# Real-Time Visibility and Sustainability in Europe's Logistics Sector





# INTRODUCTION

Sustainability is one of the most important challenges facing the world today, and also one of the most complex. Lessening the environmental impact of supply chain operations is one part of a solution that can drive us towards a greener and more sustainable future. This is why Transport Intelligence (Ti) has teamed up with Sixfold by Transporeon to investigate the sustainability of supply chains across Europe, and to ask how can real-time visibility facilitate the progress we all need.

To do this, Ti and Sixfold have undertaken a Europe-wide survey that asks key supply chain stakeholders:

- their sustainability goals
- how they monitor sustainable performance and progress
- how deep in their supply chain networks are partnerships and sustainable practices embedded
- and how technology is used to track, manage and enhance these processes.

Throughout February 2022, some 234 respondents from across Europe took part in this survey. The sample is drawn from manufacturers and retailers, from companies with revenue of less than  $\leq 100$  million to more than  $\leq 5$  billion. The results show that 72% of companies in the sample have a sustainability strategy in place, with a little more than half of the respondents already more than two years into their sustainability journey.

But what progress has been made, and which goals do shippers prioritise in their journey towards sustainability? What is holding some of Europe's leading manufacturers and retailers back from more sustainable operations today? And how can technology, data and collaboration help make growth more sustainable in the future? The results that follow provide answers to these questions and more, providing a snapshot of sustainability in Europe's logistics sector today as well as evidence of a tech-enabled path to a greener future.



# **KEY FINDINGS**

- More than 72% of those surveyed have a supply chain sustainability strategy in place. Slightly more than half of the respondents have a sustainability strategy that has been in place for at least two years. The other 50% have either no sustainability strategy or a strategy that has been in place for less than two years.
  - The maturity of a company's sustainability strategy appears to impact its goals and targets. While all strategies emphasise the reduction of emissions and carbon footprints, newer strategies – those implemented during two years covered by the Covid-19 pandemic – place greater emphasis on cost reductions and operational efficiency.
- A wide mix of systems and approaches is used both automated and manual, both internal and external. The varied mix of methods used appears to suggest a lack of centralised, supply chain-wide systems to capture and record sustainability data.
  - In combination, the widespread use of third-party systems, partner data and real-time visibility platforms suggests an openness to collaboration and technology to solve this problem.
  - This is particularly true of those with newer sustainability strategies who make less use of internal systems than those with more established plans.
  - 45% of respondents have RTV in place, with around 11% already using the technology to help improve the sustainability of their operations. It's gaining traction and is well placed to offer the real-time sustainability data respondents say is the most valuable to them.
- Emissions reduction is the primary target of sustainability strategies. That reduction places ahead of overall measurement seem to suggest an ongoing need over the long-term to deepen sustainability monitoring, recording improvements with accurate and reliable data.
  - Real-time data is the most valuable to respondents when it comes to making improvements in sustainable operations.
- High value is placed on the capture and measurement of internal sustainability data as well as from the closet supply chain partners, namely contract carriers and tier 1 suppliers.
  - Sustainability monitoring from these sources is key in understanding the true picture of a company's emissions, particularly scope 3.

- It is also a central component of supply chain planning and design internal company goals are the primary use of data, so accurate recording and an evidence-based approach are key.
- Improved visibility over the sustainable performance of these groups would provide the most significant improvement in the sustainability of respondents' supply chains.
- Supply chains, and the measurement of sustainable performance in them, are adopting technology at a rapid pace – at least 60% of those surveyed either have or plan to adopt tech-based solutions including carrier performance monitoring, route optimisation and shipment status monitoring in the next two years
  - Some 45% of those surveyed already have RTV in place, with another 36% planning to introduce RTV in the next two years. This provides significant scope for the technology to gain traction in the capture and reporting of sustainability data in the near term.
  - Those claiming to have 'total' visibility over sustainability performance, even internally, are in the minority. In aggregate, less than one fifth claim total visibility over the sustainability performance of any partner organisation. For those with newer sustainability strategies, however, the levels of 'total' visibility are markedly higher than for those with strategies established for more than two years or without a strategy at all. It is no coincidence that this group has the highest proportion of automated and partner-based data capture and monitoring.
- The internal adoption of technology is the most significant factor in determining the pace at which sustainability strategies are implemented.
  - Respondents suggest this is based on first-hand experience of both the limitations of manual reporting systems and the benefits of tech-based solutions which have been introduced to the supply chain
  - Of those that cited the internal adoption of technology as being the most important determinant of sustainability strategy implementation, around one fifth already use RTV. A further 15% plan to introduce RTV in the next two years. These are the second-highest totals of any individual tech-based solution, suggesting RTV brings real benefits and is set to gain traction in the near term.

### 1. STRATEGY & GOALS



DOES YOUR ORGANISATION HAVE A SUSTAINABILITY STRATEGY IN PLACE?

Across the sample of 234, more than 72% of those surveyed have a supply chain sustainability strategy in place. However, there is a relatively even split between those with sustainability strategies that have been in place for more than two years and those with either new or no sustainability strategies. Within the two major groups of shippers surveyed, retailers have been more proactive in the implementation of sustainability strategies, particularly over the last two years. This is likely driven by the direct relationship retailers have with end consumers and the exposure they have to shifts in consumer behaviours and perceptions. Amongst manufacturers, close to one third started 2022 with no sustainability strategy in place at all.



#### HOW LONG HAVE SUSTAINABILITY STRATEGIES BEEN IN PLACE - SHIPPER CATEGORY

#### HOW LONG HAVE SUSTAINABILITY STRATEGIES BEEN IN PLACE AT THE START OF 2022 - SHIPPER REVENUE (€)



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Shippers with revenues above €1bn have been most proactive in designing and implementing sustainability strategies, with a significant majority having established plans more than two years ago. That larger companies have taken a more proactive approach is likely a result of having greater resources to deploy in tackling complex corporate responsibility challenges, including sustainability.

Shippers with lower revenues have been most active in establishing and implementing sustainability strategies in recent years. It is also the group of companies with revenue up to €250m that plans to be the most active in the coming year – more than half of those without sustainability strategies currently in place say they will implement plans during 2022. In contrast more than 30% of those with revenue between €250m and €500m, and 25% of those between €500m and €1bn, will end 2022 without a sustainability strategy.



#### WHAT ARE THE MOST IMPORTANT TARGETS WITHIN YOUR SUSTAINABILITY STRATEGY?

The reduction of carbon footprints is the top sustainability target amongst those surveyed. Tackling sustainability in a coherent, supply chain-wide approach is a recurring theme throughout the responses provided, with the majority taking both a top-down view of reducing aggregate environmental impacts as well as an operations-led approach to improvements at the tactical level. The mixed approach can be seen here, with both 'cost reductions' and 'increased operational efficiency' closely following the emissions reduction goal. However, while this mixed approach holds across those surveyed, there is variation in its implementation, with cost reductions and efficiency gains rating as more important than reducing carbon footprints for those with sustainability strategies implemented within the last two years. The elevation of these targets amongst those with newer strategies is likely driven by the implementation of sustainability strategies amid a global pandemic that first threatened top-line growth and is now squeezing profitability as costs rise sharply. A sustainability strategy that works hand-in-hand with operational improvement is a pragmatic response.



#### SUSTAINABILITY GOALS - VARIATION BY STRATEGY MATURITY

When comparing those with sustainability strategies in place and those without such codified plans, the emphasis on tactical-level improvements to cost management and operational efficiency as a route to aggregate sustainability gains is reinforced. Those without sustainability strategies place greater emphasis on emissions reductions goals, particularly those of transport operations, suggesting a narrower and more direct approach to achieving the goal.

Both 'winning new business' and 'improving customer perceptions' are important targets within sustainability strategies. Across all levels of sustainability strategy maturity, at least 20% of those surveyed include the targets as important elements of their strategies. The results offer a clear indication that external perceptions matter, but equally that the ability to provide accurate, reliable and timely evidence of sustainable practice and progress to key stakeholders is highly valued.

## 2. MEASURES & CAPTURE



#### HOW DO YOU MANAGE SUSTAINABILITY MONITORING CURRENTLY?

Capturing accurate and timely data related to the sustainability of operations remains a complex task and one which survey respondents show has led to a wide mix of systems and approaches. The implication of the broadly even mix of manual and automated, internal and external systems is that, so far at least, the challenge has been met with pragmatism. At all stages of strategy maturity, there appears to not yet be a consensus on the best approach to monitoring sustainability performance.

Across those surveyed, manual internal systems are the most commonly used method for monitoring sustainable performance. That such systems are followed closely by automated internal systems suggests a lack of ready-made monitoring solutions that apply directly to a specific company's needs.



#### MONITORING OF SUSTAINABILITY DATA BY THE MATURITY OF SUSTAINABILITY STRATEGY

Looking more deeply, however, this appears to be changing. Internal systems (%) and manual systems (%) are most commonly a part of the monitoring mix amongst those with the longest-established sustainability strategies. Those that have implemented strategies in the last two years make more use of automated and third-party systems, and more of those with no current sustainability strategy make use of third-party automated systems than any. In sum, respondents suggest that the future of sustainability monitoring is in tech-enabled partnerships, with a move away from internal systems. The adoption of real-time visibility platforms in sustainability monitoring also follows this path. The technology has already gained traction across all stages of strategy maturity.



### WHEN MONITORING SUSTAINABILITY WITHIN ROAD FREIGHT TRANSPORTATION, WHICH MEASURES ARE MOST IMPORTANT TO YOU?

Note: respondents were asked to rank the three most important measures. The highest-ranking features were attributed three points, the second two points and the third, one. The percentages refer to the proportion of total ranking points each measure received.

When measuring sustainability performance specifically related to road freight transportation, emissions data is at the heart of the two most important metrics through which survey respondents record success. This fits with the overall target of sustainability strategies being the reduction of carbon footprints. Importantly, reducing emissions ranks more highly than the recording of overall emissions. The suggestion here is that the greatest emphasis is placed on progress towards sustainability goals and that, subsequently, the ongoing management and progressively deeper and more accurate recording of sustainability performance throughout supply chains is most valued. Measurement of progress in this more dynamic way can, for example, help monitor progress towards Net Carbon Zero and similar targets more accurately.

A second group of three road freight transportation measures – emissions intensity, overall mileage and empty milage – also reinforce the indication that accurate data in road freight operations underpins wider sustainability targets. In each case, improvement in the measures identified here will have positive effects on both cost reduction and operational efficiency. In addition, each improvement at the individual scale – a shorter route, improved trailer positioning – adds up in aggregate to a tactical-level improvement across operations and fleets.



### PLEASE RANK THE FOLLOWING SUPPLY CHAIN STAGES FOR WHICH IT IS MOST IMPORTANT TO HAVE ACCESS TO RELIABLE AND TIMELY SUSTAINABILITY DATA.

Note: respondents were asked to rank the three most important measures. The highest-ranking features were attributed three points, the second two points and the third, one. The percentages refer to the proportion of total ranking points each measure received.

It is important to have reliable and timely sustainability data from all supply chain stages according to survey respondents, with the 'most' and 'least' important groups separated by less than six percentage points. Despite the closeness of results, however, a preference for data from internal and key stakeholder sources does emerge over more distance and less direct relationships.

The results indicate a clear need to access timely and reliable data from contracted logistics service providers that allows for reporting of the environmental impact of warehousing and distribution operations. For those contracting logistics services, this data will be central to the accurate reporting of Scope 3 emissions which will likely be a significant proportion of the overall environmental impact of many retailers and manufacturers. Scope 3 emissions data is also an important external indicator within corporate social responsibility strategies, access to which is highly valued.

The availability of sustainability data to inform internal planning and sourcing decisions is also an important area of emphasis for survey respondents. This stage ranking so highly is a clear indication of an evidence-based approach to decision-making and an overall process that requires the right level of timely and trustworthy data. Allied to the preference for data from close stakeholders, the suggestion is one of proactive and responsive actions that facilitate interventions and allow for decisions that will achieve sustainability goals.

### PLEASE RANK THE FOLLOWING MEASURES OF SUSTAINABILITY PERFORMANCE DATA BY THE VALUE THEY WOULD OFFER TO YOUR ORGANISATION, ASSUMING ALL WERE AVAILABLE.



Real-time transportation data Overall transportation Transportation information (not real-time) Transportation leg (e.g. by mode, country) Transportation lane

Note: respondents were asked to rank the three most important measures. The highest-ranking features were attributed three points, the second two points and the third, one. The percentages refer to the proportion of total ranking points each measure received.

As with the data available from various supply chain stages, survey respondents have a broadly balanced need for sustainability performance data from various supply chain operations. The highly even set of results again indicates that all types of data hold value, but again a pattern emerges between the 'highest' and 'lowest' ranked, with a preference for supply chain-wide measures over more specific, discrete data related to individual legs or lanes.

The preference for real-time transportation data is significant. It reinforces the preference for proactive approaches, especially regarding cost reductions and efficiency gains which feature as important targets in sustainability strategies. The preference is also likely driven by the desire to combine real-time data with other technologies and targets within sustainability strategies. This includes, for example, the ability to react and make adjustments based on events, particularly in combination with route planning/optimisation software being the most important individual tech-based feature currently supporting sustainability strategies (see below).

More widely, the preference for aggregate-level performance data – both real-time and otherwise – again shows the preference, certainly for those with sustainability strategies in place, to underpin decision-making processes with data that provides evidence across the supply chain.



### TO WHAT EXTENT HAVE YOU INTEGRATED THE FOLLOWING TECH-BASED SOLUTIONS INTO YOUR SUPPLY CHAIN SUSTAINABILITY STRATEGY?

The sustainability of supply chains is set for rapid and widespread digitalisation in the coming years. Across every tech-enabled feature identified, at least 60% of those surveyed either have the systems in place or plan to within two years. The clear message is that the next two years will see a step-change in the management of supply chain sustainability across Europe.

Real-time visibility will be, along with carrier performance monitoring, one of the most rapidly adopted technologies in this digitalisation. In both cases, around 81% of those surveyed say the technologies either currently are or will be integrated into their supply chain strategies in the next two years. Real-time visibility is already 'in place' at more companies surveyed than any other individual tech-based solution covered. The process to integrate real-time visibility into sustainability strategies already appears underway, with around 11% overall stating it was a part of their sustainability monitoring mix, with newer strategies integrating RTV more proactively. When married to the results here, the suggestion is that RTV is well-placed to gain further traction and become one of the most significant tech-based solutions in the digitalisation of supply chain sustainability.

Amongst the other tech-based solutions set for rapid adoption, carrier performance and shipment status monitoring, as well as route optimisation, all reinforce the findings that shippers value access to timely and accurate data from key stakeholders, such as contract carriers and tier 1 suppliers, that can facilitate efficiency gains. In addition, the relatively lower adoption rate of API and third-party verification of 'partner data' points to the internal focus seen elsewhere. Nonetheless, the clear conclusion here all data remains valuable to have and to trust.

It is important to remember that while responses indicate a step-change in the digitalisation of supply chain sustainability, it is not yet in place and work remains before it is realised. For all tech-based solutions other than RTV and shipment status monitoring, there are more planned integrations over the next two years than those already 'in place', and the implementation of technology remains a notoriously difficult operation.



WHICH OF THE FOLLOWING FEATURES ARE MOST IMPORTANT IN HELPING YOU ACHIEVE YOUR SUPPLY CHAIN SUSTAINABILITY TARGETS?

Route optimisation is by some distance the most important feature helping survey respondents achieve sustainability targets. The rapid adoption of route optimisation may also be behind the secondary importance of reducing empty and overall mileage as a sustainability goal with its adoption checking the boxes for optimised transportation. Rather it is cost reduction and operational efficiency that are cited as more important sustainability goals. This, in combination with an emphasis on real-time and data for decision-making, suggests sustainability management is trending in the direction of a dynamic environment that facilitates the selection of the best options available.

Despite other features trailing route optimisation by some distance, the closeness of the ranking again indicates there is value to be found in all. It is likely that as the features are more widely integrated into sustainability strategies, value will be unlocked. It is, though, the potential of route optimisation to take mileage out of a network, reducing emissions and costs, which respondents appear to value most highly.



#### HOW DO YOU USE THE SUSTAINABILITY PERFORMANCE DATA YOU TRACK? (TICK ALL THAT APPLY)

The monitoring of progress towards internal goals is the most common use of the sustainability data gathered, according to respondents. This aligns closely with the main goals of sustainability strategies, from the reduction of emissions and carbon footprints to reduced costs and increased operational efficiencies – all are targets over which internal change and process improvement, as well as monitoring, are ultimately the driving force.

External-facing uses are not ignored, however, and the closely grouped uses for various audiences suggests that communication with stakeholders is common and important. The implications are many, but perhaps the most important is that progress towards achieving sustainability targets is a collaborative effort. Whether it is showing legislative compliance, reporting to customers and external partners or internally, full visibility of sustainability management is not possible in isolation.

# 3. TECH & SOLUTIONS



#### TO WHAT EXTENT DO YOU HAVE VISIBILITY INTO SUSTAINABILITY PERFORMANCE?

Survey respondents indicate the highest degree of total visibility is internal. This is likely a result of a greater degree of access to data monitoring internal operations, but also the greater degree of development and entrenchment of internal monitoring systems. Still, that only slightly more than one-third of those surveyed claim 'total' visibility even internally highlights the challenge not only of accessing and recording supply chain data but also of doing consistently while giving it meaning.

For all other supply chain partners, visibility is predominantly 'good' or offered to 'some' level. Both carriers under contract and sub-contract carriers appear to offer the lowest levels of visibility to supply chain partners. This sits in contrast with those groups being named amongst the most important source of timely and reliable sustainability data. The complexity of obtaining visibility, especially into partner organisations, should not be underestimated.

### PERCENTAGE CLAIMING TOTAL VISIBILITY OF SUSTAINABILITY AT VARIOUS STAGES

Yes, for more than 2 years	Internally <b>36.8%</b>	Tier 1 <b>18.4%</b>	Tier 2 <b>14.3%</b>	Contract carriers <b>21.0%</b>	Sub-contract carriers <b>12.5%</b>
Yes, for less than 2 years	Internally <b>40.9%</b>	Tier 1 <b>30.2%</b>	Tier 2 <b>22.7%</b>	Contract carriers <b>25.0%</b>	Sub-contract carriers <b>19.0%</b>
No sustainability strategy in place	Internally <b>24.6%</b>	Tier 1 <b>14.5%</b>	Tier 2 <b>9.8%</b>	Contract carriers <b>11.8%</b>	Sub-contract carriers <b>11.9%</b>

Across all supply chain partner groups, respondents that have established a sustainability strategy within the last two years claim the highest levels of 'total' visibility. In addition, this is the group of respondents that utilises automated data collection most and makes the highest use of partner data. This suggests respondents in the bracket have designed and implemented strategies that place a greater emphasis on tech-based solutions to enable greater levels of collaboration.



### TO WHAT EXTENT WOULD TRANSPARENCY/DATA SHARING WITH THE FOLLOWING GROUPS INCREASE THE SPEED WITH WHICH YOU CAN ACHIEVE YOUR SUPPLY CHAIN SUSTAINABILITY TARGETS?

An improvement in internal visibility would have the most significant impact on the speed of sustainability strategy implementation, according to survey respondents. This again fits with the internal focus of sustainability strategies that respondents have emphasised, while also reinforcing the significance that the availability of reliable internal sustainability performance data at the 'planning and design' stage holds.

More widely, access to a higher degree of data through collaborations with supply chain partners would unlock a significant increase in the speed with which sustainability strategies can be implemented and have a meaningful impact on the progress respondents feel can be made over the short term. While this holds for each supply chain partner group, it is particularly so for the closest contract carrier and tier 1 relationships, as well as internally. Perhaps the most important conclusion to be drawn, however, is that a lack of visibility over sustainability data is holding organisations back.



#### WHAT DETERMINES THE PACE OF IMPLEMENTATION OF YOUR SUPPLY CHAIN SUSTAINABILITY STRATEGY MOST?

The ability of companies to implement and utilise technology as part of their sustainability strategies is the primary determinant of its pace. This is likely a result of a significant proportion of those surveyed having had first-hand experience of the limitations of manual data tracking, but also of the experience of the gains available from using technology, with the most tech-enabled able to claim the highest levels of visibility over sustainable practices throughout supply chains now. It is also echoed in the findings that at least 60% of those surveyed either have or plan to introduce tech-based solutions into sustainability strategies in the next two years.

The goal of becoming more sustainable and reducing carbon footprints as an end in itself also features highly, likely a result of the overall aim of many strategies which aim at a holistic reduction in emissions in aggregate. Legislative compliance is also a significant driver, suggesting both a role for government in setting targets as well as a role for tech-enabled compliance solutions. Indeed, a not insignificant proportion cites the availability of appropriate tech solutions as a driver of pace, suggesting tech-based solutions still need to evolve to meet all needs.

# CONCLUSION

In sum, the results show that supply chains across Europe are becoming greener, more tech-enabled and more proactive in the pursuit of opportunities to enhance sustainability. Respondents are targeting carbon and emissions reduction goals, but not ignoring the daily operational improvements that underpin progress. Amongst the other key findings:

- 72% of those surveyed have a supply chain sustainability strategy in place, with the maturity of the strategy showing different points of emphasis in terms of sustainability goals and the use of technology in their pursuit
- A wide mix of systems and approaches is used to monitor sustainability performance. These are both automated and manual, both internal and external. More recently enacted sustainability strategies are more likely to favour tech-enabled solutions and collaboration with supply chain partners
- Reducing overall emissions and carbon footprints is the primary target of sustainability strategies. Respondents emphasise the reduction of emissions over measurement as part of a shift towards ongoing, proactive management of sustainability
- Real-time data is most valuable when it comes to making improvements in sustainable operations, and another strand of the shift towards proactive and responsive management of supply chain sustainability
- The sustainability of supply chains is set for rapid and widespread digitalisation. Respondents indicate that the pace of tech adoption will result in a step-change in the management of supply chain sustainability across Europe
- However, with the internal adoption of technology rated as the most significant factor in determining the pace at which sustainability strategies are implemented, achieving planned progress remains a complex challenge.



### **ABOUT TI**

Transport Intelligence (Ti) is one of the world's leading providers of expert research and analysis dedicated to the global logistics industry. Utilizing the expertise of professionals with many years of experience in the express, road freight and logistics industries, Transport Intelligence has developed a range of market-leading web-based products, reports, profiles and services used by many of the world's leading logistics suppliers, consultancies, banks and users of logistics services.

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Transporeon is the leading transportation management platform and the largest network provider of real-time visibility (RTV) with a comprehensive network of over 145,000 carriers and ~1,400 shippers & retailers across 100+ countries. Behind the scenes is one of the largest operations teams worldwide that provide support around the clock.

Real-time visibility on its own is important for tracking shipments and orders with the highest levels of accuracy and predictive insights. Transporeon goes a step further in using this real-time visibility data to power a wider range of services and modules through the Transportation Management Platform. Our growing range of products e.g. Carbon Visibility, Time Slot Management, Real Time Yard Management, My Network Insights work harmoniously to increase efficiency throughout the full lifecycle of visibility activities.

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