Sustainable Logistics Procurement Playbook

Facilitating the transition to logistics decarbonisation by integrating sustainability in logistics procurement
Facilitating the transition to net-zero logistics by introducing the Procurement Playbook

**Ambition and purpose of the playbook**

In the playbook, we provide tangible recommendations to empower logistics procurement professionals to advance freight decarbonisation in their companies.

We wish to speed up the transition to low-GHG emission logistics services by offering hands-on guidance based on recognised sustainability standards and practical experiences.

We aim to harmonise and overhaul the current logistics procurement process.
Introduction

Structure of the playbook

The playbook follows an intuitive structure, from pain points to recommendations

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<td>▪ Climate action is already being taken – however, the level of commitment, ambition and speed varies greatly.</td>
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<td>▪ The world needs us to change. Fundamentally. And now!</td>
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<td>▪ Logistics procurement professionals face a range of dilemmas – and most of them are not trivial.</td>
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<td>2 Necessary changes in the procurement process</td>
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<td>▪ When interviewing the companies involved in the playbook, the following common challenges occur frequently.</td>
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<td>▪ A transformational approach to low-GHG emission logistics will force both buyers and sellers to rethink their existing logistics operating models.</td>
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<td>▪ In a low market maturity, a collaborative approach could be more successful than a traditional procurement process.</td>
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<td>5 Updating the traditional procurement process</td>
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<td>▪ A traditional procurement process can deliver the desired impact if implemented properly.</td>
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<td>▪ Six interventions have been identified: sourcing strategy, specification, RFI/RFQ, evaluation, contracting, performance management.</td>
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<td>▪ Why is this intervention important?</td>
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<td>▪ Examples of best practice</td>
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The playbook has been developed in collaboration with SFBA, its members and Implement Consulting Group.
We have applied seven design principles to develop the playbook

1. **Respecting buyers and sellers**
   A successful procurement process requires a successful sales process. We want to identify the key touchpoints where conversations need an upgrade to deliver quantifiable emissions reductions.

2. **Designed for and by procurement professionals**
   The playbook has been designed for procurement professionals who wish to shift to low GHG emission logistics solutions in their organisations or strive to gain a deeper understanding of sustainable procurement processes and concepts.

3. **Respecting differences**
   Designing a global playbook for large multinationals across industries is a daunting task. We aim to respect the great regional, industrial, operational and technological differences and have designed the playbook to cut across these differences.

4. **Widely applicable**
   The playbook has been designed to be able to cater for logistics across modalities such as road, sea and air. We recognise that there are important nuances that are crucial to each modality in the procurement process. These are not described in this playbook.

5. **Focus on strategy more than tactical operations**
   We have consciously decided to stay at a strategic level rather than a tactical or operational level. This means that we have not focused on day-to-day ordering of logistics but merely focused on strategic sourcing and category management of logistics services.

6. **Building basics first**
   We have seen a wide range of maturity in decarbonisation—from both buyers and sellers. We have decided to focus this playbook on building the basics rather than sophisticated decarbonisation solutions that would be difficult for many companies to realise without having the basics in place.

7. **Focus on impact and practical application**
   We want to make a difference and address the climate crisis NOW. We have designed the playbook to inspire action and impact rather than striving for perfection and causing us to wait with the launch or delay climate impact.

Introduction
1. Importance of sustainable logistics
A scientific reality impacting everyone

Global warming is happening.

A political commitment to making the change happen

Governments are making regulatory commitments and requirements.

A deep economic transformation

Businesses must rethink how they create and deliver value.

… with logistics at the core

The logistics sector needs to transform – now!

1. The importance of sustainable logistics

The world needs us to change. Fundamentally. Now!

- Global CO₂ emissions can be broken down into the responsible sectors.
- The transport sector is responsible for around a quarter of global emissions.
- Road and ocean freight alone account for almost half of these emissions with a combined weight of 8 billion tonnes.
The importance of sustainable logistics

Many companies have started to decarbonise their logistics. The reason why varies greatly

A. Serving the world’s need for a green transition

B. Adapting to increasing regulatory requirements

C. Removing inefficiencies and waste from fossil operations

D. Demands from customers and investors

E. Improving the employer value proposition

F. Identifying new revenue pools and business models

There is no better time than now!

Climate change is happening at an unprecedented pace, and many companies have seen the impact on their own operations.

National and international regulatory bodies are increasing requirements to accelerate the green transition, such as the EU’s Green Deal as well as other national regulations being introduced.

Companies are identifying inefficiencies in their current operations that can be removed while transitioning to low-GHG operations.

Many industries are moving towards a green transition, creating further expectations from customers and investors for companies to engage in decarbonisation across the value chain.

Public awareness – particularly driven by the climate crisis – is resulting in current as well as potential employees demanding their employers to act.

A green transition creates new opportunities at the product/service level but potentially even in entire business models.
Climate action is already being taken – however, the level of commitment, ambition and speed varies greatly.

Most common climate actions based on interviews with SFBA members participating in the development of the playbook.

- **Establishing GHG emission baseline**
  - Understanding the complexity of the supply chain to measure climate footprint, identify hotspots and map GHG emission scope 1, 2 and 3 emissions.

- **Formulating climate ambitions**
  - Creating a common view on the GHG emissions reduction ambitions across the organisation.
  - Setting fact-based short-, mid- and long-term targets for the supply chain based on the level of ambition.

- **Pulling reduction levers**
  - Optimising own and supply chain footprint.
  - Redesigning for low climate footprint.
  - Changing the procurement processes to favour low-GHG emission products and suppliers.

- **Engaging value chain partners**
  - Developing and implementing robust supplier decarbonisation engagement strategies.
  - Ensuring internal capabilities to support, track and strengthen supplier efforts.
Balancing the financial investment required for decarbonisation efforts with the long-term environmental benefits can be a significant dilemma. Implementing sustainable practices often involves higher upfront costs, which may conflict with budget constraints. Securing logistics suppliers with decarbonisation solutions aligned with our goals may require a stronger value proposition.

Choosing the right technology to decarbonise logistics operations can be challenging. Evaluating different options such as electric vehicles, alternative fuels or renewable energy sources requires careful consideration of factors such as cost, infrastructure requirements and compatibility with existing systems.

Logistics operations often involve complex supply chains with multiple partners and stakeholders. Decarbonising these operations may require collaboration and alignment with suppliers, customers and other logistics providers, which can be challenging due to different interests and priorities.

Keeping up with evolving regulations and policies related to GHG emissions can be a dilemma. Logistics professionals need to ensure local compliance with existing and upcoming regulations while navigating potential conflicts with operational efficiency and cost effectiveness, which may require scale.

The transition from conventional logistics operations to decarbonised practices may involve a period of adjustment and uncertainty. Managing this transitional phase while maintaining service levels, minimising disruptions and optimising costs can be a dilemma.

Collecting accurate data on GHG emissions and energy consumption across logistics operations is crucial for effective decarbonisation planning and monitoring. However, data availability, reliability and standardisation can be a dilemma that logistics professionals need to address.

Decarbonisation initiatives can provide a competitive advantage by enhancing brand reputation and attracting environmentally conscious customers. The question is whether we can decarbonise faster on our own and make it a competitive advantage – or whether we need to collaborate to create the necessary scale and business case.

Decarbonisation efforts may impact certain performance metrics such as delivery speed, payload capacity or range. Logistics professionals must carefully assess and balance these trade-offs to ensure that decarbonisation initiatives do not compromise the overall efficiency and effectiveness of operations.
2. Necessary changes in the procurement process
These were the most frequently mentioned challenges in the interviews with the participating companies

- **Lack of logistics GHG emissions data**
  Poor logistics GHG emissions data for both buyers and sellers.

- **Limited influence on logistics emissions**
  Buyers find limited success in leveraging their influence to reduce supply chain emissions.

- **Differing decarbonisation ambitions**
  Buyers' and sellers' ambitions often differ in terms of speed and scope.

- **Lack of recognised KPIs**
  There are no commonly agreed standards for measuring and monitoring GHG emissions performance between buyers and sellers.

- **Lack of resources for delivering on sustainable targets**
  The current budget and resources dedicated to delivering logistics' decarbonisation targets are lacking in the face of the necessary ambition.

- **Fragmented logistics supplier base**
  Buyers face difficulties in scaling their decarbonisation plans due to a large and fragmented logistics service provider base.

- **Different regulations and policies**
  Buyers face difficulties in staying informed of the differences in regulations and policies as they vary across modality and geography.

- **Investing without guaranteed demand**
  Sellers face difficulties in investing and planning for low-GHG operations due to fluctuating demand patterns.

- **Setting GHG emission value**
  Buyers struggle to define the internal value of emission: How much is GHG emissions valued compared to cost, reliability, availability etc.?

- **Sellers' maturity and decarbonisation solution vary**
  Sustainability maturity varies significantly, and the availability of low-GHG emission solutions varies accordingly.

- **Difficult to communicate decarbonisation requirements**
  Buyers experience difficulties in specifying and contracting low-GHG logistics solutions due to lack of experience.

- **Allocating ownership of new risks**
  The lack of technological maturity makes it difficult for buyers and sellers to contractually allocate risks.

The playbook is intended to help solve most of the challenges.
The issues identified are experienced at different stages of the procurement process

**Key observations**

- The issues identified are universal and applicable across industries, modalities and geographies. We have not prioritised these issues, as we have not seen any pattern in our interviews.
- The issues are largely identified at the early stages of the procurement process but continue and are then experienced at the later stages of the process.
- Addressing just a few of the issues is a considerable effort for buyers, which requires a significant commitment of time and money. Most of the member companies have started to address these issues, but we have not seen anyone who has resolved all of the issues below.
- The issues which may arise from either the buyer or seller perspective manifest themselves either directly or indirectly at different points of interaction between the procurement and sales processes.

**Analysis**

- The traditional procurement process:
  - Strategic direction
  - Supply analysis
  - Sourcing strategy
  - Tendering
  - Supplier selection
  - Framework agreement
  - Call offs and monitor KPIs

- The traditional sales process:
  - Demand analysis
  - Solution design
  - Marketing
  - Tendering
  - Negotiation
  - Framework agreement
  - Execute

### Table

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<td>Lack of logistic emission data</td>
<td>Limited influence on logistics emissions</td>
<td>Difference in decarbonisation ambitions</td>
<td>Lack of recognised KPIs</td>
<td>Lack of resources</td>
<td>Fragmented logistics supplier base</td>
<td>Different regulations &amp; policies</td>
<td>Investing without guaranteed demand</td>
<td>Setting a GHG emission value</td>
<td>Sellers' maturity and decarbonisation solution vary</td>
<td>Difficult to communicate decarbonisation requirements</td>
<td>New risk allocation</td>
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Necessary changes
To understand where and how procurement can impact decarbonisation, let us look at the traditional processes.

### Example of a traditional procurement process

<table>
<thead>
<tr>
<th>Strategic direction</th>
<th>Supply analysis</th>
<th>Sourcing strategy</th>
<th>Tendering</th>
<th>Supplier selection</th>
<th>Framework agreement</th>
<th>Call-offs and monitor KPIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify strategic objectives and risks</td>
<td>Establish baseline and define scope (e.g. cost and GHG emissions)</td>
<td>Develop RFI content and requirements</td>
<td>Consolidate submissions for comparability</td>
<td>Establish service specifications (KPI and reporting)</td>
<td>Joint implementation planning process</td>
<td></td>
</tr>
<tr>
<td>Design structure and project plan</td>
<td>Identify optimisation potential</td>
<td>Develop RFQ (incl. low-GHG options)</td>
<td>Several rounds of RFQ negotiation</td>
<td>Negotiations</td>
<td>Internal handover</td>
<td></td>
</tr>
<tr>
<td>Mobilise project team</td>
<td>“Supplier survey” conversations</td>
<td>Execute tendering process</td>
<td>Supplier engagement on e.g. low-GHG emissions offering</td>
<td>Sign framework agreement</td>
<td>Follow-up with suppliers on performance/KPIs</td>
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</table>

### Example of a traditional sales process

<table>
<thead>
<tr>
<th>Demand analysis</th>
<th>Solution design</th>
<th>Marketing</th>
<th>Tendering</th>
<th>Negotiation</th>
<th>Framework agreement</th>
<th>Execute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify customer and customer needs</td>
<td>Design new or tweak existing logistics, solutions, services</td>
<td>Describe unique selling points (USP)</td>
<td>RFI stage, incl. questionnaire</td>
<td>Several rounds of RFO submissions based on price</td>
<td>Prepare agreement</td>
<td>Joint implementation planning process</td>
</tr>
<tr>
<td>Mobilise project team</td>
<td>Establish technical specifications, process and pricing</td>
<td>Broadcast USPs in relevant markets</td>
<td>Receive RFQ and understand evaluation criteria</td>
<td>Engage wth customer to address concerns and tweak approach if needed</td>
<td>Negotiate final terms and conditions, incl. those for low-GHG emission options</td>
<td>Establish contingency plans</td>
</tr>
<tr>
<td></td>
<td>Engage in early-stage conversations wth customers</td>
<td>Activate sales channels and other relevant commercial activities</td>
<td>Decide approach and proposal</td>
<td>Discuss low-GHG emission options</td>
<td>Sign framework agreement</td>
<td>Execution of services</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Respond to RFQ</td>
<td></td>
<td></td>
<td>Follow-up on performance/KPIs wth customer</td>
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### Key conclusions

- A traditional procurement process is mirrored by a sales process from a logistics service company.
- It is critical for buyers and sellers to ensure alignment between the buying process and the sales process and ensure that there is a common understanding of the buyer’s desired needs and the seller’s available services.
- Speaking the same language and understanding where both parties are in the process is critical to success.
- We believe that we can make significant GHG emission impact with very few interventions in the traditional procurement process.
- During the process, we have learnt that the traditional procurement process has its limitations. The market for low-GHG emissions logistics is not yet mature in all geographical areas, and the availability of “standard” low-GHG emission solutions varies greatly – and so do the associated cost levels. This will be addressed later in the playbook.
The SFBA members identified six interventions where procurement could impact the decarbonisation of logistics:

1. **Sourcing strategy**
   - Translation of the corporate target into a sustainable logistics procurement roadmap.

2. **Specification**
   - Clear specification of the requirements for low-GHG emission logistics services.

3. **RFI/RFP**
   - Inclusion of low-GHG emission logistics information in the RFI and RFP process.

4. **Evaluation**
   - Low-GHG emission criteria added to the evaluation of different logistics suppliers and their services.

5. **Contract**
   - Introduction of new contract language about low-GHG requirements in the contract agreement.

6. **Performance mgt**
   - Measuring and monitoring of low-GHG emission performance with appropriate KPIs.

In the very first stage of the process, a procurement professional needs to determine whether the traditional procurement process can be used or whether a more transformative and partnership-based approach should be applied instead.
3. Types of collaboration between shippers and LSPs
Sourcing logistics; the right mix depends on strategic importance and market opportunities

Strategic importance
Assessing which sourcing approach to take requires a detailed understanding of the strategic importance of the logistics solutions to your core business. This is sometimes difficult to assess in a rapidly evolving market.

Examples of strategic importance:
- The reasons for changing to low-GHG emission logistics.
- The consequences of not changing.
- The business implication of the change on the companies.

Market opportunities
In addition, the company also needs to understand the market opportunities or, more specifically, the availability of reliable GHG emissions reduction solutions in each market.

The market opportunities reflect the ability of the market to provide low-GHG emission logistics.

There are three key themes to evaluate when assessing the market opportunities:
- Potential capabilities of suppliers and scalability of the available solutions.
- Financial and GHG emission impact of the available solutions.
- Business risks and operational impact of the available solutions.

Strategic importance
The extent to which the service or process is strategically important to our company.

Capability and scalability
The ability of the market to provide high GHG emission reductions and scalability.

Financials and GHG impact
The financial and GHG emission implications of the alternatives offered by the market.

Risks
The business risks of the alternative offered by the market.
The characteristics of a transactional or a transformational approach can be summarised as follows

<table>
<thead>
<tr>
<th>Types of collaboration</th>
<th>Transactional</th>
<th>Transformational</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective</strong></td>
<td>Specific KPI improvements</td>
<td>Business model innovation</td>
</tr>
<tr>
<td><strong>Impact</strong></td>
<td>Incremental improvements</td>
<td>Potential for significant improvements</td>
</tr>
<tr>
<td><strong>Risk appetite</strong></td>
<td>Risks are known – clear who carries the risk</td>
<td>Risks unknown and to be shared</td>
</tr>
<tr>
<td><strong>Time horizon</strong></td>
<td>Short/medium</td>
<td>Long</td>
</tr>
<tr>
<td><strong>Cost</strong></td>
<td>Focus on unit cost improvements</td>
<td>Focus on end-to-end cost efficiency</td>
</tr>
<tr>
<td><strong># of partners</strong></td>
<td>Several suppliers</td>
<td>Fewer partners</td>
</tr>
<tr>
<td><strong>Investments</strong></td>
<td>Usually left with logistics provider</td>
<td>Potential for joint investments in low-GHG emission assets</td>
</tr>
</tbody>
</table>

**Focus on incremental improvements**

**Focus on innovation and business model innovation**
To assess the market maturity, we have developed a maturity assessment that buyers can use.

Deciding which approach to take …

There may be several reasons why a company chooses to apply a conventional procurement process instead of an innovative and collaborative process to select its suppliers of low-GHG emission logistics services.

- **Familiarity and risk mitigation**: Conventional procurement processes are often well established and familiar to companies. They follow a structured and predictable approach, which can help mitigate risks associated with supplier selection. Companies may prefer to stick to what they know rather than experiment with new and untested methods.

- **Time and resource constraints**: Implementing an innovative and collaborative procurement process takes time, effort and resources. This may involve conducting extensive market research, engaging in collaborative discussions with potential suppliers and evaluating unconventional criteria. In some cases, companies may not have the bandwidth or resources to invest in such an elaborate process.

- **Supplier stability and reliability**: Conventional procurement processes often prioritise stability and reliability in supplier selection. By following the established guidelines and standards, companies can select suppliers with a proven track record and an established reputation. This is particularly important in industries where logistics services are critical to the company’s operations.

- **Cost considerations**: Conventional procurement processes are designed to focus on cost optimisation. By using standardised evaluation criteria and competitive bidding, companies can more easily compare suppliers based on price. This approach may be appropriate when cost efficiency is the primary concern.

And of course: the **existence of a market that can deliver low-GHG emission services needs to be in place.**

… and understanding what the market can offer

*Refer to appendix 1*
4. Transformational process
Taking a transformational procurement approach

- **High Strategic Importance**
  - Transform own operations (not in scope of the playbook)
  - Transformational approach with service providers
- **Low Strategic Importance**
  - Transactional relationship with service providers

- **Low Market Opportunities**
- **High Market Opportunities**
A transformational approach to low-GHG emission logistics

In a low market maturity, a collaborative approach could be more successful than a traditional procurement process

The benefits of a collaborative vs a conventional procurement approach

There are several reasons why a company might choose to apply an innovative and collaborative process instead of a conventional procurement approach when selecting logistics service suppliers. Here are some of the potential benefits:

- **Customised solutions**: Conventional procurement processes often focus on standardised requirements and specifications. In contrast, an innovative and collaborative approach enables companies to work closely with suppliers to develop customised logistics solutions that meet their specific needs. This can result in more efficient and tailored supply chain processes, leading to cost savings and improved operational performance.

- **Improved supplier relationships**: An innovative and collaborative process allows for closer collaboration and engagement with potential suppliers. This can lead to stronger relationships built on trust, transparency and shared goals. By involving suppliers early in the process, companies can tap into their expertise and insights to develop more effective logistics solutions.

- **Continuous improvement**: Engaging suppliers in an ongoing collaboration fosters an environment of continuous improvement. By encouraging suppliers to propose innovative ideas and solutions, companies can tap into their knowledge and expertise to drive efficiency gains and process improvements. This collaborative approach can lead to a more agile and responsive supply chain that adapts to changing market conditions.

- **Risk mitigation**: Collaborative processes allow for a deeper understanding of potential risks and vulnerabilities throughout the supply chain. By involving suppliers in risk assessments and mitigation strategies, companies can proactively address potential disruptions and develop contingency plans. This can help minimise the impact of unforeseen events and enhance overall supply chain resilience.

- **Competitive advantage**: Embracing innovation and collaboration in supplier selection can provide a competitive advantage in the marketplace. By working closely with suppliers to develop cutting-edge logistics solutions, companies can differentiate themselves from competitors and offer unique value propositions to customers. This can lead to increased customer satisfaction, market shares and long-term business success.

*See also appendix 2*
A transformational approach to low-GHG emission logistics

However, this will force both buyers and sellers to rethink their current logistics operating models.
A transformational approach to low-GHG emission logistics

Eight best practices have been identified if a buyer and a seller wish to pursue a more transformative process

<table>
<thead>
<tr>
<th>Clearly identify impact requirements</th>
<th>Let strategy and market guide</th>
<th>Settle on preferred partnership model</th>
<th>Ensure clear partner selection criteria</th>
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</thead>
</table>
| ▪ Identify desired GHG emissions reductions, cost and performance impact measures early.  
▪ Define the target state and desired impact of the transformation. How quickly to decarbonise and to what level of ambition?  
▪ Break down the target state solution to understand the GHG emission reduction requirements in logistics operations. | ▪ Establish a clear decarbonisation strategy with clear ambitions and priorities for the company.  
▪ Assess market opportunities and capabilities based on the most relevant evaluation criteria that support the strategy.  
▪ Adjust the logistics procurement strategy to match these decisions. | ▪ Explore different partnership models to understand different ways to decarbonise your logistics.  
▪ Identify the most relevant models based on our specific requirements. | ▪ Firmly design and anchor the partner selection criteria that meet the target state, including the ability to meet business and decarbonisation requirements. |

<table>
<thead>
<tr>
<th>Create attractive partner value propositions</th>
<th>Integrate elements in partner operating model</th>
<th>Take a holistic approach to the business case</th>
<th>Design governance suited for collaboration</th>
</tr>
</thead>
</table>
| ▪ Acknowledge that partnerships are a two-way street and need to have highly attractive value propositions for partners. | ▪ Link the overall target state in an operating model to the detailed design of the partner operating model – together with the possible partners.  
▪ Include all relevant operating model dimensions to be as specific as possible. | ▪ Include end-to-end cost, GHG emission and value elements.  
▪ Make sure to incorporate scaling/ramping up of differences when assessing the impact. | ▪ Ensure that the collaboration and operations are governed by solid mechanisms/agreements.  
▪ Rigorously outline the organisational and governance structure, including centralised and decentralised mandates. |
5. Updating the traditional procurement process
Taking a transactional procurement approach

<table>
<thead>
<tr>
<th>Strategic Importance</th>
<th>Market opportunities</th>
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<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>High</td>
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- **Transform own operations (not in the scope of the playbook)**
- **Transformational approach to service providers**
- **Transactional relationship with service providers**
A transactional procurement process can deliver the desired impact, but several process updates are required.

In the following chapters, we will go through each of the six interventions from page 13.

1. Why is the intervention needed?

2. What needs to change?

3. How to change?

4. Examples of best practice
A sourcing strategy translates corporate targets into a sustainable logistics procurement roadmap

**What do we want to achieve?**

A clear sourcing strategy enables logistics professionals to optimise costs, improve service levels, mitigate risks, enhance visibility and control and foster collaboration and innovation with logistics service providers.

**Why do we need a sourcing strategy?**

A sourcing strategy is essential for a number of reasons when buying logistics services:

- **Optimisation:** A sourcing strategy enables businesses to identify cost-effective logistics service providers.
- **Risk mitigation:** Logistics services play a critical role in the supply chain, and disruptions or failures can have a significant impact on a company’s operations. A sourcing strategy helps diversify the provider base, establish backup options and implement risk management measures to mitigate potential risks and ensure business continuity.
- **Scalability and flexibility:** As businesses change and their logistics requirements evolve, a sourcing strategy enables scalability and flexibility. This is key to understanding the market landscape and engaging with a network of logistics providers.
- **Innovation and continuous improvement:** A sourcing strategy encourages businesses to actively engage with logistics service providers, fostering collaboration and innovation. By seeking out new technologies, processes and best practices, companies can enhance their supply chain efficiency, reduce lead times and stay competitive in a dynamic market.

**What needs to change?**

If you wish to include decarbonisation in your sourcing strategy and have not done this before, there are several changes to consider:

- **Assess your GHG emission footprint:** Assess your current GHG emission footprint and identify the major sources of emissions within your logistics operations.
- **Set clear goals and targets:** Set specific goals and targets for reducing GHG emissions in your sourcing strategy.
- **Identify low-GHG emission alternatives:** Evaluate and identify low-GHG emission alternatives for different aspects of your logistics operations. This could involve exploring options such as electric vehicles, hybrid vehicles, biofuels, rail transport or other sustainable modes of transport. Consider the availability, feasibility and cost effectiveness of these alternatives.
- **Engage with your suppliers** and encourage them to adopt sustainable practices. Work together to identify ways to reduce emissions throughout the supply chain.
- **Invest in infrastructure and technology:** Depending on your specific logistics requirements, you may need to invest in new infrastructure and technology to support decarbonisation efforts.
- **Monitoring and reporting:** Implement robust monitoring and reporting mechanisms to track progress towards your decarbonisation goals.
- **Training and awareness:** Provide training and awareness programmes for your employees and suppliers to educate them on the importance of decarbonisation and the changes being implemented in the sourcing strategy.
To deliver a strong decarbonisation sourcing strategy, we recommend working with the Playing to Win framework.

A strategy process following a logical thought process:

1. Outline current strategy
   - Winning aspiration
   - Where to play
   - How to win
   - Mgmt. systems
   - Capabilities

2. Frame key strategic issues
   - Example:
     Our decarbonisation ambition is difficult to realise, as the supply chain has not followed our growth pace.
   - Issue:
     How might we radically increase the capacity and capability in new markets to help us grow and decarbonise at the same time?

3. Generate options (per issue)
   - Option A
     - Change supplier.
   - Option B
     - Stay with current supplier but commit long term to incentivise investments.

4. Identify barriers to choices
   - Technology is not yet mature in our core markets.
   - Suppliers do not yet share our ambitions.
   - Are there willing and able partners with whom we can grow?

5. Test and choose
   - Test: We have identified three new partners who want to grow with us.
   - Test: Do we want to commit to longer contracts?
   - Test: Bottom-up business case assessing the cost of decarbonisation.

6. Adjust to new strategy
   - Winning aspiration
   - Where to play
   - How to win
   - Mgmt. systems
   - Capabilities
To exemplify how to generate a clear sourcing strategy, we have listed some of the strategic issues:

A strategy process following a logical thought process:

1. Outline current strategy
2. Frame strategic issues
3. Generate options
4. Identify barriers to choices
5. Test and choose
6. Adjust to new strategy

### Issues of delivering today

<table>
<thead>
<tr>
<th>Theme</th>
<th>Issue</th>
<th>Description</th>
</tr>
</thead>
</table>
| A     | Deliver on current projects (short term) | How might we deliver on our current low-GHG emission targets?  
- We see capacity and capability issues with the current LSPs within the current timeframe.  
- How might we attract a higher share of the low-GHG emission offers currently available? |
| B     | Track the agreed emissions reduction | How might we monitor that the agreed emissions reduction is taking place?  
- How do we confirm that our suppliers are delivering the agreed emissions reductions?  
- Is our current emissions performance aligned with our interim goals? |

### Issues related to long-term strategy

<table>
<thead>
<tr>
<th>Theme</th>
<th>Issue</th>
<th>Description</th>
</tr>
</thead>
</table>
| 1     | Ensure long-term capacity | How might we ensure long-term supplier capacity?  
- From a buyer's market to more of a supplier's market. How do we create value for our suppliers?  
- Are we satisfied with the main suppliers that currently service our business? |
| 2     | Ensure supplier capabilities | How might we align supplier capabilities with the current and future requirements?  
- Suppliers need our support to upgrade their processes or temporarily adjusted requirements.  
- New suppliers with the required capabilities may need to be included in our pool of carriers. |
| 3     | Support sustainable investment | How might we reduce the cost of current and future operations?  
- Have we identified candidates for a long-term partnership to support low-carbon solution development?  
- What cost levers are relevant? How can we leverage our scale? How do LSPs define value? |
| 4     | Develop learnings | How might we improve our knowledge of low-GHG emission solutions?  
- Develop knowledge and maturity of new low-GHG emission solutions.  
- Ensure that new knowledge is leveraged in future procurement activities. |
| 5     | Early tech adoption rendered obsolete | How might we mitigate the suppliers' risk of being technologically stranded?  
- With the strong development of sustainable transport solutions, there is a risk of stranded assets.  
- How can we foster carrier confidence in investing in low-GHG emission solutions? |
| 6     | Reach end goal | How might we ensure a smooth path towards our 2050 target?  
- There is a strong difference in terms of decarbonising ambitions and sustainable roadmaps between our suppliers. |
Sourcing strategy

... and how can we work with different strategic “options” to resolve the issues we have identified.

A strategy process following a logical thought process:

1. Outline current strategy
2. Frame strategic issues
3. Generate options
4. Identify barriers to choices
5. Test and choose
6. Adjust to new strategy

**Gross list of possible “where to play” options**

Possible strategic options ...

- Support the entry of a new supplier
- Change the value of GHG emission in our evaluation
- Reduce operational requirements to lower barriers to decarbonisation
- Support existing supplier upgrade
- Long-term tie-ins with existing players to secure capacity
- Change modality to lower GHG emission footprint
- Do nothing

**Considered choices**

... Which we evaluate against how well they address the strategic issues ...

- Option A
- Option C
- Option D
- Option E

**Attractive choices**

... Resulting in two attractive options where we can focus and evaluate further

- Option B
- Option D

Continue to refine and detail
Ultimately, we will end up with a sourcing strategy suitable for decarbonising logistics in our company.

A strategy process following a logical thought process:

1. Outline current strategy
2. Frame strategic issues
3. Generate options
4. Identify barriers to choices
5. Test and choose
6. Adjust to new strategy

- **What is our winning aspiration?**
  - What is the winning aspiration of the logistics sourcing?
  - What major issues do we need to resolve to deliver on the ambition?

- **Where will we play?**
  - What decisions have we made about “where to play”?
  - Which suppliers, geographies, technologies and modalities?
  - What decisions have we made about “where NOT to play”? 

- **How will we win?**
  - What GHG emission reporting standards will we enforce?
  - What low-GHG emission solution will we support?
  - What investments will we make?
  - What approach will we take with our logistics service providers?

- **What capabilities must be in place?**
  - What capabilities do we need in the team – and what capabilities do we have?
  - Who do we partner with?
  - What do we need to train and teach?

- **What management systems are required?**
  - How do we measure and monitor GHG emissions reduction gains?
  - How do we govern the collaboration with our service providers?
You need to clearly specify your decarbonisation requirements to inform your logistics service providers

**What do we want to achieve?**

An accurate, cost efficient, quality assured, standardised specification to help ensure that suppliers understand the exact requirements of the logistics procurement process. The specification will provide a basis for evaluating suppliers and mitigating risks, enabling quality and clarity for procurement professionals.

**Why do we need a clear specification?**

A logistics service provider needs a clear specification from the buyer to understand the requirements and expectations for the services they are contracted to provide. Clear specifications help ensure that the service provider understands the scope of the project, the desired outcome and the performance metrics that will be used to measure success. This can help avoid misunderstandings or miscommunication that could lead to delays, increased costs or other issues.

In addition, clear specifications can help ensure that the service provider is able to deliver solutions that meet the specific needs of the buyer, which can help improve customer satisfaction and build long-term relationships.

**What needs to change?**

- **Identify key areas for decarbonisation:** Assess the logistics operations and identify areas where decarbonisation measures can be implemented. This may include transport modes, packaging materials, energy usage, waste management and supplier selection.
- **Set decarbonisation targets:** Set clear objectives and targets for decarbonisation in the logistics procurement process. These targets should be aligned with the organisation's decarbonisation goals.
- **Develop decarbonisation guidelines:** Create guidelines that outline the specific decarbonisation measures required from suppliers. These guidelines should cover key areas such as emissions reduction, sustainable packaging, transport efficiency and waste management practices.
- **Include decarbonisation requirements in RFQs and RFPs:** Modify the request for quotation (RFQ) and request for proposal (RFP) templates used in the procurement process to include specific decarbonisation requirements. This may include adding sections or questions related to decarbonisation practices, emissions reduction plans or environmental certifications.
The introduction of GHG emission-related requirements in tenders calls for both data- and performance-related requirements.

Interviews conducted show a number of approaches to how buyers specify low-GHG emission requirements. Some are more complex than others.

<table>
<thead>
<tr>
<th></th>
<th>Requirement</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Require that suppliers have dedicated human resources for decarbonisation.</td>
</tr>
<tr>
<td>2</td>
<td>Require that suppliers measure CO₂ emissions.</td>
</tr>
<tr>
<td>3</td>
<td>Require that suppliers disclose CO₂ emissions.</td>
</tr>
<tr>
<td>4</td>
<td>Require that suppliers disclose CO₂ emissions according to a standard.</td>
</tr>
<tr>
<td>5</td>
<td>Require that suppliers have a decarbonisation roadmap in place.</td>
</tr>
<tr>
<td>6</td>
<td>Require that suppliers use alternative fuels or specific equipment.</td>
</tr>
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<td>7</td>
<td>Require that suppliers work on emissions reduction initiatives.</td>
</tr>
<tr>
<td>8</td>
<td>Require that suppliers suggest low-GHG emission options in addition to the “basic options” in tenders.</td>
</tr>
<tr>
<td>9</td>
<td>Require that suppliers comply with low-GHG emission specifications.</td>
</tr>
<tr>
<td>10</td>
<td>Require that suppliers participate in joint innovation projects (most transformative).</td>
</tr>
</tbody>
</table>

Data-related requirements

Performance-related requirements
Absence of established sustainable reporting standards: Emerging momentum with GLEC and ISO 14083 combination.

1. Define the standards you wish to rely upon

   E.g. I need my supplier to calculate and report GHG emissions according to the selected methodology.

   ISO – widely acknowledged standards for GHG emissions calculation and reporting – 14083:2023
   Smart freight centre – practical guidance on how to implement ISO 14083 – GLEC framework V3.0

2. Define how you want to measure it

   E.g. I need to be sure of the accuracy of the data. I want to rank my suppliers. I want to audit my suppliers.

   EPA – widely acknowledged ranking of LPS in the USA based on their sustainable performance – Smartway carrier performance ranking
   Smart freight centre – list of SFC accredited verification body. 3rd party assurance accredited by smart freight centre

3. Define the level of “actuality” in the data

   E.g. I want to automate emissions data access.

   Smart freight centre – list of reporting platform and calculation tools compliant with the GLEC framework.
   Smart freight centre’s accredited partner

4. Define ambition level

   E.g. I need my supplier’s targets and decarbonisation roadmap to be aligned with my objectives.

   Science-based targets – widely acknowledged approaches for establishing sustainable targets and methodologies. SBTi target setting manual
Outcome-based contracting – what is it:

Outcome-based contracting is a type of contractual arrangement where the potential incentives and penalties are based on the successful completion of the delivery of the operational requirements and meeting certain performance metrics rather than on the inputs or resources used to complete the project.

Under this type of contract, the contractor is rewarded based on the achievement of specific outcomes, such as meeting decarbonisation targets.

Performance-based solutions are relevant where you need:

- Constantly high performance
- High level of supplier knowhow
- Long-term relationships
- Simplicity and transparency

Examples of outcome-based contracting could be:

Performance requirements for a logistics service company delivering low-GHG emission services include metrics related to reducing GHG emissions and baseline performance. LSPs could either use low-emission vehicles, optimise delivery routes to minimise fuel consumption and/or implement sustainable practices in their operations to meet the required target.

Specific performance metrics therefore focus on reducing greenhouse gas emissions regardless of the type of logistics services. The contract may also include penalties for failing to meet these performance requirements and incentives for exceeding them. Realising that not all logistics service providers will be able to deliver this from year 1, there might be a need to specify an improvement path and agree on incentive and penalty schemes for these improvements.
There are multiple ways to specify the performance requirements for a low-GHG emission logistics service provider

Input-based contracting – what is it:

Input-based contracting is a type of contractual arrangement where the method of execution is specifically prescribed. Under this type of contract, potential incentives or penalties are based on the quantity of the resources used aligned with the required specification, such as labour, materials and equipment, rather than relying entirely on meeting certain performance metrics.

Input-based solutions are relevant where you need:

- Varying level of performance during operations
- Strong existing fact-based data foundation
- High level of buyer knowhow
- Transactional relationships with service providers
- Advanced monitoring and control

Solutions are based on:

- The required input
- 100% detailed specified requirements (scope of work)
- Performance measured against many KPIs
- Buyer has comprehensive visibility of the logistics chain
- Allocation of risk and responsibility pushed to the service provider
- Transactional approach

Examples of input-based contracting could be:

Specify what the suppliers must do to deliver performance according to the standards, such as:

- Specifying the assets and engines the service provider must operate
- Specifying the type of fuel
- Specifying the way you want the operator to operate when servicing your operations
- Specifying how suppliers should use renewable energy in their operations
What do we want to achieve?

Identify qualified service providers, obtain information and receive detailed proposals through clear and understandable RFI, RFQ and RFP documents to ensure that both the buyer and the service provider have a clear understanding of the scope, requirements and expectations of the project.

Why do we need the RFI/RFP?

- A logistics service provider needs a clear RFI (Request for Information) and RFQ (Request for Quotation) from buyers in order to understand the buyer’s needs and requirements and to provide an accurate and competitive proposal for the services they are contracted to provide.
- An RFI can be used to gather information about the buyer’s needs and preferences, while an RFQ is typically used to request a formal proposal and pricing for specific services.
- Clear RFI and RFP documents help ensure that the service provider understands the scope of the project, the desired outcomes and the performance metrics that are used to measure success, which can help avoid misunderstandings or miscommunication that could lead to delays, increased costs or other issues.

What needs to change?

- **Introduction and background:** Include a section in the documents that clearly communicates your organisation’s commitment to decarbonisation.
- **Sustainability criteria:** Introduce specific decarbonisation criteria that suppliers should address in their responses.
- **Emissions reporting:** Ask suppliers to provide data on their GHG emissions and plans for emissions reductions.
- **Low-GHG emission solutions:** Encourage suppliers to propose innovative low-GHG emission solutions in their responses. Ask them to outline their strategies for reducing emissions.
- **Supplier collaboration:** Emphasise the importance of supplier collaboration in achieving decarbonisation targets.
- **Evaluation criteria:** Modify the evaluation criteria in your documents to give appropriate weight to sustainability and decarbonisation factors.
- **Performance monitoring:** Include provisions for ongoing performance monitoring and reporting in the contract or agreement with suppliers.

Converting your specification for the RFI/RFP to include decarbonisation requirements and questions
In order to effectively assess the sustainable performance of the LSP’s offers in the RFQ process, procurement should focus on sharing expectations and requirements for the LSP in line with the chosen specification approach. These could be input-based requirements or output-based requirements.

**Input**
- (Euro) emissions standards,
- Fuel type (biofuel, electric, etc.),
- Mode of transport

**Output**

*Four criteria to assess all logistics services*
- CO₂e intensity
- Tonnes – Km (or tons for storage)
- Energy emissions factor
- Consumption factor
For the RFI/RFP/RFQs to include decarbonisation, the following key changes are required

<table>
<thead>
<tr>
<th>Introduction and background</th>
<th>Emissions reporting</th>
<th>Supplier collaboration</th>
<th>Performance monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Include a section in the documents that clearly communicates your organisation’s commitment to decarbonisation and sustainability. Explain the importance of reducing GHG emissions in your supply chain and the goals you aim to achieve through the procurement processes.</td>
<td>Ask suppliers to provide data on their GHG emissions and plans to reduce emissions. This information will help you assess the environmental performance of potential suppliers and compare their sustainability efforts. Consider asking for emissions data on transport, energy use and any other relevant aspects of their operations.</td>
<td>Emphasise the importance of supplier collaboration in achieving decarbonisation goals. Ask for information on how suppliers plan to work with your organisation to reduce emissions throughout the supply chain.</td>
<td>Include provisions for ongoing performance monitoring and reporting in the contract or agreement with suppliers. Specify the information you expect suppliers to provide on a regular basis, such as emissions data, progress on decarbonisation targets or updates on new initiatives. This will enable you to track suppliers’ performance over time and ensure ongoing adherence to the decarbonisation goals.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sustainability criteria</th>
<th>Low-GHG emission solutions</th>
<th>Evaluation criteria</th>
<th>Further inspiration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduce specific decarbonisation criteria that suppliers must address in their responses. For example, you could ask suppliers to provide information on their GHG emission reduction initiatives, commitment to using low-GHG emission transport options or use of renewable energy sources in their operations. These criteria will help you assess suppliers’ alignment with your decarbonisation goals.</td>
<td>Encourage suppliers to propose innovative low-GHG emission solutions in their responses. Ask them to outline their strategies for reducing emissions.</td>
<td>Modify the evaluation criteria in your documents to give appropriate weight to sustainability and decarbonisation factors. This will ensure that suppliers’ efforts to reduce GHG emissions are considered alongside other traditional procurement criteria, such as cost, quality and delivery.</td>
<td>For inspiration on best practice questions and metrics in RFI, RFQ/RFP across modalities, please see the smart freight procurement questionnaire and the GLEC framework: Smart Freight Procurement questionnaire GLEC Framework V3.0</td>
</tr>
</tbody>
</table>
What do we want to achieve?

When evaluating an RFI, RFQ or RFP, the buyers of logistics services want to achieve several objectives. These objectives may include identifying potential suppliers that can meet their specific needs and requirements, comparing pricing and service offerings across multiple suppliers, assessing the quality and reliability of the supplier’s services and ensuring compliance with regulatory and environmental standards.

Why do we need an evaluation?

- Buyers of logistics services need to do an evaluation of the RFI, RFP and RFQ to ensure that they select the most suitable supplier that can meet their specific needs and requirements.
- The evaluation allows the buyer to compare the offerings of multiple suppliers, assess the quality and reliability of their services and determine which supplier offers the best value for money.
- In addition, the evaluation ensures that the selected supplier is compliant with regulatory and environmental standards and can provide innovative solutions to improve the buyer’s logistics operations. Ultimately, the evaluation process is essential for buyers to make an informed decision and select the most suitable supplier for their logistics needs.

What needs to change?

- If the buyer starts to evaluate GHG emissions in addition to cost, reliability and performance when evaluating logistics service suppliers, then the selection criteria and evaluation process would need to be updated.
- The buyer would need to set specific performance metrics related to reducing GHG emissions and incorporate them into the evaluation criteria.
- This could include asking suppliers to provide data on their GHG emissions, assessing the use of low-emission vehicles and sustainable practices and considering the suppliers’ commitment to reducing their GHG emission footprint.
- The evaluation process would need to prioritise suppliers that demonstrate a strong commitment to decarbonisation and provide innovative solutions for reducing emissions in the logistics industry.
While the specific criteria may vary depending on the industry and the organisation’s needs, here are ten major criteria commonly used for evaluating logistics service providers:

<table>
<thead>
<tr>
<th></th>
<th>Criteria</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Reliability</td>
<td>Procurement professionals assess the reliability of logistics service providers by examining their track record of on-time deliveries and their ability to meet agreed-upon service level agreements (SLAs).</td>
</tr>
<tr>
<td>2</td>
<td>Cost effectiveness</td>
<td>The cost effectiveness of a logistics service provider is evaluated by considering the overall pricing structure, including transport costs, warehousing fees and any additional charges. Procurement professionals aim to strike a balance between cost and quality of service.</td>
</tr>
<tr>
<td>3</td>
<td>Service quality</td>
<td>The quality of service provided by a logistics service provider is assessed by metrics such as order accuracy, inventory management, responsiveness to inquiries and customer satisfaction levels.</td>
</tr>
<tr>
<td>4</td>
<td>Global capabilities</td>
<td>For organisations with international operations or supply chains, the logistics service provider’s global capabilities are crucial. This criterion evaluates the provider’s network, infrastructure and expertise in managing cross-border logistics.</td>
</tr>
<tr>
<td>5</td>
<td>Technology and innovation</td>
<td>Procurement professionals assess the reliability of logistics service providers by examining their track record of on-time deliveries and their ability to meet agreed-upon service level agreements (SLAs).</td>
</tr>
<tr>
<td>6</td>
<td>Scalability and flexibility</td>
<td>As businesses grow or face fluctuations in demand, logistics service providers must demonstrate the ability to scale their operations accordingly. Procurement professionals evaluate providers based on their flexibility to adapt to changing business needs.</td>
</tr>
<tr>
<td>7</td>
<td>Compliance and risk management</td>
<td>Logistics service providers must adhere to regulatory requirements and manage risks effectively. Procurement professionals assess the provider’s compliance track record, certifications, safety procedures and risk mitigation strategies.</td>
</tr>
<tr>
<td>8</td>
<td>Sustainability and environmental impact</td>
<td>With increasing focus on sustainability, procurement professionals may evaluate logistics service providers based on their commitment to environmentally friendly practices, such as GHG emission footprint reduction, use of alternative fuels and waste management. Most organisations have some of these criteria already included in the evaluation — but would need to increase the extent of the evaluation and the importance of the criteria.</td>
</tr>
<tr>
<td>9</td>
<td>Financial stability</td>
<td>The financial stability of a logistics service provider is assessed to ensure its long-term viability. Procurement professionals may review the provider’s financial statements, credit ratings and overall financial health.</td>
</tr>
<tr>
<td>10</td>
<td>References and reputation</td>
<td>Procurement professionals seek references and evaluate a logistics service provider’s reputation in the industry. They may consider customer testimonials, case studies and industry awards to gauge the provider’s credibility and track record.</td>
</tr>
</tbody>
</table>
The evaluation model needs to include decarbonisation

An evaluation model for low-GHG emission logistics would include specific performance metrics related to reducing GHG emissions, such as using low-emission vehicles, optimising delivery routes to minimise fuel consumption and implementing sustainable practices in operations. The model would prioritise suppliers that demonstrate a strong commitment to decarbonisation and provide innovative solutions for reducing emissions. The evaluation model would also consider the supplier’s track record in improving GHG emission efficiency and its ability to meet regulatory and environmental standards. In addition, the model may include penalties for failing to meet decarbonisation performance requirements and incentives for exceeding them. Overall, the goal of the evaluation model is to select a supplier that can provide high-quality, cost-effective logistics services while reducing GHG emissions and promoting sustainability. However, during the workshops on developing the playbook, members expressed that it is rather difficult to compare suppliers based on decarbonisation evaluation criteria. Therefore, we suggest adding the following evaluation and maturity model to the existing evaluation models used.

Several members have asked us to provide guidance on how to weight GHG emission in an evaluation matrix. We have deliberately not pursued this, as it depends on a number of local and company-specific factors. However, as a concrete example of a CO₂e valuation, the study “Putting a Price on Carbon” by CDP, providing the 2020 average per industry in the annex.

Examples of evaluation criteria, please see the Smart Freight Procurement questionnaire

What a simple evaluation model might look like

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<table>
<thead>
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<tbody>
<tr>
<td>1</td>
<td>Commitment</td>
</tr>
<tr>
<td></td>
<td>To what extent do suppliers have existing commitments, pledges and targets in place?</td>
</tr>
<tr>
<td>2</td>
<td>Transparency</td>
</tr>
<tr>
<td></td>
<td>To what extent are suppliers able to report and demonstrate progress towards an emissions reduction plan?</td>
</tr>
<tr>
<td>3</td>
<td>Operational targets</td>
</tr>
<tr>
<td></td>
<td>To what extent are suppliers able to meet our specific operational targets (e.g. input-based or outcome-based contracting)?</td>
</tr>
<tr>
<td>4</td>
<td>Data sharing</td>
</tr>
<tr>
<td></td>
<td>To what extent are suppliers able to exchange data with us and demonstrate improvements in data quality?</td>
</tr>
<tr>
<td>5</td>
<td>Innovation and leadership</td>
</tr>
<tr>
<td></td>
<td>To what extent do suppliers have a continuous improvement mindset and a desire to innovate?</td>
</tr>
</tbody>
</table>

However, GHG emissions are not yet considered in most evaluation models. This needs to change.
When drafting the contract, it is important that the language is closely aligned with the specified requirements.

The clauses can be split into three groups:

1. **Data-related requirements**
   
   “Focus on how to build a data foundation.”
   
   Example: Contract language to build a data baseline, data source and measurement standards.

2. **Input-based performance requirements**
   
   “Focus on how the activity is carried out.”
   
   Example: Contract language to control what specific mode of transport or type of fuel to use.

3. **Output-based performance requirements**
   
   “Focus on what the activity is achieving.”
   
   Example: Contract language to control how we achieve net-zero transport by 2030.
New contractual language will be needed as buyers seek to commit service providers to low-GHG emission solutions

What do we want to achieve?
Establish a legally binding relationship between buyers and sellers that protects both entities throughout the procurement process.

Why do we need contracting?

- **Legal protection:** Contracts provide a legal framework that outlines the rights, obligations, and responsibilities of both the procurement professional and the logistics service provider.

- **Service Level Agreement (SLA):** Contracts often include a service level agreement that defines the expected level of service and performance metrics that the logistics service provider must meet. This ensures that the procurement professional receives the agreed quality of service and enables them to hold the provider accountable if there are any deviations.

- **Costs and pricing:** Contracts specify the pricing structure, payment terms, and any additional charges or penalties. This helps the procurement professional to understand the costs associated with the logistics services and ensures transparency in financial transactions.

- **Scope of services:** Contracts clearly define the scope of services provided by the logistics service provider. This includes specific logistics activities, such as transport, warehousing, inventory management, and any value-added services.

- **Risk mitigation:** Contracts often include clauses related to risk allocation and liability. This helps mitigate risks associated with the loss or damage of goods, delays, disruptions, or any other issues that may arise during the logistics process.

- **Confidentiality and intellectual property:** Contracts may include provisions to protect confidential information and intellectual property shared between the procurement professional and the logistics service provider.

- **Termination and exit strategy:** Contracts outline the terms and conditions for termination or renewal of the agreement. This provides a structured process for both parties to exit the contract if necessary, including any notice periods, obligations, and procedures for transitioning to another service provider.

What needs to change?

- **Decarbonisation goals:** The contract should clearly state the procurement professional’s environmental objectives related to decarbonisation, such as reducing GHG emissions or meeting specific environmental targets.

- **Performance metrics:** The contract should include specific performance metrics (KPIs) related to decarbonisation. For example, the logistics service provider may be required to report on its GHG emissions, energy consumption or use of alternative fuels. The KPIs should be measurable and time-bound to track progress and hold the provider accountable.

- **Compliance with environmental regulations:** The contract should require the logistics service provider to comply with all relevant environmental regulations and standards related to decarbonisation.

- **Reporting and transparency:** The contract should outline the logistics service provider’s reporting obligations regarding its decarbonisation efforts. This may include regular reporting on GHG emissions.

- **Collaboration and innovation:** The contract should encourage collaboration and innovation between the procurement professional and the logistics service provider to achieve their decarbonisation goals. This may include provisions for sharing best practices, exploring new technologies or processes, and jointly developing sustainability initiatives.

- **Continuous improvement:** The contract should emphasise the logistics service provider’s commitment to continuous improvement in its decarbonisation efforts. This may include regular reviews, performance assessments, and the implementation of corrective actions to achieve ongoing reductions in GHG emissions and environmental impact.

- **Transition and scalability:** If the procurement professional plans to transition to low-GHG or carbon-neutral logistics operations in the future, the contract should address the logistics service provider’s ability to support such transitions. This may include provisions for scalability, flexibility, and the provider’s readiness to adopt new technologies or processes as the procurement professional’s decarbonisation strategy evolves.

- **Contract duration and renewal:** The contract should consider the duration of the agreement and the potential for renewal. As decarbonisation efforts evolve rapidly, it may be beneficial to have shorter contract durations with the opportunity to regularly assess and adjust decarbonisation requirements. Some LSPs may also require longer contracts to provide certainty in the business case for decarbonisation.
Defining key metrics

For the purpose of the agreement, greenhouse gases (GHG) shall be deemed to include the gasses prescribed in annex A to the Kyoto Protocol to the United Nations Framework Convention on Climate Change ("UNFCCC"), as amended from time to time, currently: GHG dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluoro-carbons (PFCs), sulfur hexafluoride (SF₆) and nitrogen trifluoride (NF₃). GHG shall be expressed as a total in units of GHG dioxide equivalents ("CO₂e").

[Other relevant metrics]

Sustainable roadmap and reporting scope standard

As part of the contractor’s environmental management plan, the contractor shall submit a climate change mitigation plan (the “climate change mitigation plan”) to THE CUSTOMER for review and acceptance during the preliminary design phase. The climate change mitigation plan shall describe how the contractor will provide the deliverables under the agreement in accordance with the Science Based Targets initiative ("SBTi") and consist of the following:

a) Maintaining a GHG emission reduction pathway which is compatible with limiting the global average temperature increase to 1.5°C above pre-industrial levels.

Reporting frequency

To ensure transparency in the contractor’s ongoing progress in achieving the targets, the contractor must submit to THE CUSTOMER GHG emission accounts disclosing the GHG emissions arising out of the performance of the agreements as follows:

- Annual GHG emission accounts with respect to each of the agreements starting from the calendar year when production of the deliverables under the supply agreement is commenced, and
- Monthly GHG emission accounts with respect to the service agreement starting from the calendar year when commencement of service in accordance with the service agreement occurs.

Tiered clause based on maturity (sector or mode)

- Tier 2: Greenhouse gas (GHG) reports must be provided at minimum quarterly in accordance with the standards outlined in the service agreement. During the initial 12 months of service commencement, the contractor undertakes to increase the frequency at which to share the GHG emission report to a monthly basis.
- Tier 3: GHG emission accounts are required to be submitted monthly, adhering to the standards defined in the service agreement. This obligation begins at the conclusion of the 12-month grace period, commencing from the date of service initiation as specified in the service agreement.
Topics

Required solutions to be applied/deployed over time

The contractor shall ensure that, in line with the timeline set out in line 1 of the table below, it shall meet or exceed the targets set out in line 2 of the table below in respect of the percentage of clean vehicles deployed by it in fulfilling its obligations under the agreement.

<table>
<thead>
<tr>
<th>Period</th>
<th>12 months</th>
<th>24 months</th>
<th>36 months</th>
<th>48 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of clean vehicles</td>
<td>25%</td>
<td>50%</td>
<td>75%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Phase-out of certain vehicles/assets

As of [date] the contractor shall not utilize [diesel vehicles/other vehicles produced before 2009] in the fleet allocated to fulfilling obligations under the contract.

Penalties to be deployed to achieve climate goals

If the contractor is responsible for the deviation and the adjustment of the targets would jeopardize the achievement of THE CUSTOMER’s targets, the adjustment shall not take place and the contractor shall pay penalties in accordance with [schedule] if the targets are not achieved. Penalties paid by the contractor shall be deployed by THE CUSTOMER at its sole discretion to finance activities that are documented GHG neutral or GHG negative, and/or determined as a sustainable economic activity in accordance with the taxonomy regulation, cf. Schedule […].

Allowing for automatic renewal

This contract shall automatically renew on a yearly basis for the agreed period of 5 years, including the automatic application of the renewal mechanism as defined in this contract, unless the contractor fails to meet the targets, as described in this contract.

Please contact Peter Hedegaard Madsen for additional information.
### Topics

#### Define performance outcome

The contractor shall ensure that, in line with the timeline set out in the targets below, it shall meet or exceed the targets set out below in respect of the percentage of GHG emission reduction generated in fulfilling its obligations under the agreement.

- Becoming climate neutral in scope 1 and 2 in 2030 and reducing greenhouse gases (“GHG”) in scope 3 by 30% in 2030 compared to the customer’s GHG emissions in 2019; and
- Becoming net-zero climate neutral in 2050.

#### Defining new external factors

During the execution of contracted shipments, no operational delays shall be officially documented within the initial X months of implementing new vehicles or processes, providing a grace period for necessary learning and adaptation. This concession is granted at the discretion of the shipper and must be confirmed in advance upon receipt of a detailed description of the proposed changes and their anticipated effects.

#### Allowing for relevant flexibility

During the provision of contracted shipment services, operational delays will not be documented on days when the temperature falls below -X degrees for battery electric vehicles (BEV).

The supplier is anticipated to furnish the most accurate data at all times. However, it is acknowledged that forecasting performance concerning empty kilometres may pose challenges. Consequently, while this performance will undergo assessment and evaluation, no penalties will be applied in the event of a decline in performance related to empty kilometres.

Contact Peter Hedegaard Madsen for additional information.

---

**Examples**

<table>
<thead>
<tr>
<th>Topics</th>
<th>Examples</th>
</tr>
</thead>
</table>
| Define performance outcome | The contractor shall ensure that, in line with the timeline set out in the targets below, it shall meet or exceed the targets set out below in respect of the percentage of GHG emission reduction generated in fulfilling its obligations under the agreement.  
- Becoming climate neutral in scope 1 and 2 in 2030 and reducing greenhouse gases (“GHG”) in scope 3 by 30% in 2030 compared to the customer’s GHG emissions in 2019; and  
- Becoming net-zero climate neutral in 2050. |
| Defining new external factors | During the execution of contracted shipments, no operational delays shall be officially documented within the initial X months of implementing new vehicles or processes, providing a grace period for necessary learning and adaptation. This concession is granted at the discretion of the shipper and must be confirmed in advance upon receipt of a detailed description of the proposed changes and their anticipated effects. |
| Allowing for relevant flexibility | During the provision of contracted shipment services, operational delays will not be documented on days when the temperature falls below -X degrees for battery electric vehicles (BEV).  
The supplier is anticipated to furnish the most accurate data at all times. However, it is acknowledged that forecasting performance concerning empty kilometres may pose challenges. Consequently, while this performance will undergo assessment and evaluation, no penalties will be applied in the event of a decline in performance related to empty kilometres. |
Performance management is important to effectively monitor the outcome of all the previous five phases.

What do we want to achieve?

Implementing strong performance and contract management with logistics service providers allows procurement professionals to achieve service level adherence, cost savings, risk mitigation, continuous improvement and contractual compliance.

Why do we need performance management?

- Quality control: Monitoring the performance of logistics service providers allows procurement professionals to ensure that the quality of service meets the required standards. By monitoring key performance indicators (KPIs) such as on-time delivery, accuracy and customer satisfaction, professionals can identify any issues or deviations from the agreed-upon service levels.

- Cost optimisation: Monitoring performance helps identify inefficiencies and areas of improvement within the logistics service provider’s operations. This information can be used to negotiate better pricing, optimise routes, reduce transport costs and eliminate unnecessary expenses, ultimately resulting in cost savings for the company.

- Risk management: Logistics operations involve various risks, such as delays, damages or disruptions. By monitoring performance, procurement professionals can identify any potential risks or issues and take proactive measures to mitigate them. This includes ensuring compliance with safety regulations, monitoring insurance coverage and addressing any operational vulnerabilities that may impact the supply chain.

- Continuous improvement: Monitoring the performance of logistics service providers enables procurement professionals to track trends and identify opportunities for improvement. By analysing performance data over time, professionals can identify patterns, bottlenecks or areas where service can be enhanced. This information can be used to implement process improvements, optimise supply chain operations and enhance overall efficiency.

- Contract compliance: Logistics service providers typically operate based on contractual agreements. By monitoring performance, procurement professionals can ensure that the service provider meets its contractual obligations and fulfils the agreed-upon terms and conditions. This includes monitoring service levels, compliance with agreed-upon standards and adherence to contractual obligations such as reporting requirements or documentation.

What needs to change?

- Decarbonisation goals: Establish specific decarbonisation targets. These goals may include reducing greenhouse gas emissions, minimising GHG emission footprints or transitioning to low-GHG emission transport modes.

- Key performance indicators: Introduce new or modify existing KPIs to incorporate decarbonisation metrics. This can include tracking and monitoring of the GHG emissions associated with transport activities, energy consumption or the use of alternative fuels.

- Collaboration and innovation: Foster collaboration with logistics service providers to jointly explore and implement decarbonisation initiatives. This can involve working together to identify innovative solutions such as optimising transportation routes to minimise emissions or adopting new technologies that support cleaner and more sustainable logistics operations.

- Performance incentives: Consider implementing performance incentives or contractual agreements that reward logistics service providers for achieving decarbonisation targets. This can include financial incentives or preferential treatment for providers that demonstrate consistent progress in reducing GHG emissions.

- Data transparency and reporting: Emphasise the importance of data transparency and reporting related to GHG emissions and sustainability metrics. Procurement professionals can require logistics service providers to provide regular reports on their environmental performance, including GHG emission footprint calculations and progress towards decarbonisation goals. This enables better monitoring, evaluation and improvement of sustainability practices.
Strong performance management, including decarbonisation, requires us to think about the power of 5 x one

- **One** set of **PROCESSES**
  - A clear process description for all the core operational processes that impact the carbon footprint of the operations.
  - A foundation for process standardisation and simplification.

- **One** set of **NUMBERS**
  - A set of standardised decarbonisation and operational performance metrics.
  - A standardised performance cockpit.

- **One** way of **MANAGING**
  - A clear operating model to run the operations.
  - A clear operating model to develop the operations.
  - A system that builds capabilities and leadership across the organisation.

- **One** **ORGANISATION**
  - A clear organisational diagram.
  - A clear set of roles and responsibilities across functional areas.

- **One** **IMPROVEMENT MINDSET**
  - A continuous improvement approach.
  - A clear decarbonisation improvement road map.
  - A common daily optimisation engine that lowers the carbon footprint.

---

So how to get started?

- Define key performance indicators (KPIs): Identify the essential metrics that will measure the performance of the logistics supplier. These KPIs should align with the buyer’s KPIs.
- Establish performance goals: Set specific, measurable, attainable, relevant and time-bound (SMART) performance goals for the logistics supplier. These goals should be aligned with the buyer’s expectations and overall strategy.
- Develop service level agreements (SLAs): Create SLAs that outline the specific services to be provided by the logistics supplier along with the agreed-upon performance targets and consequences for not meeting them. SLAs help ensure clarity and accountability, and as such, they should be reviewed regularly against any business change and its requirements.
- Implement performance tracking systems: Use technology and systems to track and monitor the logistics supplier’s performance against the defined KPIs and SLAs. This could involve using software, data analysis tools or automated reporting systems.
- Regularly measure performance: Continuously measure and evaluate the logistics supplier’s performance against the established KPIs and SLAs. Regular monitoring allows for early identification of any deviations or areas in need of improvement.
- Conduct performance reviews: Schedule periodic performance reviews with the logistics supplier to discuss their performance, review data and address any concerns or areas for improvement. These reviews help maintain transparency and foster collaboration.
- Provide feedback: Offer constructive feedback to the logistics supplier based on the performance data and review discussions. Highlight areas of strength and identify opportunities for improvement. Feedback should be clear, specific and actionable.
- Collaborative problem-solving: Work together with the logistics supplier to address any performance issues or challenges that may arise. Encourage open communication, problem-solving discussions and joint decision-making to find mutually beneficial solutions.
- Continuous improvement initiatives: Encourage the logistics supplier to implement continuous improvement initiatives to enhance their performance. This could involve process optimisation, employee training, technology upgrades or innovation projects.
- Performance recognition and incentives: Recognise and reward the logistics supplier for consistently meeting or exceeding performance targets. Provide incentives, such as performance-based bonuses or long-term contracts, to motivate and maintain high levels of performance.
Imagine that we proudly could hand over the world to our kids and grandkids knowing that we had done our share to decarbonize the logistics industry…
Based on the recommendations and best practice examples in the previous chapters, the summary is that …

**Companies are taking climate action, but challenges exist**
- A plethora of dilemmas
- Lack of data and KPIs
- Differences in ambition/influence
- Lack of resources
- Variation in maturity
- Investing against uncertain demand
- Challenge in allocating risk

**Procurement professionals need tangible tools**
- This playbook provides tangible tools and recommendations to address the existing challenges
- Everyone should be able to apply the recommendations
- Help is also on the way in the form of more standards

**The procurement process needs to be updated**
- A sourcing strategy built around decarbonisation
- Evaluating whether to apply a transactional or transformational approach depending on the strategic importance and opportunities in the market

**It is possible for procurement to support the transition**
- By imbedding decarbonisation in all steps of the process
- By understanding how to cut through the dilemmas
- By knowing and adopting best practice from the industry
Contact

Director Sustainable Freight Buyers Alliance
Rik Arends
Mobile: +31 626868522
Email: rik.arends@smartfreightcentre.org

Procurement manager
Julien Bictel
Mobile: +31 627882858
Email: julien.bictel@smartfreightcentre.org

Project manager
Kasper Julin
Mobile: +45 5011 1025
Email: kaju@implement.dk

Senior partner
Anders Lehmann
Mobile: +45 6124 6355
Email: anle@implement.dk

Program coordinator
Zsófia Mészáros
Mobile: +39 3409413838
Email: zsofia.meszaros@smartfreightcentre.org
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Contact

Smart Freight Centre
Keizersgracht 560, 1017 EM, Amsterdam, Netherlands
P.O. Box 11772, 1001 GT, Amsterdam, Netherlands
Tel office: +31 6 4695 4405
www.smartfreightcentre.org
info@smartfreightcentre.org

Implement Consulting Group
Strandvejen 54, DK-2900 Hellerup, Denmark
Contact: Anders Lehmann (anle@implement.dk)
www.implementconsultinggroup.com
## Definitions

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td><strong>BEV</strong></td>
<td>Battery Electric Vehicle.</td>
</tr>
<tr>
<td><strong>European Union Emissions Trading System (EU ETS)</strong></td>
<td>EU ETS is a carbon emissions trading system implemented by the European Union to regulate greenhouse gas emissions from industries.</td>
</tr>
<tr>
<td><strong>ISO</strong></td>
<td>International Organization for Standardization.</td>
</tr>
<tr>
<td><strong>CO₂</strong></td>
<td>GHG dioxide is a colourless, odourless gas naturally present in the Earth’s atmosphere and a major contributor to the greenhouse effect.</td>
</tr>
<tr>
<td><strong>CO₂-e</strong></td>
<td>GHG dioxide equivalent is a unit that describes the collective impact of different greenhouse gases as a single measure related to the overall global radiative forcing caused by GHG dioxide.</td>
</tr>
<tr>
<td><strong>Consumption factor</strong></td>
<td>Amount of energy or fuel consumed per unit distance or unit handled.</td>
</tr>
<tr>
<td><strong>Emissions</strong></td>
<td>Refers to the release of greenhouse gases into the atmosphere.</td>
</tr>
<tr>
<td><strong>Energy emission factor</strong></td>
<td>The volume of GHG emissions expressed in CO₂-e released per unit of energy.</td>
</tr>
<tr>
<td><strong>EPA</strong></td>
<td>The U.S. Environmental Protection Agency.</td>
</tr>
<tr>
<td><strong>EV</strong></td>
<td>Electric Vehicle.</td>
</tr>
<tr>
<td><strong>Environmental Protection Agency</strong></td>
<td>The U.S. Environmental Protection Agency.</td>
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<tr>
<td><strong>EU ETS</strong></td>
<td>EU ETS is a carbon emissions trading system implemented by the European Union to regulate greenhouse gas emissions from industries.</td>
</tr>
<tr>
<td><strong>GHG</strong></td>
<td>Greenhouse gases defined as those indicated by the latest IPCC Assessment Report.</td>
</tr>
<tr>
<td><strong>GHG emission footprint</strong></td>
<td>The total amount of greenhouse gases emitted directly or indirectly by an individual, organisation or product.</td>
</tr>
<tr>
<td><strong>GHG emission offsetting</strong></td>
<td>The process of compensating for greenhouse gas emissions by investing in projects that reduce or remove emissions elsewhere.</td>
</tr>
<tr>
<td><strong>GLEC</strong></td>
<td>Global Logistics Emissions Council.</td>
</tr>
<tr>
<td><strong>Last-mile delivery</strong></td>
<td>The final stage of delivery typically from a transport hub to the end consumer.</td>
</tr>
<tr>
<td><strong>LCA</strong></td>
<td>Life Cycle Assessment.</td>
</tr>
<tr>
<td><strong>LSP</strong></td>
<td>Logistics Service Provider.</td>
</tr>
<tr>
<td><strong>Modal shift</strong></td>
<td>The transition from one mode of transport to another, such as from road to rail or sea transport.</td>
</tr>
<tr>
<td><strong>Primary data</strong></td>
<td>Otherwise known as actual or measured data; it is the &quot;quantified value of a process or an activity from a direct measurement or a calculation based on direct measurements.&quot; (Source: ISO 14083:2023)</td>
</tr>
<tr>
<td><strong>Renewable energy</strong></td>
<td>Energy generated from sources that are naturally replenished, such as solar, wind or hydro power.</td>
</tr>
</tbody>
</table>

**GHG** Greenhouse gases defined as those indicated by the latest IPCC Assessment Report.
# Definitions

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RFI</strong></td>
<td>Request for Information.</td>
</tr>
<tr>
<td><strong>RFP</strong></td>
<td>Request for Price.</td>
</tr>
<tr>
<td><strong>RFQ</strong></td>
<td>Request for Quotation.</td>
</tr>
<tr>
<td><strong>SBT</strong></td>
<td>Science-based targets provide companies with a clearly defined path to reduce emissions in line with the Paris Agreement goals.</td>
</tr>
<tr>
<td><strong>SBT</strong></td>
<td>Science Based Targets initiative; defines and promotes best practice in emissions reductions and net-zero targets in line with climate science.</td>
</tr>
<tr>
<td><strong>SLA</strong></td>
<td>Service Level Agreement.</td>
</tr>
<tr>
<td><strong>Subcontractor</strong></td>
<td>Company or individual that carries out the transport service for the contractor.</td>
</tr>
<tr>
<td><strong>Tank-to-Wheel (TTW)</strong></td>
<td>Tank-to-Wheel (or Tank-to-Wake for air and sea transport) refers to the section of the energy carrier’s life cycle where the energy carrier is converted to propulsion energy.</td>
</tr>
<tr>
<td><strong>SBTI</strong></td>
<td>Science Based Targets initiative; defines and promotes best practice in emissions reductions and net-zero targets in line with climate science.</td>
</tr>
<tr>
<td><strong>SLA</strong></td>
<td>Service Level Agreement.</td>
</tr>
<tr>
<td><strong>Tonne-kilometre</strong></td>
<td>The unit of measure for freight transport, representing the transport of one tonne of goods over the distance of one kilometre.</td>
</tr>
<tr>
<td><strong>SFBA</strong></td>
<td>Smart Freight Buyer Alliance.</td>
</tr>
<tr>
<td><strong>Well-to-Tank (WTT)</strong></td>
<td>The section of the energy carrier's life cycle from the start of the initial process to generate the input feedstocks to the moment where it is supplied to the vehicle (at the recharging or refuelling station).</td>
</tr>
<tr>
<td><strong>SFCC</strong></td>
<td>Smart Freight Centre.</td>
</tr>
<tr>
<td><strong>Well-to-Wheel (WTW)</strong></td>
<td>Well-to-Wheel (or Well-to-Wake for air and sea transport) refers to the full energy carrier life cycle, i.e. the summation of the WTT and TTW phases.</td>
</tr>
<tr>
<td><strong>ZEV</strong></td>
<td>Zero Emission Vehicle.</td>
</tr>
</tbody>
</table>
## Appendix 1: Illustration of a Logistics Industry Sustainable Maturity Matrix

<table>
<thead>
<tr>
<th>GHG emission reduction potential</th>
<th>Key reduction potential availability (&lt;%)</th>
<th>Consolidation potential</th>
<th>Reporting capacity</th>
<th>Insight into the relationship between cost and sustainable performance</th>
<th>Investment capabilities</th>
<th>Scope attractiveness</th>
<th>Operational alignment</th>
<th>Emission scope control</th>
<th>Sustainability strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 10% GHG emission reduction from baseline.</td>
<td>Punctual/low availability of monitored solutions.</td>
<td>Spend split across 20 or more suppliers and no possibility to leverage other buyers.</td>
<td>LSPs are not able to report the GHG emissions generated by your business.</td>
<td>Most LSPs are not able to link cost to sustainable performance.</td>
<td>Industry has very limited CAPEX spend on innovation and low technological adaptability.</td>
<td>We are not attractive as customer.</td>
<td>The solution requires a substantial investment to adopt Infrastructure, training and processes require an update to be rolled out to both us and our customers.</td>
<td>Most LSPs do not have access to their subcontractor’s emission performance.</td>
<td>LSPs have no formulated approach, focus or strategy towards climate action.</td>
</tr>
<tr>
<td>Between 11-20% GHG emission reduction from baseline.</td>
<td>Limited scale of monitored solutions.</td>
<td>Spend split across 15 suppliers and very limited possibility to leverage other buyers.</td>
<td>LSPs measure the GHG emissions generated by your business and can report quarterly based mostly on modelled data.</td>
<td>Most LSPs can only provide premium scheme with very limited insights into the relationship between cost and sustainable performance.</td>
<td>Industry has low CAPEX investment capability with slow adoption.</td>
<td>Low attractiveness as customer.</td>
<td>The solution requires a substantial investment to adapt our infrastructure, training and processes.</td>
<td>Most LSPs enforce decarbonisation requirements on their subcontractors, and it covers on average 30% of shipments.</td>
<td>Most LSPs have no formulated approach, focus or strategy towards climate action.</td>
</tr>
<tr>
<td>Between 21-40% GHG emission reduction from baseline.</td>
<td>Monitored solutions are available on some of our competitors’ markets.</td>
<td>Spend split across ten suppliers and limited possibility to leverage other buyers.</td>
<td>LSPs measure the GHG emissions generated by your business and can report monthly based on limited primary data and at a granular level.</td>
<td>Most LSPs can provide a partial link between cost and the delivered sustainable performance.</td>
<td>Industry has medium CAPEX investment capability with average adoption.</td>
<td>Medium attractiveness as customer.</td>
<td>The solution requires training and updating of processes to be rolled out at our end.</td>
<td>Most LSPs enforce decarbonisation requirements on their subcontractors, and it covers on average 50% of shipments.</td>
<td>Most LSPs have a decarbonisation target and are thinking of joining a supporting initiative.</td>
</tr>
<tr>
<td>Between 41-60% GHG emission reduction from baseline.</td>
<td>Monitored solutions are available on our key competitors’ markets.</td>
<td>Spend split across seven suppliers and limited possibility to leverage other buyers.</td>
<td>LSPs measure the GHG emissions generated by your business and can report monthly based mostly on primary data and at a granular level.</td>
<td>Most LSPs can provide a clear and direct link between cost and delivered sustainable performance.</td>
<td>Industry has high CAPEX investment capability, frontloading on technology as an early adopter.</td>
<td>High customer attractiveness.</td>
<td>The solution is operationally aligned with our capabilities, knowledge and existing processes and would only require limited adjustments.</td>
<td>Most LSPs have an established target validated by SBTi with the commitment aligned or more ambitious than our own road map.</td>
<td></td>
</tr>
<tr>
<td>Above 60% GHG emission reduction from baseline.</td>
<td>Monitored solutions are widely available on our key competitors’ markets.</td>
<td>Spend can be consolidated to three or less suppliers and partnership with other buyers is a real option.</td>
<td>The CO2 emissions generated by your business are audited and the report, which is based mostly on primary data at a granular level, is shared every month.</td>
<td>Most LSPs can provide a clear and direct link between cost and delivered sustainable performance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Financial and GHG emission impact of the solutions available

<table>
<thead>
<tr>
<th></th>
<th>GHG emission reduction potential</th>
<th>Key reduction potential availability (&lt;%)</th>
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<td>LSPs can only provide premium scheme with some insights into the relationship between cost and sustainable performance.</td>
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<td></td>
<td>Most LSPs have an established target validated by SBTi with the commitment aligned or more ambitious than our own road map.</td>
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</tr>
</tbody>
</table>
Transformational approach to low-GHG emission logistics

Appendix 2: The traditional procurement process is unlikely to succeed if the market is not yet mature. An innovative approach is needed

Mobilise and prepare

- Define and align project scope, timeline and decarbonisation impact goals with selected project stakeholders and team.
- Mobilise and onboard team.
- Develop detailed project workplan and timeline.
- Prepare 1 for project kick-off.
- Initiate desktop research on possible partner models.
- Make full list of industry and partnership experts for interviewing to challenge thinking.
- Initiate expert interviews and documentation.

Activities

Kick off and assess archetype partner models

- Kick off project and anchor project scope, timeline and emission reduction goals with key stakeholders.
- Build joint team and co-create project and sprint plan.
- Continue external inspiration on partnering models from relevant cases and industries to challenge and inspire design thinking, including rarely seen solutions.
- Describe archetype partner models, including pros and cons.
- Explore and assess archetype partner models, including external inspiration from desktop research and expert interview.

Map capability requirements

- Understand and map low-GHG emission solution requirements to be fulfilled.
- Assess current and future operational requirements and capabilities.
- Map new and existing partners.
- Identify processes that may be automated or digitalised.
- Partner candidates long list.
- Assess and evaluate how to engage potential partners to the project.

Design and test partner models

- Detail GHG emission requirements and role of partners.
- Detail potential partner models, including pros and cons.
- Define standardised (global) vs locally adapted parts of the partner models (or project).
- Establish evaluation criteria to determine short-list of potential partners based on expert-based assessment.
- Validate and evaluate potential partners and their value propositions.

Evaluate and assess potential and existing partners

- Identify partner types that match clear sustainable mitigation actions.
- Assess partner models and determine most promising partner model.
- Conduct in-depth dives in focus markets to identify potential partners.
- Outline future partner operating model, including principles and organisation.
- Pressure test findings with industry and partnership experts.

Make business case and transition road map

- Establish high-level business case for most promising model(s).
- Establish impact tracking model to track success against key performance indicators identified.
- Make decarbonisation and transition road map in alignment.
- Conduct risk assessment, including mitigating actions.
- Onboard additional stakeholders and ensure full ownership.
- Challenge and validate business case, risk assessment and transition road map.
- Establish contractual framework for the partnership.

Deliverables

- Team onboarded.
- Detailed project workplan and timeline.
- First inspiration on partnership models based on desktop research and interview.
- Agreed upon project scope, timeline and impact goals.
- Archetype partner models, including pros and cons.
- Assessment of archetype partner models from a buyer perspective.
- Capability requirements and gaps.
- Clear and aligned criteria for partner selection.
- Partner candidates long list.

- Partner capability requirements and roles.
- Detailed assessment of potential partner models.
- Agreement on most promising partner model and value propositions.

- Long list of potential partners.
- Partner evaluation criteria.
- Short-list of partners in focus markets.
- Operating model for partners.

- Business case.
- Transition road map, including clear sustainable performance measures (i.e. impact tracking model).
- Risk assessment, including risk mitigation actions.
- Internal stakeholder ownership.
- Contractual framework.

A transformational approach to low-GHG emission logistics
Appendix 3: Members of the First Movers Coalition are committing to buying low-carbon trucks and logistics

Eight sectors in scope of the FMC, representing >30% of global carbon emissions today & most new tech needs

- Aviation
- Steel
- Aluminum
- Cement / Concrete
- Shipping
- Trucking
- Carbon Removal
- Chemicals

Trucking owners and operators

- At least 30% of my heavy-duty and 100% of my medium-duty new truck purchases will be zero-emission trucks by 2030

Retailers and manufacturers

- I require my trucking service providers to meet the commitment that at least 30% of heavy-duty and 100% of medium-duty new truck purchases will be zero-emission trucks by 2030

Illustrative

- Fossil fuel-powered trucks
- Zero-emission vehicles – in FMC scope
- Battery electric vehicles
- Fuel-cell electric vehicles

Truck sales per year (M)

- Heavy-Duty
- Medium-Duty
Appendix 3: How to optimise FMC Member procurement of trucking services in alignment with their commitments

Determine the optimal combination considering the strategic significance and market availability for the different transportation requirements.

**Transformational Initiatives**

For support toward E-truck deployment:

**Fleet Electrification Coalition**

**Transactional Process**

1. **Sourcing Strategy**: Maximizing the procurement and usage of EVs
2. **Specification**: Input based - Contracted LSPs are committing to 30% of their heavy-duty and 100% of medium-duty new truck purchases will be zero-emission trucks by 2030.
3. **RFI/RFP**: Input based criteria: To be part of FMC’s supplier database
4. **Evaluation**: assess offer based on the required information and LSP’s offers
5. **Contracting**: Refers to the Input based and data related clauses
6. **Performance management**: Monitor the realization and continued commitment to FMC’s requirement while assessing sustainable performance and reporting

Most likely approach in near future due to the need to scale up EVs availability