

LOGISTICS UK

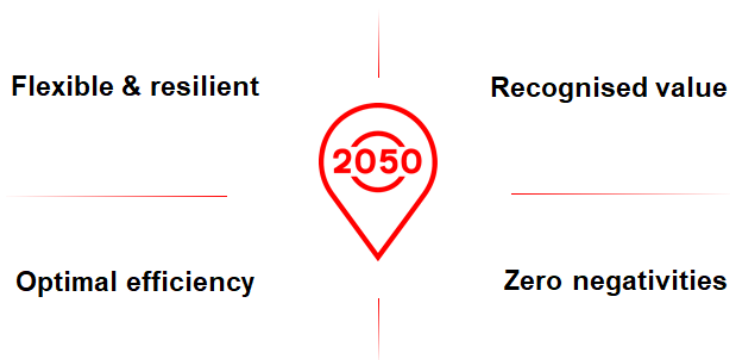
Decarbonising how we get our goods – Logistics UK briefing note for DfT Decarbonising Transport Workshops 2020

About Logistics UK

Logistics UK (the new name for FTA) 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 18,000 members, is to enhance the safety, efficiency and sustainability of freight movement throughout the supply chain, across all transport modes.

We seek to ensure that our industry can continue to supply businesses and consumers with the goods they require every day whilst reducing any social impacts – including carbon dioxide (CO₂) emissions and air pollution. The logistics industry wishes to play a positive role in helping reduce emissions.

The right approach to decarbonisation



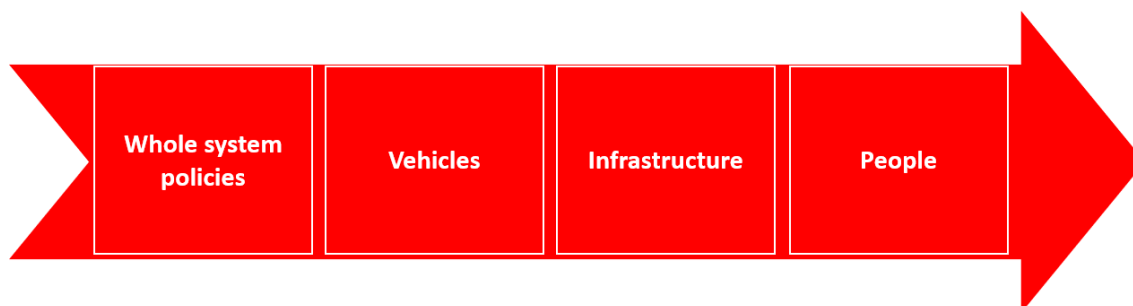
These four attributes (*left*) are Logistics UK's ambitions for our industry. It is imperative decision makers consider these aspects when deciding new policies or developing new technologies for decarbonisation, as this will help deliver a logistics industry fit for the future: flexible and resilient, recognised for the value it adds to society and the economy, optimal in its efficiency, and progressing towards zero environmental and safety negativities.

The Government's ambitious target of net zero emissions by 2050 provides a very clear end goal. The challenge now is to identify the

necessary steps required to enable industry to achieve this as efficiently as possible. Although it might be fun to imagine a future where all our goods are delivered by drones or e-cargo bikes, we need a realistic system capable of delivering the 193 billion tonne kilometres of goods moved within the UK each year.

Considerations for each element of the logistics system

To ensure this, discussions about the future must be grounded in common sense, recognising the needs of the logistics industry and setting out practical, realistic steps to get us there. We have outlined a number of considerations within each element of the logistics system for the DfT's Decarbonising Transport Workshops.



**Whole system
policies**

A multimodal approach must be taken – Although this paper focuses primarily on the road sector, which is the largest domestic mode and, consequently, the source of the majority of the UK's transport CO₂ emissions, the challenge of meeting net zero targets applies to all modes used in UK logistics, including rail, air and maritime transport.

Regulating **air and maritime** emissions is complex due to the international nature of the businesses, with rules set primarily through the relevant U.N. agencies (ICAO and IMO), with complementary and sometimes more stringent environmental regulation also enacted at EU level. Following EU Exit, the UK Government will need to establish its domestic environmental policy approach to maritime and air, working with industry and international partners. We are asking Government to adopt the international regimes established at U.N. level into domestic regulation, rather than create divergent regimes which could add complexity and unnecessary costs.

Transporting goods by **rail** significantly reduces HGV road miles – each freight train can replace about 70 lorries. However, further support is needed to enable more freight to shift from road to rail. This could include a reduction in track access charges to make rail freight more cost effective, increased capability and capacity on the rail network (aligned with freight needs), and improved road connections to rail terminals to enable intermodal changes.

Maritime shipping is the lowest-carbon form of freight transport. The UK should consider the case for a national Strategic Water Network which would set out the priority freight routes for inland waterways and potentially guide planning and investment decisions. In addition, the use of water freight should be promoted in construction-project supply chains and, where appropriate, included in planning consents.

Better land-use planning can reduce mileage, congestion and emissions – Logistics should be considered as part of essential infrastructure, as it services the needs of the economy and the people – when building new communities, the requirements of logistics should be as intrinsic as considerations for gas, electricity, water, broadband, public transport, schools and hospitals. At this early stage of planning, consideration can be given as to how deliveries to shops could be made quietly at night (which would remove freight vehicles from peak hours, reducing congestion and emissions) and the ways residents could be supported in how they receive their online deliveries.

Land must be safeguarded for rail terminals and wharves, to enable modal shift and to take advantage of the associated carbon savings. Land should also be protected for logistics centres, to ensure they are not pushed further out of our cities, as this would increase the distance freight vehicles need to travel, thereby increasing emissions, and limit freight vehicles' connections.

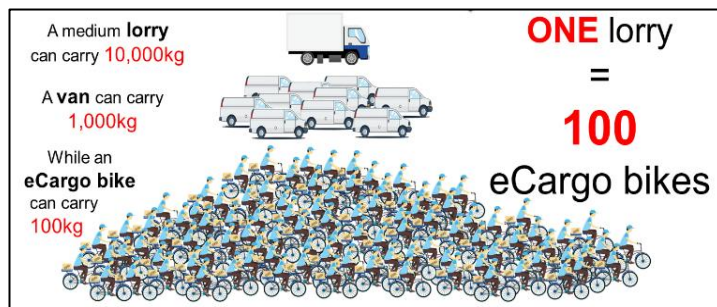
Transport planning must focus on reducing congestion – As there is limited space in our towns and cities to build new roads, we need to consider how existing infrastructure can be used more intelligently. Congestion has a direct impact on fuel consumption and emissions, with an exponential effect on the environment – according to a leading truck manufacturer, stopping three times per mile and getting back up to 30mph each time triples emissions compared to just cruising at 30mph. Reviewing road layouts and traffic signals can significantly help reduce congestion, and reducing congestion also allows the freight industry to do its job more efficiently, potentially reducing the number of vehicles it needs to deploy.

New transport schemes, such as those aimed at enabling more walking and cycling by reallocating road space, must consider the needs of and impact on freight, not just access to the kerbside for deliveries, but also the potential to increase journey times and emissions. Rules on micromobility devices (eg, e-scooters) should take this into account; the growth in these new modes of transport is likely to add pressure on urban transport and could create additional congestion.

Priority access should be considered for goods vehicles delivering into our city centres – for example, allowing HGVs to access bus lanes, particularly on arterial routes, will help maximise the use of valuable road space. There should also be greater access for deliveries to be made at night when the roads are quieter. Enabling goods vehicles to spend less time in congestion will significantly increase their efficiency and reduce their emissions.

Vehicles

Vehicle efficiency is vital – The most environmentally friendly vehicle is often the one with the biggest payload, as they require fewer journeys, meaning fewer road miles, less fuel and, therefore, fewer emissions. The diagram below illustrates the amount of vans and e-cargo bikes required to carry the same payload as one medium HGV. Even if these vehicles emit zero-tailpipe emissions, they still add to congestion which increases carbon emissions for other vehicles that may still be running on fossil fuels.



The efficiency of HGVs can be increased further by increasing the opportunities for backhaul. This will reduce the number of total vehicle movements and, therefore, carbon emissions. Whilst operators are already incentivised to implement measures that will improve efficiency, as it will reduce fuel costs, this will require more collaboration and consolidation of loads in a highly competitive market, so we need to consider how we overcome any barriers.

Whilst able to carry less payload, vans will still play a valuable role in our supply chain. They are more adaptable to rural and urban deliveries, and they are easier to decarbonise due to the availability of more advanced technology. E-cargo bikes can provide a last-mile solution in dense urban environments, particularly for small parcel deliveries, groceries and takeaway food deliveries, but their application will be niche.

A clear pathway is needed for zero-emission vehicles – Hydrogen electric and battery electric have been identified as the lead potential power alternatives for HGVs; however, a clear direction and certainty is needed for businesses before they invest in designing, building and procuring these new vehicles.

The finalisation of the Ultra-Low Emission Truck (ULET) definition will be a vital stepping-stone in reducing HGV emissions, but we also need a similar definition for ultra-low emission vans. Whilst electric van technology has already been developed, clear business cases are required for these vehicles to work across all applications. This includes ensuring payloads are not affected by any additional battery weight, mileage range is sufficient and charging infrastructure is accessible and affordable.

An Ultra-Low Emission Fuel definition is also required to provide vehicle operators with certainty that selected fuels will deliver the expected environmental savings; additionally, this will be a vital stepping-stone on the way to net zero but will also compliment the savings from ULETs. This could be further enhanced by low-emission trailer design, such as reducing weight and improving aerodynamics and legislative changes to enable Longer Semi-Trailers to be used on UK roads on a permanent basis.

Rail has a relatively clear technical route to decarbonisation via electrification of the rail network, although there are significant challenges to this. Currently, diesel is the only fuel option available for rail, and the transition to a cleaner alternative is dependent on Government support, including progressive electrification of the network. Further research is needed to identify the best way to transition rail to a cleaner alternative to further increase rails emissions savings.

Infrastructure

Charging and refuelling infrastructure is currently a blocker – A supportive refuelling network needs to be in place ahead of time, to support new electric or hydrogen vehicles so they can continue to operate. This needs to be strategically placed, along the road network as well as in city centres.

The correct regulatory framework for power infrastructure is needed now – A clear structure of who is responsible for upgrading the electricity grid and who installs the required charging infrastructure should be considered. There is currently a market failure here, as logistics operators are expected to pay for the full costs of infrastructure upgrades – which they will not own and cannot take with them if they relocate.

People

We need to encourage customer behaviour change – Customers need to be encouraged towards a significant behaviour change in their purchasing habits, so they make greener and more efficient delivery choices. Online commercial businesses could use a traffic light system for their delivery options, to help highlight the greener delivery choice – this is already offered by several supermarkets and could be rolled out to other sectors. Offering free delivery often results in the cost of goods' transportation being largely undervalued, so such a system could be coupled with the least carbon-intensive option as the cheapest, allowing the company to share the financial savings with their customers. The growth in shops, petrol stations or lockers operating as pickup points is a useful way to help consolidate deliveries and reduce stop-start operations; we anticipate this will continue to grow in the future.