Consultation on a New Heavy Goods Vehicle CO_2 Emissions Regulatory Framework for the United Kingdom

Summary

- **Enabling conditions for decarbonisation must precede regulation:** For any regulatory option to be workable, government must address core barriers including infrastructure readiness (grid access, depot charging, hydrogen), technology maturity and cost challenges. Without these enablers, mandates risk outpacing practical deliverability.
- **Option 1 is the most credible and workable pathway:** A manufacturer CO_2 standard provides a technology-neutral, flexible and least-disruptive route to decarbonisation, allowing multiple technology pathways and gradual fleet transition aligned with operational realities.
- **Tailpipe-only framework overlooks low-carbon fuel (LCF) benefits:** All options focus on tailpipe emissions and therefore fail to recognise lifecycle CO_2 reductions already being delivered by LCF (e.g. biomethane, HVO). A technology-neutral approach should account for verified well-to-wheel emissions savings alongside zero-emission vehicles.
- **Emissions trajectory must reflect real-world operations:** Targets should follow a progressive, infrastructure-led and deliverable pathway consistent with UK duty cycles, utilisation and fleet renewal patterns, achieving majority electrification over time rather than assuming rapid early uptake.

About Logistics UK

Logistics UK is one of the country's largest business groups, and the only trade association which represents all of logistics. Our mission is to support, shape and stand up for a safe, sustainable and efficient logistics sector. Our membership of more than 22,000 includes global, national and regional businesses and SMEs spanning road, rail, inland waterways, sea and air freight, in ports, airports and warehousing, as well as the customers of freight services, such as retailers and manufacturers. We deliver services, representation and thought leadership, helping members and policymakers to seize new opportunities for the sector and the economy as a whole, right across the country.

The logistics sector

Nothing moves without logistics. The sector employs 8% of the UK workforce in good jobs with strong career progression, contributes £170 billion in GVA each year, and underpins the resilience of the everyday economy.

Logistics plans and coordinates the movement and storage of the goods that businesses, public services and households rely on – using ports, airports, roads, railways, waterways, warehouses and smart digital systems to tie it all together.

With the right policies, logistics can drive up UK growth by £8 billion a year.[1] However, rising costs, red tape and poor infrastructure are holding the sector back – putting firms out of business, fuelling inflation, and undermining productivity and supply chain resilience. As a result, the UK has fallen from 4th to 19th in the World Bank Logistics Performance Index over the decade to 2023.

[1] Logistics Delivering a solution to the UK's productivity puzzle, Oxford Economics, 2023

Introduction

We welcome the opportunity to respond to the HGV CO_2 regulatory framework consultation. However, before considering specific regulatory options, it is essential to establish the conditions that must be in place for any policy framework to be workable for the logistics sector.

The logistics sector is fully committed to decarbonisation and recognises its critical role in delivering decarbonisation. However, regulatory ambition must be matched by practical enablers and removal of barriers. Without the necessary infrastructure, market conditions, and system readiness, even well-intentioned measures risk slowing progress rather than accelerating it.

Before assessing policy mechanisms, the following must be true for this transition to work for industry:

1. **Infrastructure must lead regulation**

No mandate or regulatory requirement should be introduced ahead of infrastructure readiness. In particular:

- Grid access, connection queues, and capacity must be prioritised for logistics hubs and freight corridors.
- Planning processes must be streamlined for depot charging and hydrogen refuelling infrastructure.
- A nationally coordinated rollout must avoid regional disparities that disadvantage operators.

2. **A technology-neutral approach is essential**

Policy frameworks should focus on emissions outcomes rather than prescribing specific technologies. Operators require flexibility to deploy solutions suited to different duty cycles, vehicle weights, and operating models. A technology-neutral approach reduces risk and supports innovation.

3. **A whole-systems approach is required**

Freight does not operate in isolation. Road, rail, ports and warehousing are interconnected. Policy must reflect this and avoid siloed decision-making that shifts emissions or costs elsewhere in the supply chain.

4. **Commercial competitiveness must be protected**

UK operators must remain commercially competitive, particularly with EU counterparts. Divergent regulatory frameworks or cost burdens risk distorting competition and driving activity offshore rather than reducing emissions.

5. **Stranded asset risk must be minimised**

Fleet investment cycles are long, and capital costs are significant. Policy design must avoid creating stranded assets or forcing premature write-down of existing vehicles and infrastructure. Clear transition pathways and realistic timelines are essential.

For any of the proposed regulatory approaches to be feasible in practice, the enabling conditions outlined above must be addressed as a priority. Decarbonisation cannot be delivered through regulation alone, it requires infrastructure readiness, removal of systemic barriers, commercial viability, and policy certainty.

Without these foundations in place, new regulation risks undermining industry confidence and slowing investment. Ultimately, regulation does not create a market. If businesses are forced to buy vehicles that are not commercially viable, they will choose to extend the life of existing vehicles to ensure the business case

works. However, with the correct foundations the sector can transition at pace and deliver meaningful emissions reductions while maintaining operational resilience and economic competitiveness.

Consultation response

Q1 – Do you think the Certification Regulation (EU) 2017/2400 should be amended within the UK to align with the 2nd and 3rd amendments, as adopted in the EU?

The UK should update the regulation to align with the EU's 2nd and 3rd amendments.

Aligning with the latest EU updates would provide significant benefits for manufacturers, operators, and policymakers. Most trucks sold in the EU market are also sold in the UK, so maintaining regulatory consistency avoids the duplication of testing and compliance processes, reducing unnecessary administrative and cost burdens for manufacturers.

Updating the regulation would also ensure that the UK can properly certify the full range of modern vehicle types. The newer EU amendments expand the scope of vehicle categories covered, whereas the older UK version leaves gaps that prevent some newer HGV types from being accurately assessed under domestic rules.

Crucially, the updated EU rules allow for the measurement of CO_2 performance for zero-emission (ZE) technologies. The current UK regulation does not, making it more difficult to evaluate and compare emerging low-carbon and ZE HGV technologies.

Bringing the UK regulation into alignment would therefore give policymakers access to a more complete, consistent and modern dataset. This would support the development of fair, credible and future-proof CO_2 standards for all HGVs, providing greater certainty for industry and improving operator and investor confidence.

Q2 – What are your views on Option 1 regarding a strengthened and expanded CO_2 standard for HGVs?

Logistics UK does support option 1.

This is Logistics UK preferred option. A CO_2 standard for new HGVs is the most practical, proportionate and deliverable regulatory pathway to decarbonisation. This approach provides a clear regulatory signal while maintaining the flexibility necessary for industry to transition at pace without unnecessary operational disruption.

Of the proposed options, this provides the most technology-neutral opportunity. By setting emissions reduction targets at manufacturer fleet level rather than prescribing specific technologies, it allows compliance through a range of measures, including improved diesel efficiency, hybridisation, battery electric vehicles (BEV), hydrogen, aerodynamic improvements, and wider powertrain optimisation. This flexibility supports innovation and avoids prematurely locking the market into a single solution before infrastructure and technology have fully matured.

Crucially, this option supports the decarbonisation of road freight in a way that is operationally deliverable. In the early stages of the transition, when zero-emission technologies and infrastructure are still developing, operators would retain the ability to purchase diesel vehicles where operationally necessary while progressively reducing emissions through manufacturer fleet standards. This avoids forcing premature fleet transformation before technologies are fully mature. Importantly, it allows decarbonisation to take place alongside normal fleet replacement cycles, providing businesses with the stability needed to plan investment in vehicles, infrastructure and operations in a sector characterised by tight margins and long asset lives.

Option 1 is also the most cost-sensitive of the options presented, and this matters enormously in the current economic climate. The decarbonisation of road freight is a generational undertaking that will require significant capital investment across the supply chain, including vehicles, infrastructure and operations. That investment must be sequenced in a way that does not place undue financial stress on logistics businesses, many of which are operating on thin margins and face acute pressures from energy costs, inflation and consumer demand. A framework that mandates large-scale capital commitments too early in the transition risks placing unnecessary strain on logistics businesses and ultimately increasing costs across supply chains, which would feed through to higher prices for consumers..

Furthermore, option 1 reduces immediate dependence on large-scale infrastructure rollout. Given ongoing constraints around grid capacity, depot electrification, hydrogen production and refuelling networks, and long DNO connection timelines, a more gradual transition reduces systemic risk. It avoids creating a situation where regulation advances faster than infrastructure readiness, which could otherwise delay fleet renewal and undermine confidence.

Finally, Option 1 minimises stranded asset risk. Fleet investment cycles are long and capital intensive. A progressive tightening of manufacturer fleet averages enables operators to maximise the value of existing vehicles, phase investment in line with infrastructure readiness, and maintain more stable residual values. This supports a commercially sustainable transition.

However, for option 1 to deliver its full potential, it is essential that the regulatory framework gives appropriate recognition to LCF. CO_2 standards that measure only tailpipe emissions risk undervaluing the significant carbon reduction benefits that LCF can deliver across the existing and near-term fleet. Logistics UK urges government to ensure that the methodology underpinning any strengthened CO_2 standard accounts for the lifecycle carbon emissions of vehicles running on LCF so that operators investing in these fuels are not disadvantaged. This is consistent with a genuinely technology-neutral approach and would better reflect the actual greenhouse gas savings being achieved.

In particular, the CO_2 standards framework should explicitly include gas trucks as a recognised compliance pathway, with appropriate carbon accounting to reflect near zero or even negative lifecycle emissions that biomethane can offer.

Excluding or inadequately recognising gas trucks running on biomethane within option 1 would narrow the range of options available to the sector to meet its decarbonisation targets. Logistics UK therefore urges DfT to work with industry to establish a robust, fair and transparent methodology for crediting LCF with any strengthened CO_2 standards regime.

To conclude, option 1 represents the most credible and deliverable pathway for reducing HGV CO_2 emissions while protecting the operational integrity and competitiveness of the UK logistics sector.

Q3 – What are your views on Option 2 regarding the introduction of a ZEV mandate limiting the sales of non-ZE HGVs

Logistics UK does not support Option 2.

The introduction of a ZEV mandate that limits the sale of non-ZE HGVs would be premature. As recognised by the government in the Ministerial Foreword of this consultation document, the barriers to adopting ZE HGVs are different, and more significant, to the barriers of adopting LCVs which are currently subject to a ZEV mandate. The government is aware that over half a million heavy goods vehicles operate on UK roads, and for HGVs, the transition to power sources other than diesel has been much slower than the CCC's balanced pathway anticipated due to concerns around payload loss, vehicle capability on range, cost, lack of suitable infrastructure and the inability to double shift vehicles. These concerns are exacerbated by the large size of the vehicles and by the essential role they play in moving goods around, into, and from the UK. Fundamentally, it is critical that government policies take into account that the UK economy depends on the effective functioning of HGV operations.

The number of HGVs using fuels other than diesel and petrol since Q4 2020 has increased from 1,131 to 4,289 in Q4 2024[2]. Although this increase is noteworthy, the actual number of alternatively fuelled vehicles on UK roads is still minimal in comparison to ICE-powered HGVs. Many ZE HGVs are on UK roads as a result if direct government support through programmes like the ZEHID trials (zero emission HGV and infrastructure demonstrator programme). Operators who are trialling ZE HGVs rely heavily on grants like the plug-in truck grant and depot charging scheme to help align TCO concerns. The continuity of these grants is critical to encourage uptake of ZE HGVs.

It is not feasible to implement a ZEV Mandate for HGVs when there is a lack of infrastructure to support a large-scale transition to ZEV. This coupled with the practical operational concerns such as range, inability to double shift vehicles and the payload penalty must all be addressed if a ZEV Mandate was to be introduced. This level of regulatory intervention at this time could have a serious detrimental impact on the industry which requires vehicles with comparable capabilities as ICE equivalents. As such, a mandate is far too rigid due to its sole focus on ZEV compared to option 1.

In a 2025 survey of Logistics UK's membership, 92.7% of respondents said that a HGV mandate would have a negative impact on their business and operations. A mandate on operators and manufacturers would harm the logistics businesses that the UK economy relies upon and there are other, more effective regulatory interventions the government has proposed and that should be pursued. A ZEV mandate for HGVs is not supported by the majority of the logistics industry.

The experience of the van ZEV mandate further illustrates the risk of applying a rigid ZE sales obligation before the market and infrastructure are ready. Since its introduction, the van mandate has consistently missed its intended trajectory. The government has already been required to intervene and adjust the mandate's parameters in response to market realities, an acknowledgement that the policy was set ahead of what the market could deliver. If a mandate for vans – which face lower operational constraints and a more developed charging infrastructure than HGVs – has proved difficult to implement, the case for imposing a comparable obligation on HGVs at this stage is highly questionable. Logistics UK urges the government to learn from the van mandate experience and avoid repeating the same approach for HGVs where the operational and infrastructure barriers are considerably more pronounced.

Q4 – If you agree with using Option 2 as a future framework, should the ZE HGV mandate be accompanied by a CO_2 standard for non-ZE HGV vehicles?

Option 2 is not supported by Logistics UK.

If government chooses to proceed with option 2, Logistics UK would support the introduction of an option 1 mechanism alongside the implementation of option 2. This would provide greater flexibility for operators in how decarbonisation is achieved if it reduced the rigidity of a ZEV mandate, and offer important flexibilities for operators that are unable to transition fully to ZEV. However, Logistics UK would caution that although the nature of option 1 would support alignment with the EU, the combination of option 2 with option 1 could reflect an over-abundance of regulation and must therefore be considered carefully.

Where operators have already made investments into reducing CO_2 emissions from their new non-ZE HGV fleet, for example through investments in Euro 6 compliant vehicles, and through investment in low carbon fuel, Logistics UK would support appropriate recognition of these investments alongside recognition of the role that low carbon fuel can play in reducing emissions from the logistics industry.

Logistics UK recommends that, if option 2 is pursued by government, it must be done so alongside a government publication of a freight decarbonisation roadmap. This stands for all options, however, is particularly pertinent to option 2 as it will require the most immediate transition to ZEV. This roadmap must make it clear what plans the government has for infrastructure delivery, and where future taxation plans could impact investments into ZE technologies. Any future taxation and planned infrastructure could impact

[2] Department For Transport Overview of Road Freight Sector 2024

operator TCO calculations for ZE HGVs and therefore, government must shed light on how the transition to ZE HGVs will be supported by government beyond regulatory action.

Logistics UK therefore urges government to publish a trajectory or roadmap to 2050 highlighting the following:

- Infrastructure rollout timelines.
- Commitment to a multi-year funding window for plug-in truck grants, so operators can be confident in their ability to access the grants in future.
- Commitment to a multi-year extension of the Depot Charging Scheme so operators can be confident in their ability to access this funding pool.

Q5 – What are your views on Option 3 considering requirements for fleets to purchase or lease an increasing share of ZE HGVs?

Logistics UK does not support option 3.

A fleet-level purchase mandate would introduce significant operational and commercial risks at this stage of market development.

Vehicle supply is not yet at the scale or maturity required to support a mandated transition across all duty cycles. Availability of ZE HGV models remains limited, particularly in heavier weight categories and for long-haul operations. Production volumes are constrained and there is insufficient certainty around delivery schedules. Introducing mandatory purchase requirements in advance of stable supply risks creating market distortion and delaying fleet renewal rather than accelerating it.

The technology is also not yet universally operationally viable. While battery electric solutions are progressing rapidly, range limitations, payload impacts, charging time requirements and infrastructure concerns remain significant barriers for many use cases. Hydrogen solutions are at an even earlier stage of commercialisation. A mandated share risks forcing operators to adopt technologies before they are technically or commercially suitable for their specific operations, potentially undermining service reliability.

Furthermore, infrastructure readiness remains a critical constraint. Grid access delays, long DNO connection timelines, depot upgrade costs, land availability constraints and planning challenges are all barriers. A fleet purchase mandate that runs ahead of infrastructure deployment would create a misalignment between regulatory requirements and practical deliverability. Operators cannot invest in vehicles that they are unable to power or refuel reliably.

Option 3 would also introduce significant financial risk. ZE HGVs carry substantially higher upfront capital costs and uncertain residual values. Mandating fleet shares could accelerate stranded asset risk by forcing premature replacement of serviceable vehicles and disrupting normal asset life cycles. In a sector characterised by tight margins and long investment horizons, this would materially affect business resilience.

Finally, a rigid fleet share requirement removes the flexibility needed to manage diverse operational profiles. Logistics operations vary significantly by geography, sector and duty cycle. A one-size-fits-all purchase mandate does not reflect this diversity and risks unintended consequences, including reduced fleet efficiency or constrained service capacity.

For these reasons, we consider Option 3 premature and disproportionately disruptive at this stage. A framework that maintains flexibility while driving emissions reductions through manufacturer standards represents a more deliverable and lower-risk pathway.

Q6 – If you agree with using Option 3 as a future framework, what eligibility criteria should be set to include freight operators in a fleet mandate?

We do not agree that Option 3 should be adopted as a future framework at this stage. Introducing eligibility criteria for a mandate before foundational barriers are resolved risks creating regulatory uncertainty and investment hesitation across the sector.

If government were nevertheless to explore this approach in the future, it is critical that there is absolute clarity on how “fleet” and “large operator” are defined. What may appear to be a large fleet in policy terms may not align with how the industry is structured in practice. Many logistics businesses operate through multiple legal entities, franchise models, subcontracted networks or mixed fleet arrangements. Others operate high vehicle numbers but on extremely tight margins or under long-term contractual arrangements that limit fleet flexibility. A simple vehicle number threshold risks capturing operators who lack the infrastructure access, depot control or financial capacity.

Q7 – If you agree with using Option 3 as a future framework, should a purchasing requirement, fleet requirement, or a combination be established?

We do not agree that Option 3 should be adopted as a future framework at this stage.

From an operator perspective, both a purchasing requirement and a fleet requirement present significant challenges.

A purchasing requirement could distort fleet renewal cycles. Operators replace vehicles based on asset life and residual value optimisation. A purchasing mandate risks forcing premature replacement or constraining the ability to acquire vehicles for specific duty cycles. It could also create supply bottlenecks if manufacturers are unable to meet demand at scale.

Fleet requirements could introduce even greater complexity. Fleet composition fluctuates with seasonal demand, subcontracting models and leasing arrangements. Determining compliance would require clarity on how fleets are defined and risks penalising operators whose business models rely on flexibility. It would also increase stranded asset risk by effectively mandating accelerated fleet turnover.

Neither a purchasing requirement nor a fleet requirement is appropriate at this stage. Policy should focus on enabling market conditions and infrastructure deployment before considering mandatory fleet-level obligations.

Q8 – Of the options presented, what is your preferred approach, or combination of approaches, for reducing emissions from HGVs and delivering a phase-out of new non-ZE HGVs?

We consider Option 1 to be the most credible and deliverable approach for reducing emissions from HGVs.

Option 1 provides clearer regulatory signals while maintaining technology neutrality and operational flexibility. By tightening average fleet CO_2 limits for manufacturers, it drives emissions reductions across the market without imposing disproportionate disruption on operators. It allows innovation across multiple pathways and supports gradual decarbonisation aligned with infrastructure readiness and technology maturity.

However, none of the options presented adequately recognise the role of LCF in supporting the transition. This is a significant gap.

LCF, including biomethane, HVO and other renewable fuels, is already delivering verified lifecycle emissions reductions in existing fleets. LCF provides immediate, scalable carbon savings without requiring new vehicle platforms or major infrastructure upgrades. For many operators, particularly those with long-haul or heavy-duty operations, LCF represents a practical and cost-effective transitional solution.

The current framework focuses primarily on tailpipe emissions from new vehicles, which does not capture the lifecycle carbon benefits of renewable fuels. Modelling shows that for a single articulated truck, 100% HVO, biodiesel (particularly high-blend biodiesel e.g B100), and biomethane all offer significant GHG savings compared to the conventional diesel truck. In some instances, there are greater life cycle GHG

emission savings from LCF than BEVs using grid electricity. Given the current policy focus on tailpipe emissions, operators investing in LCF today receive limited recognition within the regulatory structure.

Furthermore, it is important to challenge the assumption that zero-emission vehicles automatically deliver zero emissions in practice. The UK electricity grid remains substantially dependent on fossil fuel generation, and while the transition to renewable power is progressing, the grid today is far from fully decarbonised. An HGV charging from the grid is not drawing on green electricity, it is drawing a mix that still carries significant carbon emissions, particularly during peak demand periods. As the logistics sector increases its electricity demand to power a growing BEV fleet, alongside other energy-intensive industries increasing their electricity demand, there is a real risk that demand outpaces the growth of renewable generation capacity, placing further pressure on the grid and potentially undermining green electricity targets that the government has set. A regulatory framework that treats tailpipe zero emissions as equivalent to genuine zero lifecycle emissions therefore overstates the carbon benefit of electrification in the near and medium term and understates the relative contribution of LCF which delivers verified emissions reduction now. Policy must be grounded in this reality rather than in assumption about a fully decarbonised grid that does not yet exist.

We therefore support option 1 as the primary mechanism for driving long-term decarbonisation of new vehicle sales, but it should be complemented by a framework that properly accounts for lifecycle carbon reductions from LCF during the transition period. This could include mechanisms to recognise verified well-to-wheel emissions savings.

Without acknowledging the contribution of LCF, policy risks overlooking a significant source of near-term carbon reduction. It should also recognise that the transition to zero-emission vehicles will take longer in some vehicle weights and duty cycles due to cost, vehicle availability and operational constraints. Failing to reflect these realities could increase the cost and complexity of transition for operators, with impacts ultimately feeding through into supply chains and consumer prices..

Option 1 provides the most proportionate and workable pathway for reducing HGV emissions, but it should be accompanied by measures that recognise and support the role of LCF as part of a pragmatic, whole-system transition.

Q9 – Are there any alternative approaches that the government should consider to reduce CO_2 emissions from HGVs?

The approaches set out in the consultation are primarily framed around tailpipe CO_2 emissions from new vehicles. While this provides regulatory simplicity, it does not reflect the full decarbonisation opportunity across the HGV sector.

A tailpipe-only framework risks narrowing the policy objective to electrification rather than decarbonisation. If the government's goal is specifically electrification, that should be clearly articulated. However, if the objective is to reduce overall GHG emissions from freight, then a broader, lifecycle-based approach is required.

Decarbonisation is not limited to eliminating tailpipe emissions from new vehicles. Significant carbon savings are already being delivered through LCF, which reduce well-to-wheel emissions from the existing fleet. These reductions are immediate, scalable and commercially deployable, yet they are not meaningfully recognised within the options presented.

A regulatory framework focused solely on tailpipe emissions effectively limits qualifying technologies to battery electric and hydrogen fuel cell vehicles. This narrows innovation pathways and excludes transitional and complementary solutions that can deliver material emissions reductions in the near to medium term. For many duty cycles, particularly long-haul and high-payload operations, a blended technology approach will be necessary during the transition.

Government should therefore consider alternative approaches that incorporate lifecycle (well-to-wheel) emissions accounting alongside tailpipe performance. A technology-neutral framework based on total

carbon intensity would better reflect real-world climate impact and allow multiple decarbonisation pathways to contribute. This would include recognising the role of verified renewable fuels, improving vehicle efficiency, hybridisation, and operational optimisation in addition to zero-emission vehicle deployment.

A broader systems approach would ensure policy coherence rather than siloed decarbonisation measures.

If the objective is decarbonisation of freight rather than a single-technology transition, government should adopt a technology-neutral, lifecycle-based framework that recognises all credible emissions reduction pathways. A tailpipe-only approach risks overlooking significant carbon savings and constraining the sector's ability to transition efficiently and cost-effectively.

Q10 – Do you have any comments on the exclusion of ZE HGVs with a GVW between 3.5 tonnes and 4.25 tonnes from a future HGV regulation?

The DfT confirmed in January 2026 it had laid down in Parliament the draft Statutory Instrument required to introduce the regulatory flexibilities for ZEVs up to 4.25t that Logistics UK had requested in the 2025 consultation. It is hoped that the draft legislation *The Goods Vehicles (Testing, Drivers' Hours and Tachographs etc.) (Amendment) Regulations 2026* will become law by March 2026. It therefore is logical to exclude ZE HGVs with a GVW between 3.5t and 4.25 from HGV regulation as they will not be classified in this way.

Q12 – What are your views on a future regulation including CO_2 emission reduction targets for trailers?

Trailers are usually non-motorised and do not produce any direct CO_2 emissions. However, they can contribute towards the CO_2 emission reduction of the motorised vehicle that is towing the trailer through a combination of technologies, such as light weighting, aerodynamic improvements, and using low-rolling resistance tyres. Trailer manufacturers in the EU-27 are required to reduce their indirect CO_2 emissions through these measures, amongst others, by 10% for a semi-trailer and 7.5% for a drawbar trailer by 2030 relative to 2025 in accordance with (EU) 2024/1610.

Trailers may also contribute towards CO_2 emission reductions through the addition of an electrified propulsion system, otherwise known as an e-trailer, which may be towed by both a conventional HGV and ZE HGV. E-trailers may provide greater range for a ZE HGV and contribute towards CO_2 emission reduction of a conventional vehicle.

It is logical that regulation should therefore include trailer CO_2 emission reduction targets, especially as alignment with EU regulations streamlines regulatory burdens. However, consideration must also be given to the cost implications of decarbonising trailers. Technologies such as electrified axels and e-trailer systems can provide emission benefits and support the range of ZE HGVs but they represent a significant additional capital cost for operators and trailer manufacturers. Any regulatory framework should therefore remain simple, proportionate and affordable and allow for sufficient time for these technologies to mature and scale.

Q15 – Should a sunset clause be set for any derogation? If yes, by what year should this be set?

Yes. A sunset clause ensures that derogations remain temporary, proportionate, and aligned with long-term decarbonisation objectives. It also prevents exemptions from becoming de facto permanent, which can undermine regulatory certainty and decarbonisation adoption.

Q17 – What criterion, or combination of criteria, should be used to set the eligibility of a ZE HGV?

Of the suggested 3 options for determining the eligibility of a ZE HGV, Logistics UK supports the continued use of existing criteria for determining compliance in the UK: grams of CO_2 per vehicle activity, where this aligns with the EU. This approach focuses on the actual emissions outcomes rather than a specific technology, allowing for an industry-led approach to reducing emissions, including battery electric, hydrogen fuel cell, and hydrogen combustion, in line with the EU's approach.

Sole focus on an engine technology approach (i.e. defining a ZE HGV as one without an internal combustion engine) is too restrictive, especially as it does not align with the nuanced definition of ZE in the EU where a majority of HGVs for the UK market are manufactured.

In the EU, the definition of a ZE HGV includes vehicles without an internal combustion engine, or with an internal combustion engine emitting less than 3g CO_2 per tonne-km or 1g CO_2 per person-km.

Logistics UK strongly advocates for the alignment of the definition of a ZE vehicle with the EU.

Additionally, many logistics operators have invested, and continue to invest, in LCF technologies to reduce emissions of their operations today. Logistics UK supports the EU's approach to LCF which promotes production of e-fuel and biofuel in the Union and encourages the UK government to consider the economic and employment benefits for the UK should a similar approach be taken here. Additionally, the EU specifically defines "low-emission vehicles (LEV)" i.e. heavy-duty vehicles with CO_2 emissions less than half of the reference value in their sub-group. Where possible, alignment on these definitions and recognition of the investment and emissions benefits of using LCF should be implemented in the UK.

Many operators feel that the focus on defining "zero emission" and focusing only on zero-tailpipe emission is not the right approach to decarbonising the sector. The logistics industry's main priority is on operational efficiency and road safety. Where vehicles are unable to meet the operational demands of the logistics industry, sales of these vehicles will continue to lag. Focusing on improving operational efficiency and removing regulatory burdens (for example the recent update to the 4.25t electric van derogation) should be the first focus of government, rather than a sole focus on achieving zero-tailpipe emissions for HGVs.

Q20 – Do you agree with maintaining the VECTO vehicle category segmentation? If not, what alternative segmentation would you suggest?

Logistics UK supports retaining VECTO as the technical basis for vehicle categorisation and CO_2 certification. The system already exists, and manufacturers already use it to certify CO_2 emissions for the EU and Northern Ireland. Keeping it would avoid implementing new and extra administrative burdens. Most UK-supplied HGVs are built by large European manufacturers already using VECTO.

However, Logistics UK does not believe that VECTO segmentation alone provides a sufficient or appropriate basis for determining phase-out dates and should be retained purely as a technical and administrative tool as explored in question 25.

Q21 – What metric should be applied as a weighting system for a particular vehicle grouping?

The current weighting method accurately reflects real-world operations: the trucks that travel the furthest distances and carry the heaviest loads are responsible for the most CO_2 emissions. Because these vehicles contribute the largest share of emissions, the existing approach rightly concentrates regulatory effort where it can deliver the greatest impact.

The methodology is straightforward, already widely understood by industry, and grounded in real operational data. Changing the system risks introducing unnecessary complexity without a clear guarantee of improved outcomes. Over-engineering the framework could divert attention and resources away from the long-haul segment, the area where efficiency gains and emissions reductions are most substantial.

For these reasons, maintaining the current weighting method provides continuity, keeps administrative burden low, and ensures the policy focus remains where it needs to.

Q22 – Which flexibilities do you think should be established under a future HGV regulation?

Logistics UK would support flexibilities to help manufacturers manage ups and downs and would therefore support:

1. Credits when manufacturers do better than required.

2. Limited borrowing of future credits for short term issues.

3. Controlled trading of credits between manufacturers.

These tools already exist in current EU CO_2 rules and help smooth out delays or model launch timings without avoiding emissions reductions.

Q25 – Which VECTO groups should be included in the 2035 phase out dates, and which should be included in the 2040 phase out dates?

Logistics UK does not support the use of vehicle weight as the primary determinant for allocating phase-out dates. While weight-based categorisation may offer administrative simplicity, it is not an accurate proxy for decarbonisation readiness and risks producing a framework that is misaligned with operational flexibility.

The fundamental flaw in a weight-based approach is that it conflates vehicle specification with use case. A 26 tonne rigid and a 44 tonne articulated truck may sit in different VECTO groups, but both could be operating urban distribution routes where zero emission technology is already viable. Alternatively, both could be operating in long-haul, multi-drop off where it is not yet operationally or commercially viable. Vehicle weight alone tells you very little about whether a credible, commercially viable ZEV exists for the work that the vehicle is doing. Maintaining phase-out dates around weights risks mandating phase-out for vehicles in applications where decarbonisation remains technically or commercially immature, while simultaneously falling to accelerate phase-out where it is genuinely achievable today.

On this basis, and while Logistics UK previously supported the 2035 and 2040 phase-out dates, we now support the removal of the 2035 phase-out date so that there is a consistent 2040 date across all weight categories and use cases. This will help businesses to decarbonise in a way that is both realistic and commercially viable to their real-world operations.

Q26 – For your chosen regulatory option, what target trajectory do you think should be set?

We support a target trajectory under Option 1 that reflects a progressive but realistic transition aligned with infrastructure readiness and technology maturity. The trajectory illustrated in the chart, which is data gathered from a survey of our membership and the wider industry (figure 1), broadly reflects the direction of travel identified by our members, with battery electric HGV uptake increasing significantly over time.

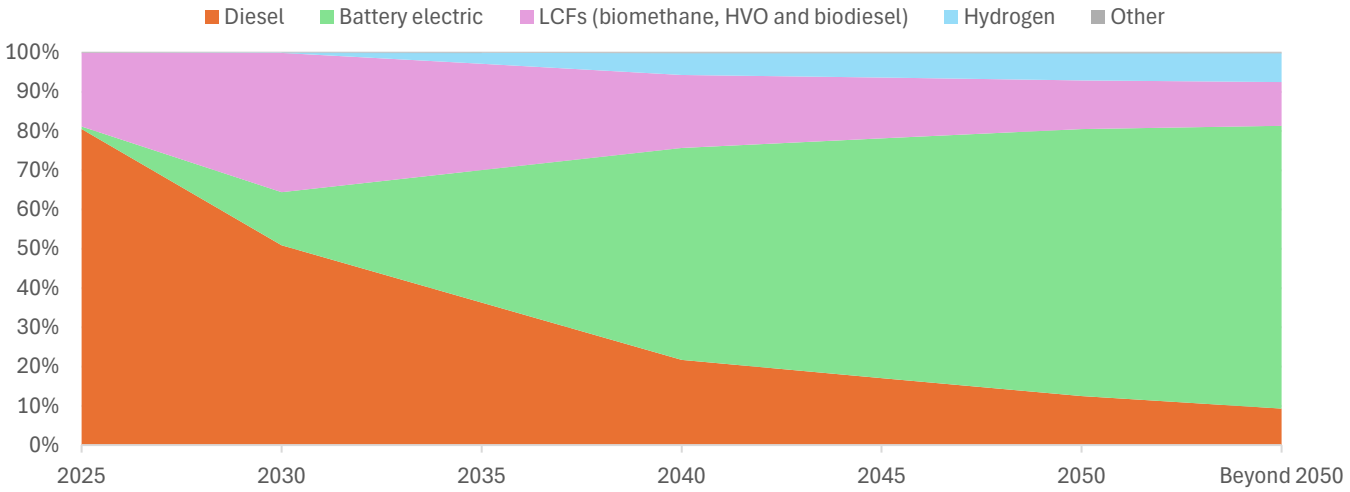

Figure 1: Member survey response – HGV projections

As shown, member survey data estimates that BEV uptake will rise from a very low share today to around 15% by 2030, approximately 40% by 2035, and around 55% by 2040, before becoming the dominant technology in fleets. This broadly aligns with operator expectations that electrification will accelerate through

the late 2030s as vehicle capability improves and infrastructure constraints ease. However, achieving these shares depends critically on infrastructure rollout keeping pace, particularly depot charging and grid connections. At present, long connection timelines, high upgrade costs and planning barriers mean that even the early uptake levels illustrated to 2030 represent a stretch for many operators.

The chart also demonstrates that while BEVs become the dominant technology over time, reaching roughly 70% by 2050 and around 75% beyond 2050, fleets are not expected to reach full electrification. Important roles remain for LCF and potentially hydrogen, which together still account for approximately 20% of energy use beyond 2050 in the trajectory shown. This reflects the operational reality that some duty cycles, payload requirements and specialist applications are unlikely to be fully electrified.

Importantly, the trajectory also shows diesel declining steadily rather than abruptly, falling from around 80% today to around 50% by 2030, around 20% by 2040 and below 10% beyond 2050. This gradual decline aligns with asset replacement cycles and avoids premature scrappage or stranded assets, which is essential for a capital-intensive sector with long vehicle lives.

Rigids

Weight band	MGDC avg. (mi/yr)	EU (RD) (mi/yr)	EU (LH) (mi/yr)	MGDC vs EU RD (mi)	MGDC vs EU LH (mi)	EU classifications
16–18t rigid (4×2)	50,000	48,467	60,895	1,533	-10,895	EU 4-RD (regional), 4-LH (long-haul)
26t rigid (6×2)	60,000	45,360	67,108	14,640	-7,108	EU 9-RD (regional), 9-LH (long-haul)

Artics

Weight band / config	MGDC avg. (mi/yr)	EU (RD) (mi/yr)	EU (LH) (mi/yr)	MGDC vs EU RD (mi)	MGDC vs EU LH (mi)	EU classifications
33t artic (4×2 tractor)	75,000	48,467	72,079	26,533	2,921	EU 5-RD (regional), 5-LH (long-haul)
38t artic (4×2 tractor)	70,000	48,467	72,079	21,533	-2,079	EU 5-RD (regional), 5-LH (long-haul)
38t artic (6×2 tractor)	70,000	42,253	66,487	27,747	3,513	EU 10-RD (regional), 10-LH (long-haul)
44t artic (6×2 tractor)	80,000	42,253	66,487	37,747	13,513	EU 10-RD (regional), 10-LH (long-haul)

Figure 2: comparison table of MGDC vs EU regulatory dataset for rigids and artics

There is also evidence that current regulatory modelling in this consultation may misrepresent real-world UK freight activity levels. Mileage assumptions drawn from EU regulatory datasets differ materially from observed UK operational data in the Logistics UK Manager's Guide to Distribution Costs (MGDC). Across several vehicle classes, EU regional delivery mileage assumptions are significantly below MGDC averages and, in some cases, below the lower bound of UK samples, while some long-haul rigid assumptions exceed UK upper-bound values. This is particularly pronounced for articulated vehicles, where EU regional delivery

mileage is typically 20,000–37,000 miles per year lower than MGDC averages, and for 44-tonne artics EU long-haul mileage is also below UK lower-bound values. These discrepancies suggest that modelling may underestimate real-world utilisation for much of the UK fleet and therefore mis-scale emissions impacts.

In practice, higher-mileage UK operations mean that smaller shifts in technology share delivered at a slower rate can generate larger CO_2 reductions than assumed in modelling based on lower utilisation. This reinforces the case for a more gradual early transition trajectory, with meaningful emissions savings achieved through incremental adoption aligned with actual UK duty cycles while infrastructure and vehicle capability mature.

Taken together, the chart and UK operational mileage evidence support a transition that is infrastructure-led, accelerates through the 2030s and 2040s, and results in majority electrification. Government trajectories that assume faster early uptake or full BEV saturation would not align with current deployment constraints or real-world utilisation patterns.

This echoes the experience of the van ZEV mandate and should serve as a warning when setting trajectories for HGVs. The trajectory set for vans has proven extremely challenging, with manufacturers significantly behind on delivery against the targets that were set on sales of ZEV vans. That shortfall has not occurred because of industry lacking ambition, it reflects the genuine constraints in vehicle suitability, supply, affordability, and charging infrastructure that were not adequately accounted for when the trajectory was designed. Government must not repeat the same mistake with HGVs where the operational complexity, infrastructure requirements and costs involved are considerably greater than for vans.

The chart in figure 1 highlights a target trajectory our members find realistic and feasible. (15% BEV by 2030, 40% by 2035, 55–60% by 2040). This represents a realistic and deliverable pathway for HGV decarbonisation. Setting a trajectory that looks credible on paper but cannot be delivered in practice serves nobody. Not operators, not manufacturers and not the decarbonisation agenda itself.

Q27 – If a ZEV mandate is your preferred option, should a CO_2 improvement target also be set for the non-ZE HGV fleet? If so, please elaborate.

Option 2 is not supported by Logistics UK.

If government chooses to proceed with option 2, Logistics UK would support the introduction of an option 1 mechanism alongside the implementation of option 2. This would provide greater flexibility for operators in how decarbonisation is achieved if it reduced the rigidity of a ZEV mandate. This could offer important flexibilities for operators that are unable to transition fully to ZEV. However, Logistics UK would caution that although the nature of option 1 would support alignment with the EU, the combination of option 2 with option 1 could reflect an over-abundance of regulation and must therefore be considered carefully.

Where operators have already made investments into reducing CO_2 emissions from their new non-ZE HGV fleet, for example through investments in Euro 6 compliant vehicles, and through investment in low carbon fuel, Logistics UK would support appropriate recognition of these investments alongside recognition of the role that LCF can play in reducing emissions from the logistics industry.

Logistics UK recommends that, if option 2 is pursued by government, it is especially vital that the government publishes a freight decarbonisation roadmap. This roadmap must make it clear what plans the government has for infrastructure delivery, and where future taxation plans could impact investments into ZE technologies. Any future taxation and planned infrastructure could impact operator TCO calculations for ZE HGVs. Therefore, it is important for government to shed light on how the transition to ZE HGVs will be supported by government beyond regulatory action.