Roadblocks to Sustainability 2023

Sustainable Freight Research Report

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ZEUS

WE ARE THE FUTURE OF FREIGHT

About This Report

This is the first of our new annual insights into the progress and challenges to implementing sustainable freight globally. This inaugural research focuses on companies that operate in the UK and Europe. Research was conducted in the last quarter of 2022, with transport and sustainability teams from 310 major manufacturers and retailers (defined as companies with yearly revenues exceeding 1bn Euros).

The research was anonymous, however approximately 10% of respondents chose to name their organisations. Combined, these organisations have revenues exceeding 200bn Euro, and include industry leaders such as P&G, Primark, Decathlon and Kellogg's . Results linked specifically to these companies will not be presented.

Introduction from the Founders, Zeus

In today's rapidly changing business landscape, sustainability has become a key consideration for organisations seeking to manage risk, build resilience, and stay competitive.

The future of freight requires decarbonisation and the adoption of sustainable supply chain practices. **Zeus is bringing a new approach to sustainability, combining new technology, new fuels and a focus on simplicity.**

We founded Zeus in 2020 on one intensely clear objective: to make freight truly sustainable. Now, after just two years, we count 60 major brands as clients, and have been gratified to be listed in the Startups 100 Index and named Young Entrepreneurs of the Year, 2023.

This is just the start. Our motto at Zeus is that climate change is not a debate, it's a deadline. Our approach is unique, we have always believed that the best impact we can make is to help the shippers who move the most freight, which means consumer goods, have access to real solutions that reduce carbon significantly, today.

Our low-carbon automated multimodal solution piloted in November 2022 showed that Zeus's freight planning technology combined with renewable diesel and mixed modal transport generated a significant 84% reduction in carbon emissions, compared to diesel road freight. Run with a major FMCG brand, these results were so impressive that they just kept the pilot running.

We hope you find this report illuminating. Most importantly, motivating. Let's make the future a sustainable one together!

Clemente Theotokis, Jai Kanwar

This report provides valuable insights and guidance for all those interested in decarbonisation. It offers an insight for driving progress towards a more sustainable future for the transport industry.

Fundamentally, what we see is a significant commitment to sustainability within the European and UK freight sector.

Report Structure:

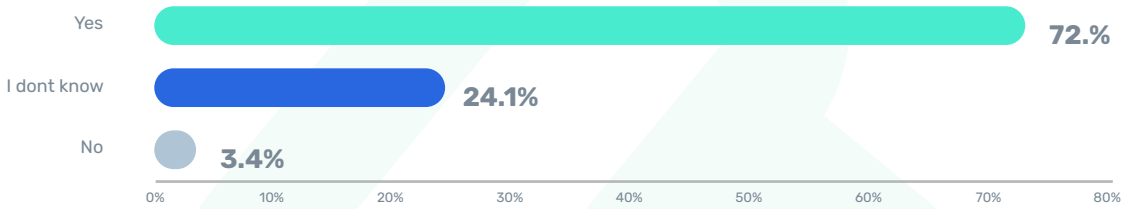
Section 1: The Current State of Green Supply Chain Practices

Understanding the current state of green supply chain practices sets the foundation, expectations and path for our journey towards truly a sustainable future.

Our findings reveal a promising trend: 72.5% of Europe and the UK's largest retailers and manufacturers use sustainable supply chain practices in their operations.

GRAPH 1

Does your company use sustainable supply chain management practices?

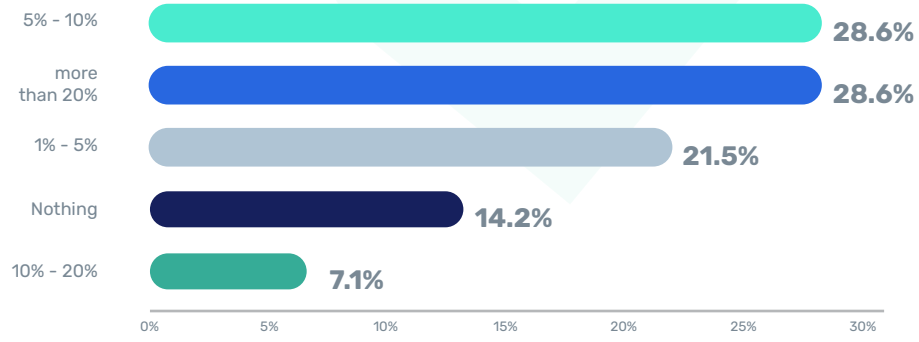


This is supported by further data showing that organisations are embracing green supply chain management strategies with considerable economic commitment.

85.8% are actively investing in a sustainable supply chain - with nearly one-third allocating over 20% of their profit.

GRAPH 2

How much (as a proportion of profit) is your business investing in sustainable supply chain?

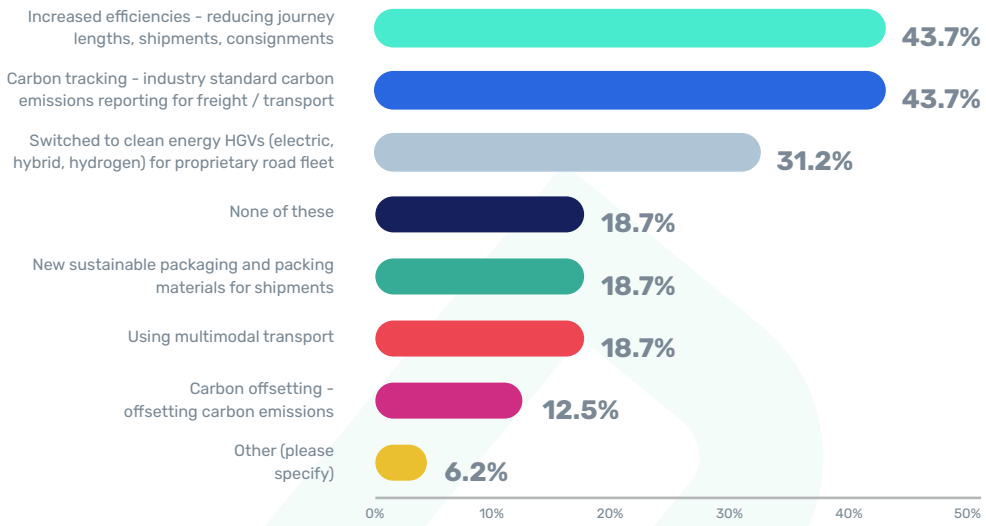


According to our study, shippers are keen to show investment in sustainable supply chain practices, however, is this enough? Is this filtering through to tender processes and appropriate sustainability metrics by which to judge transport and logistics service providers?

Today's leading supply chain practices are those that enhance operational efficiency while minimising environmental impact.

GRAPH 3

What are the supply chain practices your company applies today?

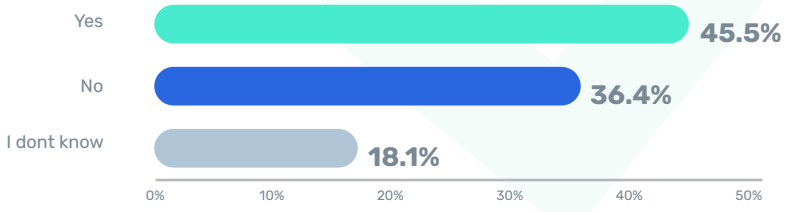


Analysing specific practices adopted in Graph 3, we see that the two most predominant strategies are increasing efficiencies, and carbon tracking through industry-standard carbon emissions reporting for freight and transport.

Complementing the predominant practices, several other notable strategies are being adopted including the use of clean energy HGVs for road fleets, sustainable packaging materials, and multimodal transport.

GRAPH 4

Do you voluntarily report your net zero target progress and sustainability initiatives?



The survey sheds light on major organisations' approaches to tracking and emissions reporting.

Graph 4 reveals that almost half of the participating manufacturers and retailers proactively disclose their net-zero target progress and sustainability initiatives.

While this shows a growing trend towards transparency in sustainability efforts, we cannot overlook the considerable proportion (36.4%) of companies who do not disclose, or the 18.1% who are unsure.

However, the fact that nearly half of the representatives of these major retailers and manufacturers are aware that their company has sustainability goals and believe they are reporting on them is a good sign.

Summary of Insights

Two prominent trends have emerged - a trend of uncertainty and a trend of inaction in green supply chain practices.

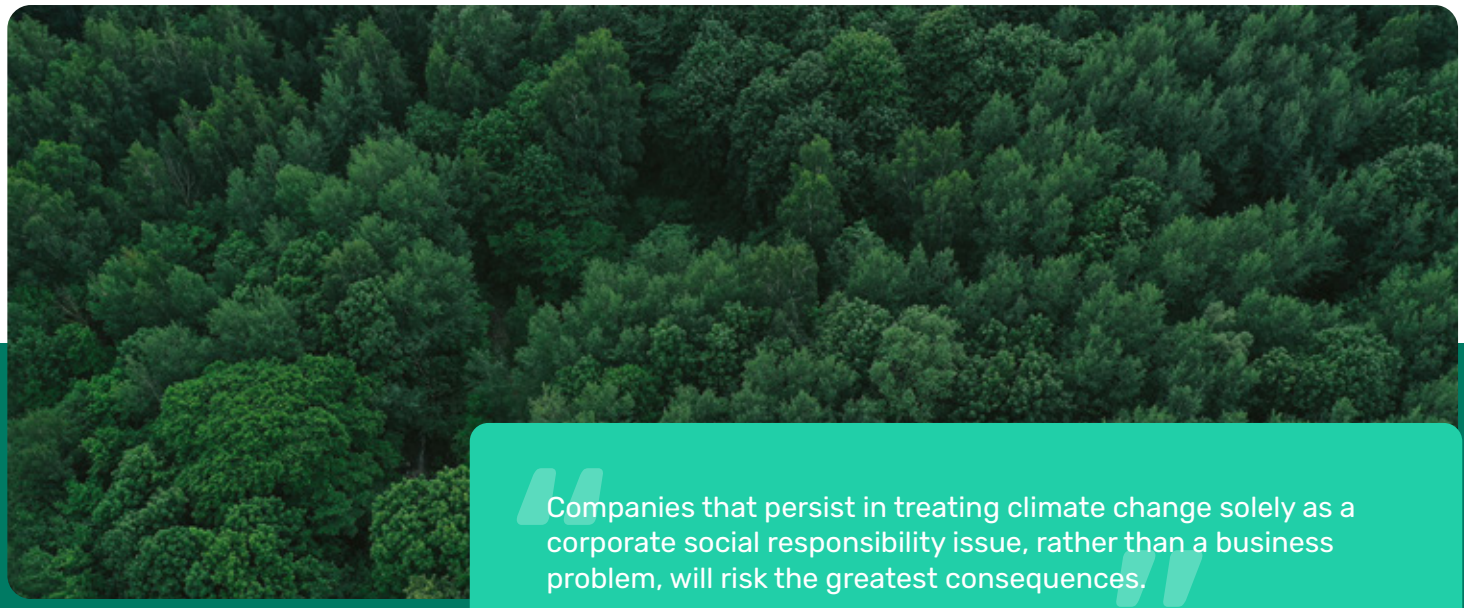
Graph 1, for instance, shows 24.1% of companies answering “I don’t know” when asked if they use sustainable supply chains in their operations. This could indicate either an absence of implementation or confusion surrounding the definition of 'sustainable supply chain practices'.

Regardless of interpretation, throughout the survey we see that there is a valuable opportunity for sustainable supply chain service and transport providers to step up as trusted partners and educators for businesses seeking to effectively (and effortlessly) adopt more sustainable practices.

While uncertainty and inaction persist, it is evident that green supply chain management has become an essential part of the industry.

Sustainability has become a vital consideration for these organisations when managing their supply chains, but there’s work to be done; the 85.8% of organisations who are investing in green supply chains doesn’t overshadow the 14.2% not investing in sustainable supply chain management.

Advancing the industry towards a greener future requires a combination of awareness and providing easily implementable, ready-to-roll-out sustainable supply chain solutions that can be swiftly adopted.



> Companies that persist in treating climate change solely as a corporate social responsibility issue, rather than a business problem, will risk the greatest consequences.
>
> **Michael E. Porter and Forest L. Reinhardt**

Section 2: How are Europe's Manufacturers and Retailers Decarbonising Freight?

This section focuses on large manufacturers and retailers' views about how to decarbonise their freight chains - both from an efficiency perspective, where new investments could go, and what they see as the vital new technologies to reduce greenhouse gas emissions.

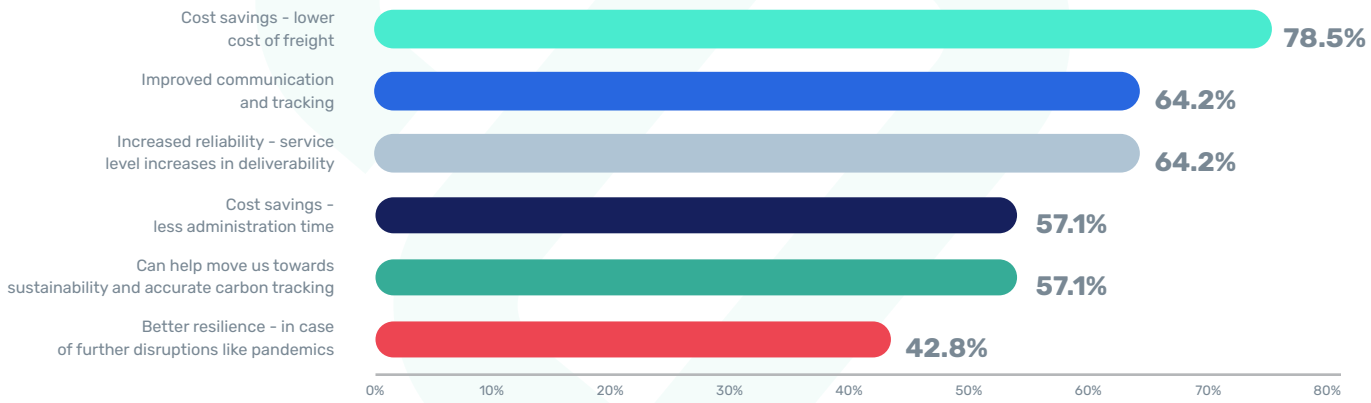
How do they plan to decarbonise their freight operations?

In response to the ambitious climate targets established by the European Union and UK, these companies are exploring a range of technologies and strategies to reduce the carbon footprint of their freight operations.

Digital supply chain technologies are gaining momentum due to their numerous benefits, such as cost savings, improved communication, increased reliability, and precise carbon tracking.

GRAPH 5

What do you believe is the greatest benefit that digital supply chain technologies can bring to your company generally? Choose all that apply.

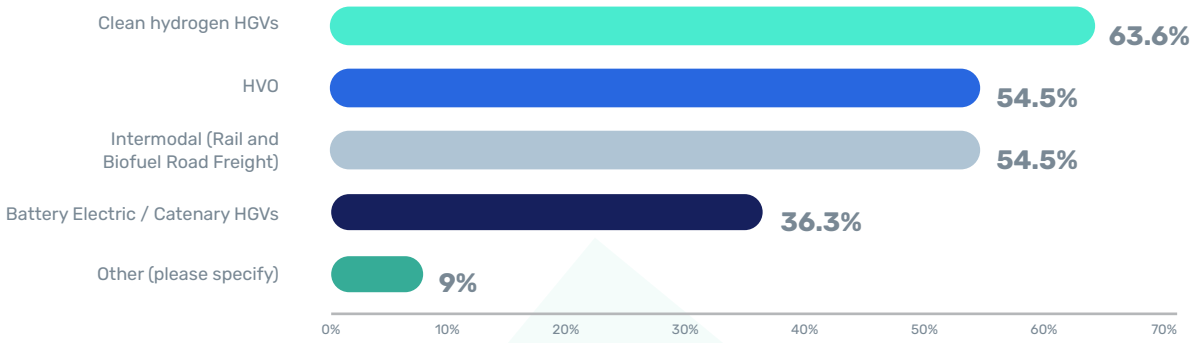


It is accepted that supply chain leaders see technology as the most important source of competitive advantage (61%, according to Gartner, 2023). The results here further echo and enforce that perception. Supply chain technology is commonly defined as digital systems, processes and advances that support efficiency in the supply chain.

Other than cost savings, it is extremely interesting that 'reliability' and 'better communication' are still the most significant perceived benefits (and thus, known problems), even among major brands in 2023.

GRAPH 6

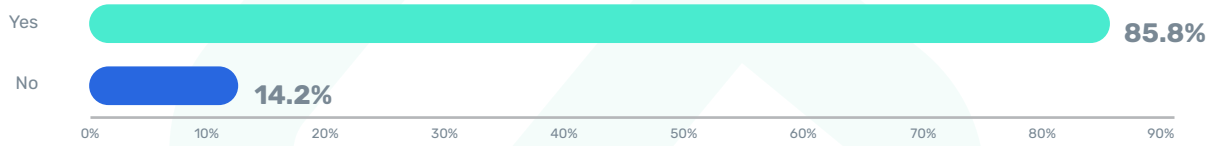
Which of these technologies do you think is most viable for significant carbon reduction by 2025?



Clean hydrogen HGVs emerge as the top technology for substantial carbon reduction by 2025 with 63.6% of companies most viable technology. HVO (Hydrogenated Vegetable Oil) and intermodal (rail and biofuel road freight) follow closely, tied at 54.5%, while battery Electric/ catenary HGVs were chosen by 36.3%.

GRAPH 7

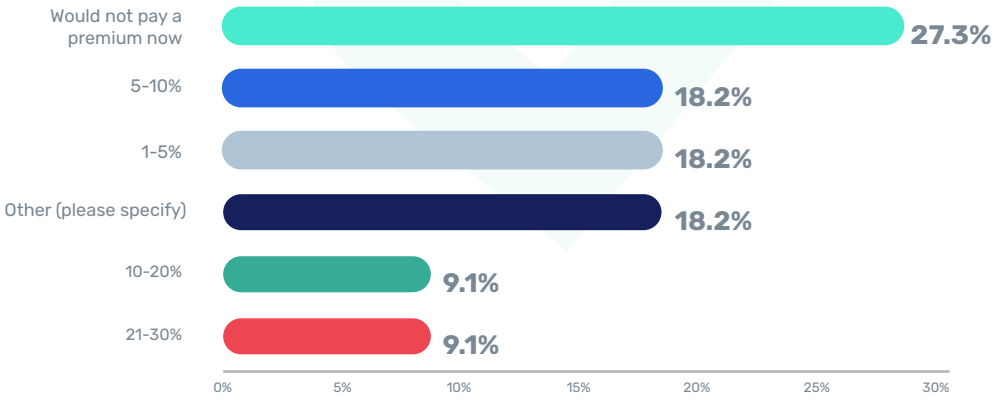
Would you prioritise a green road freight supply as a part of carbon reduction?



A striking 85.8% of companies prioritise green road freight supply in their carbon reduction efforts, demonstrating a strong willingness to curbing carbon emissions in the transportation sector, particularly in road freight.

GRAPH 8

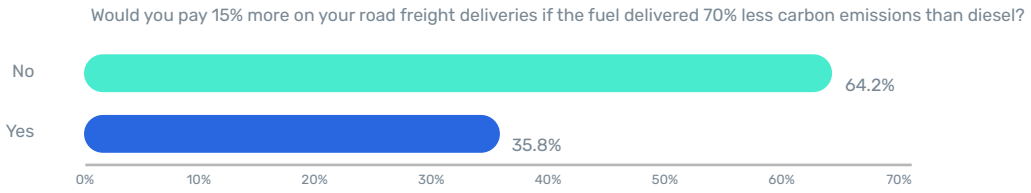
Today, would you pay a premium for having your freight transported on guaranteed zero-emission vehicles, and how much premium is acceptable?



However, the trade-off between environmental benefit and cost becomes evident when considering zero-emission vehicles. While 72.7% of businesses are willing to pay a premium for these vehicles, their willingness decreases as the premium amount rises.

GRAPH 9

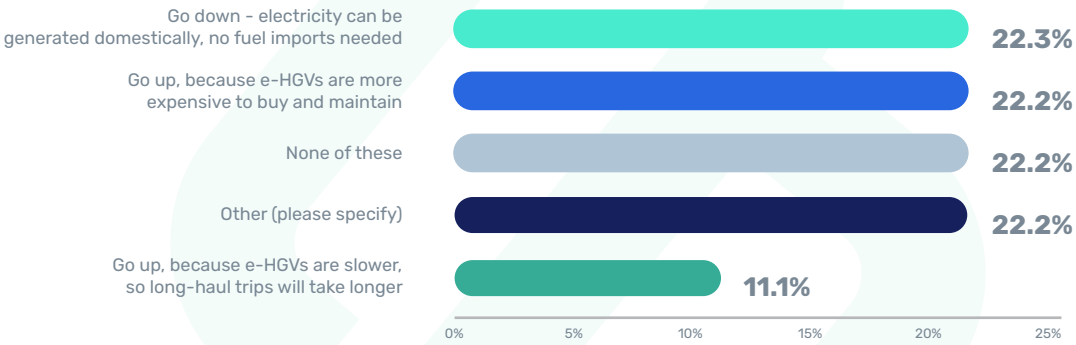
Would you pay 15% more on your road freight deliveries if the fuel delivered 70% less carbon emissions than diesel?



In the case of HGVs, there is no clear consensus on the cost implications for shippers, with responses evenly distributed across different options.

GRAPH 10

In the future, if all HGVs were electric, do you expect the cost to shippers (the people paying transport companies to transport their freight) to:



Some respondents anticipate cost increases, while others' comments mainly echoed the sentiment that a mix of scenarios would happen.

In the case of eHGVs, there is a mixed understanding of the cost implications for shippers, with responses evenly distributed across different options.

Section 3: Barriers to Decarbonising Freight in Europe

As manufacturers and retailers in Europe and the UK strive to decarbonise their operations, they face various challenges and barriers.

This report has already named and discussed several of these - this section goes deeper into the issue.

GRAPH 11

What challenges and barriers remain to the adoption of low-carbon technology and decarbonisation efforts?

Limited infrastructure and insufficient government investment are among the top barriers

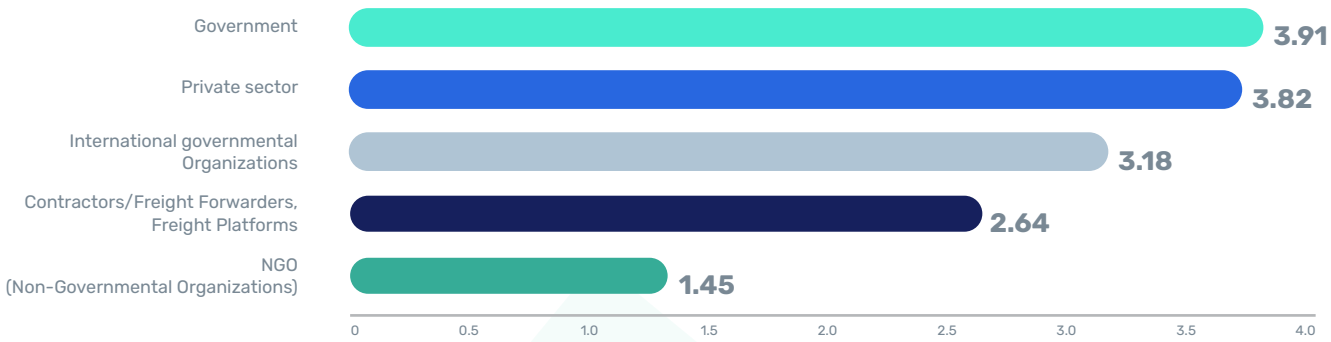
According to the surveyed companies, the most significant barrier is limited infrastructure, such as not enough capacity on the national electric grid, followed by a lack of government investment.

The current lack of coordination between local and central government agencies, coupled with the industry's siloed approach, further complicated the situation. Rising costs are also seen as a barrier to change, while some respondents feel that there are other very important issues that take priority over decarbonisation efforts.

To overcome these barriers, a unified front is essential - one that involves different sectors working together to balance economic considerations and develop the necessary infrastructure.

GRAPH 12

Who has the most influence in driving decarbonisation behaviours?

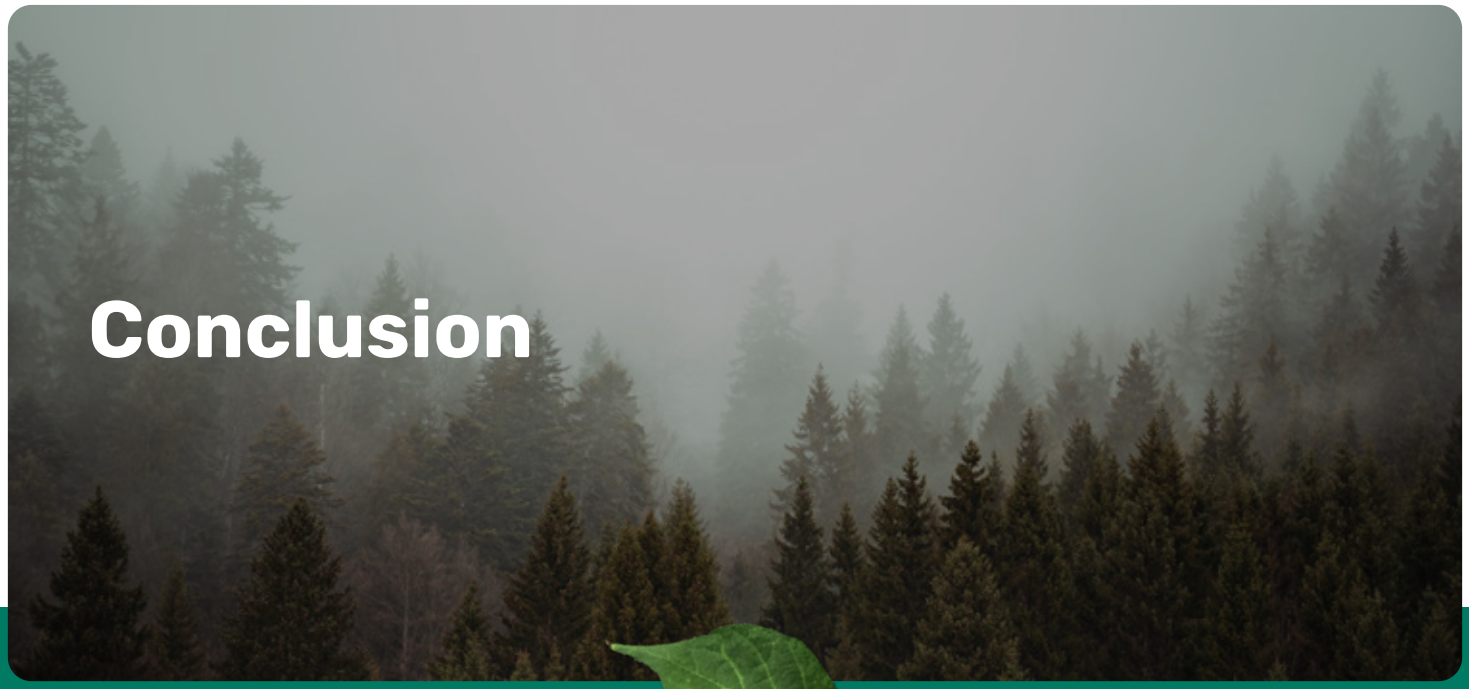


It's not just about governments and industries; a complex network of stakeholders is driving decarbonisation behaviours in the transport sector.

Interestingly, businesses believe that the Government plays the most important role driving forward decarbonisation. When it comes to transforming national energy grids, using more renewable energy sources, or enforcing new regulations, it is indeed the most significant stakeholder.

In fact, the picture painted in Graph 12 is that international coordination, cooperation and joint planning is essential. The role of international and cross-border organisations is listed as the third most influential force in ensuring we can decarbonise freight. This is not a surprise, as supply chains for major consumer companies often span the globe.

As the race towards a greener future continues, leading manufacturers and retailers are turning to innovative solutions and partnerships.



Conclusion

Summary of key insights from this study:

1. Sustainable supply chain practices are being implemented by leading consumer brand manufacturers and retailers, with some investing over 20% of their profits into this Improving efficiency is a key focus area.

2. 45% of respondents believe companies are voluntarily reporting on net-zero progress or sustainability initiatives, indicating either a lack of reporting or a lack of internal transparency on the company's reporting practices.

3. Cost is currently still the leading driver for digital supply chain technologies, while sustainability is growing in influence.

4. Interestingly, most respondents thought that clean hydrogen was the most viable technology to decarbonise HGVs in the short term, followed by HVO fuel, and increased intermodal transport. Battery and catenary electric HGVs were seen as less viable in the short term (to 2025).

5. Most respondents were not willing to pay a premium for zero emissions haulage, with others only willing to pay a small premium of no more than 10%. There also seems to be a mixed understanding of how much electric HGVs are going to cost, with many respondents of the opinion that operating these vehicles will cost less than current operations.

6. The biggest barriers to progress on sustainability were considered to be the lack of infrastructure and government investment, which are of course closely related.

"These results are interesting. There are large deviations in the understanding of the cost and technology readiness of future clean vehicles. However, there is general agreement that government needs to move quickly to provide clear policy direction. We see that cost is still the biggest driver of company decisions, with sustainability taking a back seat irrespective of a company's publicly stated green ambitions. Zeus has observed this first hand, tendering with companies with very aggressive net-zero and climate positive goals, yet for subcontracted transport, cost is the core metric. I think that many companies do not realise the extent of upcoming investment needed to deliver net-zero, and how near this deadline really is. "

Dr Christopher de Saxe,
Head of Sustainability, Zeus

Collaboration between government, manufacturers, retailers, and logistics providers is crucial for the next step towards sustainable freight. It is apparent from this report that successful decarbonisation requires a great deal more collaboration and more coordination, at a global, national and market level.