



## Forwarders as Catalysts for Supply Chain Sustainability

What logistics service companies need to consider when defining the sustainability agenda



Abstract	4
Why do forwarders need to become sustainable?	5
What do forwarders need to do to become sustainable?	6
Strategic focus	8
Expert workforce	9
Building alliances	10
Operational adjustments	12
Technological solutions	14
Distinct marketing	14
Transparent reporting	15
How can forwarders best address the seven sustainability levers?	16
Contacts	18
References	18

# Abstract

Today, most players in the industry agree that sustainability is an issue they have to address: Going green is more than just a trend, it is an imperative – particularly in one of the world's most highly connected industries: shipping and transportation<sup>1</sup>. In this market, Logistics Service Providers (LSPs)<sup>2</sup> play a central role in coordinating supply and demand. By passing on shippers' demands for sustainable freight forwarding to the carriers, LSPs have all the strategic bargaining power and catalyst role to push the entire industry towards greener shipping practices.

Despite unanimous agreement on the necessity of sustainability, what sustainability means and how to implement it is still an open question among forwarders. For this Point of View, we interviewed leading subject matter experts in guided deep-dive sessions:

- Based on our findings, we are now able to provide a comprehensive and actionable framework of seven strategic and operational levers that show LSPs what is required to become sustainable and to act as true sustainability pioneers for the entire shipping and transportation industry.
- The accumulated insight in these interviews also suggests a series of implementation parameters to best address the seven transformation levers.

With these tangible insights, we hope to make a valuable contribution to improving the (sustainable) ways our world connects.

## Concept of sustainability underlying this Point of View

This whitepaper uses a broad concept of sustainability focused on more than just reducing greenhouse gas emissions. It also considers the ways transportation impacts the use of resources and biodiversity as well as the effects our business activities have on mankind inside and outside the organization, in terms of working conditions, community support and

combatting corruption. As such, the definition of sustainability used in this paper corresponds to the objectives of regional and international initiatives from ESG (Environmental, Social, Governmental) and EU regulations like the CSRD (Corporate Social Responsibility Directive) or Fit for 55 package as a measure to fulfill the Paris Agreement.

<sup>1</sup> In this document, the terms transport, transportation, shipping and logistics are used interchangeably.

<sup>2</sup> In this document, the terms (freight) forwarder and Logistics Service Provider (LSP) are used interchangeably.



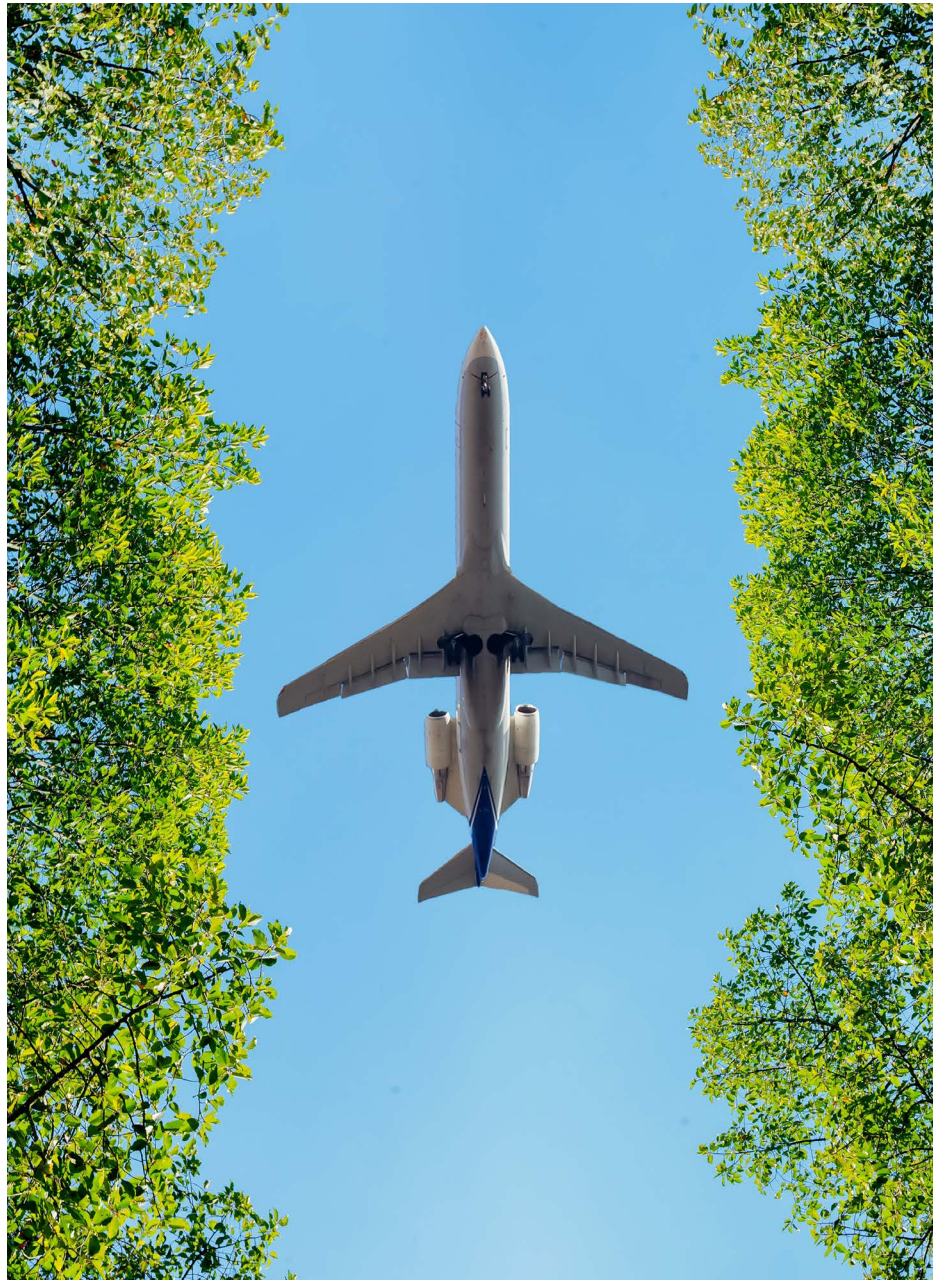
# Why do forwarders need to become sustainable?

## **Sustainability is more than just a trend; it is an imperative – also in the transportation industry.**

Every LSP claiming to provide high-quality service has to adapt as the demands of the market change. In light of climate change, societies across the globe are becoming more and more environmentally aware. We have all seen, for instance, massive changes in consumer and investor behavior. As a cause and consequence, legislation has tightened the requirements for environmental-friendly business practices in recent years, forcing companies to find new and better ways of doing business. This has made the transition to sustainability an urgent call for action, particularly in one of the world's most highly connected industries – transportation.

**LSPs are in a position to play a key role as a catalyst** in the logistics industry's transition to sustainability by coordinating supply and demand of shipping capacities. As they pass on shippers' demands for more sustainable forwarding to the carriers, LSPs have all the strategic bargaining power and huge potential to push the entire industry towards greener shipping practices. Forwarders can incentivize downstream entities, i.e., persuade carriers to create more sustainable products. They are the ones in control of allocating the aggregated demand towards responsible carriers with mature sustainability strategies.

This study is Deloitte's contribution to the ongoing sustainability debate, making an effort to answer the hows and whats in terms of operationalizing sustainability measures in LSPs' day-to-day reality.



# What do forwarders need to do to become sustainable?

Following our discussions with senior managers at the world's leading freight forwarding companies, we compiled the most relevant statements about current and planned initiatives to make the companies more sustainable. The responses of the participants made it clear that sustainability is not just a one-off project but rather a long-term, enterprise-wide endeavor. Every departmental head needs to make the sustainability transition a part of their actionable objectives. We were able to narrow our findings down to seven levers, which are outlined in figure 1 and can be classified as strategic and operational levers.

**The three strategic levers address sustainability in freight forwarding from a holistic, long-term perspective.**

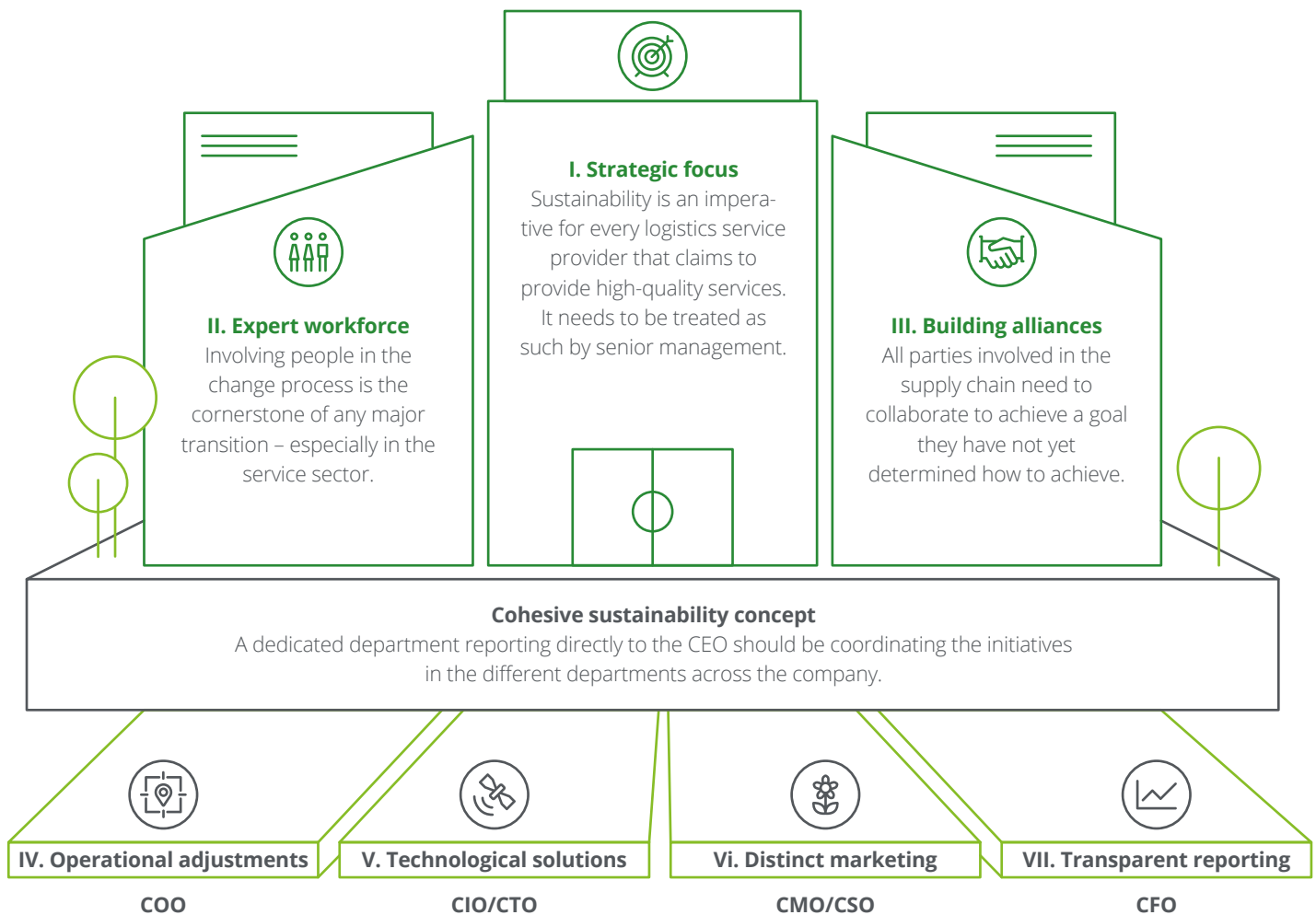
**The four operational levers are signed to business roles.** They must be aligned with the three strategic levers and the overarching strategy. The way we define these strategic levers will have an effect on the way the operational levers are implemented. What is needed is a consistent communication and training strategy that encompasses all operational changes – this will ensure that all operational and technical alliances are on the same page. While we expect the parameters of the strategic levers to be more or less stable over long periods of time, the operational levers will need to be adjusted at regular intervals to account for scientific findings and regulatory changes as well as technological advances.

The following chapters will outline the initiatives corresponding to the seven categories.





Fig. 1 – The seven levers of enabling sustainable freight forwarding business



## Strategic focus

### Aligning the transition

Non-incremental change in the value chain is the key for many companies to adapt to dynamic regulation changes and have a chance at market leadership. The sustainability transition touches every area of the business as you will see in the following chapters about operational levers – from operations to marketing and finance to procurement. According to the people we interviewed, the first step is to set up a central team and then gradually roll out transition measures as core objectives across all organizational units. It is vital for the central team to have sufficient authority and resources to align and control a comprehensive and cohesive sustainability transition strategy.

### C-suite buy-in

The sustainability imperative is changing the way our world connects. This is both a game changer and a call for action for all CxOs, which means that C-suite buy-in is vital (much as it was for the digital transformation that went before it). During the interviews, some made the argument that a CHRO or CEO (it's a people business) should bear overall responsibility for the transition, as it is one of the company's core competences. The team driving the sustainability transition is clearly more than just an intermediary task force – it's a new and growing business stakeholder (which may even attract the most effective senior managers to take on a leadership role).

### Planning long-term

The leaders we interviewed suggest that the (sustainability transition) team needs to fully grasp the ongoing political debates to be able to adapt. They also need to understand the technological innovations, some of which may appear totally unrelated at first, to prepare the business for future changes. They enable organizations to think "triple bottom line" in all their processes and consider Return on Invest beyond the annual budget cycle. Business cases for sustainability projects might

come up short in over the near term, but skipping those investments can become a financial threat in the long run. Sustainability teams should also be on the lookout for public funding initiatives at the regional, national or international level to subsidize their sustainability transition.

### Adjusting the stakeholder landscape

The responses to our survey indicate that companies need to reassess which stakeholders should become advocates for their business activities. While it may be customers and investors that directly impact economic growth today, impacted communities and workers in upstream processes could become increasingly vocal and influential in the future. B2B companies will need to convince consumers as well; after all, future supply chain legislation is likely to require even greater transparency.

## About this research

This Point of View is part of Deloitte's broader transportation and shipping practice. It draws on in-depth interviews with designated experts in the field of sustainability from leading LSPs. The interviews were structured according to the balanced scorecard model covering sustainability-related factors in customer relations, finance, internal processes, learning and strategy. We interviewed experts in management positions from the world's top LSPs.

The interviews were conducted in May and June 2022 based on a dedicated framework to allow for comparability. With the help of this guide, we asked the participants if and to what extent sustainability is relevant for different factors on the balanced scorecard. We aggregated the findings of the interviews to help us to derive conclusive action steps for practitioners within the industry.



### Expert workforce

#### Building a sustainability culture

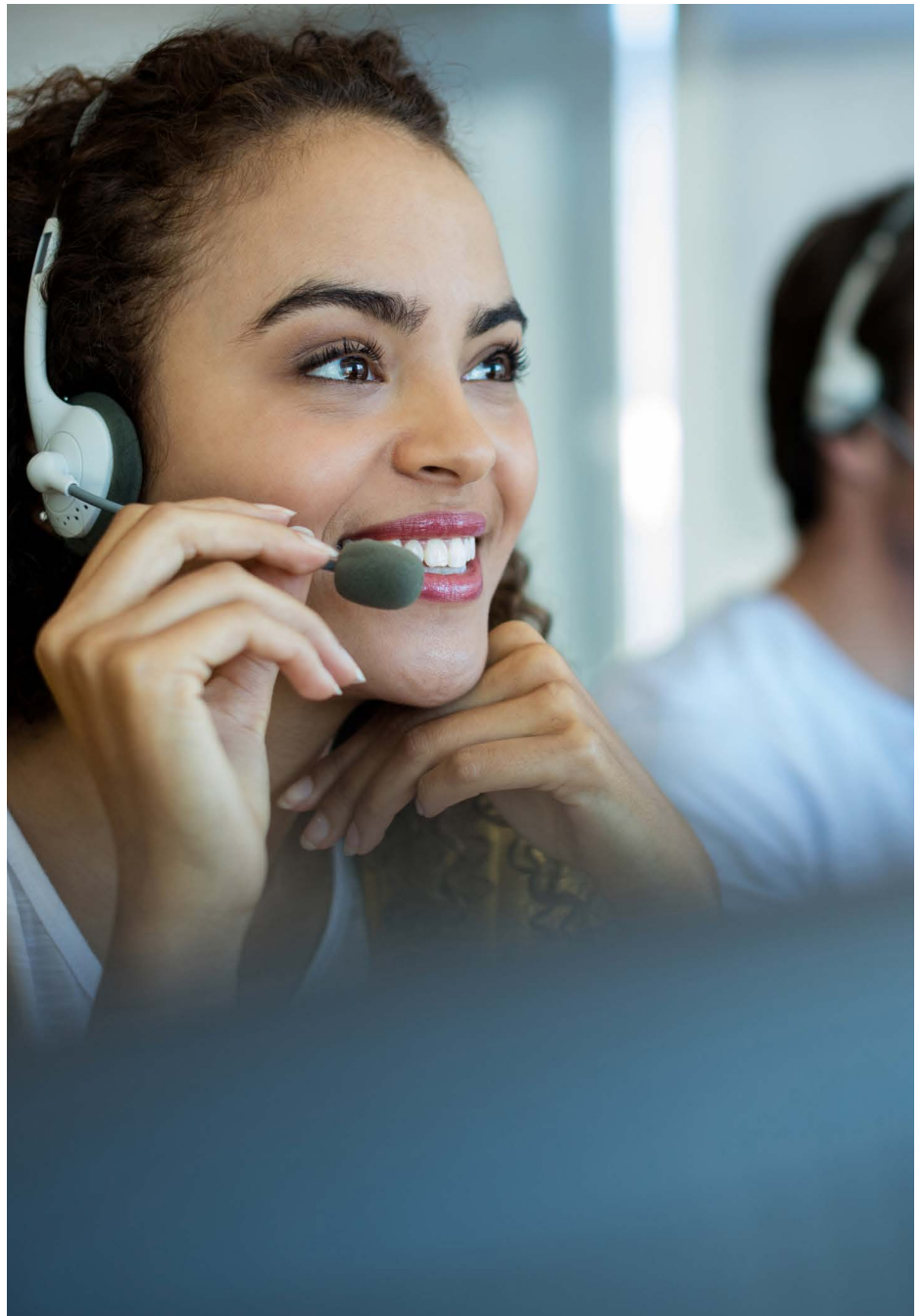
The shipping industry employs about 13.3m workers in the US (US BTS, 2018) and about 10.8m workers in the EU (Eurostat, 2021). The low margins of recent decades resulted in such cost pressure that a shadow sector of subcontractors emerged with unethical working conditions for blue collar workers and frequent violations of labor laws.

Particularly in a service sector such as freight forwarding, where humans are the main resource, communication is the cornerstone of any major transition – and the same is true for the sustainability transition. One strategy would be to educate the workforce and explain the impact the enterprise is having on the environment and on society, allowing staff to develop their own ideas on how to reduce it – a strategy that requires real commitment to change. In our interviews, the participants stressed that sustainability should be a mindset rather than an item on the daily to-do list. The best way to change hearts and minds is through comprehensive and mandatory training sessions by qualified providers. Our interview participants also recommended different ways to gamify the process, creating a system of points that employees can collect for specific efforts, which could help motivate employees with little interest in the issue. Companies need to make sure that unconscious bias and the responsible use of resources are deeply rooted in their corporate DNA to have a positive effect on day-to-day operations.

#### Be active outside the organization

Making a positive impact on the environment and society does not have to stop at the office door. Companies can give back to the communities affected by their business activities at a local or international level by encouraging employees to volunteer and get involved. This can have a positive effect on the sustainability culture within the company, can increase commitment to the company's core values and ethics as well as

develop organizational citizenship – across all generations. This is not only good for the company's sustainability transition; it can also improve the work environment – which is another element of the broad definition of sustainability we outlined in the previous section. Taking a leadership role in sustainability can also improve a company's employer brand, an aspect that should not be underestimated in the ongoing battle for (white-collar as well as blue-collar) talent.



## Building alliances

### Teaming up with carriers

Today, most of the data on emissions, consumption of resources and asset utilization is owned by the entity in question. Since a certain lack of transparency can boost profitability, data owners are not keen on making it available. The market is also very scattered, especially in surface transportation, which makes data collection extremely complex. Some of the people we interviewed said that third-party platforms can facilitate a free exchange of data and organize transmission. There are also independent organizations working on standardizing terminology and interfaces to make adoption easier.

As yet, no one is certain which propulsion system will ultimately succeed – will it be methanol, biofuel or even electricity? The ambiguity makes investments difficult to calculate so that mainly expensive dual-fuel or “methanol-ready” vessels as well as aircrafts – which can handle different degrees of fuel blends – are ordered. We need smart amortization policies to deal with these expenses that go beyond simply passing the cost on to the consumer via the shipping rate and LSPs.

### Teaming up with other incumbents

Akin to the adage: “The lonely wolf dies, the pack survives,” alliances may be the forwarders’ best bet, even if it is simply exchanging knowledge about sustainable best practices with competitors. Our survey shows that change is coming, whether we like it or not, and forwarders are trying to take the first steps, which would – ideally – be done simultaneously across the industry. One interviewee said: “Everyone is in the same boat and has to sit at a table. There must be new laws regulations applicable to every company. Many companies are leading the way when it comes to sustainability, but it needs to be driven and

enforced by everyone.” There are various independent research bodies worldwide making it possible to collaborate on sustainability, such as the SABA (Sustainable Aviation Buyers Alliance) or the SAFA (Sustainable Air Freight Alliance), where large cargo owners and shipping companies, as well as LSPs, are working together to “catalyze climate solutions for cleaner skies”. In the interest of customers and investors, it is important to establish standardized methods for calculating emissions to ensure that customers can compare company profiles and shipping offerings.

### Teaming up with customers

LSPs need to help shippers make the right shipping decisions, but in addition to providing incentives, as explained under section “Distinct marketing”, they can cooperate with shippers to find joint solutions for complex challenges during the sustainability transition.

### Staying close to legislators

Since price will most likely continue to be the key decision criteria in shipping, legislators at all levels need to provide the right regulatory framework to incentivize companies to invest in sustainable technology, while also ensuring higher costs are not just passed on to the consumer. It is vital for industry players to stay on top of the political and legislative agenda to mitigate potential losses. They also need to join industry associations and consult with business-savvy legislators on which legislative proposals are likely to pass.

While the strategic levers are focused on broad ESG sustainability over time, the operational levers in the LSP business model are geared towards environmental sustainability today. Sustainable social behavior and governance are particularly ensured by the sections “Operational adjustments” and “Transparent reporting”.

## Did you know?

The Digital Container Shipping Association (DCSA) has published open standards for exchanging information between industry participants allowing for better asset utilization and resource consumption.







## Operational adjustments

### Improving shipping efficiency

The insights gained in our interviews indicate that the most efficient way to reduce carbon emissions in the short term is to make further efficiency gains in shipping, as the industry has done in the past for purely financial reasons – i.e., swapping the financial motive for an environmental one. The so-called scope 3 emissions, meaning emissions which are neither directly emitted (scope 1, e.g., combustion engine vehicles) nor indirectly emitted (scope 2, e.g., electricity from fossil sources), are making the biggest share of the GHG emissions a LSP is held accountable for. One interviewee said: “The more efficient we are, the more sustainable we become”.

### Making carbon emissions part of the routing optimization equation

Next to routing optimization and the choice of shipping method, the most relevant lever that could use emissions as a parameter instead of transit time is consolidation. The less unused space in a shipping container, the lower the emissions for each pair of jeans will be. A simple tactic such as double-deck loading reduces the calculated emissions per product by half, even though, of course, the vehicle's emissions are the same. Nevertheless, greater consolidation leads to fewer transports in the short term or a lower need for additional transport capacity in the long term due to higher transport volumes.

### Trading carbon offsets

Even if every consumer were willing to switch to sustainable fuels, there isn't enough of these fuels available today – and we are still a long way from being able to generate sufficient supply. So, in the meantime, the only way to make shipments carbon neutral in the short-term for shipping companies is to purchase carbon offsets, i.e., investing in reliable financial instruments that support qualitative carbon-positive initiatives such as reforestation or renaturation of marshlands, to compensate for shipping emissions.

It is important here to look at the end-to-end emissions calculation since factors

like terminal handling and even delivery or transshipment are often ignored in most shipments. There is some question as to the accuracy required to achieve the objective (reducing emissions). For example, to what extent does the calculation need to reflect the shipment's actual emissions (i.e., taking into account aircraft utilization or tracking the vessel's actual route via AES data) or does it even matter, as the calculation errors will likely balance out anyway over a large number of shipments.

In the strong opinion of some participants, LSPs should be responsible and accountable for their efforts to calculate carbon offsets as precisely as possible and prepared to issue certificates that shippers can use to give consumers an accurate account of a product's emissions.

### Preventing risk and improving reliability

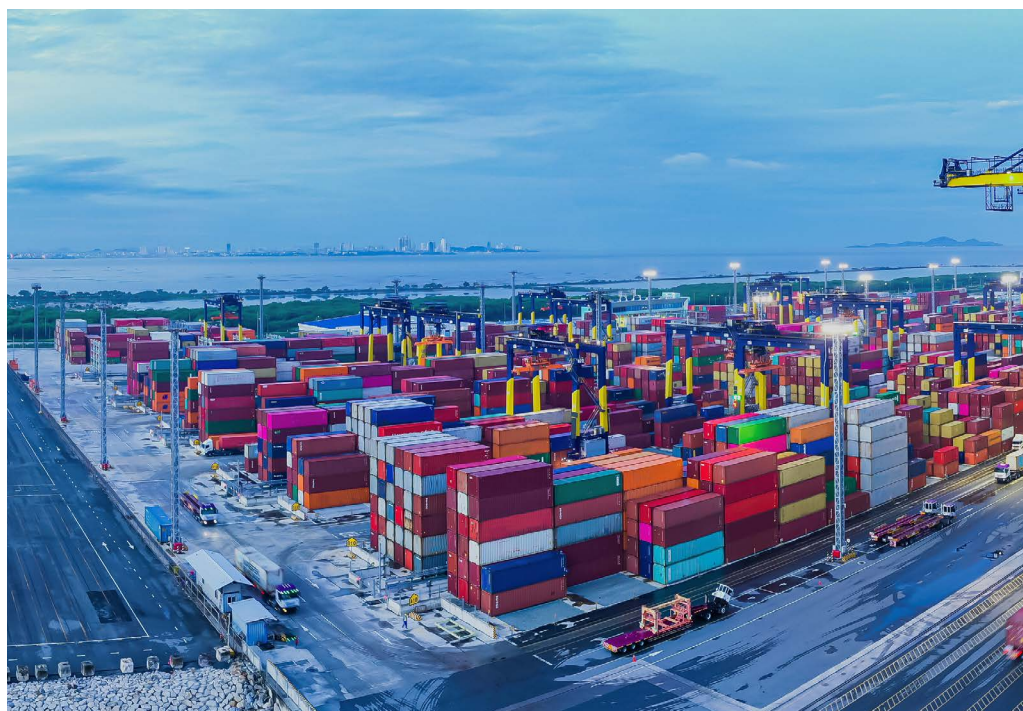
It may become the LSP's responsibility to handle trading of emission certificates between consumers and the actual emitters. To increase interest in sustainable products, it is important to give shippers a certain amount of certainty in unstable markets by hedging price risks through com-

petitive forward contracts on sustainable fuel and developing a client credit system to allocate the emission savings in a compliant and certified way so they can be accounted on their side.

The experts we interviewed agree that over the next few years more products will offer loading and transit time guarantees, including real-time tracking options based on updates provided by IoT devices directly attached to the cargo (replacing manual updates by operations clerks and the use of AES data to track vessels carrying a particular cargo).

### Promoting sustainability across the entire value chain

The duty of care within a company also applies to everything from preventing child labor, slavery and adverse effects on communities to ensuring fair pay, good working conditions and opportunities for education. Our interview findings reflect how important it is to promote independent oversight and worker representation to prevent any kind of misconduct including corruption or anti-trust issues with other market incumbents. Transparency is critical here to earn the trust of clients and society, including making





the relevant documents and easy-to-understand reports available to the public. Particularly when government subsidies are in play, companies should be proactive about keeping taxpayers informed.

Some European countries implemented respective supply chain acts already, which oblige corporations of a certain size to be held responsible for the business practices of their suppliers. The European Commission recently issued a proposal that will increase the scope of the legislation even further in the coming years. The proposal extends a company's responsibility to the entire value chain instead of only its direct suppliers, including means of legal redress against companies based in and operating in the EU. For LSPs, these laws mean that they can be held responsible for labor law and human rights violations on vessels or impacting truckers – they will need to start monitoring this issue very carefully in the near term.

#### **Enforcing legal norms**

When they take care of a shipper's cargo, LSPs need to provide their clients peace of mind in all transport-related matters. LSPs have a crucial role to play when it comes to

their clients' sustainability governance. As experts, LSPs must have robust processes in place to ensure that every shipment complies with prevailing laws, declares customs correctly and does not turn the client into an unwitting smuggler.

#### **Ensuring worker's health**

Mental health training, ergonomic equipment and even subsidized massages are common perks for office workers in a wide range of industries today. The service portfolio of most LSPs goes beyond simply coordinating shipments to include physical interactions with the cargo such as warehousing, weighing, screening, wrapping and labeling. As a result, they should be offering protective measures for blue collar workers as well. Enforcing worker protections in this field is a must for social sustainability, according to every expert we interviewed. This includes protecting the workforce from common risks such as fire, falling goods and hazardous materials, but also supporting the long-term mental health of night shift workers and the physical health of warehouse staff with equipment such as exoskeletons.

### **Did you know?**

The OneTrust ESG & Sustainability Cloud, part of the Trust Intelligence Platform™, empowers companies to measure and track the carbon footprint, automate ESG reporting, drive change, demonstrate impact, and foster trust with key stakeholders through enhanced transparency.

## OneTrust



### Technological solutions

The main element of the sustainability transition is decarbonization. Key to reducing the carbon footprint is green transportation technology and fuels on the road, sea and in the air. It is incumbent upon LSPs to find agreements with asset owners as described under section "Building alliances". The second most important factor for service companies is data and data competence.

### Improving data skills to meet reporting requirements

Several regulatory changes described under section "Transparent reporting" will require operational systems to provide qualitative and assured metrics. For example, GHG emission reports should appropriately and accurately reflect the environmental impact of a company, supply chain or service within the chosen reporting boundaries. These reports should be comparable over time and provide a transparent explanation of all assumptions made (Piecnyk, 2015). Today, companies are often not collecting the data points they need or are unable to extract them because of a lack of standardized interfaces and data formats on the technology landscape.

In addition to regulatory compliance, LSPs need data skills and technical enablers such as cloud computing to process data in real time and give customers the support they need. And there are technology solutions that still need to be developed, e.g., to compute different routing options, to mount a

fast, flexible response to operational events and improve resilience as well as to calculate end-to-end CO<sub>2</sub> emissions in an accurate and forward-looking way.

### Shielding the ecosystem

Several prominent cyber attacks against shipping companies in recent years have shown the vulnerabilities of the global supply chain's ecosystem. With different actors in the supply chain increasingly interlinked, cyber security has become a key factor when it comes to governmental sustainability and business continuity.

### Modernizing assets

Based on our interviews, LSPs have a number of assets that should be renewed or adjusted, whether it is carbon-neutral warehouses, paperless offices or properties promoting biodiversity – to name just a few examples. LSPs are subject to the same regulations, technology and expectations as companies in other industries and can learn by collaborating in respective forums.

### Distinct marketing

The purchasing decisions customers make in shipping are mainly based on price and transit time. Sustainability is not yet a significant factor in this context, despite its vast impact as explained above. Sustainable shipping may have a negative effect on both price and transport time, as sustainable fuels are more expensive and slow steaming, transshipment and consolidation take more time. One interviewee said: "At the end, the consumer decides on how sustainable the supply chain needs to be – neither the carrier nor the freight forwarder. But of course, they can incentivize downstream entities to buy sustainability products like offsetting." Convincing clients to change their purchasing habits while avoiding financial losses requires distinct marketing and customer education as well as transparent reporting and incentives.

### Telling success stories

Under the banner of "Do good and talk about it", freight forwarding companies should be touting their sustainability efforts often and to a wide audience to help the public better understand green offerings. They do not want to be perceived as exotic, but rather to appeal to the customers' intrinsic motivation to embrace sustainability. However, it needs to be done with care, since there is a thin line between reporting far-reaching initiatives and greenwashing.<sup>3</sup> LSPs need to talk about their sustainability aspirations in an authentic way, deeply rooting the sustainability mindset in the workforce as outlined under section "Expert workforce". Customer-facing employees also need to be recognized experts if they presume to advise customers on the subject.

### Promoting space sharing

The operational adjustments outlined above are financially feasible, but often challenging in practice. To maximize the impact of consolidation, customers need to be willing to share their allocated space. The people we interviewed stressed that sales staff should offer customers the option to shift from FCL (full container loads)/FTL (full truck loads) to LCL (less than container loads)/LTL (less than truck loads). Cargo (pallets, boxes, coils, etc.)

<sup>3</sup> Pretending to become more sustainable in marketing materials without the actual impact they claim.

can be treated as individual shipments to be consolidated in a single load. Customers often worry about supply chain risks, since waiting for a container to be filled or risking heavy or dripping double-stacked pallets can cause delays or damage. Operational excellence and fast, generous complaints handling are vital to ensure the client's peace of mind.

### Introducing smart green products

Shippers need rationale and smart products which allow them to trade transit time for a reduction in carbon emissions. Including green products by default in spot market offerings might be great marketing but has little overall impact. Promoting sustainable fuel and routings in large-volume tenders by showing emissions and alternatives has a much higher impact due to the volume shipped on those contracts.

Today, most people are unaware of the difference between sustainable fuel types – from processing different kinds of feedstock to synthetic production based on water and ambient air. As the market grows, customers need clear information as to the quality they get when purchasing these products and the ability to make the right choice for their enterprise. This is true even if an LSP can only provide certificates, but cannot ensure the fuel they are paying for actually ends up in the tank of the vessel or aircraft shipping their cargo.

### Supporting the transition to local sourcing

More and more manufacturers are publicizing a shift in production to more proximate locations, in order to diversify the sources of raw materials and semi-finished goods and improve production resilience despite increasing political instability. The LSPs we interviewed have given their customer-facing staff the ability to reorganize supply chains on a large scale and gradually shift supply to new production facilities without interrupting supply. Ramping up the relevant technical aids and enabling real-time data updates are vital when it comes to making the transition as smooth as possible.

### Transparent reporting

To create trust, externals need an easy way to obtain in-depth information about a company's operations. The main motivation for this change is legislation, which will require a lot of manual work to compile the required reports, unless there are major changes in the respective systems and data collection structures.

### Fostering transparency

What legislators want for companies is to quantify their sustainability efforts. The goal is to allow consumers and investors to better compare offerings and to make these disclosures just as relevant as financial metrics. Companies will have to make their processes more transparent and have a clear incentive to introduce effective sustainability-related initiatives. It will also enable consumers to more easily detect so-called greenwashing efforts in marketing.

### Reporting non-financial metrics

During the interviews, it became evident that all reporting requirements are not created equally. Even in the Western world, Europe is far more advanced in this than North America. One of the upcoming changes in Europe is based on the Corporate Sustainability Reporting Directive (CSRD) of the European Union, which replaces the current Non-Financial Reporting Directive (NFRD) and forces companies with more than 250 employees, total assets in excess of EUR 20m and net earnings of over EUR 40m (meeting two out of three criteria) to report non-financial sustainability metrics, which are currently being developed by the EFRAG (European Financial Reporting Advisory Group).

Companies may be directly affected by the regulation, because they meet the criteria, or indirectly, if customers and investors ask

for this information because other players in the market are directly affected. Ultimately, this means that all major players in the shipping sector need to have the systems in place to report operational metrics like total water withdrawal, energy consumption per shipment, share of female managers and number of carrier audits.

### Did you know?

With Greenomy, companies can easily calculate the EU Taxonomy eligibility and ensure alignment by Turnover, CapEx and OpEx. The Greenomy software is always up to date with the latest EU sustainability reporting requirements and is computing all relevant ESG metrics which leads to a seven times faster reporting process and 80 percent cost savings.



# How can forwarders best address the seven sustainability levers?

Based on the seven levers in the LSP Sustainability Framework outlined above, it is clearly incumbent upon forwarders to approach the sustainability transition as an enterprise-wide challenge. To best address these seven sustainability levers, the subject-matter experts we interviewed recommend the following implementation parameters:

First and foremost, speed is a decisive parameter in implementation of a holistic

sustainability framework for LSPs. It may be possible for those forwarders who only comply with certain parameters to survive in the short term by addressing only one of the seven levers: “Transparent reporting”. However, our research insights clearly suggest that to succeed in the long run, all LSPs need to address all seven levers. Those who manage to quickly introduce a comprehensive sustainability agenda can become sustainability leaders and really stand out from their competitors. They will

pave the way for greener shipping practices and set the standard for the future of logistics as outlined in figure 2. The speed of adoption of these seven sustainability levers will be a key differentiator in the short term, but it will soon become the only way to survive.

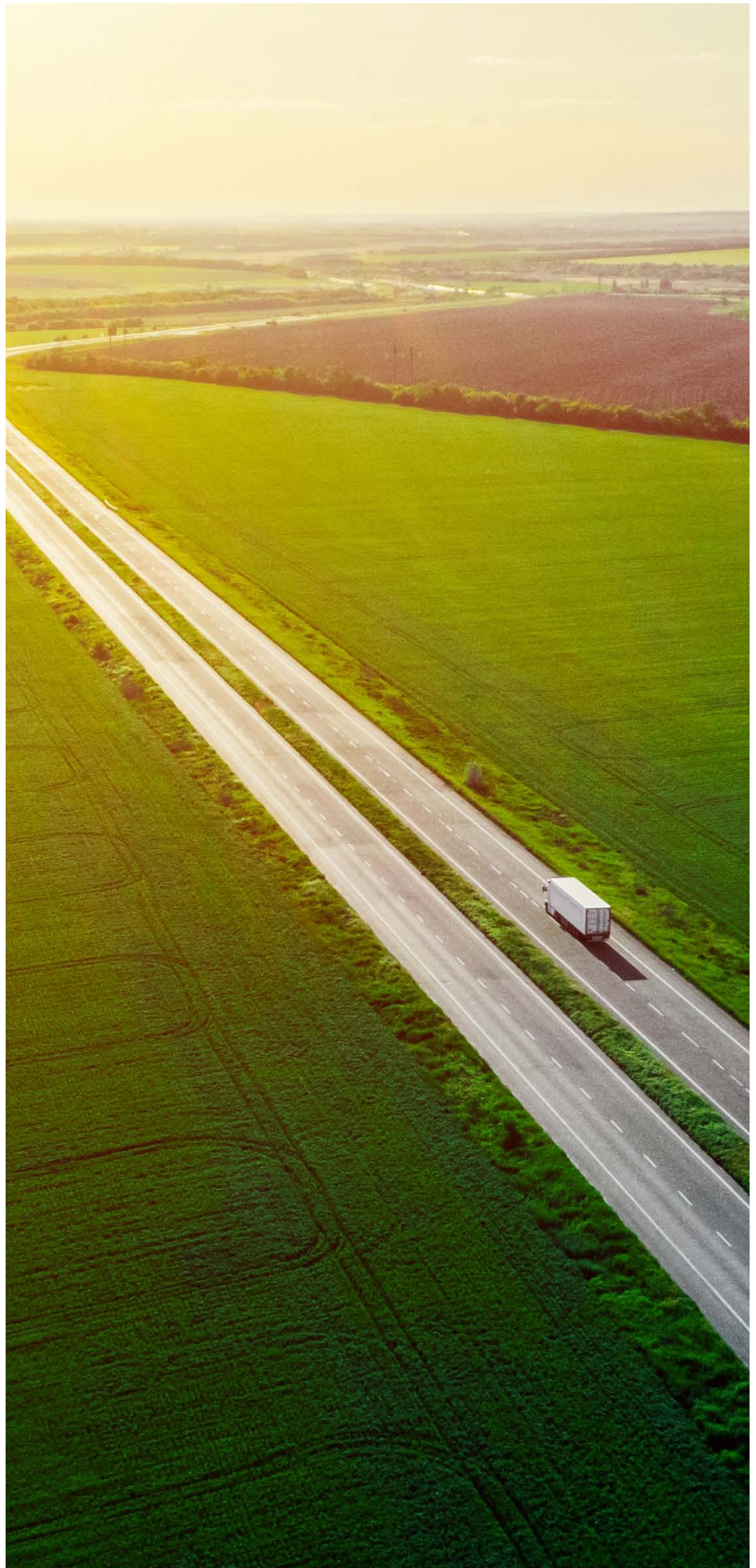
**Fig. 2 – Sustainability Strategy – Value Profile**





Cross-business alignment is another key factor: Sustainability is an issue that touches every part of an enterprise and requires a big picture view as well as strong alignment. Our study also showed that for many sustainability levers, the only way to accelerate the transition is to exchange knowledge across traditional barriers, partnering within the value chain, and establishing independent entities to research and innovate. However, price still rules, and legislators at all levels need to provide the relevant regulatory framework that incentivizes companies to invest in sustainable technology while also ensuring that higher costs are not just passed on to the consumer. The right balance of staff buy-in and technology solutions is also key: Change can only happen if it starts within the workforce before moving on to introduce hardware and software solutions.

The transition is here to stay, and it is imperative for traditional freight forwarders to understand the implications of sustainability as an all-encompassing issue that penetrates each and every aspect of their business. It is clear that such a cross-cutting organizational endeavor cannot be accomplished on the fly. It takes I) strategy, II) workforce, III) alliances, IV) operations, V) technology, VI) marketing, and VII) reporting to make it happen. While some companies are already excelling in these disciplines, others struggle to even recognize the need for sustainable change. For everyone on the industry-wide expert panel we interviewed, the conclusion is clear: **Finding ways to ship goods from A to B in a more sustainable way across all organizational silos is the only option we have.**



# Contacts



**Tillman Hentschel**

Partner

Tel: +49 151 58074737

thentschel@deloitte.de



**Tobias Koppe**

Director

Tel: +49 151 58071064

tkoppe@deloitte.de



**Dorothea Haas**

Manager

Tel: +49 151 58077234

dhaas@deloitte.de



**Björn Mais**

Senior Consultant

Tel: +49 151 1268 3732

bmais@deloitte.de

## References

**Piecyk, M. (2015).**

Carbon auditing of companies, supply chains and products. In: A. McKinnon, M. Browne, A. Whiteing, & M. Piecyk, Green Logistics: Improving the Environmental Sustainability of Logistics (pp. 55-71). Kogan Page.

**Eurostat (2021, September 23).**

Almost 29 transport workers per 1 000 people in the EU. Retrieved from Eurostat Produkte: <https://ec.europa.eu/eurostat/de/web/products-eurostat-news/-/ddn-20210923-2>

**US BTS (2018).**

TET 2018 – Chapter 4 – Transportation Employment. Bureau of Transportation Statistics.





Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited (“DTTL”), its global network of member firms, and their related entities (collectively, the “Deloitte organization”). DTTL (also referred to as “Deloitte Global”) and each of its member firms and related entities are legally separate and independent entities, which cannot obligate or bind each other in respect of third parties. DTTL and each DTTL member firm and related entity is liable only for its own acts and omissions, and not those of each other. DTTL does not provide services to clients. Please see [www.deloitte.com/de/UeberUns](http://www.deloitte.com/de/UeberUns) to learn more.

Deloitte provides industry-leading audit and assurance, tax and legal, consulting, financial advisory, and risk advisory services to nearly 90% of the Fortune Global 500® and thousands of private companies. Legal advisory services in Germany are provided by Deloitte Legal. Our professionals deliver measurable and lasting results that help reinforce public trust in capital markets, enable clients to transform and thrive, and lead the way toward a stronger economy, a more equitable society and a sustainable world. Building on its 175-plus year history, Deloitte spans more than 150 countries and territories. Learn how Deloitte's more than 345,000 people worldwide make an impact that matters at [www.deloitte.com/de](http://www.deloitte.com/de).

This communication contains general information only, and none of Deloitte Consulting GmbH or Deloitte Touche Tohmatsu Limited (“DTTL”), its global network of member firms or their related entities (collectively, the “Deloitte organization”) is, by means of this communication, rendering professional advice or services. Before making any decision or taking any action that may affect your finances or your business, you should consult a qualified professional adviser.

No representations, warranties or undertakings (express or implied) are given as to the accuracy or completeness of the information in this communication, and none of DTTL, its member firms, related entities, employees or agents shall be liable or responsible for any loss or damage whatsoever arising directly or indirectly in connection with any person relying on this communication. DTTL and each of its member firms, and their related entities, are legally separate and independent entities.