provide confidence to businesses that the adoption of low carbon fuels is supported by the Government and will continue to form a key part of long-term Government policy around decarbonisation and reaching Net Zero. At present, there is uncertainty around investing in low carbon fuels as there is not currently a policy framework that sets out continued support for their use in any detail. It is important that the strategy is clear about the important role low carbon fuels can play for heavy road transport, and specifically HGVs, given the lack of other viable options at this time for significant GHG reductions.

In the call for ideas document, it is recognised that there is a need to harness the opportunities of low carbon fuels while avoiding pitfalls such as stranded assets or technology lock-in. It is important this is viewed in the context of the need for transport emissions to rapidly reduce in the next decade and the growing appetite to utilise low carbon fuels in HGVs from our members given the decarbonisation challenge that exists. We must avoid stalling GHG emission reductions that can take place immediately and over this critical period, prior to affordable, commercially viable zero tailpipe emission HGVs coming to market.

While increased use of low carbon fuels is likely to be maximised in the short to medium term, there will still be a role for their use in the longer term. While use is likely to be predominantly aviation and shipping by 2050, there will still be a role for low carbon fuels for road transport beyond 2040. This is due to the fact that even when the phase out dates for new, non-zero tailpipe emission HGVs are reached, there will still be diesel HGVs in the vehicle parc and operating on UK roads. The average lifespan of an HGV is 12 years[2] and smaller operators may keep their vehicles even longer.

The path to decarbonisation for SMEs can be an even greater challenge than larger businesses, with SMEs often acquiring second-hand vehicles. To help these businesses reduce their GHG emissions, low carbon fuels may be a viable solution and can help reduce GHG emissions of diesel HGVs still in the parc post-2040. However, scepticism about the long-term benefits of using alternative fuels amongst SMEs have already been identified, alongside other barriers, that need to be overcome[3].

[2] https://www.smmt.co.uk/wp-content/uploads/sites/2/SMMT-Fuelling-the-Fleet-Driving-Commercial-Vehicle-Decarbonisation.pdf
[3] SME Green Light, Qualitive research, October 2020

To help provide more certainty about the deployment of low carbon fuels to support the decarbonisation of road transport, the strategy should clearly outline a long-term plan for fiscal support for these fuels. Currently the gas duty differential is helping some of our members switch to biomethane but the forthcoming review in 2024 considering its continuation is already creating uncertainty for members on whether to continue to plan investment into biomethane in case the differential is removed.

Further fiscal support is needed for other low carbon fuels. We welcome the proposal currently being explored by Zemo Partnership on a renewable diesel fiscal incentive. Not only would this help operators switch to fuels that are generally more expensive than diesel, but it would offer a greater incentive to the fuels with greater GHG savings. Fully incentivising low carbon fuels has been demonstrated as an effective lever in other countries, including Sweden, where a tax exception has been introduced for certain biofuels for use as a motor fuel or in heating, leading to a significant uptake in their use[4].

Logistics UK welcomes the review of investment allowances and reliefs announced by the Chancellor in his Spring Statement 2022. In order to support businesses, it is important that fiscal incentives avoid perverse outcomes that stall fleet GHG emission reductions. Incentives should be designed to encourage vehicle acquisition and infrastructure investments that can deliver GHG reductions as soon as possible.

A further element Logistics UK would like to see addressed in the strategy is how infrastructure can be developed to support low carbon fuel uptake. Currently more public forecourt availability is needed as not all logistics operators bunker their fuel. In some instances, this has led to operators that use low carbon fuels having to travel significant distances to refuel, which is inefficient and reduces GHG savings. This must be coupled with an increase in the availability of low carbon fuels, so the Government should take steps to stimulate low carbon fuel production here in the UK. We would like to see the Renewable Transport Fuel Obligation Order (RTFO) continue to be strengthened and then extended beyond 2032 to support the long-term vision for low carbon fuels.

The strategy must look at policies holistically, including those related to addressing air quality and possible future road user charging. It is important that our members can confidently invest in low carbon fuels and know that their vehicles can be used in Clean Air Zones or will not be penalised more heavily if road user charging were introduced. Another barrier that has been identified is where vehicle manufacturers are reluctant to offer warranties for different types of low carbon fuels used in their vehicles.

Overall, for road transport it is important we achieve GHG emission reductions to reach the legally binding carbon budgets on the pathway to Net Zero. Government policy must enable and incentivise operators to adopt low carbon alternatives, rather than holding on to their diesel and petrol vehicles as long as possible. The strategy and Government incentives must promote how much of a difference low carbon fuels can make now for difficult to decarbonise parts of road transport.

For transport more broadly, the UK needs a comprehensive policy framework to build a successful UK SAF sector, covering production, commercial incentives and investment in airspace modernisation. Logistics UK would welcome funding for domestic production of SAF to be scaled up and the UK SAF mandate should be set at an ambitious level to stimulate sustainable aviation fuel production. These policies can help ensure air freight can make steps to decarbonise.

For rail, alternative fuels to diesel are an option, although rail freight can present a challenge due to the weight of loaded rolling stock. Recent successful trials have shown HVO fuel can reduce CO_2 and NOx emissions by as much as 90%[5]. In order for rail freight and rolling stock companies to invest in this kind of technology and accelerate rollout, the private sector needs certainty that there will be a return on investment – this can be provided with greater strategic oversight and joined-up management of rail freight.

The life-span of a shipping vessel can be as long as 30 years. Where drop-in fuels are not an option, current operators would need to retro-fit in order to use newer, low-carbon fuels. This is expensive and support for funding, such as capital

[4] European Commission, State aid announcement
[5] https://www.railfreight.com/railfreight/2021/02/24/alternative-fuels-loco-in-full-commercial-service/

grants, and certainty from Government policy on the use of low carbon fuels is needed for this 'difficult to decarbonise' mode to meet Net Zero targets.

Are there specific examples or best practices, the government should take into account when drafting the strategy?

Logistics UK supports the Zemo Partnership Renewable Fuels Assurance Scheme[6] that aims to give fleet operators independent assurance of purchasing sustainable, low carbon fuels approved under the RTFO, and customer supply chain specific GHG emission performance data. We also welcome the work Zemo Partnership are undertaking on a proposal for a renewable diesel fiscal incentive.

Chapter 2 - Demand

Does this chapter accurately capture key trends, opportunities and risks in terms of low carbon fuels demand? If no, please expand on any aspects that you think are missing or inaccurate, or require further exploration.

The numbers quoted of HGVs in the fleet using higher blend biodiesel and HVO seem low compared with the vehicles we are aware our own members have transitioned to using low carbon fuels. We would welcome the Government seeking updated figures where possible as the low carbon fuels strategy is developed. Following the invasion of Ukraine, this significant impact on supply and demand must now be considered.

In your view, what are the key challenges relating to demand in the future transition of the sector?

There could be overlapping demand from different parts of transport, which will need to be carefully managed and planned as part of the strategy and long-term Government thinking.

Apart from developing demand scenarios, are there any other actions the government should consider as part of the strategy development to address uncertainties and identify opportunities on the demand side?

As referenced in the call for ideas, the Government's commitment to explore potential measures to remove existing barriers for use of low carbon fuels in compatible vehicles is important as it can impact demand.

Chapter 3 – Supply

Does this chapter capture key trends, opportunities, and risks in terms of low carbon fuels supply? If no, please expand on any aspects that you think are missing or require further exploration.

Yes, Logistics UK supports a comprehensive overview of potential feedstocks for low carbon fuels supplied in the UK being commissioned. However, following the invasion of Ukraine, this significant impact on supply and demand must now also be considered.

In your view, what are the key challenges and opportunities as relates to supply in the future transition of the sector?

There is an opportunity to increase the availability of low carbon fuels in the UK so the Government should stimulate low carbon fuel production locally. This could include utilising UK produced waste organic matter refined into renewable biofuels, such as HVO. We do however recognise the need to protect land used in food crop production, with clear parameters set for low carbon fuel production.

[6] https://www.zemo.org.uk/work-with-us/fuels/the-renewable-fuels-assurance-scheme.htm

Are there any other actions the government should consider as part of the strategy development to address uncertainties and identify opportunities on the supply side?

The Government could consider a national strategy for recycling to enable greater energy production from waste (giving existing and future production more consistency). This would also ensure better resource management and develop system resilience.

Chapter 4 - Industry

In your view, what are the key challenges and opportunities for the UK industry in the lead up to 2050?

If the Government can address the increased cost of switching to low caron fuels for all modes, the immediate environmental benefits would be significant and result in GHG emissions from transport far sooner than waiting until zero emission technologies are fully developed and are commercially viable.

What are key actions the government should consider as part of the strategy development to address uncertainties and identify opportunities for UK industry?

Government should ensure that fiscal incentives are planned to provide certainty for business investment decisions, ideally to last for the useful lifetime of the vehicles, vessels or rolling stock.

Chapter 5 – Policy framework

In view of the different challenges and opportunities, are there specific policy measures the government should prioritise and why?

Low carbon fuels have a crucial role to play in reducing transport emissions, both today and on the pathway to Net Zero by 2050. The low carbon fuels strategy must prioritise giving logistics operators the confidence to adopt low carbon fuels into their vehicle fleet, knowing there will be long-term Government support for their use.

Given air, water and rail freight are a crucial part of the logistics industry and supply chains, we recognise the overall need to decarbonise all transport modes and that low carbon fuels will be needed by these transport modes in the long-term. For aviation, we support the development and deployment of SAF. For rail and shipping, there is scope for the use of low carbon fuels provided confidence to invest is satisfied. However, this should not result in these fuels not being used for road transport in the short and medium-term.

As we move forward towards Net Zero, it will become increasingly important to look at lifecycle emissions, alongside tailpipe emissions, as part of the overarching picture. This is an important consideration for the low carbon fuels strategy and beyond.

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