



Smart Freight
Centre



wbcsd



Smart Freight Procurement Guidelines

September 2019



Disclaimer

Smart Freight Centre and the World Business Council for Sustainable Development authored this publication. The views expressed in this publication are those of Smart Freight Centre (SFC), World Business Council for Sustainable Development (WBCSD) and staff, consultants and management, and do not necessarily reflect the views of the SFC Board of Trustees or WBCSD member companies. SFC and WBCSD do not guarantee the accuracy of the data included in this publication and do not accept responsibility for the consequence of their use.

Acknowledgements

Smart Freight Centre has developed the Smart Freight Procurement Guidelines as part of WBCSD's Transforming Heavy Transport project, co-financed by We Mean Business. The document is based on existing guidelines and practices and input from individual companies and organizations, as well as the Global Logistics Emissions Council (GLEC) led by SFC. Its inspiration stems from the New Zealand Sustainable Business Council, which developed sustainable procurement guidelines with its member businesses in 2016. We would like to thank all companies and BSR who contributed to this publication.

About Smart Freight Centre

Smart Freight Centre is a global mission-driven organization dedicated to a more efficient and low-emission global freight sector. We bring the global logistics community together to drive transparency and mobilize multinational companies and their logistics partners to take action. This is done through global industry guidelines and solutions for emissions calculations, reporting and reductions, the first of which is the Global Logistics Emissions Council (GLEC) Framework, and by recognizing Smart Freight Leaders. To scale our impact, we are present in Europe, the Americas and Asia; and we collaborate with existing initiatives, partner organizations and experts worldwide.

Suggested citation:

Smart Freight Centre and WBCSD.
Smart Freight Procurement Guidelines (2019).
ISBN 978-90-82-68790-3.

Authors:

Chiara Lepori, Sophie Punte and
Eszter Toth-Weedon of Smart Freight Centre
Mariana Heinrich of WBCSD

About WBCSD

WBCSD is a global, CEO-led organization of over 200 leading businesses working together to accelerate the transition to a sustainable world. We help make our member companies more successful and sustainable by focusing on the maximum positive impact for shareholders, the environment and societies.

Our member companies come from all business sectors and all major economies, representing a combined revenue of more than USD \$8.5 trillion and 19 million employees. Our global network of almost 70 national business councils gives our members unparalleled reach across the globe. WBCSD is uniquely positioned to work with member companies along and across value chains to deliver impactful business solutions to the most challenging sustainability issues.

Together, we are the leading voice of business for sustainability: united by our vision of a world where more than 9 billion people are all living well and within the boundaries of our planet, by 2050.

www.wbcds.org

Follow us on:

Twitter
[@smartfreightctr](https://twitter.com/smartfreightctr)
[@wbcds](https://twitter.com/wbcds)

LinkedIn
www.linkedin.com/company/smart-freight-centre
www.linkedin.com/company/wbcds

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

World Business Council
for Sustainable Development
Maison de la Paix, Chemin Eugène-Rigot 2B
CP 2075 1211 Geneva 1, Switzerland
Tel office: +41 (0)22 839 31 71
www.wbcds.org



Summary

The Smart Freight Procurement (SFP) Guidelines provide professionals engaged in logistics procurement, supply chain and logistics management, and logistics emissions management with an action-based guideline on how to reduce greenhouse gas (GHG) emissions and air pollutants from their freight transport and logistics procurement practices. The SFP Guidelines lead organizations in their practical journey to low-carbon freight logistics and procurement.

The SFP Guidelines outline several actions that companies can take in four procurement phases: planning, tendering, contracting and contract-based supplier management. A preliminary phase intended to set an organization's internal environment and ensure its readiness to undertake the actions to achieve the low-carbon procurement of smart freight and logistics services precedes the four operational phases. In particular, top management support is critical to making the significant changes required to shift from a cost-focused procurement approach to a procurement process that also prioritizes reductions in GHG and air pollutant emissions.

An overview table displays all actions, allowing organizations to efficiently identify the detailed actions for implementation relevant to them. Specific toolboxes enable organizations to immediately understand the actions identified. When possible, examples from company experiences and best practices illustrate the actions, highlighting how the action can contribute to GHG emissions reductions. The example's description also outlines the impacts/lessons learned.

By implementing the SFP Guidelines, organizations can map their alignment with low emissions logistics and freight procurement and identify and address existing gaps through the implementation of the suggested actions. This alignment can extend to your organization's entire logistics procurement policies and procedures. Alternatively, you may choose to only implement certain actions for a specific objective.

List of abbreviations and acronyms

GHG	greenhouse gas
GLEC	Global Logistics Emissions Council
KPI	key performance indicator
LCTPi	Low Carbon Technology Partnerships initiative
LSP	logistics service provider
RFP	request for proposal
RFQ	request for quotation
SFC	Smart Freight Centre
SFL	Smart Freight Leadership
SFP Guidelines	Smart Freight Procurement Guidelines
UN	United Nations
US	United States of America
US EPA	United States Environmental Protection Agency
WBCSD	World Business Council for Sustainable Development



Table of Contents

1 INTRODUCTION	8
1.1 What are the SFP Guidelines	8
1.2 Target audience	8
1.3 Scope of the document	8
1.4 Structure of the document	9
1.5 Reference material and development process	9
1.6 The guiding principles	10
2 NAVIGATING THE SMART FREIGHT PROCUREMENT GUIDELINES	12
2.1 Freight procurement phases	12
2.2 Action overview table	14
2.3 How to use the SFP Guidelines	15
3 ACTION CARDS	16
3.1 Preliminary phase-related actions	16
3.2 Planning phase-related actions	18

3.3 Tendering phase-related actions	21
3.4 Contracting phase-related actions	22
3.5 Contract-based supplier management-related actions	24
4 COMPANY EXAMPLES	26
4.1 Company examples – Overview	26
4.2 Company-specific examples	27
4.3 Examples applicable to many companies	40
ANNEXES	42
A. Smart Freight Leadership	42
B. Sector initiatives	43
C. Sources	53



1 Introduction

Smart Freight Centre (SFC) and WBCSD drafted the Smart Freight Procurement Guidelines (SFP Guidelines) as part of WBCSD's Transforming Heavy Transport project.¹ It is an innovative project aimed at reducing emissions from freight and logistics operations, including air, sea, land and transshipment centers. In collaboration with Smart Freight Centre and the We Mean Business coalition, it is working to find solutions to increase demand for low-emissions heavy transport and achieve our vision of net-zero logistics emissions globally by 2050.

Transforming Heavy Transport is a key project of the Low Carbon Technology Partnerships initiative (LCTPi). Since its launch at the 21st Conference of the Parties (COP21) to the United Nations Framework Convention on Climate Change (UNFCCC) in Paris, LCTPi has brought together more than 235 companies to bring climate solutions to scale.²

This document is also a supporting element of Smart Freight Leadership³ as part of the broader activities of SFC. The SFP Guidelines are one of SFC's global standardized guidelines for industry to calculate, report and reduce emissions, developed together with the Global Logistics Emissions Council (GLEC).

The SFP Guidelines also complement the 'Sustainable Freight Procurement Framework' developed by BSR and members of the Clean Cargo and Sustainable Airfreight initiatives, to help companies evaluate, benchmark and improve their freight procurement practices. Together, SFC, WBCSD and BSR will continue to expand this practical toolbox to help business take climate action.

1.1 What are the SFP Guidelines

The SFP Guidelines aim to provide guidance on how organizations, big or small, can leverage their freight transport and logistics procurement demands to make a positive impact on reducing GHG emissions and air pollutants across their freight transport and logistics supply chains.

Through an action-driven approach, the SFP Guidelines provide organizations with a pathway to achieve low-carbon procurement of freight transport and logistics services.

1.2 Target audience

We have developed the SFP Guidelines for any type of company or organization, irrespective of size, that is interested in embedding GHG emission and air pollutant reductions in its freight procurement procedures.

The target audience of the guidelines comprises professionals engaged in the management or execution of logistics and/or environmental management, including functions and responsibilities such as:

- Logistics procurement;
- Supply chain and logistics management; and
- Logistics emissions management.

1.3 Scope of the document

The SFP Guidelines cover all transport modes and logistics sites across the global logistics supply chain. We have taken a general approach while recognizing that in its practical application there will be specific challenges for different modalities. Future expansions of the SFP Guidelines may elaborate on different modalities and application contexts.

The primary focus of this document is the reduction of GHG and air pollutant emissions. The Guidelines aim to support organizations in their transition to become a low-carbon business. They can achieve this by addressing freight and logistics procurement activities through the specific actions suggested in the SFP Guidelines.

1.4 Structure of the document

We have organized the SFP Guidelines into four chapters:

- Chapter 1 introduces the document, its scope and structure and the target audience. It also defines keywords;
- Chapter 2 explains how to navigate the document, facilitating its use in daily company activities and operations;
- Chapter 3 is the toolbox. It details the actions logistics procurement departments can take to embed GHG emissions and air pollutant reduction objectives in a company's freight procurement process. Action cards summarize their expected impact and link with SFP Guidelines guiding principles and provide guidance for implementation. Furthermore, the action cards include references to examples from companies related to the implementation of those specific actions;
- Chapter 4 contains descriptions of examples referred to in the various actions in Chapter 3. One example can be relevant to more than one of the suggested actions.

The annexes at the end of the document provide details on:

- How the SFP Guidelines link with SFC's broader strategy (Annex A: Smart Freight Leadership);
- Sector initiatives that organizations can join to work together with others to achieve sustainable freight and logistics, including GHG emissions reductions⁴ (Annex B: Sector initiatives);
- The main sources used to develop the SFP Guidelines (Annex C: Sources).

1.5 Reference material and development process

We have developed the SFP Guidelines based on a review of business practices and theory on logistics procurement from July 2018 to October 2018:

- The analysis of smart freight procurement-related business processes through interviews with more than 10 multinational companies;
- The review of 11 smart freight procurement guidelines and initiatives worldwide;
- The review of relevant professional and academic literature and company practices related to green freight procurement.

We shared the first working draft of the SFP Guidelines with a working group composed of experts and business practitioners, among them the business community comprising WBCSD's Transforming Heavy Transport project and the Global Logistics Emissions Council (GLEC). We used the feedback collected to prepare a second version submitted for a second review.

1.6 The guiding principles

The SFP Guidelines are based on relevant principles identified during the review of existing sustainable procurement guidance and initiatives and from interviews conducted with multinational companies (see section 1.5). We identify three guiding principles that address the needs of organizations and embed the recommendations received and elaborated during the SFP Guidelines drafting process itself: transparency, collaboration, and leadership and innovation.

A strong smart freight procurement process should include at least these three guiding principles to reach a complete approach. Whereas each principle is important by itself, focusing on only one or two will not be as effective in reaching maximum impact. (see Figure 1).

Transparency on emission reporting, the way shippers use the data they receive from the handling of their products by their logistics service providers, and sharing best practices are among the actions that can improve the understanding of practices along the entire logistics operations value chain and help to set targets. Such transparency drives understanding of how to improve the journey to low-carbon freight.

Collaboration between the different parties procuring or supplying logistics services is fundamental to achieving measurable and impactful supply chain emissions reductions. It can have a real and positive impact on the long-term sustainability of business relationships among supply chain partners as it has the power to enable cost savings through the establishment of standardized processes.

Innovation and leadership help organizations break away from business as usual and accelerate the incorporation of improved solutions within the logistics procurement process to meet new requirements and the potentially unarticulated needs of climate-conscious organizations.

Figure 1: Guiding principles of the SFP Guidelines



2 Navigating the Smart Freight Procurement Guidelines

This chapter helps companies navigate the SFP Guidelines and efficiently determine appropriate actions for a specific activity in their organization. A summary table (section 2.2) lists the actions according to the four phases of the procurement process.

2.1 Freight procurement phases

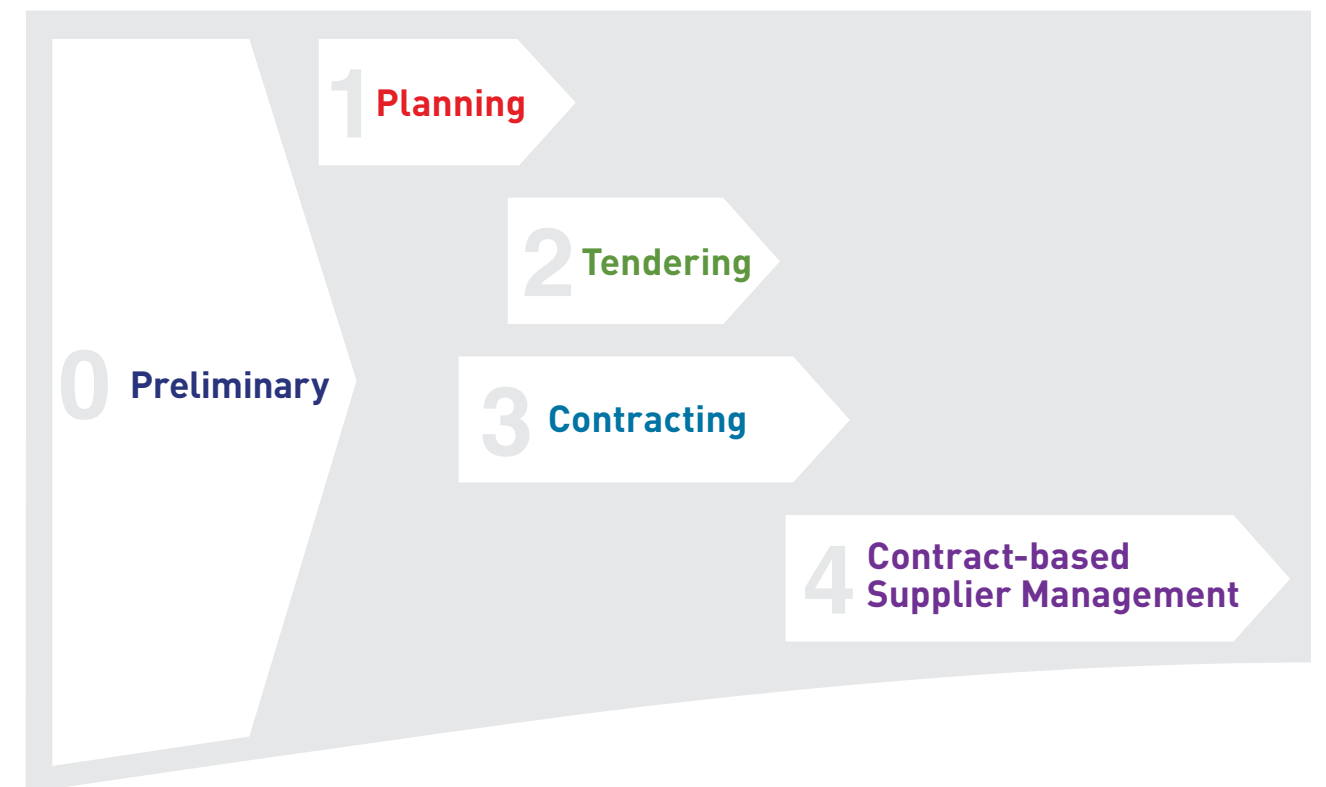
The companies interviewed (see section 1.5) described their logistics procurement process using different terminologies; they also ordered and grouped actions and procurement steps in different ways. We have organized these varying company inputs under common denominations. We subsequently determined four main freight procurement phases:

1. **Planning**: the preparatory phase, which includes the identification of needs, budget definition, a project management plan, the identification of responsibilities, and a general supplier assessment – in line with the organization's business and procurement strategy;
2. **Tendering**: tender definition (including procedure, award criteria, technical specifications, bidder-related aspects, environmental and social aspects, financial information, formal aspects), public tendering (where applicable) and the evaluation of the tenders;
3. **Contracting**: the specification of the contract terms, supplier selection and contract negotiations, agreement on qualitative and quantitative key performance indicators (KPIs) and monitoring activities; the planning phase should include early stages of this phase;
4. **Contract-based supplier management**: monitoring of supplier performance using qualitative and quantitative KPIs. Identifying future improvement areas and best practices.

While individual companies may have different numbers or types of phases, these SFP Guidelines use the four phases to provide a coherent approach.

Prior to starting with the four phases, it is important to understand the organization's structure to establish if the procurement department can take responsibility for and has the capacity and the capability to apply the actions provided in these guidelines. This is the **Preliminary** phase.

Figure 2: Preliminary phase followed by the four phases of the procurement process



2.2 Action overview table

The overview table below summarizes the actions suggested in the SFP Guidelines, grouping them into the Preliminary phase and the four freight procurement phases as identified previously.

Each action reports the expected impact and the complexity of implementation. The last column shows the guiding principles (see section 1.6) attributed to each action. The complexity of the implementation is on a scale of 1 to 5.⁵

Table 1: Action overview table

Procurement phase	Action			SFP Guidelines principles
ID Name	ID Name	Impact	Complexity	
0 Preliminary	0.1 Top management engagement	Gain top management support in implementing the SFP Guidelines, including the possibility for the procurement department to choose higher prices if this would help reduce the organization's GHG footprint, thus avoiding having costs overrule activities in the following phases	● ● ● ● ●	Collaboration Leadership & Innovation
	0.2 Award scheme establishment	Include low-carbon criteria in rewarding staff and management performance, thus boosting real behavior change	● ● ● ● ○	Transparency
1 Planning	1.1 Set up support for low-carbon freight procurement	Achieve organization-wide support for the procurement strategy, aiming to reduce GHG emissions	● ● ○ ○ ○	Leadership & Innovation
	1.2 Build low-carbon supply chain capacity	Prepare the organization to establish a low-carbon supply chain	● ● ● ● ●	Leadership & Innovation
	1.3 Focus your network on low-carbon emissions	Establish reduced carbon footprint supply chain	● ● ● ● ●	Leadership & Innovation
	1.4 Engage with suppliers	Establish two-way communication with suppliers to achieve GHG emissions reductions	● ● ● ● ○	Transparency Collaboration
2 Tendering	2.1 Revise qualification procedure to include low-carbon criteria	Establish capacity to select suppliers matching its low-carbon criteria	● ● ● ○ ○	Collaboration Leadership & Innovation
	2.2 Categorize the suppliers	Increase supplier awareness of carbon emissions reductions	● ● ● ● ●	Transparency Leadership & Innovation
	2.3 Share incentives for low-carbon behaviors	Improve supplier behavior to achieve carbon emissions reductions	● ● ● ● ●	Collaboration Leadership & Innovation
3 Contracting	3.1 Define the low-carbon-oriented contractors	Ensure supplier behavior aims to reduce carbon emissions	● ○ ○ ○ ○	Collaboration Leadership Innovation Transparency
	3.2 Allow exceptions to achieve innovation	Enable and support suppliers' innovative behavior to reduce carbon emissions	● ● ● ● ●	Collaboration Leadership & Innovation
4 Contract-based Supplier Management	4.1 Monitor & report	Enhance supply chain transparency	● ○ ○ ○ ○	Transparency
	4.2 Support suppliers and expert leadership	Encourage suppliers to maintain and improve emissions reductions efforts	● ● ● ● ●	Leadership & Innovation
	4.3 Collaborate	Implement concrete actions to achieve performance-based improvements	● ● ○ ○ ○	Collaboration

2.3 How to use the SFP Guidelines

The action overview table in the previous chapter allows you to identify the actions your organization should take in its journey to achieving low-emissions freight transport and logistics procurement.

The classification of implementation complexity allows your organization to prioritize the actions to take – progressively moving up in complexity to fulfill the set commitments. This is particularly helpful for organizations that have not yet started their low-carbon procurement journey. By starting with simpler actions, organizations can plan their own implementation path in line with their maturity level. Maturity refers to the level of implementation of existing activities for low-carbon freight and logistics procurement for a specific organization.

- Depending on your organization's current approach to sustainable procurement and its maturity level, there are two main ways to use the SFP Guidelines:
1. To structurally improve your organization's existing procedures and policies for low-carbon procurement;
 2. To use certain suggested actions, verifying your organization's existing low-emissions procurement strategy and/or identifying areas for improvement.

- In both cases, it is possible to implement the SFP Guidelines as follows:
- Map how the suggested SFP actions outlined in Table 1 (section 2.2) are aligned with your organization's practices and process;
 - Using the action cards (chapter 3), identify the gaps between current practices and suggested actions;
 - Analyze how to address the gaps identified and what your company needs to enable low-emissions logistics and freight procurement;
 - Draft or review your organization's current logistics procurement policies and procedures based on the gaps identified, including a comparison and evaluation of alignment of the current guiding principles with the SFP Guidelines (see section 1.6).

3 Action cards

This is the SFP Guidelines toolbox. Here we detail the actions needed to embed GHG emissions reductions within your organization's freight transport procurement process. The actions listed below follow the four freight procurement phases described in section 2.1.

Such actions are presented in tabular form (as **cards**), which include a title for each action followed by the estimated implementation complexity on a scale 1 to 5 (see sections 2.2 and 2.3) shown as circles, the expected impact, and the guidance for its implementation. The cards include references to **company examples** related to the implementation of the specific action. Chapter 4 details the examples.

3.1 Preliminary phase-related actions

Action 0.1 – Top management engagement



Impact: Gain top management support in implementing the SFP Guidelines, including the possibility for the procurement department to not prioritize cost as the most important decision criteria. This will help avoid having costs overrule activities in the following phases.

Toolbox

- **Define a clear business case** to justify the actions undertaken to achieve low-carbon procurement for freight and logistics services based on expected commercial and reputational benefits. It is necessary to identify relevant key performance indicators to support the business case definition (see Action 0.2 – Award scheme establishment). Furthermore, when formulating the business case, consider:
 - Linking a smart freight procurement plan to the organization's overall business and sustainability plan;
 - Demonstrating positive return on investment related to logistics investments (e.g., reduced fuel consumption should lead to lower costs);
 - Demonstrating improved brand reputation and competitive advantage, including improved customer satisfaction;
 - The increased possibility of attracting and retaining a talented workforce in logistics and supply chain functions;
 - Highlighting improved supply chain risk management capabilities;
 - The cost of carbon where logistics emissions are likely to be relevant in the future (e.g., investments in new warehouse and distribution locations, suppliers and carbon pricing);
 - Demonstrating enhanced shareholder and investor satisfaction through voluntary reporting and disclosure (see the bullet point for investor initiatives below).
- **Provide top management with information and materials to support** their decision-making process and ensure their engagement. Useful sources are:
 - Case studies describing companies that have successfully introduced sustainable procurement practices and the benefits they have obtained;
 - An overview of sustainability requirements from Investor Initiatives⁶ and relevant sector initiatives⁷ that are applicable to the organization;
 - An overview of competitors' actions to demonstrate the need to catch up to or use sustainable logistics procurement to stay ahead of the competition.

- **Involve top management in the development or review of sustainable procurement principles and processes.** In both cases, you should involve top management in the implementation of the SFP Guidelines following the identification of the organization's needs. You should also keep them informed throughout the implementation of the steps suggested in section 2.3, meaning:
 - Mapping of the suggested SFP Guidelines actions versus your organization's existing practices and processes;
 - Identifying gaps between your organization's current practices and the suggested actions;
 - Analyzing how to address the gaps identified and what your company needs to enable low-emissions logistics and freight procurement;
 - Drafting or reviewing your organization's current logistics procurement policies and procedures based on the gaps identified using the SFP Guidelines, including comparison and alignment of the current procurement principles with those proposed in the SFP Guidelines.

Examples

A.P. Moller-Maersk Group
IKEA
Nike
Philips
Unilever

Responsible Procurement Programme
IWAY Standard on Purchasing Products, Materials and Services
Sustainable Manufacturing & Sourcing Index
SPLC Guidance for Leadership in Sustainable Purchasing
Responsible Sourcing Policy

Action 0.2 – Award scheme establishment



Impact: Include low-carbon criteria in rewarding internal staff and supplier performance, thus boosting real behavior change.

Toolbox

- **Make low-carbon criteria relevant** to your company's logistics staff and establish individual KPIs and performance tracking. *Your company can track and measure* the relevant key performance indicators internally or hire third party evaluators.
- **Introduce incentives, bonuses and clear recognition for logistics and sustainability staff and management** involved in logistics procurement and sustainability improvements.
- **Establish an award scheme for suppliers** to recognize low-carbon behavior: Consider adopting a theory-based approach to stimulate low-carbon freight and logistics. The theory-based approach could be a mix of economics and behavioral science, taking into account unaligned goals among the company and its suppliers (agency theory⁸). Under such an approach, it is possible to classify logistics service providers (LSPs) based on their responsiveness to awards offered by their clients (shipper stimuli⁹).

Examples

DHL Global Forwarding
HEINEKEN

Port of Rotterdam
Van der Stelt

GoGreen rating scheme to evaluate air & ocean freight carriers
Boosting internal initiatives to achieve supply chain sustainability
Discounts on port dues for sustainable vessels
The CO₂ Performance Ladder

3.2 Planning phase-related actions

Action 1.1 – Set up support for low-carbon freight procurement

Impact: Achieve organization-wide support for the procurement strategy, aiming to reduce GHG emissions.

Toolbox

- Define your organization's goals:
 - Create an internal team to lead low-carbon freight and logistics actions, including procurement.
 - Run an initial session with procurement/supply chain/logistics teams to understand the organization's current priorities and processes the and clearly articulate low-carbon freight transport and logistics goals.
- Align freight and logistics procurement objectives throughout the organization:
 - Decide on overarching requirements for low-carbon logistics procurement that are key to improving logistics performance (e.g., the provision of key and verified supplier data to allow the company to calculate and track logistics KPIs). Annex B: Sector initiatives offers an extensive list of relevant requirements.
 - Align logistics procurement with broader procurement and organizational objectives by translating high-level objectives into specific ones for logistics procurement.
 - Set the values for KPIs and targets of the key management functions¹⁰ involved in logistics procurement.
- Adopt low-carbon selection criteria for LSPs and carriers:
 - Conduct LSP evaluation using multi-criteria decision-making, considering various criteria to push them to incorporate environmental best practices (e.g., evaluate the level of cooperation with the carrier, require carriers to establish an environmental management system, a sustainable process design, and/or an efficient network design, and progressively reduce their energy consumption).
 - Organize the selection of LSPs from an environmental sustainability perspective by using advanced models,¹¹ possibly collaborating with universities and research centers.
- Establish contracting terms for suppliers:
 - Translate low-carbon freight and logistics goals into applicable contracting terms; also consider potential misalignment of contractual arrangements among parties (agency theory¹²).
 - Embed KPIs and their preliminary benchmark values in contracts with suppliers according to the award scheme established through Action 0.2 – Award scheme establishment.¹³ Give preference to simple, transparent and widely known KPIs to facilitate replication for suppliers who serve several shippers.

Examples

Dow Chemical	Global Emissions Inventory (GEI)
IKEA	IWAY Standard on Purchasing Products, Materials and Services
Johnson & Johnson	Using sustainability to strengthen carrier relationships
Van der Stelt	The CO2 Performance Ladder
Walmart	Ambitious fleet efficiency targets result in considerable savings

Action 1.2 – Build low-carbon supply chain capacity

Impact: Prepare the organization to establish a low-carbon supply chain.

Toolbox

- Model the integrated logistics network with the objective of maximizing suppliers' low-carbon scores, if possible, using operational research techniques:¹⁴
 - Check your organization's capability to model such networks or supply chains according to the business' low-carbon freight and logistics goals articulated through Action 1.1 – Set up support for low-carbon freight procurement.
 - If necessary, get external support to model the network or ensure internal capability.
- Check that your supply chain's current capacity (infrastructure) fits the desired model. If necessary, run a capacity building stage and an engineering phase to identify and implement new and innovative logistics solutions.
- Integrate the strategic selection of logistics partners with operational flow planning decisions.¹⁵

Examples

Home Depot	Supply chain restructuring, bidding process rethinking, carrier rating, collaboration
Johnson & Johnson	Using sustainability to strengthen carrier relationships

Action 1.3 – Focus your network on low-carbon emissions

Impact: Establish reduced carbon footprint supply chain.

Toolbox

- Identify the fields of LSP and carrier activity in your network that you want to influence (e.g., reduce transport intensity and emissions, carrier selection criteria). Determine:
 - Possibilities to enable logistics providers to adopt sustainable practices, such as allowing grouping of your freight;
 - Possibilities to exert direct influence on a logistics provider's activity, such as ensuring carrier certification or training.¹⁶
- Customize your supply chain: Consider the adoption of the proper Incoterms (International Commercial Terms)¹⁷ in the purchase and sale of goods, based on the amount of leverage that the organization aims to exert on "carbon-sensitive" decisions.

Examples

Home Depot	Supply chain restructuring, bidding process rethinking, carrier rating, collaboration
IKEA	IWAY Standard on Purchasing Products, Materials and Services
Johnson & Johnson	Using sustainability to strengthen carrier relationships
Jumbo	Collaboration between retailer, product suppliers and LSPs
Multinational Shippers (China)	Smart Transport Manager Training

Action 1.4 – Engage with suppliers



Impact: Establish two-way communication with suppliers to achieve carbon emissions reductions.

Toolbox

- **Communicate emissions calculations and reporting requirements** to LSPs and freight operators in a standardized way:
 - Provide guidance on what data to collect and how to report them;
 - Explain to your suppliers how you will use the data collected and how can they incorporate actions to reduce emissions and improve their decision-making.
- **Differentiate supplier engagement formats**:
 - **Customize the engagement formats** based on supplier size, location and maturity (e.g., supplier summits, smaller sector forums, or possibly online portals for sharing best practices, education and training);
 - In the customization of the engagement format, consider the different levels of sophistication of LSPs and carriers, which impacts their internal and external behavior because supply chain operators have different levels of sophistication around the world; tailor the engagement approach/strategy accordingly.
- **Demonstrate corporate leadership by supporting your suppliers**:
 - Provide clear information to suppliers about your (shippers') GHG emissions reductions expectations and the resulting expectations for their supply chain in turn;
 - Foster collaboration and enable progress on achieving sustainability by providing your suppliers with self-assessment tools and checklists;
 - Provide clear business cases that could enable your suppliers to approach GHG emissions reductions as a business development and investment opportunity;
 - Clarify your intention when forming strategic partnerships with sustainable logistics providers, thereby enabling business operation improvements by focusing on the company's core competencies;
 - Provide freight and logistics service providers with guidance on their internal communication and collaboration between procurement, supply chain and sustainability departments;
 - Consider helping any existing suppliers who are underperforming in GHG emission activities to match your organization's ambitions (e.g., support training on improving the fuel efficiency of their fleet).

Examples

Braskem	A vertical approach to supplier engagement
Ford Motor Company	Applying GEMI's Quick Guide to Strategic Buyer/Supplier Collaboration on Sustainability
Johnson & Johnson	Using sustainability to strengthen carrier relationships
Multinational Shippers (China)	Smart Transport Manager Training
Nike	Sustainable Manufacturing & Sourcing Index
Unilever	Responsible Sourcing Policy
Applicable to all companies	GLEC Declaration
Applicable to all companies	Shippers and LSPs using SmartWay data to inform transportation purchasing decisions

3.3 Tendering phase-related actions

Action 2.1 – Revise qualification procedure to include low-carbon criteria



Impact: Company has the capacity to select suppliers that match its low-carbon criteria.

Toolbox

- **Define a standardized qualification procedure** that prioritizes carriers and LSPs that adopt low-carbon freight and logistics considerations following the low-carbon selection criteria identified under Action 1.1 – Set up support for low-carbon freight procurement:
 - Include standardized request for proposal (RFP)/request for quotation (RFQ) wording in tendering documents, possibly through a checklist. The wording has to align with the proposed set of KPIs (Action 1.1 – Set up support for low-carbon freight procurement) and the data to provide.
- **Apply relevant low-carbon assessment criteria** adopted by the organization as per Action 1.1 – Set up support for low-carbon freight procurement:
 - Compare LSPs and carriers on their reported emissions, overall performance and improvement actions;
 - Assess suppliers not only on their service delivery performance but also on their corporate GHG reduction strategy and on their capacity to identify and implement innovative solutions to reduce emissions.
- **Include in the qualification procedure an analysis of strengths and weaknesses** of the potential logistics partners. Decision-makers in the contracting organization can use this information to identify the most suitable suppliers with whom to establish and maintain a long-term partnership.
- **Engage your sector initiatives** (Annex B: Sector initiatives) and use their tools and questionnaires to assess your suppliers.

Examples

Home Depot	Supply chain restructuring, bidding process rethinking, carrier rating, collaboration
Schneider	How to create an effective transportation RFP
Van der Stelt	The CO2 Performance Ladder
Applicable to all companies	SmartWay's RFP specification

Action 2.2 – Categorize suppliers



Impact: Increase supplier awareness of carbon emissions reductions.

Toolbox

- **Categorize LSPs by their low-carbon behavior**:
 - Consider a potential conflict of interest with both your shippers and LSPs (agency theory¹⁸) in the design of the categorization criteria and the possible subsequent incentive mechanism;
 - Categorize LSPs in line with the adoption of low-carbon selection criteria for LSPs and carriers as per Action 1.1 – Set up support for low-carbon freight procurement;
 - Use a categorization system that allows the inclusion of different levels of supplier sophistication around the world.
- **Share information on categorization with suppliers** to enable transparency, the establishment of an improvement feedback cycle, and the establishment and development of low-carbon behavior.

Examples	
A.P. Moller-Maersk Group	Responsible Procurement Programme
Braskem	A vertical approach to supplier engagement
DHL Global Forwarding	GoGreen rating scheme to evaluate air & ocean freight carriers
Home Depot	Supply chain restructuring, bidding process rethinking, carrier rating, collaboration
Nike	Sustainable Manufacturing & Sourcing Index
Unilever	Responsible Sourcing Policy

Action 2.3 – Share incentives for low-carbon behaviors

●●●●●

Impact: Improve supplier behavior to achieve carbon emissions reductions.

Toolbox

- Build market-based mechanisms, such as emissions trading, into your tender specification, which can act as an incentive for shippers to lower emissions within their supply chains.
 - This must be in accordance with the award scheme for the suppliers’ low-carbon behavior established in Action 0.2– Award scheme establishment.
- Embed the market-based mechanism for sharing incentives with suppliers into the contracting terms for suppliers established through Action 1.1 – Set up support for low-carbon freight procurement:
 - To influence supplier behavior, reward their low-carbon efforts with discounts and/or longer contracts.

Examples

Port of Rotterdam

Discounts on port dues for sustainable vessels

3.4 Contracting phase-related actions

Action 3.1 – Define the low-carbon-oriented contract

●○○○○

Impact: Ensure supplier behavior aims to reduce carbon emissions.

Toolbox

- Define and prepare the contract:
 - Take into account the terms established in Action 1.1 –Set up support for low-carbon freight procurement, ensuring in particular that the contract terms support such procurement;
 - Clearly state low-carbon requirements in the freight and logistics contract:
 - I) Adapt the corporate social responsibility GHG emissions reductions clauses to the supplier (size/sector/country);
 - II) Include in the contract the possibility of verifications and audits, penalties and termination clauses.
 - Include a bonus system in the contract based on the progressive achievement of KPIs defined in Action 1.1 – Set up support for low-carbon freight procurement to incentivize supplier behavior to achieve carbon emissions reductions.
 - Promote long-term partnerships with longer contracts (at least 12 months), if possible factoring joint emissions reduction goals into the process to improve environmental performance without having a negative impact on cost. Longer term contracts and joint development would likely enhance the level of emissions reduction initiatives. Longer term contracts may indirectly result in an opportunity for the buyer to influence LSPs to increase commitments to lower emissions; interaction with employees on different levels in the company, including top management, can further boost this.

- Promote the development of emissions reductions initiatives and joint strategic development plans in collaboration with LSPs. The long-term perspective of the relationship between the buyer and its LSPs also promotes the development of joint initiatives in collaboration between the buyer and the provider. It is possible for buyers to participate actively in the development of the green service offerings of their LSPs.¹⁹

- Detail service specifications:**
 - Include KPIs and reporting requirements in GHG emissions performance in the contract, as established in Action 1.1 – Set up support for low-carbon freight procurement and Action 1.4 – Engage suppliers.
 - Adapt service specifications to enable low-carbon freight and logistics by considering the following points:
 - I) Changing transport lead time specifications may offer opportunities to reduce costs in combination with reduced environmental impacts;
 - II) Including a minimum order quantity or other similar requirements can lead to a decrease in the number of shipments;
 - III) Increasing the understanding of each other’s operations allows the detailing of better service specifications, facilitating more efficient and effective operations;
 - IV) It is possible to achieve long-term improvements if transport buyers and LSPs jointly demand the inclusion of low-emissions actions with reasonable environmental goals in their contracts;
 - V) It is best to develop new solutions in collaboration with LSPs, making use of their expertise.

Examples

Home Depot

Supply chain restructuring, bidding process rethinking, carrier rating, collaboration

Johnson & Johnson

Using sustainability to strengthen carrier relationships

Action 3.2 – Allow exceptions to achieve innovation

●●●●●

Impact: Enable and support suppliers' innovative behavior to reduce carbon emissions.

Toolbox

- Allow for exceptions in the behavior of freight and logistics suppliers to push for emissions reductions:
 - Exceptions in relation to the service specification established in Action 3.1 – Define the low-carbon-oriented contract (e.g., modifications of lead time, pick-up and delivery times, transport mode/s) are allowed.
 - Buyers can often be a barrier to the development of green initiatives, limiting the providers’ investments into green technology.²⁰ One way of addressing this problem is to be willing to pay extra for innovative, low-emissions solutions in line with the impact expected from the implementation of Action 0.1 – Top management engagement.

Examples

None, as yet.

3.5 Contract-based supplier management-related actions

Action 4.1 – Monitor & report

Impact: Enhance supply chain transparency.

Toolbox

- Drive supply chain transparency through KPI monitoring and reporting as agreed in Action 1.1
 - Set up support for low-carbon freight procurement:
 - Adopt standardized reporting formats;
 - Do not set too many KPIs;
 - Give preference to KPIs that are transparent and most commonly used in freight and logistics. This will help suppliers streamline their reporting efforts with multiple customers.
- Use both internal and external communications to make sure that your employees, customers and other stakeholders are aware of your smart freight procurement actions and results:
 - Provide suppliers with clear feedback on the use of the monitored KPIs and data;
 - Share the different scores your suppliers are receiving according to their performance when taking action to reduce emissions;
 - Consider establishing a feedback mechanism to detail the benefits that your organization is deriving from suppliers' low-carbon behavior to encourage their further investment and commitment.

Examples

Braskem	A vertical approach to supplier engagement
Nike	Sustainable Manufacturing & Sourcing Index
Van der Stelt	The CO ₂ Performance Ladder
Applicable to all companies	GLEC Declaration
Applicable to all companies	Shippers and LSPs using SmartWay Data to inform transportation purchasing decisions

Action 4.2 – Support suppliers and exert leadership

Impact: Encourage suppliers to maintain and improve the emissions reduction efforts.

Toolbox

- Design a process/tool to support LSPs and carriers with different levels of sophistication to implement concrete actions for improvement in a systemic way, encouraging them to embrace all organization processes instead of tackling them on a project basis.
- Support freight and logistics service providers in promoting continuous communication and collaboration between their procurement, supply chain and sustainability departments, following the activities started in Action 1.4 – Engage with suppliers.
- Support low-emissions road mapping by LSPs and carriers and provide guidance on their assessment to help identify options for improvement.
- Recognize the actions and improvements that LSPs and carriers make to comply with contractual GHG emissions reductions expectations, e.g., following the award scheme for suppliers suggested under Action 0.2 – Award scheme establishment.

Examples

A.P. Moller-Maersk Group	Responsible Procurement Programme
Braskem	A vertical approach to supplier engagement

DHL Global Forwarding Home Depot	GoGreen rating scheme to evaluate air & ocean freight carriers Supply chain restructuring, bidding process rethinking, carrier rating, collaboration
Johnson & Johnson Multinational Shippers (China) Nike Port of Rotterdam	Using sustainability to strengthen carrier relationships Smart Transport Manager Training Sustainable Manufacturing & Sourcing Index Discounts on port dues for sustainable vessels

Action 4.3 – Collaborate

Impact: Implement concrete actions to achieve performance-based improvements.

Toolbox

- Establish and maintain broader cooperation with supplier personnel at various levels:
 - The strongest drivers among suppliers are their internal sales and operations management personnel. The implementation of an engagement plan to establish trustworthy relationships with LSP and carrier employees beyond top management can further enhance collaboration on incorporating environmental best practices throughout the logistics supply chain.
 - We advise you to consider the different levels of sophistication of suppliers to properly approach the cooperation strategy.
- Collaborate with freight and logistics service providers:
 - Provide suppliers with clear feedback on their performance;
 - Collaborate with suppliers on innovation, including through Green Freight Programs;²¹
 - Collaborate across the entire supply chain to reduce risks; good business relationships and supply chain insights support managers in delivering a company's corporate social responsibility policy, including GHG emissions reductions, which improves risk management.
- Implement joint strategic development plans with LSPs and carriers, following the contract defined under Action 3.1 – Define the low-carbon-oriented contract:
 - Identify and implement opportunities for future improvements and innovation with suppliers and favor potential gain sharing;
 - Recognize that small LSPs have more potential to perform joint development plans with shippers, as large LSPs generally have their own development plans for low-emissions freight;
 - Consider providing unique grants or other financial support to launch low-emissions freight solutions by LSPs and collaboration on low-carbon freight projects.

Examples

A.P. Moller-Maersk Group Ford Motor Company	Responsible Procurement Programme Applying GEMI's Quick Guide to Strategic Buyer/Supplier Collaboration on Sustainability
Home Depot	Supply chain restructuring, bidding process rethinking, carrier rating, collaboration
Jumbo Unilever Walmart applicable to all companies	Collaboration between retailer, product suppliers and LSPs Responsible Sourcing Policy Ambitious fleet efficiency targets result in considerable savings FreightShare Lab's asset sharing platform



4 Company examples

This chapter provides examples of companies implementing actions aligned with the guiding principles of the SFP Guidelines.

The examples illustrate how the actions detailed in chapter 3 can lead to measurable emissions reductions throughout the preliminary and the four procurement phases. Each example may be relevant to one or more actions. We may enrich the list of examples in the future.

4.1 Company examples – Overview

Table 2 provides an overview of the examples that organizations are implementing or can implement.

There are two categories:

- Company specific, i.e., examples from company experience, provided by the companies mentioned or drafted on the basis of publicly available information (no. 1-18);
- Examples companies are implementing or can implement and that are applicable to many companies (no. 19-22).

We have highlighted the company-specific examples provided verbatim and/or signed off by the respective company with an asterisk in square brackets next to the title. Whereas the Schneider example in this section does not specifically focus on emissions reductions, the majority of contributing members found it useful as a pertinent example of the different steps in building an effective RFQ, which is key to addressing emissions reduction in the process.

Table 2: Overview of company examples

#	Company	Title
1	A.P. Moller-Maersk Group	Responsible Procurement Programme
2	Braskem	A vertical approach to supplier engagement
3	DHL Global Forwarding	GoGreen rating scheme to evaluate air & ocean freight carriers [*]
4	Dow Chemical	Global Emissions Inventory (GEI) [*]
5	Ford Motor Company	Applying GEMI's Quick Guide to Strategic Buyer/Supplier Collaboration on Sustainability
6	HEINEKEN	Boosting internal initiatives to achieve supply chain sustainability [*]
7	IKEA	IWAY Standard on Purchasing Products, Materials and Services
8	Johnson & Johnson	Using sustainability to strengthen carrier relationships
9	Jumbo	Collaboration between retailer, product suppliers and LSPs
10	Multinational Shippers (China)	Smart Transport Manager Training
11	Nike	Sustainable Manufacturing & Sourcing Index
12	Philips	Case from SPLC Guidance for Leadership in Sustainable Purchasing
13	Port of Rotterdam	Discounts on port dues for sustainable vessels [*]
14	Schneider	How to create an effective transportation RFP
15	Home Depot	Supply chain restructuring, bidding process rethinking, carrier rating, collaboration
16	Unilever	Responsible Sourcing Policy [*]

#	Company	Title
17	Van der Stelt	The CO2 Performance Ladder [*]
18	Walmart	Ambitious fleet efficiency targets result in considerable savings
19	Applicable to many companies	FreightShare Lab's asset sharing platform
20	Applicable to many companies	GLEC Declaration
21	Applicable to many companies	Shippers and LSPs using SmartWay data to inform transportation purchasing decisions
22	Applicable to many companies	SmartWay's RFP specification

4.2 Company-specific examples

A.P. Moller-Maersk Group – Responsible Procurement Programme²²

As part of its main Sustainability Strategy 2014-2018, A.P. Moller-Maersk Group put in place mandatory programs to ensure compliance with minimum standards for anti-corruption, responsible procurement and global labor principles. It established a six-step process to evaluate suppliers: qualification, tender, workshops, negotiations, implementation and supplier relationship management. The company gives preference to suppliers based on quality and price and those who share the group's commitment to conducting business in an ethically, environmentally and socially responsible manner. It expects suppliers to make continuous improvements and to have similar rules for their own suppliers. To prioritize resources and achieve maximum impact, the program has a focused approach based on high-risk categories. The category guides act as a blueprint for carrying out supplier due-diligence. Included among high-risk categories are: trucking/intermodal, warehousing services, terminals, shipbuilding yards/drydocks, container manufacturers and manning – seafarers. Specific category guides and supplier evaluation questionnaires are available as well.

The case for GHG emissions reductions: The company established the Responsible Procurement Programme to promote continuous improvements in its supply chain.

Some suppliers may be in a better position to easily adopt good business practices in the areas of human rights, labor, environment and anticorruption than others. Nevertheless, what is important to the group is that suppliers show commitment to including the main principles of the code in their own operations and across their supply chains, including environmental principles, in some instances geared to GHG emissions reductions.

Impacts/lessons learned: Over a longer period, the practice of evaluating suppliers with the six-step process will enable Maersk to rate suppliers across defined risk categories. The group expects long-term suppliers to have management systems in place to ensure compliance with the Group Third Party Code and to proactively extend these principles within their own supply chain, further extending the reach of environmental action.

Braskem – A vertical approach to supplier engagement²³

Braskem has adopted a comprehensive and integrated strategy across both its own operations and its value chain to address climate change. Recognizing the role that suppliers play in mitigating and managing climate risks and opportunities, the company has decided to take a vertical approach to engagement. Braskem begins by assessing engagement and awareness levels among its suppliers and rates them at different levels. Braskem supports them through targeted workshops, which vary depending on their level of engagement. These workshops improve supplier awareness and provide them with training and the dissemination of best practices, as well as technical support in identifying opportunities to reduce emissions and costs. Furthermore, all suppliers receive feedback on an annual basis, allowing them to identify actions for further progress.

The case for GHG emissions reductions: With this approach to supplier engagement, Braskem has achieved a voluntary and steady improvement in supplier performance in key areas, such as setting up GHG emissions inventories, defining reduction targets, and identifying opportunities and risks associated with their business. As a result, Braskem reports nearly 44% of its scope 3 emissions.

Impacts/lessons learned: The Braskem approach to supplier engagement has allowed the company to achieve voluntary and steady improvement in supplier performance in key areas. The feedback sent to suppliers on an annual basis allows them to identify actions for further progress. Additionally, Braskem has been able to start analyzing the opportunities and risks communicated to the company by suppliers, which will inform its future engagement strategy. In light of this success, the company has subsequently launched the same engagement process targeting suppliers operating in water-stressed regions, offering more targeted support for water resource management strategies.

DHL Global Forwarding – GoGreen rating scheme to evaluate air & ocean freight carriers [*]

The GoGreen carrier rating is an integral part of DHL Global Forwarding's overall carrier evaluation process by which the environmental sustainability of carriers is determined. An above average rating is an essential element to obtain "preferred carrier" status by DHL Global Forwarding. Carriers are rated along the following four categories:

- Sustainable management: sustainability strategy, policies, training and emissions reporting are in place;
- Transparency: the provision of "credible" carbon efficiency data on different levels of granularity;
- Carbon efficiency: significant share of DHL volumes needs to be shipped with better than average gCO_{2e} per transported kilometer;
- Sustainable innovation and development: decarbonization strategy, technology and fuel pilots in place.

Carriers are invited to provide qualitative information via a standardized survey. Quantitative data (CO_{2e} efficiency) is provided by the individual carrier and matched with the company's shipment profiles and data. After an assessment of the data provided, carriers receive a points-based rating in each of the four categories. The evaluation criteria of each category are adjusted yearly to better reflect the ever-changing industry status and any possible future development needs. Via a separate Evaluation Factsheet, detailed scores and benchmarking are shared with the carrier on a regular basis and discussed bilaterally. Carriers are expected to continuously improve their performance and strive for maximum scores.

Additionally, carriers are provided with a GoGreen Carrier Certificate recognizing the carrier's efforts and performance once a year in December. If the performance requirements of a category are fulfilled, the carrier is awarded with a green aircraft/vessel.

The case for GHG emissions reductions: Carrier evaluation insights are used to optimize the environmental supply chain performance of DHL Global Forwarding's customers. Carrier and routing

selection represent important levers for optimizing the carbon efficiency of supply chains. To make an informed decision, shippers need transparency across different transport options. Selecting a more efficient solution does not necessarily result in higher expenses; however, it can affect lead times and air and marine ports of loading and discharge. Most tenders still primarily have a commercial focus within a narrower scope. The company therefore recommends analyzing and discussing options to reduce emissions in the supply chain beyond the tender process and, ideally, within a holistic scope.

Impacts/lessons learned: The GoGreen rating scheme provides carriers with a better understanding of DHL Global Forwarding's expectations and how they can contribute to Group Mission 2050 – Zero Emissions. At the same time, the rating insights enable DHL Global Forwarding to support shippers by helping them optimize the carbon footprint of their own supply chains.

Dow Chemical – Global Emissions Inventory (GEI)²⁴ [*]

Dow has a corporate database called the Global Emissions Inventory (GEI). The emitting businesses track and record their emissions in the GEI, the central database that is used as the basis for regional and global reports of emissions. Each facility has an environment, health and safety focal point responsible for collecting and reporting all waste and emissions data. The GEI tracks Scope 1 GHG emissions coming from the manufacturing processes, which include power plants (cogeneration), crackers, smelters, flares, etc. Dow's Scope 2 GHG emissions come from purchased power. Dow's emissions are divided by Scope 1 GHG emissions, 74.5%; and Scope 2 GHG emissions, 25.5%. Dow manages the reporting and cost of emissions with the joint objectives of minimizing the cost of emissions and maximizing the profitability of the company over the long term. There are two types of work performed to achieve these objectives:

- The Energy and Climate Change business, led by a global business director and through regional directors and their organizations, both purchases and trades any required allowances for these emissions, and considers the cost of carbon in the production and acquisition of steam and power for the company. This includes developing long-term projections of the cost of carbon at each of its production locations globally;
- In addition, the global carbon management director and team are responsible for developing an optimized list of projects to reduce carbon emissions and to increase efficiency and to ensure the present and future cost of carbon is included in all capital investment and maintenance decisions.

Dow tracks progress in reducing emissions through three specific goals as part of its 2025 Sustainability Goals:

- I) Dow will obtain 750 MW of its power demand from renewable sources by 2025;
- II) Though Dow will grow globally over the next 10 years, Dow's absolute greenhouse gas emissions will not exceed the 2006 baseline;
- III) Dow will grow but offset emissions of priority compounds, volatile organic compounds and nitrogen oxides.

The case for GHG emissions reductions: Dow is well on track to meet these goals. The company has long-term contracts to procure clean energy in the United States, Latin America and Europe. Approximately 9.5% of purchased electricity is from renewable sources. Similarly, its new plants have significantly improved efficiency, enabling them to increase sales significantly with stable emissions.

Impacts/lessons learned: The integrated central management approach for reporting greenhouse gas emissions and their cost allows Dow to minimize the cost of emissions while maximizing the profitability of the company over the long term.

Ford Motor Company – Applying GEMI’s Quick Guide to Strategic Buyer/Supplier Collaboration on Sustainability²⁵

Braskem has adopted a comprehensive and integrated strategy across both its own operations and its value chain to address climate change. Recognizing the role that suppliers play in mitigating and managing climate risks and opportunities, the company has decided to take a vertical approach to engagement. Braskem begins by assessing engagement and awareness levels among its suppliers and rates them at different levels. Braskem supports them through targeted workshops, which vary depending on their level of engagement. These workshops improve supplier awareness and provide them with training and the dissemination of best practices, as well as technical support in identifying opportunities to reduce emissions and costs. Furthermore, all suppliers receive feedback on an annual basis, allowing them to identify actions for further progress.

The case for GHG emissions reductions: With this approach to supplier engagement, Braskem has achieved a voluntary and steady improvement in supplier performance in key areas, such as setting up GHG emissions inventories, defining reduction targets, and identifying opportunities and risks associated with their business. As a result, Braskem reports nearly 44% of its scope 3 emissions.

Impacts/lessons learned: The Braskem approach to supplier engagement has allowed the company to achieve voluntary and steady improvement in supplier performance in key areas. The feedback sent to suppliers on an annual basis allows them to identify actions for further progress. Additionally, Braskem has been able to start analyzing the opportunities and risks communicated to the company by suppliers, which will inform its future engagement strategy. In light of this success, the company has subsequently launched the same engagement process targeting suppliers operating in water-stressed regions, offering more targeted support for water resource management strategies.

HEINEKEN – Boosting internal initiatives to achieve supply chain sustainability [*]

The carbon reduction ambition of the company is driven by management and it is cascading to all teams by two main initiatives:

- Linking personal targets to sustainability. All logistics-related buyers have the target to have three projects related to sustainability. There are a few standard projects (e.g., increasing the usage of telematics by carriers). A local team can identify and do its own projects and the global functions have the overview to ensure that they can select best practices that can be considered for implementation in other regions as well.
- Motivating via internal competition. The company has established a Supply Chain Implementation Award, for which different efficiency or sustainability topics are selected every year. The Global Supply Chain department organizes the related events and relevant regional or local teams have the opportunity to submit projects that are interesting and impactful. Then the jury selects the best submissions, and these are invited to the final competition event where the finalists have the opportunity to showcase and present their projects to the other finalists and to the top management (including the CEO). The winning team will have dinner with the top management.

The case for GHG emissions reductions: The personnel is encouraged to undertake initiatives to improve supply chain sustainability. These include GHG emissions reductions.

Impacts/lessons learned: The initiatives have motivated the personnel to include sustainability – including GHG emissions reductions – in their daily activities, as this impacts their personal targets. Furthermore, local teams are motivated via competition. The Supply Chain Implementation Award also allows the company to show the commitment of the top management.

IKEA – IWAY Standard on Purchasing Products, Materials and Services²⁶

IWAY is the IKEA code of conduct, first introduced in 2000. It specifies the requirements, including some specific to emissions, placed on product and service suppliers and details benefits they can expect in return from IKEA. In addition to the main document, there are several industry-specific supplements and a special code of conduct for child labor; there is also a specific transport section, which details requirements for all services (road, rail, ocean, customer distribution including home delivery, shunting, barge and consolidation points) involved in transporting IKEA products. IWAY is based on eight core conventions defined in the Fundamental Principles of Rights at Work, the **United Nations** International Labour Organization declaration of June 1998, the Rio Declaration on Sustainable Development of 1992, The UN Johannesburg Summit on Sustainable Development and the Ten Principles of the UN Global Compact of 2000.

The steps for procuring supplier services are: (i) start-up requirements must be complied with before signing a business contract; (ii) the IKEA supplier shall acknowledge and accept the IWAY requirements by signing the IWAY Compliance Commitment document; (iii) the IKEA supplier shall appoint one or several persons who shall have defined responsibilities and the authority to ensure compliance with requirements; (iv) the IKEA supplier shall communicate the IWAY requirements to all workers and sub-suppliers and ask the latter to accept it in writing.

The case for GHG emissions reductions: By specifying the requirements for suppliers, with a focus on transport, IWAY pushes suppliers to adopt CO2 emissions reductions programs and practical actions and/or plans to reduce environmental impacts related to their own facilities.

Impacts/lessons learned: IWAY creates a common approach to procurement for the IKEA Group, applying high standards to all services and materials sourced. This includes exploring ways to work with circular procurement models to save materials, increasing the share of renewable, recyclable or recycled materials in the non-home furnishing range, working with suppliers to ensure compliance with the IWAY supplier code of conduct, and developing a sustainable approach for food, including animal welfare standards. It sets specific requirements for ocean transport, land transport and consolidation points; suppliers have to update and submit related surveys to IKEA annually.

Johnson & Johnson – Using sustainability to strengthen carrier relationships²⁷

The Johnson & Johnson logistics operation in North America has a long track record of attracting carriers that share the company’s commitment to customer service, efficiency and sustainable transportation. This includes the United States Environmental Protection Agency’s (US EPA) SmartWay Transport Partnership, a public-private initiative between the EPA and the freight transportation industry aimed at improving efficiency and sustainability. Johnson & Johnson has been a SmartWay partner since 2005 and works exclusively with freight carriers that participate in the program.

Johnson & Johnson has several initiatives to back up that commitment:

- The logistics incentive order program incentivizes customers to place orders in quantities that legally optimize space use on trailers, which reduces the number of deliveries and makes it more efficient to schedule, load and unload goods. These financial and service-oriented incentives are available to all customers that meet a certain order and volume threshold. Furthermore, the company also promotes reductions in idle time and faster turnaround times at distribution centers by scheduling deliveries, allowing dropped trailers and, where available, offering shore-power electrical connections for trucks.

- Dedicated trucks operate as a regional fleet for a distribution center in the northeastern US. The company has precisely matched its truck specifications to the characteristics of the load, using day cabs instead of sleepers.
- A modal shift in North America has allowed the company to shift approximately 700 shipments on five lanes from truckload to intermodal transport; and in 2017 it improved intermodal use from 69% to 78%.
- The exclusive use of 50 SmartWay carriers in its North American logistics operations ensures that the company measures, benchmarks and shares fuel use and emissions.

The case for GHG emissions reductions: The optimization of deliveries, the use of trucks, promoting modal shifts and the use of carriers that are able to measure their performance have allowed Johnson & Johnson to double its miles-per-gallon fuel savings throughout its logistics operations in North America. Consequently, GHG emissions from the Johnson & Johnson supply chain have decreased.

Impacts/lessons learned:

- The financial and service-oriented incentives enable customers to improve truck space use and reduce the number of deliveries.
- The use of dedicated trucks matched with specific loads had allowed savings of about 5,000 pounds of tare weight per truck and another four to five pallets of payload per trip compared to the tractor-trailers the company used previously.
- The mode-shifting initiative has doubled miles-per-gallon fuel savings (6.3 miles per gallon for truckload vs. 12 miles per gallon for intermodal), removed 420 trucks from the road, and kept truckload capacity free for other lanes.
- The exclusive use of SmartWay carriers gives Johnson & Johnson the possibility to evaluate carriers' performance. Furthermore, it gives the company opportunities to collaborate with carriers and customers on more efficient and sustainable transportation practices.

Jumbo – Collaboration between retailer, product suppliers and LSPs²⁹

In 2015, Dutch retailer giant Jumbo, five product suppliers (SCA Hygiene, Heinz, FrieslandCampina, Hero Benelux and Refresco) and logistics service provider Nabuurs decided to focus on CO2 reductions and a more responsive supply chain as a common goal. They understood the everyday challenge that Jumbo was facing when getting products to shops and consumers across the Netherlands using hundreds of carriers. Suppliers transported products from different brands separately to Jumbo's distribution center in Woerden, only for trucks to then return empty. The five product suppliers and Nabuurs arranged to bundle orders for Jumbo in shared trucks and avoid empty running on freight backhauls.

The case for GHG emissions reductions: Their actions paid off: 40% fewer supplies stacked at the distribution center; 40% fewer deliveries; 30% higher truck load factors; 35% fewer transport kilometers; and 35% lower carbon footprint. This has translated into cost savings for all partners. While these have not been the same for each, everyone has benefitted in some way, at the very least by contributing to a greener and more responsive supply chain and being able to position themselves as a supply chain partner striving for excellence in logistics.

Impacts/lessons learned: Logistics supply chains involve several stakeholders. Collaboration among them is key to accelerating the decarbonization of the sector.

Multinational Shippers (China) – Smart Transport Manager Training³⁰

Four Multinational Shippers (IKEA, Heineken, H&M and Walmart) in China defined their long-term sustainability strategy to include GHG emissions reductions throughout the entire supply chain. They requested that the transport managers from several of their key carriers attend Smart Transport Manager Training. Carriers' transport managers play key roles in the operations of road freight operators as they look after the operation's resources and are responsible for safety, compliance and customer service, as well as for maximizing resource use and reducing operating costs.

Smart Transport Manager Training, a training course offered by the SFC, equips transport managers with the skills and expertise they need to develop a robust, credible and effective action plan to increase fleet fuel efficiency. The action plan is based on the five principles of efficient truck fleet management:

1. Fuel management – managing your fuel use;
2. Driver and staff skills – develop skills and motivate drivers and staff;
3. Vehicles and maintenance – optimize vehicle specifications, operations and maintenance;
4. Performance monitoring – continuously monitor and improve your truck fleet's performance;
5. Information technology – use the right information technology efficiently.

The case for GHG emissions reductions: By raising awareness of the holistic approach to fleet fuel efficiency, carriers typically reduce fuel consumption by a minimum of 5% per tonne kilometer, which reduces the carrier's Scope 1 GHG emissions and the shipper's Scope 3 emissions.

Impacts/lessons learned: Trained transport managers who prepare an action plan during the Smart Transport Manager Training will start implementing it by themselves or seek follow up support to work on specific activities, such as eco-driver training or implementing new technologies.

Nike's Sustainable Manufacturing & Sourcing Index³¹

Part of Nike's growth strategy is to seek partners who are developing agile and resilient management systems to drive sustainable business growth by minimizing their environmental impacts, fostering a strong culture of safety and developing an engaged and valued workforce. In 2012, Nike launched its Sustainable Manufacturing and Sourcing Index, a system combining factory ratings for lean manufacturing and human resource management, and health, safety and the environment. Nike's sourcing strategy prioritizes and favors suppliers who show demonstrable leadership in corporate responsibility and sustainability and who seek to move beyond minimum sustainability standards.

Nike measures contract factory performance through the index and works only with factories achieving at least the bronze level. Reaching a bronze rating demonstrates baseline factory compliance with Nike's Code of Conduct and Code Leadership Standards, which the company designed to respect the rights of workers and create a safe working environment.

Nike monitors and audits supplier compliance [for finished goods] through its Factory Compliance Ownership Program, which is based on the company's Code of Conduct and Code Leadership Standards. Internal and accredited third parties, including the Fair Labor Association (a neutral industry body) and assessments by Better Work – a joint initiative of the United Nations International Labor Organization and the International Finance Corporation, a member of the World Bank Group – conduct regular announced and unannounced audits. Suppliers with higher compliance ratings receive contractual preference. When a supplier does not reach the bronze rating, Nike works with factory managers to ensure that they take corrective actions. A supplier that fails to remedy the issues identified is subject to review and sanctions, including potential termination of the supply agreement. As a requirement for working with Nike, factories must comply with Nike's Code of Conduct and Code Leadership Standards, which align with International Labor Organization standards.

The case for GHG emissions reductions: Nike seeks partners with management systems that enable them to minimize the environmental impact of their activities. Nike's Sustainable Manufacturing and Sourcing Index allows it to rate suppliers according to their level of commitment to corporate responsibility and sustainable practices, giving precedence in contract decisions to those that would result in decreased emissions.

Impacts/lessons learned: The Sustainable Manufacturing and Sourcing Index gives environmental and human resource management performance equal weight alongside business metrics in Nike sourcing, increases transparency to reduce non-compliant practices, and creates targets and incentives for suppliers to go well beyond compliance.

Philips – Case from SPLC Guidance for Leadership in Sustainable Purchasing³²

Philips invests in improving operations and achieving its sustainability goals with innovative strategies that require a new way of doing business, moving away from the traditional linear economy towards a holistic and circular one. In 2015, the company's Procurement and Sustainability groups worked together to develop a strategy to achieve carbon neutrality, a commitment the company made as part of the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change. The strategy includes energy efficiency initiatives, the deployment of onsite renewable resources, the purchase of renewable energy credits, and the purchase of a long-term power purchase agreement. Philips undertook the process to develop its cross-functional strategy to carbon neutrality, along with an analysis of power purchase agreement benefits and the business case.

The case for GHG emissions reductions: The strategy includes energy efficiency initiatives, the deployment of onsite renewable resources, the purchase of renewable energy credits, and the establishment of a long-term power purchase agreement, which will allow the company to achieve carbon-neutral operations in the US and reduce its global carbon footprint by 8.3%.

Impacts/lessons learned: Already a leader in sustainability, the Philips power purchase agreement has helped the company take a leap forward in reducing the impact of its North American operations. Though not specific to transport and Scope 3 emissions, the company's cross-functional carbon reduction strategy is a good example.

- The use of dedicated trucks matched with specific loads had allowed savings of about 5,000 pounds of tare weight per truck and another four to five pallets of payload per trip compared to the tractor-trailers the company used previously.
- The mode-shifting initiative has doubled miles-per-gallon fuel savings (6.3 miles per gallon for truckload vs. 12 miles per gallon for intermodal), removed 420 trucks from the road, and kept truckload capacity free for other lanes.
- The exclusive use of SmartWay carriers gives Johnson & Johnson the possibility to evaluate carriers' performance. Furthermore, it gives the company opportunities to collaborate with carriers and customers on more efficient and sustainable transportation practices.

Port of Rotterdam – Discounts on port dues for sustainable vessels³³ [*]

The Port of Rotterdam Authority offers several discount options on port dues. Vessels that regularly visit the Port of Rotterdam or handle a large amount of cargo are rewarded, but sustainable vessels are eligible for a specific incentive scheme. In particular, the following discounts on port dues may apply to sustainable vessels:³⁴

- Seagoing LNG tankers, chemicals/gas tankers and oil/product tankers provided with a Green Award Certificate qualify for a 15% discount on port dues related to gross tonnage size. The Green Award³⁵ is a voluntary quality assessment certification scheme; the certificate is issued by the independent Green Award Foundation to vessels and shipping companies that have made additional investments in the vessel and crew in order to improve environmental performance, safety and quality. The Green Award system also applies to a wide range of inland vessels. Certification is based on the environmental performance of the engines, various other energy saving equipment, environmental management and safety. Inland vessels with a Green Award certificate qualify for a discount of up to 100% on port dues.
- Seagoing Vessels that score 31.0 points or more on the Environmental Ship Index (ESI),³⁶ as administrated by the International Association of Ports and Harbors (IAPH)³⁷ qualify for a 10% discount on port dues related to gross tonnage size already paid. If the vessel also has an individual ESI nitrogen oxide score of 31.0 points or more, the discount will be doubled. The ESI identifies seagoing ships that perform better in reducing air emissions than required by the current emissions standards of the International Maritime Organization; in particular, it evaluates the amount of nitrogen oxide and sulphur oxide that is emitted by a ship and includes a reporting scheme on the greenhouse gas emission of the ship.

The case for GHG emissions reductions: Both the Green Award certificate and the ESI act as indicators of the environmental performance of vessels. They are quality marks and can bring benefits to their holders. The Port of Rotterdam Authority rewards vessels that hold the certificate and/or have a good ESI indicator, thereby encouraging more sustainable behavior in the shipping industry.

Impacts/lessons learned: The discount scheme used by the Port of Rotterdam allows the rewarding of ships that have a reduced environmental impact and enables the promotion of cleaner ships. Both the Green Award certificate and the ESI score can also be used by shippers and ship owners as their own promotional instrument.

Schneider³⁸ – How to create an effective transportation RFP³⁹

A request for proposal (RFP) is the formal call for a carrier to answer a shipper's business needs once the shipper has chosen a select group to consider for hire. Carriers' completed proposals provide the opportunity to compare information on a level basis across all submissions. During the process, shippers can narrow down potential carriers to hire to those who will best execute the work. Before compiling the necessary questions and statistics to create an RFP, the shipper makes decisions for components that will affect the final proposal and impact how a carrier crafts its response:

- Determine the number of bid rounds;
- If packaging or bundling lanes, determine in advance how to evaluate this in the bid process;
- Decide the bid/price duration – best practice is a two-year bid term with annual escalation;
- If splitting bids, implement annual price-adjustment processes for the freight on which your carriers are about to bid;
- Establish whether to adjust bid rates to value incumbency.

After making these decisions, the shipper can create the RFP. In order to allow carriers to provide the most accurate and comprehensive overview of their capabilities, the RFP should ask for both qualitative and quantitative information:

- Qualitative, to allow carriers to report the details of their expertise and business, often in fill-in-the-blank or short-answer formats. Guidelines:
 - I) Create clear, streamlined questions and avoid repetition;
 - II) Include adequate space for respondents to provide context or add additional information to a numerical answer – numbers do not always tell a complete story;
 - III) Format the RFP so that the carrier provides accurate scores and data – outdated formats may inhibit the correct reporting of data;

- IV) Limit financial questions, as most carriers are unable to answer them due to privacy restrictions;
- V) Consider creating the RFP in Excel for easy data input and tracking.
- Quantitative, aiming to provide as many details as possible in order to enable the carriers to prepare an accurate proposal. Guidelines are:
 - I) Pay attention to the details, as the shipper needs to see a clear and accurate picture of the carrier's capabilities. The carrier's expertise in the industry, portfolio of services, cultural fit, network and technology use are just a few components to help shippers make the right choice;
 - II) Provide details regarding origin-destination pairings (ZIP/postal codes, states/provinces, regions, freight volume between destination points on each lane);
 - III) Include detailed freight characteristics (e.g., drop and hook);
 - IV) Describe any seasonality/variability and take into account whether there will first be negotiations with incumbents or if it will be a one-bid round, with key lane negotiations among incumbents;
 - V) List any ancillary requirements (e.g., top-off, trailer detention);
 - VI) Identify who is the shipper and who is the consignee;
 - VII) Include bid-to-implementation duration and objectives between the shipper and carrier;
 - VIII) Be prepared to select 2 to 5 alternative carriers as a backup to the primary carrier;
 - IX) Consider creating the RFP in Excel for easy and consistent data input and tracking.

The case for GHG emissions reductions: Reliable and complete upfront information provided in the RFP can help the carrier determine whether the potential business will be the correct fit, mitigating the risk of winning the business and later realizing it is not the right opportunity and/or operating it inefficiently. Inefficiencies in the supply chain exercise can have a negative impact on GHG emissions (e.g., unoptimized deliveries, increased number of needed trips, inefficient use of trucks).

Impacts/lessons learned: To get the most accurate and effective bid from carriers, it is important to have a user-friendly and informative RFP. Thoroughly creating and detailing the RFP at the onset of the process will save shippers time once the carriers return the proposals for consideration. With clear expectations set up front, it will be easier to both eliminate carriers who do not meet the basic requirements of the RFP and spot the ones that are indeed viable candidates.

Home Depot – Supply chain restructuring, bidding process rethinking, carrier rating, collaboration⁴⁰

Home Depot, a home improvement supplies retailing company⁴¹ based in the United States (US), favors a balance between performance and cost when selecting carriers. For the past several years, the company has been revising its approach to the supply chain to better support its retail operations, with three main actions:

- Centralized supply chain: More than 10 years ago, the company took transportation responsibilities away from regional offices and centralized them at Home Depot's headquarters in Atlanta, Canada and Mexico. Prior to centralization, 30% of Home Depot's freight went through the distribution supply chain and 70% went direct to stores; centralization has led to a reversal in those numbers. In the US, Home Depot operates over 60 distribution centers across the country.⁴² Moving products between those distribution centers and more than 2,000 US locations requires Home Depot to use multiple forms of transportation: Home Depot does not own its own trucks, but each distribution center has a dedicated fleet run by dedicated carriers on three-year contracts. Likewise, it puts its less-than-truckload (LTL) contracts out for bidding every two years. The length of those contracts and the way Home Depot is managing its national trucking and intermodal bids for over-the-road (OTR) shipping is changing the relationship between carrier and customer.

- Rethinking the bidding process: In 2009, during the recession, declining retail sales slowed activity along transportation lines. As trucking companies had an abundance of capacity and few expiring contracts, Home Depot began to aggressively bid out its trucking rates against the evergreen prices carriers had long held. Carriers needed work and accepted the new, lower rates, but when the economy began rebounding in 2010 those carriers came back to Home Depot looking to raise prices even though the new contracts were still in place. Home Depot held firm at first, but soon its tender (load) acceptance began to go down: therefore, the rate per mile increased because carriers were not accepting Home Depot's loads, causing many of those loads to move at spot rates. Home Depot responded by quickly adjusting rates for carriers, but the experience made the retailer realize it needed a more standardized process for setting OTR shipping costs. In 2011, Home Depot held its first national bid for a one-year OTR shipping contract. For the past five years, Home Depot has rebid approximately 80% of its expiring OTR trucking and intermodal contracts. Incumbent carriers retained the 20% not bid at a neutral rate. This practice allows strong performing carriers to hold on to lanes that are critical parts of their network. Home Depot typically favors asset-owning carriers because it wants to spend money on companies that are investing in their own trucks and drivers: asset-owning carriers handle more than 95% of Home Depot's overall OTR shipping.
- Rating carriers: In order to have a strong understanding of how each transportation partner and how the network as a whole have performed, Home Depot has developed the Carrier Rack and Stack program, a scorecard that rates the performance of all the carriers in its network. The company shares those scorecards with carriers on a weekly basis, showing how the carrier performed that week, in four-week, twelve-week and year-to-date periods against all other transportation providers in the network. Home Depot factors that annual performance into the following year's bid to choose transportation providers. Based on where the carriers rank, Home Depot artificially inflates the carrier's rates entered into the bidding tool. The reasoning is that a low-performing carrier will actually cost more than a top performing one and accounting for carrier service in the bid helps Home Depot determine the true cost of its contracted rates. The end-process rewards carriers based on a combination of performance, rates and a carrier's SmartWay ranking, which encourages the carriers to reduce emissions and support the environment. Home Depot also uses the scorecards to make service adjustments based on quarterly performance reviews.

Furthermore, Home Depot has recognized the importance of collaboration along the supply chain. After transforming how it approaches its transportation contracts, it continues to work with carriers to improve efficiency in its supply chain and capacity by employing supply chain synchronization where freight orders coincide with selling store patterns. This synchronization results in steadier week-over-week shipping and reduces lead times.

Home Depot is conscious of the difficult work/life balance many truckers experience and is responding by improving efficiencies across its carrier base. This leads to happy drivers who want to run loads for the company. The goal of those efforts is for drivers to make Home Depot a higher priority in shipping.

The case for GHG emissions reductions: The general restructuring of the supply chain and the bidding process, and the consequent introduction of the carrier rating system, have allowed the company to acquire better knowledge and control of its supply chain. The influence of the new carrier rating system in the selection process allows for the rewarding of carriers based on a combination of performance, rates and its SmartWay ranking, a United States Environmental Protection Agency (US EPA) rating that encourages transportation companies to reduce emissions and support the environment.

Impacts/lessons learned:

- The length of the contracts with shippers and the way Home Depot is managing its national trucking and intermodal bids for OTR shipping is changing the relationship between carrier and customer.
- Home Depot has set up a more standardized process for setting OTR shipping costs, holding national bids for a one-year OTR shipping contract.

- Rebidding all of the national carrier contracts each year requires a strong understanding of how each transportation partner and the network as a whole have performed. A carrier rating system facilitates this process and makes the selection of best performing carriers easier, including those committed to emissions reductions.
- The 12-month bid process allows Home Depot and its carriers to reset based on market conditions and network changes. The process has also encouraged carriers to follow through with their commitments: once the new lanes and rates are set, Home Depot sustains approximately 98% of the volume locked-in during the following 12 months. Further, resetting those contracts annually gives Home Depot an opportunity to adjust its lanes and commitment levels to improve capacity.

Unilever – Responsible Sourcing Policy⁴³ [*]

Unilever's Responsible Sourcing Policy (RSP) aims to enable Unilever to work together with suppliers to establish sustainable supply chains. This ambition is also at the core of the Unilever Sustainable Living Plan (USLP), based on 12 fundamental principles anchored in internationally recognized standards (i.e., UN Guiding Principles on Business and Human Rights; International Bill of Human Rights; International Labor Organization's Declaration on Fundamental Principles and Rights at work).

The RSP includes a set of mandatory requirements that all the suppliers need to meet in order to be able to do business with Unilever. RSP supports the implementation of the Unilever Supplier Qualification System (USQS⁴⁴) for all suppliers of products and services to Unilever. When invited to register in USQS, suppliers are assessed against the principles detailed in the RSP. Unilever verifies alignment with and the implementation of the policy's mandatory requirements through the use of supplier self-declaration, online assessments and – for designated high-risk countries and supplier types – independent verification including third-party audits. A three-step process is established: implementing mandatory requirements relevant to the fundamental principles and applying to all the suppliers in a Unilever supply chain; advancing to good practice; achieving and maintaining best practices. Suppliers are also encouraged to move from the mandatory requirements to best practices.

The case for GHG emissions reductions: The RSP embodies the way that Unilever seeks to operate in addition to the standards it expects of its suppliers. This can also be used to push GHG emissions reductions along the supply chain.

Impacts/lessons learned: The policy reinforces Unilever's commitment to working together with suppliers to ensure that the business objectives are delivered while making a positive social impact on supply chains and reducing environmental impacts and GHG emissions.

Van der Stelt – The CO₂ Performance Ladder⁴⁵ [*]

Van der Stelt is a Dutch freight transportation company with a fleet of 45 trucks that has the ambition to continuously develop its sustainability and CO₂ reductions. For this, the organization is certified on the CO₂ Performance Ladder.⁴⁶ Through the award advantage provided by the CO₂ Performance Ladder, Van der Stelt won the tender for a project consisting of the transportation of sediment for one of the Dutch water authorities, Hoogheemraadschap Hollands Noorderkwartier. The water authority presented a tender for this project in 2015 in which it used the CO₂ Performance Ladder as a procurement instrument. To register in this tender, Van der Stelt set its CO₂ ambition level to 3; the company did not have a certificate on the CO₂ Performance Ladder at the time. When Van der Stelt was awarded the contract, it needed to prove that it complied with the CO₂ Performance Ladder level 3 within a year, which it did. Van der Stelt

takes measures to reduce the carbon footprint of the project that is awarded to the company by means of the CO₂ Performance Ladder. The company remains in dialogue with the water authority to ensure effective CO₂ reduction measures are taken. Both Van der Stelt and the commissioning party are investigating various measures to keep the carbon emissions of this project at a minimum.

The case for GHG emissions reductions: In addition to the implementation of CO₂ reduction measures in its projects, Van der Stelt also takes measures to cut back carbon emissions within the organization. Examples of the measures taken are the use of LED lighting, the installation of solar panels, as well as stimulating behavioral change, such as efficient driving measures to save fuel. In order to stimulate behavioral change, the company arranges training for its drivers to become more aware of the consequences of carbon emissions in the atmosphere and how to drive more efficiently. These measures led to carbon savings of 2.6% in 2017. The company has the goal to reduce its carbon emissions by 15% in the period 2015 to 2020. To achieve this objective, Van der Stelt is looking into alternative fuels such as hydrotreated vegetable oil (HVO) and hydrogen fuel. The use of alternative fuels will help the company cut most of its carbon emissions, because 97% of the CO₂ resulting from its activities are caused by diesel. Moreover, the transportation company is looking for ways to reduce CO₂ emissions during the loading and unloading of the goods during transportation.

Impacts/lessons learned: Thanks to the Ladder, Van der Stelt has now has a control mechanism for its ambitions to structurally reduce CO₂ and the company is becoming more and more aware of carbon emissions within its operations and within its projects. In addition, the CO₂ Performance Ladder contributes to the relevance of discussions to reduce CO₂. With this, the importance of carbon emissions reduction is spread throughout the entire organization.

Walmart – Ambitious fleet efficiency targets result in considerable savings

In 2005, Walmart committed to a momentous goal: doubling the efficiency of its fleet by the end of 2015. Walmart achieved such impressive results in part by collaborating with associates to establish more efficient techniques for loading, routing and driving, as well as through collaboration with tractor-trailer manufacturers on new technologies.

The case for GHG emissions reductions: Its year-end results showed a 102.2% improvement in efficiency over its 2005 baseline, with associated savings of nearly USD \$1 billion annually and avoided emissions of almost 650,000 metric tons of CO₂.⁴⁷

Impacts/lessons learned: Collaboration with supply chain partners to optimize operations and to incorporate improvements in equipment and technologies is fundamental to achieving efficiency goals.

4.3 Examples applicable to many companies

Applicable to many companies – FreightShare Lab’s asset sharing platform⁴⁸

Optimizing asset use is one of few decarbonization measures in the logistics sector that closely aligns with good business practice and offers low-carbon mitigation costs.⁴⁹ FreightShare Lab is developing an advanced platform to improve asset use and reduce the number of freight transport vehicles on the road. The objective is to create “the” platform of platforms where companies can share loading spaces within a common service provider, thus potentially optimizing every journey and avoiding empty running. The heart of the platform is the optimization algorithm developed by Route Monkey, which can reduce total fleet mileage by up to 20% and increase productivity by up to 30%. An estimation with real data shows that one fleet of 1,500 vehicles could increase deliveries per vehicle by one-third after using the advanced platform. The enhancement of the algorithm could effectively collate vehicles, depots and other assets from multiple companies, treating them as if they were one fleet. In this way, it can further reduce empty-running of trucks and vans, reduce the number of vehicles operating in congested urban areas, and therefore substantially cut costs and emissions.

The case for GHG emissions reductions: The Low-Carbon Technology Partnerships initiative’s (LCTPi) 2017 annual report found among its key outcomes that “modest asset sharing models that can save 15% [in emissions and mileage] are only being used by 20% of operators, while highly integrated vehicle and depot sharing can lead to a 20% [emissions and mileage] savings and is yet to be taken up in the case of at least 85% of commercial vehicle miles.”⁵⁰ FreightShare Lab’s dynamic data and asset sharing platform can enable route and load optimization/consolidation while simultaneously providing development opportunities to small and medium-sized enterprises. The result is a potential reduction in costs and emissions across fleets of approximately 20%.

Impacts/lessons learned: Freight and logistics operations are notoriously difficult to decarbonize. Smart solutions like an asset sharing platform can accelerate emissions reductions and enhance the sector’s efficiency so that there are fewer vehicles carrying the same, or greater, volumes of goods. This collaboration among stakeholders encourages them to consolidate their cargo, resulting in an optimized load factor, a reduction in fleet mileage, and an increase in productivity.

Applicable to many companies – GLEC Declaration⁵¹

Over the years, many company managers have complained that none of their transport providers provide data in the same format or that none of their customers ask for information in the same way. This leads to wasted efforts in processing and reporting logistics performance data in response to different requests. The Global Logistics Emissions Council’s GLEC⁵² Declaration is a harmonized template, customized to each target audience, that companies and organizations can use to report GHG emissions to different users/stakeholders. Indeed, it builds on a menu of data/information on logistics emissions that organizations can include in their report/GLEC Declaration. GLEC developed the Declaration in consultation with businesses, starting with a selection of GLEC member companies and then with the wider GLEC community, including additional companies as well as green freight programs, NGOs and policy-makers, as well as the European Commission and LEARN⁵³ partners.

The case for GHG emissions reductions: The use of a standardized reporting template to report GHG emissions publicly and to customers could make better data available, enabling the underpinning of European Commission policy and tracking of logistics emission across the European Union against targets. Furthermore, it means companies can have better data to underpin corporate targets and support decision-making. The GLEC Declaration can help businesses streamline efforts to better understand results, lower costs and allow greater focus on emissions reductions.

Impacts/lessons learned: The main reason to implement the GLEC Declaration is to achieve greater harmonization in the disclosure of data/information and to increase transparency at different levels (e.g., overall company, by region, by customer, per shipment).

Applicable to many companies – Shippers and LSPs using SmartWay data to inform transportation purchasing decisions⁵⁴

SmartWay⁵⁵ is the United States Environmental Protection Agency’s (EPA) program aiming to help companies advance supply chain sustainability by providing the transportation industry with tools to measure, benchmark and take action to reduce GHG emissions and improve fuel efficiency. Partnering with SmartWay allows shippers and LSPs to equip themselves with actionable data and, in turn, use that information to help further inform customers’ buying decisions and improve freight sustainability. Initially, SmartWay focused on gathering data from shippers, carriers and LSPs on factors such as tractor age and emissions, miles per gallon, distance travelled, and trailer load weights. Specific, defined transportation emissions data, controls and operational targets are necessary to drive emissions reporting and meet sustainability goals. Measurement is the first step in applying the value of the derived data to reach identified targets. The newest generation of SmartWay allows shippers and third-party logistics providers to evaluate and incorporate environmental data and use it to make educated, meaningful and valuable business decisions. SmartWay compiles information into a standardized, transparent format for reporting carbon footprint data. This allows comparison among carriers’ emission profiles and their use as a decision-making factor in procurement.

The case for GHG emissions reductions: Shippers and LSPs can incorporate environmental performance data into purchasing decisions. For example, carriers in all transport modes can have specific CO₂, nitrogen oxide and particulate matter emissions factors for their operating fleets. These advancements in fleet-specific emissions factors create measurable ways to incorporate environmental performance into the procurement process. When reducing environmental impact, shippers and LSPs often look first at direct emissions or those they can control. Over time, they can improve these impacts and extend their focus to reducing the indirect emissions that result from global supply chain operations. In the future, shippers and LSPs will not only use SmartWay data as a decision point when purchasing services; they will also come to expect its availability and disclosure.

Impacts/lessons learned: Shippers and LSPs have information on their GHG emissions and use it in the decision-making process. Actively participating in these programs brings value directly to shippers, carriers and LSPs by creating efficiency opportunities, new avenues to advance shipper sustainability initiatives and, ultimately, new ways to improve global freight sustainability.

Applicable to many companies – SmartWay’s RFP specification⁵⁶

The SmartWay Transport Partnership is a voluntary collaboration between the United States Environmental Protection Agency (US EPA) and the freight industry designed to increase energy efficiency while significantly reducing greenhouse gases and air pollution. The program gives some suggestions on the proper wording to adopt in preparing (the shipper) and answering (the carrier) RFPs.

- Suggested RFP specification: “Vendors awarded this contract will be required to be an EPA SmartWay Transport Shipper Partner and commit to shipping at least 50% of goods using an EPA SmartWay Transport Carrier Partners.”
- Suggested RFP questions: “Preference will be for suppliers who are an EPA SmartWay Transport Shipper Partner and commit to shipping at least 50% of their goods using EPA SmartWay Transport Carrier Partners. For a list of Partners, see <http://www3.epa.gov/smartway/about/partnerlists.htm>.
I) Is your company an EPA SmartWay Transport Shipper Partner? (Yes/No) Prefer YES a. If yes, have you committed to ship or receive 50% or more of your freight using SmartWay registered carriers? (Yes/No)
II) If you have a private fleet of trucks, is your company a registered EPA SmartWay Transport Carrier Partner? (Yes/No) a. If yes, what bin number are you in (1, 2, 3, 4 or 5) for CO₂ g/mile and g/ton-mile?”

The case for GHG emissions reductions: SmartWay transport partners are leading the way in achieving a cleaner, more efficient transportation future by adopting fuel-saving strategies that increase profits and reduce emissions.

Impacts/lessons learned: Companies that achieve environmental goals through procurement and contracting strategies built on the success of US government environmental purchasing programs can benefit from the same services that federal, state and local governments require of their suppliers. All suggested strategies are adapted from RFP and contract language used by US state and federal agencies.

Annexes

A. Smart Freight Leadership

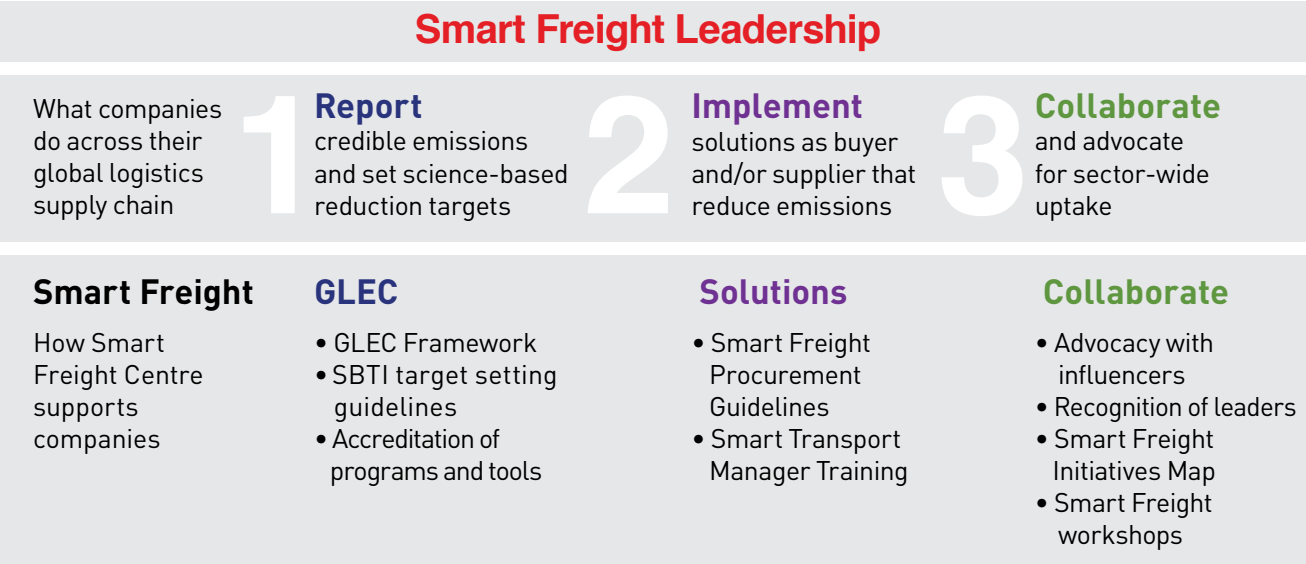
Climate change continues to climb the global agenda, driven by momentum from the Paris Agreement and the Sustainable Development Goals. Within in the framework of the Paris Agreement, governments have developed / are developing Nationally Determined Contributions that embody efforts to reduce emissions and adapt to the impacts of climate change.

In parallel, businesses are strengthening their strategies to reduce their carbon footprint. What is currently lacking is a global and unified strategy for heavy transport covering air, sea, and land and transshipment centers. This would both strengthen efforts between businesses and enable corporations to collaborate with governments directly, planning for and achieving compliance with Nationally Determined Contributions.

Smart Freight Centre (SFC) simplifies the pathway for companies to report emissions, implement solutions to reduce emissions, and collaborate and advocate for uptake and recognizes that leaders must come forward, inspire others and set industry norms. Smart Freight Centre calls this Smart Freight Leadership.

Figure 3 summarizes the Smart Freight Leadership concept, illustrating actions companies can take to become Smart Freight Leaders and the support offered by the SFC to help them achieve such recognition.

Figure 3: Smart Freight Leadership chart



Smart Freight Centre recognizes companies that calculate and report logistics GHG emissions using the Global Logistics Council’s GLEC Framework and demonstrate leadership globally by making progress on one or more of the other smart freight leadership behaviors. Visit [SFC’s website](#) or [contact SFC](#) for further information and for up-to-date news on Smart Freight Leadership,.

SFP Guidelines role

The Smart Freight Leadership (SFL) concept supports the SFP Guidelines as one possible solution that supply chain buyers (and consequently suppliers) can implement to reduce logistics GHG emissions. The SFP Guidelines have the mission of providing guidance to ensure that companies can leverage their transport and logistics procurement to achieve GHG emissions reductions.

Both the SFL concept and SFP Guidelines aim to enable companies to move in the same direction. Three guiding principles – transparency, collaboration, leadership and innovation – are the cornerstones of the SFP Guidelines (see section 1.6). Such principles are consistent with the SFL concept shown in Figure 3 as the SFP Guidelines provide companies with instructions on how to embed a low-carbon approach in companies’ freight and logistics services procurement processes, along with reference material including examples and sources to illustrate efforts.

B. Sector initiatives

By joining forces in a sector initiative, organizations can address the urgent, systemic challenges that are difficult to tackle alone. Members of a sector initiative bring their expertise and perspective together in a common approach that enhances the best potential in the industry.

Most industries manage complex value chains and a deeply structured supplier base. As supply chains are global, it is necessary to promote the standardization and harmonization of supply chain approaches to achieve long-term impact. It is also important that companies active in a sector send a common message about their sustainability activities and requirements to their providers across the supply chain, including for GHG emissions and air pollutant reductions.

By joining a sector initiative, organizations show suppliers, other partners and stakeholders that they hold a common and unified position and understanding of and commitment to supply chain sustainability, while maintaining independent supply chain management. Furthermore, they can develop and apply common tools to drive change and have a positive impact on sustainability, including in their supply chains and its environmental footprint.

Sector initiatives can strive to embed sustainability topics, in particular GHG emissions reductions, into the procurement processes of companies in a targeted sector. When shippers have a common approach to sustainability, it also benefits suppliers who clearly understand what the companies’ specific sector expects from them.

Sector initiative reference table

The following table summarizes the main sector initiatives that can be useful for company procurement teams that are aiming to embed sustainability and GHG emissions and air pollutant reductions in their freight and logistics services procurement process. We may enrich the list of sector initiatives in the future.

Table 3: Sector initiatives reference table

#	Name	Sector	Tools
1	CDP’s supply chain program	Cross-industry	<ul style="list-style-type: none">Standardized reporting platformScope 3 reporting emissions data into their scope 3 inventoryAnalytics products to benchmark and compare suppliers and yourselfFacilitation of collaborative projects
2	Cefic	Chemical	<ul style="list-style-type: none">Safety and Quality Assessment System (SQAS)
3	Confederation of European Paper Industries (CEPI)	Pulp and paper	<ul style="list-style-type: none">To Our Roots and Beyond project

#	Name	Sector	Tools
4	Consumer Goods Forum (CGF)	Consumer goods	<ul style="list-style-type: none"> • End-to-end Value Chain Initiative: Best Practice Sharing, Learning Series • Sustainable Supply Chain Initiative (SSCI): SSCI Benchmarking and Recognition
5	Drive Sustainability	Automotive	<ul style="list-style-type: none"> • Self-assessment questionnaire (SAQ), • Supplier Training Series • Raw Material Observatory
6	Green Electronic Council (GEC)	Information technology	<ul style="list-style-type: none"> • Electronic Product Environmental • Assessment Tool (EPEAT)
7	International Council of Mining and Metals (ICMM)	Mining	<ul style="list-style-type: none"> • Details not available
8	International Petroleum Industry Environmental Conservation Association (IPIECA)	Oil and gas	Reports and guidance on various topics, among them: <ul style="list-style-type: none"> • Low-emission pathways • Transparency and reporting • Emissions management
9	Kitchen Cabinet Manufacturers Association (KCMA)	Cabinet manufacturing	<ul style="list-style-type: none"> • KCMA Certification Seals: KCMA/ANSI A161.1 Quality certification • Environmental Stewardship Program
10	Pharmaceutical Supply Chain Initiative (PSCI)	Pharmaceuticals and healthcare	<ul style="list-style-type: none"> • Common Tools for guidance • PSCI audit sharing program
11	Responsible Business Alliance (RBA) – formerly the Electronic Industry Citizenship Coalition (EICC)	Electronics	<ul style="list-style-type: none"> • RBA Online • Self-assessment questionnaire (SAQ) • Risk Assessment Platform • Risk Readiness Assessment
12	Retail Industry Leaders Association (RILA)	Retail	<ul style="list-style-type: none"> • Retail Sustainability Leadership Model • Retail Sustainability Management Resource Library • Sustainability recognition opportunities • Sustainability reporting platforms
13	Supplier Ethical Data Exchange (Sedex)	Cross-industry	<ul style="list-style-type: none"> • Sedex Advance – collaborative platform • Sedex Members Ethical Trade Audit
14	Sustainable Apparel Coalition (SAC)	Apparel, footwear and textile	<ul style="list-style-type: none"> • Higg Index
15	Together for Sustainability (TfS)	Chemical	<ul style="list-style-type: none"> • TfS Sustainability Assessment • TfS Sustainability Audit
16	World Ports Sustainability Program (WPSP)	Maritime ports	<ul style="list-style-type: none"> • WPSP Portfolio • Environmental Ship Index (ESI) • Further tools for CO2 reductions available via the World Ports Climate Initiative website (guidance document to develop or improve GHG emissions inventories; CO2 calculators; IAPH Tool Box for Port Clean Air Programs)

Sector initiative cards

The following cards take a closer look at the sector initiatives listed in Table 3 to better understand how they can support organizations in achieving the intended outcomes when implementing actions to promote emissions reductions through the freight and logistics procurement process.

CDP's supply chain program

Sector: Cross-industry

Active from: 2008

Brief description

CDP, formerly the Carbon Disclosure Project, runs the global disclosure system that enables companies, cities, states and regions to measure and manage their environmental impacts. Over the past 18 years, CDP has built a comprehensive collection of self-reported environmental data worldwide.

CDP's supply chain program enables purchasing organizations to engage their suppliers on environmental issues to manage risks and drive positive action. Through CDP's standardized global online reporting platform, supply chain members invite strategic suppliers to report their climate change, deforestation and water security information using CDP's annual questionnaires.

CDP's supply chain program supports purchasing organizations in collecting a primary data set, building stronger supplier relationships, joining an established group and benefiting from tried and tested supplier engagement best practices, and changing the way suppliers do business for their customers and for their own economic and environmental benefit.

Tools

- Internationally recognized and standardized reporting platform.
- Scope 3 report to help purchasing organizations integrate suppliers' primary emissions data into their scope 3 inventory.
- Analytics products to benchmark and compare suppliers.
- Facilitation of collaborative projects for buyers and suppliers.

Link: www.cdp.net/supplychain

Cefic

Sector: Chemical

Active from: 1972

Brief description

Based in Brussels, Cefic represents large, medium and small chemical companies across Europe. These companies directly provide 1.2 million jobs and account for 14.7% of the world's chemical production. Cefic interacts on behalf of its 670 members with international and European Union institutions, non-governmental organizations, the international media, and other stakeholders.

Cefic is also an active member of the International Council of Chemical Associations, which represents chemical manufacturers and producers all over the world and seeks to strengthen existing cooperation with global organizations, such as the United Nations Environment Programme and the Organisation for Economic Co-operation and Development, to improve chemicals management worldwide.

Tools

- The Safety and Quality Assessment System (SQAS) is a standardized assessment that Cefic centrally manages and that organizations use to evaluate the quality, safety, security and environmental performance of logistics service providers and chemical distributors. The SQAS covers all key service providers in the land-logistics chain: road transport companies, intermodal operators and terminals, rail carriers, rail tank car maintenance workshops, packaged goods warehouses and tank cleaning stations. Independent assessors carry out assessments.
- Chemical companies use the SQAS system to support their risk management plan for logistics' activities as part of product stewardship. The SQAS reports provide good insights into the strengths and weaknesses of (potential) service providers. Chemical companies use the assessment reports

in their selection processes for new service providers and for the ongoing evaluation of the standards and performance of their existing ones. SQAS reports support the dialogue between chemical companies and their LSPs as part of a continuous improvement process.

Link: <http://www.cefic.org/>

Confederation of European Paper Industries (CEPI)

Sector: Pulp and paper

Active from: 1992

Brief description

The Confederation of European Paper Industries (CEPI) brings together national associations representing 18 countries from the pulp and paper industry across Europe to coordinate actions at the European level and support the industry's strategy and objectives. CEPI's goal is to bring added value to the industry for future growth. Its mission is to promote the uniqueness of the industry as an example to follow, demonstrating how sustainability and competitiveness can go hand in hand.

In order to achieve its mission, CEPI facilitates cooperation throughout the entire forest and paper chain. The European pulp and paper industry uses three basic modes of transport – rail, road and maritime – with road transport as the predominant mode. The organization recognizes that high-quality, flexible, cost-efficient and sustainable transport solutions are essential to maintaining the European pulp and paper industry's competitiveness.

Tools

The To Our Roots and Beyond project helps maintain focus on the industry's leading role in contributing to a sustainable low-carbon society. The project demonstrates how industry is taking responsibility in reducing its carbon emissions, as well as taking a leading role in providing bio-based solutions to decarbonize society at large. In total, the project has gathered 14 innovative case studies from 10 European Union countries involving 12 companies representing a diverse array of projects. The case studies focus on energy efficiency and/or renewables and are indicative of the diverse means the paper industry has at its disposal to reduce emissions while building upon its unique strength as an entirely renewable material.

Link: <http://www.cepi.org/>

Consumer Goods Forum (CGF)

Sector: Consumer goods

Active from: 2009

Brief description

The Consumer Goods Forum (CGF) is a global, parity-based industry network, driven by its members. It brings together the CEOs and senior management of over 400 retailers, manufacturers, service providers and other stakeholders across 70 countries and reflects the diversity of the industry in geography, size, product category and format. Its board of directors, which includes 50 manufacturer and retailer CEOs and chairpersons, governs the Forum. The CGF provides a unique global platform for knowledge exchange and initiatives around four strategic pillars: sustainability, product safety, health and wellness, and end-to-end value chain and standards; the CGF's fifth focus area is knowledge and best practice sharing. It actively shares knowledge collectively created under the CGF umbrella with its members, strategic alliances and other key stakeholders.

The Forum's vision is "Better lives through better business". To fulfil this vision, its members have given the Forum the mandate to develop common positions on key strategic and operational issues affecting the consumer goods business, with a strong focus on non-competitively sensitive process improvement.

Tools

- End-to-End Value Chain Initiative: Best Practice Sharing, Learning Series.
- Sustainable Supply Chain Initiative (SSCI): SSCI Benchmarking and Recognition.

Link: <https://www.theconsumergoodsforum.com/>

Drive Sustainability

Sector: Automotive

Active from: 2013

Brief description

Drive Sustainability is a leading automotive partnership based on strong collaboration, innovation and impact. The initiative brings together 10 global automotive companies willing to address sustainability issues in raw material sourcing, committing to improve both its own performance and that of its supply chain.

The vision is to achieve excellence, innovation and performance in a sustainable manner, including ensuring that all individuals making vehicles or components or providing services receive decent working conditions and are treated with dignity and respect, while minimizing the environmental impact of the industry and promoting business integrity. The partnership's mission is to drive sustainability throughout the global automotive supply chain by integrating sustainability in the overall procurement process.

Drive Sustainability's set of common guidelines – the Global Automotive Sustainability Guiding Principles⁵⁷ – outline expectations for suppliers on key responsibility issues, including human rights, the environment, working conditions and business ethics. The Guiding Principles represent the global strategy and base of all activities.

Tools

- It uses a self-assessment questionnaire (SAQ) to assess the sustainability performance of automotive suppliers. It focuses on social and environmental sustainability, business conduct and compliance, and supplier management. It aligns with the Global Automotive Sustainability Guiding Principles. The SAQ is globally applicable to all suppliers in the automotive supply chain, including sourcing, manufacturing, logistics, assembly and retail.
- The supplier training series aims to build supplier capacity. The training series covers topics in areas such as social and environmental sustainability, business conduct and compliance, and supplier management. The content is based on Global Automotive Sustainability Guiding Principles and tailored to the country where it offers training.
- The Raw Material Observatory is a process to: (i) assess the sustainability risk of the top raw materials for the automotive sector and (ii) identify potentially impactful activities that Drive Sustainability partners could pursue collectively to address such risk. The Material Change report presents the results of the first round of raw material assessments. The report examines the responsible sourcing of materials in the automotive and electronics industries.

Link: <https://drivesustainability.org/>

Green Electronic Council (GEC)

Sector: Information technology

Active from: 2005

Brief description

The Green Electronics Council (GEC) is a mission-driven non-profit that collaborates to achieve a world in which companies only design and manufacture and customers only purchase sustainable information technology (IT) products; it acts as the fulcrum point between those who buy (institutional purchasers) and those who make (IT brands) IT products. By deciding to buy sustainable IT products, institutional purchasers can help the world achieve greater sustainability: GEC supports them implement sustainable procurement and, through its flagship Electronic Product Environmental Assessment Tool (EPEAT) program, provides additional tools and resources.

Tools

EPEAT is a leading global ecolabel for the IT sector and an easy-to-use resource for purchasers, manufacturers, resellers and others wanting to find or promote electronic products with positive environmental attributes. The EPEAT system evaluates electronics on more than 50 environmental criteria, some required and some optional, that measure a product's efficiency and sustainability attributes: products are rated gold, silver or bronze depending on how many optional criteria they meet.

EPEAT provides independent verification of manufacturers' claims and the EPEAT online registry lists sustainable products from a broad range of manufacturers. National governments and private and public institutional purchasers around the world use EPEAT as part of their sustainable procurement decisions.

GEC developed EPEAT using a grant from the US Environmental Protection Agency. GEC manages it and maintains EPEAT's website and product registry; it also documents the environmental benefits resulting from the purchase of EPEAT-registered products.

Link: <https://greenelectronicscouncil.org/>

International Council of Mining and Metals (ICMM)

Sector: Mining and metals

Active from: 2001

Brief description

The ICMM is an international organization dedicated to a safe, fair and sustainable mining and metals industry. Bringing together 27 mining and metals companies and over 30 regional and commodity associations, the ICMM strengthens environmental and social performance. The council aims to serve as a catalyst for change, enhancing mining's contribution to society. The ICMM is currently working on numerous programs and activities that relate to climate change, socio-economic development, and health and safety matters and involving a large number of companies and organizations.

The ICMM supports greater use of renewable energy, other cost-effective low-emissions technologies, and improved efficiency, including in member company operations. It recognizes that implementing cost-effective energy efficiency has the dual benefit of reducing operational greenhouse gas emissions while improving productivity and reducing costs.

Tools

The ICMM encourages member companies to take voluntary actions to reduce GHG emissions by:

- Developing greenhouse gas emissions reduction strategies (e.g., carbon reduction cost curve assessments, energy-efficiency studies) and implementing economical emissions reductions measures.
- Ensuring the efficient use of natural resources.
- Supporting research into and the development of low greenhouse gas emissions technologies relevant to the industry.
- Measuring progress and reporting results.

Link: <https://www.icmm.com/>

International Petroleum Industry Environmental Conservation Association (IPIECA)

Sector: Oil and gas

Active from: 1974

Brief description

The International Petroleum Industry Environmental Conservation Association (IPIECA) is a non-profit association providing a forum to encourage continuous improvement in the industry's performance. It is a global association involving both the upstream and downstream oil and gas industry. It is also the industry's principal channel of communication with the United Nations.

IPIECA convenes industry and stakeholders to work on issues across the environmental spectrum, including oil spill preparedness and response, biodiversity and ecosystem services and water management. The association promotes environmentally responsible operations across the oil and gas sector by developing, sharing and promoting good practices and knowledge while its member companies continue to meet society's demands for fuels and petroleum products.

Tools

Reports and guidance on various topics, among them:

- Low emissions pathways.
- Transparency and reporting; emissions management.

Link: <http://www.ipieca.org/>

Kitchen Cabinet Manufacturers Association (KCMA)

Sector: Cabinet manufacturing

Active from: 1955

Brief description

The Kitchen Cabinet Manufacturers Association (KCMA) is a non-profit organization that represents companies that manufacture kitchen cabinets, bath cabinets and other residential cabinets, and key kitchen and bath industry suppliers. With a membership of more than 300 companies throughout North America, KCMA works to advance the cabinet industry through standardization, advocacy, setting cabinet quality standards, and sponsoring kitchen and bath cabinet-related research, and by providing the cabinet industry with management tools and educational programs.

Tools

The KCMA Certification Seals:

- KCMA/ANSI A161.1 Quality Certification, which certifies that products meet the established and proven standards for performance and durability.
- The Environmental Stewardship Program (ESP), which proves that manufacturers build cabinets with sustainable and responsible practices that benefit the environment and communities. As part of this certification, the manufacturer must enroll in the US Environmental Protection Agency's SmartWay Transport Partnership as a registered partner.

Link: <https://www.kcma.org/>

Pharmaceutical Supply Chain Initiative (PSCI)

Sector: Pharmaceuticals and healthcare

Active from: 2006

Brief description

The Pharmaceutical Supply Chain Initiative (PSCI) is a non-profit business membership organization in the United States. Its aim is to create a better supply chain in the pharmaceutical and healthcare

industry. Its vision is to establish and promote responsible practices that will continuously improve social, health, safety and environmentally sustainable outcomes for the supply chains of its members. This includes:

- Fair and safe work conditions and practices;
- Responsible business practices;
- Environmental sustainability and efficient use of resources.

The purpose of the initiative is to bring together the pharmaceutical industry to define, implement and champion responsible supply chain practices. Members of the PSCI share knowledge and expertise across the industry to drive complex, global change more effectively than any one organization can alone.

Its three strategic pillars are: (i) leadership; (ii) a community of improving suppliers; (iii) partnering.

Tools

- PSCI develops common guidance tools assessing performance and risk and tailors them to the industry.
- The PSCI audit sharing program enables suppliers to share audits with more than one member via a web-based platform, thus avoiding the replication of audits for each supplier and resulting in efficiency gains for members.

Link: <https://pscinitiative.org/home>

Responsible Business Alliance (RBA)

Sector: Electronics

Active from: 2004

Brief description

The Responsible Business Alliance (RBA) is the world's largest industry coalition dedicated to corporate social responsibility in global supply chains. Founded by a group of leading electronics companies, and formerly named the Electronic Industry Citizenship Coalition (EICC),⁵⁸ RBA is committed to supporting the rights and well-being of workers and communities worldwide affected by global supply chains. RBA members commit to a common Code of Conduct and RBA holds them accountable for their actions under the code. Members use a range of RBA training and assessment tools to support continuous improvement in the social, environmental and ethical responsibility of their supply chains.

Today the RBA is comprised of more than 140 companies, with combined annual revenue of over \$5 trillion, directly employing more than 6 million people.

Tools

- RBA Online, a sustainability data management system designed to help companies manage and share sustainability data.
- A self-assessment questionnaire (SAQ).
- The Risk Assessment Platform, which assesses inherent/potential risks of supplier sites for an early high-level risk assessment within supply chains.
- The Risk Readiness Assessment, which assesses risks in raw material supply chains.

Link: <http://www.responsiblebusiness.org/>

Retail Industry Leaders Association (RILA)

Sector: Retail

Active from: 2007

Brief description

The Retail Industry Leaders Association (RILA) is a trade association in the US that promotes consumer choice and economic freedom through public policy and industry operational excellence. Executives participate in RILA for its educational forums, its public policy advocacy, and its advancement of the industry.

RILA focuses on core areas where retailers can collaborate to make a difference, including supply chains, sustainability, and technology and innovation.

RILA has three types of members: retailer, consumer product manufacturer and service provider.

Tools

RILA helps retailers become sustainability leaders through its Retail Sustainability Initiative (RSI). The RSI offers various programs and working groups that provide education, sharing and networking, such as:

- The Retail Sustainability Leadership Model, which is a tool for retail sustainability executives to identify management practices that will drive improved corporate and sustainability performance. It represents the collective knowledge of many industry experts and numerous retailers.
- The Retail Sustainability Management Resource Library composed of the Retail Sustainability Management Maturity Matrix. Retailers can refer to the resource library for specific tools, case studies and further opportunities to help them advance the maturity of their programs.
- Sustainability Recognition Opportunities, a matrix that summarizes a variety of recognition opportunities available through third parties to showcase leadership in areas ranging from operations to consumer engagement, with links to learn more.
- Sustainability Reporting Platforms, a matrix providing an initial overview of the platforms most often used and referenced in the industry, with links to learn more about reporting on sustainability efforts and accomplishments.

Link: <https://www.rila.org/Pages/default.aspx>

Supplier Ethical Data Exchange (Sedex)

Sector: Cross-industry

Active from: 2004

Brief description

The Supplier Ethical Data Exchange (Sedex) is a global membership organization that aims to make doing business that is good for everyone simpler by working with the right standards, information and technologies.

Sedex hosts one of the world's largest collaborative platforms for the sharing of responsible sourcing data on supply chains. More than 50,000 members in over 150 countries use it to manage labor rights, health and safety, the environment and business ethics performance. Sedex services enable members to bring together many kinds of data, standards and certifications, to make informed business decisions, and to drive continuous improvement across their value chains.

Sedex works in partnership with many of the world's most recognizable brands and thousands of factories, producers and industry experts to shape the future of global trade and to have an increasingly positive impact worldwide.

Tools

- Sedex Advance is a collaborative platform for buyers, suppliers and auditors to store, share and report on information quickly and easily. It includes a self-assessment questionnaire (SAQ), which supplier and buyer members complete when they register.
- The Sedex Members Ethical Trade Audit is a social audit procedure that provides a globally recognized way to assess responsible supply chain activities, including labor rights, health and safety, the environment and business ethics.

Link: <https://www.sedexglobal.com/>

Sustainable Apparel Coalition (SAC)

Sector: Apparel, footwear and textile

Active from: 2010

Brief description

The Sustainable Apparel Coalition (SAC) is a leading apparel, footwear and textile industry alliance for sustainable production. Its vision is of an apparel, footwear and textiles industry that produces no unnecessary environmental harm and has a positive impact on the people and communities associated with its activities.

Tools

The Coalition develops the Higg Index, a standardized supply chain measurement suite of tools for all industry participants that enables brands, retailers and facilities of all sizes – at every stage in their sustainability journey – to accurately measure and score a company's or product's sustainability performance. The Higg Index delivers a holistic overview that empowers businesses to make meaningful improvements that protect the well-being of factory workers, local communities and the environment.

The index measures environmental and social labor impacts across the supply chain. With this data, the industry can address inefficiencies, resolve damaging practices, and achieve the environmental and social transparency consumers are demanding.

Link: <https://apparelcoalition.org/>

Together for Sustainability (TfS)

Sector: Chemical

Active from: 2011

Brief description

In order to enhance sustainability within the supply chain, a group of leading chemical companies joined forces in 2011 for the Together for Sustainability (TfS) initiative. The goal of the TfS initiative is to drive and foster global supply chain resilience, efficiency and sustainability in the chemical industry.

The TfS initiative aims to build the industry's standard for sustainable supply chains and has established a common approach to evaluating and improving the sustainability performance of chemical industry suppliers through a global program that assesses, audits and improves sustainability practices.

Within the TfS initiative, members conduct assessments and audits based on a pre-defined set of criteria and then share them across members, improving efficiency for all involved.

Tools

- The TfS Initiative Sustainability Assessment is based on established international sustainability standards and provides expert feedback to both members and suppliers. The assessment covers the supplier's sustainability management approach to the environment, labor practices and human rights, ethics and sustainable procurement. To ensure a consistent and reliable supplier assessment approach, the TfS initiative selected EcoVadis as its partner and service provider. A typical industry-specific assessment uses an online web-based questionnaire; the assessment is valid for three years, though members can ask their suppliers for more frequent assessments to show continuous improvement.
- The TfS initiative Sustainability Audit is an onsite examination of a company's sustainability practices. Independent companies perform audits using a pre-approved auditor pool. The scope typically covers a single or combined business location, such as a production site, warehouse or office building. The TfS initiative's audit process verifies the supplier's sustainability performance against a pre-defined set of management, environmental, health and safety, labor and human rights, and governance criteria.

Link: <https://tfs-initiative.com/>

World Ports Sustainability Program (WPSP)

Sector: Maritime ports

Active from: 2017

Brief description

In May 2017, the International Association of Ports and Harbors (IAPH) set up the World Ports Sustainability Program (WPSP) to enhance and coordinate the future sustainability efforts of ports worldwide and foster international cooperation with supply chain partners. The WPSP builds on the World Ports Climate Initiative (WPCI) that IAPH started in 2008 and extends it to other sustainable development areas.⁵⁹

In this context, the WPSP aims to illustrate the global leadership of ports that contribute to the United Nations Sustainable Development Goals (SDGs). The program seeks to empower port community actors worldwide to engage with business, government and society stakeholders and create sustainable added value for local communities and wider regions where they operate. The WPSP implements the SDGs along five themes, including climate and energy. This supports the Paris Agreement climate goal aiming to keep global warming well below 2°C. Building on the output of the WPCI, port community actors can collaborate in refining and developing tools to facilitate CO₂ emissions reductions from shipping, port and landside operations. In addition, they can run programs to enable the energy transition, improve air quality and stimulate the circular economy.

Tools

- The WPSP Portfolio is a global database of port-related sustainable development projects. Through the WPSP portfolio, ports worldwide and WPSP partner organizations raise awareness of their ongoing work on sustainability, share their experiences and provide inspiration.
- The Environmental Ship Index (ESI) is a WPSP project that allows the identification of seagoing ships that perform better in reducing air emissions than required by the International Maritime Organization's current emission standards. Several ports offer a substantial discount on harbor dues for ships with a high ESI score.
- Further resources to facilitate CO₂ emissions reductions are available via the WPCI website:
- A guidance document that serves as a reference for ports looking to develop or improve their GHG emissions inventories.
- CO₂ calculators (Scopes 1 & 2; Scope 3 under construction).
- IAPH Tool Box for Port Clean Air Programs,⁶⁰ which complements and supports the WPCI website by providing a resource for GHG case studies and emissions reduction strategies.

Link: <https://sustainableworldports.org/>

C. Sources

Professional literature and company practices

- A.P. Moller-Maersk A/S. 2017. "Sustainability Strategy 2014–2018". Retrieved from <https://www.maersk.com/en/about/sustainability/read-more-about-sustainability/sustainability-strategy>.
- A.P. Moller-Maersk A/S. 2017. "Third Party Code of Conduct". Retrieved from <https://www.maersk.com/en/about/sustainability/third-party-code-of-conduct>.
- A.P. Moller-Maersk A/S. 2017. Sustainability Report 2017. Retrieved from <https://www.maersk.com/en/about/sustainability/reports>.
- A.P. Moller-Maersk A/S. 2018. "Responsible Procurement". Retrieved from <https://www.maersk.com/en/procurement/responsible-procurement>.
- Association Club Déméter. 2018. "Dispositif FAIR FRET". Retrieved from <http://www.club-demeter.fr/>.
- BICEPS (Boosting Initiatives for Collaborative Emission-reduction with the Power of Shippers) Network. 2016. "BICEPS Rating System". <https://bicepsnetwork.org/rating-system/>.

- BMW Group. 2017. BMW Group supplier sustainability policy. Retrieved from https://www.bmwgroup.com/content/dam/grpw/websites/bmwgroup_com/responsibility/downloads/en/2017/Supplier_Sustainability_Policy.pdf.
- BMW Group. 2017. Sustainable Supply Chain Management – Due Diligence in the Supply Chain. Retrieved from https://www.bmwgroup.com/content/dam/grpw/websites/bmwgroup_com/responsibility/downloads/en/2017/BMW_Group_due_diligence_in_the_supply_chain.pdf.
- BMW Group. 2018. “BMW Group International Terms and Conditions for the Purchase of Production Materials and Automotive Components”. Retrieved from https://b2b.bmw.com/documents/14402/7501963/180331_IPC+2018_EN_clean_v2.pdf/150a812c-228b-7ffc-323e-f576133c39ae.
- Carbon Disclosure Project – CDP. 2017. Missing link: Harnessing the power of purchasing for a sustainable future. Retrieved from <https://www.cdp.net/en/research/global-reports/global-supply-chain-report-2017>
- Clean Cargo Working Group – CCWG. 2015. How to Calculate and Manage CO2 Emissions from Ocean Transport. Retrieved from <https://www.bsr.org/en/our-insights/report-view/how-to-calculate-and-manage-co2-emissions-from-ocean-transport>.
- Foundation for Climate Friendly Procurement and Business – SKAO. 2017. How to use the CO2 Performance Ladder – A practical manual for companies, Part 1 and Part 2. Retrieved from https://www.skao.nl/home_en.
- Foundation for Climate Friendly Procurement and Business – SKAO. 2015, Handbook: CO2 Performance Ladder 3.0. Retrieved from https://www.skao.nl/home_en.
- Foundation for Climate Friendly Procurement and Business – SKAO. 2016. Procurement Guide Version 3.0. Retrieved from https://www.skao.nl/home_en.
- Global Environmental Management Initiative. 2018. GEMI Quick Guide: Strategic Buyer/Supplier Collaboration on Sustainability. Retrieved from <http://gemi.org/solutions/solutions-quick-guides/gemi-quick-guide-on-buyer-supplier-collaboration-on-sustainability/>.
- IKEA. 2013. “IWAY Standard: Transport section”. Retrieved from https://www.ikea.com/ms/en_US/pdf/reports-downloads/IWAY-standard-transport-section.pdf.
- IKEA. 2016. “IWAY Standard”. Retrieved from https://www.ikea.com/ms/en_US/pdf/reports-downloads/IWAY-standard-ed-5.2.pdf.
- INGKA Holding. 2018. Sustainability Summary Report FY17. Retrieved from https://www.ikea.com/ms/en_US/pdf/sustainability_summary/INGKA_Sustainability_Summary_Report_FY17.pdf
- International Organization for Standardization – ISO. 2017. “ISO 20400:2017 standard on Sustainable Procurement”. Retrieved from <https://www.iso.org/standard/63026.html>.
- McKinnon, A. 2018. Decarbonizing Logistics: Distributing Goods in a Low Carbon World. Kogan Page Ltd. ISBN 978-0-7494-8047-9.
- New Zealand Sustainable Business Council – NZSBC. 2016. Sustainable procurement guidelines for freight. Retrieved from https://www.sbc.org.nz/__data/assets/pdf_file/0011/119783/Sustainable-procurement-guidelines-for-freight.pdf.
- Nike Inc. 2018. “Sourcing and Manufacturing standards”. Retrieved from <https://sustainability.nike.com/sourcing-manufacturing-standards>.
- Nike Inc. 2018. FY16/17 Sustainable Business Report. Retrieved from <https://sustainability.nike.com/reports>.
- Railsponsible website. <http://railsponsible.org/>.
- Railsponsible. 2018. Annual Report 2017-2018. Retrieved from <http://railsponsible.org/download/annual-report-2017-2018/>.
- Railsponsible. 2018. “Railsponsible Position Paper on Climate”. Retrieved from http://railsponsible.org/wp-content/uploads/2018/07/Railsponsible_Climate-Position-Paper.pdf.
- Sustainable Purchasing Leadership Council – SPLC. 2016. Guidance for Leadership in Sustainable Purchasing. Retrieved from <https://www.sustainablepurchasing.org/guidance/>.
- Unilever. 2017. Responsible Sourcing Policy – Working in partnership with our suppliers. Retrieved from https://www.unilever.com/Images/responsible-sourcing-policy-interactive-final_tcm244-504736_en.pdf.
- United Nations Global Compact and Business for Social Responsibility (BSR). 2015. Supply Chain Sustainability – A Practical Guide for Continuous Improvement. Retrieved from <https://www.unglobalcompact.org/library/205>.

Academic literature/papers

- Andersson, D., Dubois, A., Halldorsson, A. & Hulthén, K. 2016. “Purchasing transport services: Relationships and conditions for ‘green connectivity’”. Paper 32. Green Logistics Management: Balancing environmental and shareholder priorities Colloquium. 29 September 2016.
- Broman, G. & Robèrt, K.H. 2015. “A Framework for Strategic Sustainable Development”. Journal of Cleaner Production. 140. 10.1016/j.jclepro.2015.10.121.
- Celik, E., Erdogan, M. & Gumus, A.T. 2016. “An extended fuzzy TOPSIS–GRA method based on different separation measures for green logistics service provider selection”. Int. J. Environ. Sci. Technol. (2016) 13: 1377. <https://doi.org/10.1007/s13762-016-0977-4>.
- Evangelista, P., Colicchia, C. & Creazza, A. 2017. “Is environmental sustainability a strategic priority for logistics service providers?”. Journal of Environmental Management. 198. 353–362. 10.1016/j.jenvman.2017.04.096.
- Evangelista, P., Hüge-Brodin, M., Isaksson, K., & Sweeney, E. 2013. “Purchasing Green Transport and Logistics Services: Implications from the Environmental Sustainability Attitude of 3PLs”. In D. Folinas (Ed.), Outsourcing Management for Supply Chain Operations and Logistics Service (pp. 449–465). Hershey, PA: IGI Global. doi:10.4018/978-1-4666-2008-7.ch026.
- Evangelista, P., Santoro, L. & Thomas, A. 2018. “Environmental Sustainability in Third-Party Logistics Service Providers: A Systematic Literature Review from 2000–2016”. Sustainability. 10. 1627. 10.3390/su10051627.
- Govindan, K., Agarwal, V., Dhingra Darbari, J. & C. Jha, P. 2017. “An integrated decision making model for the selection of sustainable forward and reverse logistic providers”. Annals of Operations Research. 273. 10.1007/s10479-017-2654-5.
- Kähkönen, A.K., Lintukangas, K., Hallikas, J. & Evangelista, P. 2016. “Responsible buying practices in supply risk management”. International Journal of Integrated Supply Management. 2016 Vol.10 No.3/4.
- L. Kudla, N. & Klaas-Wissing, T. 2012. “Sustainability in shipper-logistics service provider relationships: A tentative taxonomy based on agency theory and stimulus-response analysis”. Journal of Purchasing and Supply Management. 18. 218–231. 10.1016/j.pursup.2012.04.001.
- McKinnon, A. 2014. “The possible influence of the shipper on carbon emissions from deep-sea container supply chains: An empirical analysis”. Maritime Economics & Logistics. 16. 10.1057/mel.2013.25.
- O. Large, R., Kramer, N. & Katharina Hartmann, R. 2013. “Procurement of logistics services and sustainable development in Europe: Fields of activity and empirical results”. Journal of Purchasing and Supply Management. 19. 122–133. 10.1016/j.pursup.2013.05.002.
- Raut, R., Kharat, M., Kamble, S. & Shekhar Kumar, C. 2016. “Sustainable Evaluation & Selection of potential Third Party Logistics providers (3PL): an Integrated MCDM Approach”. Benchmarking An International Journal 25(2):00–00 January 2018.
- Rizet, C., Cruz, C. & de Lapparent, M. 2013. “Impact of logistical choices on freight transport carbon efficiency”. World Conference on Transport Efficiency. July 2013, France.

SFP Guidelines Contributors

The people who contributed to the SFP Guidelines are mostly from the Transforming Heavy Transport project and from the Global Logistics Emissions Council (GLEC). We would like to highlight the input of the following companies and experts.

Shippers

- H&M
- Heineken
- Intel
- PepsiCo
- Signify
- Smurfit Kappa
- Unilever
- Walmart

LSPs/carriers

- A.P. Moller-Maersk
- DB Schenker
- Deutsche Post DHL Group
- Ewals
- RCS Logistics
- STEF

Agencies/NGOs

- ADEME
- CDP
- Global Logistics Emissions Council
- SKAO
- TK Blue

Experts

- Ian Wainwright – Futurecitylogistics
- David Coleman – Transcient
- Marcio Dagosto – UFRJ
- Alan Dirks – Port of Rotterdam
- Pietro Evangelista – CNR-IRISS
- Alan McKinnon – KHL University
- Buddy Polovick – US Environmental Protection Agency
- Jorge Tesler – Centro de Logística y Sostenibilidad
- Laetitia Dablanç – IFSTTAR

Notes

¹ WBCSD and Smart Freight Centre developed a project concept to unify business in the low-carbon transition of freight transport with the working title Transforming Heavy Transport. The goal is to help create demand for low-carbon heavy transport and enhance collaboration. In particular, the project aims to:

- Establish a global business community by identifying interdependencies between We Mean Business coalition partners, Smart freight Centre and external organizations;
- Develop a We Mean Business strategy for heavy transport that builds on existing initiatives and covers the three Smart Freight Leadership behaviors;
- Create a framework for logistics procurement that considers GHG emissions as guidance for companies that subcontract freight services. This will help mobilize action by logistics service providers and transport operators.

² See the Low Carbon Technology Partnerships (LCTPi) initiative at <https://www.wbcsd.org/Programs/Climate-and-Energy/Climate/Low-Carbon-Technology-Partnerships-initiative>.

³ Smart Freight Leadership, as described in Annex A.

⁴ As they are global in scale, the issues that dominate the sustainable development agenda – i.e., climate and energy, environmental and social issues, including GHG emissions reductions – are too big for individual companies to tackle alone. Therefore, companies must work together to achieve improvements that have a real impact. Sector initiatives help to achieve this goal. By joining a sector initiative, companies can: share experiences and information; develop and apply common tools; work together on common projects to improve the sustainability of their supply chains and work to achieve GHG emissions reductions; and send a common message to their supply chains about sustainability.

⁵ For each action, we estimated the complexity of implementation by assessing all the sub-actions suggested in the Toolbox (see chapter 3) and expressed that as a percentage from 0% to 100%. We present this in a graph through the following equivalences:

- 0-20% = complexity of implementation 1 on 5;
- 21-40% = complexity of implementation 2 on 5;
- 41-60% = complexity of implementation 3 on 5;
- 61-80% = complexity of implementation 4 on 5;
- 81-100% = complexity of implementation 5 on 5.

⁶ A non-exhaustive list of interesting investor initiatives providing sustainability requirements includes CDP – Carbon Disclosure Project; DJSI – Dow Jones Sustainability Indices; MSCI – Morgan Stanley Capital International; Natural Capital Coalition; SASB – Sustainability Accounting Standards Board Foundation; and the TCFD – Task Force on Climate-Related Disclosure.

⁷ See Annex B: Sector initiatives.

⁸ Agency theory explains the relationship between principals and agents in business. Agency theory aims to resolve problems that can exist in agency relationships due to unaligned goals or different levels of aversion to risk. The most common agency relationship in finance occurs between shareholders (principal) and company executives (agents). See <https://www.investopedia.com/terms/a/agencytheory.asp>.

⁹ In terms of the agency problems of sustainability in a shipper-LSP relationship, the main findings are:

- Companies should better design and implement stimuli for sustainability (i.e., selection criteria and incentives) aimed at shippers; agency theory can support traditional problems, such as moral hazards and adverse selection;
- The proactiveness of small and medium-sized enterprises and larger companies are different and impacts and drivers are different; you should take this into account when establishing procurement processes;
- Sustainability in one-on-one or supply chain relationships demands different points of view and datasets, such as from a local firm or from a network perspective.

¹⁰ This action logically follows the establishment of KPIs as per Action 0.2 – Award scheme establishment.

¹¹ For instance, we propose a two-phase model based on data envelopment analysis (DEA) and analytic network process (ANP) techniques:

- The methodology allows for the evaluation and selection of LSPs and freight operators in two steps: initial screening of maximally efficient third-party logistics providers using DEA; and ANP-based final ranking and selection. ANP enables companies to consider the degree of inter-dependences among the criteria.
- Selection criteria could be transportation charge per metric ton per km; fleet capacity/strength; vehicle type and quality (rejection %); driver rejection %; LSP/freight operator performance with desired output; flexibility; vehicle lead (response) times. Eco-efficient transportation leads to better transportation planning, better inventory and warehouse management, lower inventory costs and sustainable supply chain operations.

¹² Agency theory explains the relationship between principals and agents in business. Agency theory aims to resolve problems that can exist in agency relationships due to unaligned goals or different levels of aversion to risk. The most common agency relationship in finance occurs between shareholders (principal) and company executives (agents). See <https://www.investopedia.com/terms/a/agencytheory.asp>.

¹³ The final KPIs and their benchmark values can be definitively agreed in the Contracting phase, but we recommend that you start their elaboration in the Planning phase so as to ensure their alignment with the shipper's objectives of cutting CO2 emissions and monitoring supplier performance throughout the entire smart freight procurement process.

¹⁴ Govindan, K., Agarwal, V., Dhingra Darbari, J. & C. Jha, P. 2017. "An integrated decision making model for the selection of sustainable forward and reverse logistic providers". Annals of Operations Research. 273. 10.1007/s10479-017-2654-5.

¹⁵ This can immensely improve the sustainable performance value of the supply chain network and secure reasonable profits. You can achieve this by introducing 7 economic criteria in LSP evaluation: financial position, asset ownership, optimization capabilities, cost of service, reputation and market position, experience in a similar industry, geographical location. Through this, it is possible to obtain a reasonable trade-off between financial gains and association with sustainable partners. Emphasis must be put on evaluating logistics partners on social and environmental criteria along with the traditional economic criteria to enhance the firm's sustainability image.

¹⁶ O. Large, R., Kramer, N. & Katharina Hartmann, R. 2013. "Procurement of logistics services and sustainable development in

Europe: Fields of activity and empirical results”. *Journal of Purchasing and Supply Management*. 19. 122–133. 10.1016/j.pursup.2013.05.002.

¹⁷ The Incoterms specify who organizes and pays for the physical movement of goods, their insurance while in transit and customs clearance. It is known that the amount of leverage that a shipper can exert on “carbon-sensitive” decisions depends partly on the Incoterms employed and the use of freight forwarders, as the Incoterms can give the shippers a substantial degree of control over their global supply chains, in particular for inbound transport. [See McKinnon, A. 2014. “The possible influence of the shipper on carbon emissions from deep-sea container supply chains: An empirical analysis”. *Maritime Economics & Logistics*. 16. 10.1057/mel.2013.25.]

¹⁸ Agency theory explains the relationship between principals and agents in business. Agency theory aims to resolve problems that can exist in agency relationships due to unaligned goals or different levels of aversion to risk. The most common agency relationship in finance occurs between shareholders (principal) and company executives (agents). See <https://www.investopedia.com/terms/a/agencytheory.asp>.

¹⁹ Evangelista, P., Huge-Brodin, M., Isaksson, K., & Sweeney, E. 2013. “Purchasing Green Transport and Logistics Services: Implications from the Environmental Sustainability Attitude of 3PLs”. In D. Folinas (Ed.), *Outsourcing Management for Supply Chain Operations and Logistics Service* (pp. 449–465). Hershey, PA: IGI Global. doi:10.4018/978-1-4666-2008-7.ch026.

²⁰ Evangelista, P., Huge-Brodin, M., Isaksson, K., & Sweeney, E. 2013. “Purchasing Green Transport and Logistics Services: Implications from the Environmental Sustainability Attitude of 3PLs”. In D. Folinas (Ed.), *Outsourcing Management for Supply Chain Operations and Logistics Service* (pp. 449–465). Hershey, PA: IGI Global. doi:10.4018/978-1-4666-2008-7.ch026.

²¹ Green Freight Programs promote the use of technologies and practices able to improve the efficiency of the freight sector, while ensuring the possibility to benchmark and track performance. The final objectives are cost cutting, carbon tracking and creating environmental benefits. See “What are Green Freight Programs” at <http://www.globalgreenfreight.org/why-green-freight/what-are-green>.

²² See <https://www.maersk.com/en/procurement/responsible-procurement>

²³ The Carbon Disclosure Project (CDP) highlights this case as part of its Global Supply Chain Report to support collaboration and transparency in the value chain. The 2017 edition explores how purchasers and suppliers are working together to improve sustainability across global supply chains and taking advantage of low-carbon opportunities. It includes the Braskem case as an example of the framework approach for reducing carbon emissions and water impacts in the supply chain, in the section “Act”. See <https://www.cdp.net/en/research/global-reports/global-supply-chain-report-2017>. The CDP is an initiative that supports companies and cities in disclosing the environmental impact of major corporations. It aims to make environmental reporting and risk management a business norm and to drive disclosure, insight and action to achieve a sustainable economy. CDP works with purchasing organizations and suppliers to reduce climate, water and forest risks.

²⁴ See the *Dow Corporate Sustainability Report 2017* at <https://corporate.dow.com/en-us/science-and-sustainability/reporting>.

²⁵ GEMI brings together leading companies dedicated to fostering global environmental, health and safety and sustainability excellence through the sharing of tools and information to help business achieve environmental sustainability excellence. Through the collaborative efforts of its members, GEMI also promotes a worldwide business ethic for environmental, health and safety management and sustainable development through example and leadership. GEMI provides guidance for companies in a wide range of industrial sectors to work together in a cost-effective manner. Among the solutions, its Quick Guide aims to support companies in engaging with their suppliers in more collaborative ways to create shared value. See <https://corporate.ford.com/microsites/sustainability-report-2017-18/operations/supplier-impact/reducing-footprint.html>.

²⁶ Download the IWAY Standard from https://www.ikea.com/ms/en_US/pdf/reports-downloads/IWAY-standard-ed-5.2.pdf.

²⁷ See <https://www.inboundlogistics.com/cms/article/jj-uses-sustainability-to-strengthen-carrier-relationships>.

²⁸ See <https://www.epa.gov/smartway>.

²⁹ See <https://www.smartfreightcentre.org/en/news/blog/849/?token=XB1IUltvYhmcjSSLs-BPysiaJWuo3WL9>.

³⁰ See <https://www.smartfreightcentre.org/en/what-is-smart-transport-managers-training/>.

³¹ See <https://sustainability.nike.com/sourcing-manufacturing-standards>.

³² The reported example is based on the Sustainable Purchasing Leadership Council (SPLC) case “Carbon Neutrality: How Philips’ Procurement & Sustainability Teams Delivered Results”, available at <https://www.sustainablepurchasing.org/library/>. The SPLC is a non-profit organization whose mission is to support and recognize purchasing leadership that accelerates the transition to a prosperous and sustainable future. It has defined 5 principles (understanding; commitment; results; innovation; transparency), along with guidance. It has developed maturity levels (initiating; developing; improving; leading) to allow purchasers to benchmark where they are at themselves. The SPLC guide aims to be a comprehensive handbook to help organizations to iteratively grow their sustainable purchasing efforts into a comprehensive sustainable purchasing program, thus improving environmental, social and economic performance within their supply chains. The guidance also helps them link sustainable purchasing to business processes and financial performance. SPLC Benchmark is a program released in 2017 that enables diverse organizations to assess their own sustainable purchasing activities against the recommendations in SPLC’s Guidance and to benchmark the maturity of their sustainable purchasing activities against those of other organizations. This voluntary program is the basis for the SPLC Awards, a rating system rewarding organizations that demonstrate leadership in sustainable purchasing; it also aims to provide standardization to suppliers and purchasers. SPLC adds all awarded case studies to its Case Study Library and cross links them with the SPLC Guidance.

³³ See <https://www.portofrotterdam.com/en/shipping/sea-shipping/port-dues/discounts-on-port-dues>

³⁴ See <https://www.portofrotterdam.com/en/files/general-terms-and-conditions-including-port-tariffs>

³⁵ See <https://www.greenaward.org/>

³⁶ See <http://www.environmentalshipindex.org/Public/Home>

³⁷ See <http://wpci.iaphworldports.org>

³⁸ Schneider is a provider of truckload, intermodal and logistics services in North and Central America and China. Its services include regional, long-haul, expedited, dedicated, bulk and intermodal transport, brokerage, cross-dock logistics, supply chain management, and port logistics. Its website includes a Knowledge Hub that aims to be a source of answers. It is organized by shipper challenges, services and type of content and includes an article dedicated to requests for proposals (RFPs).

³⁹ See <https://schneider.com/knowledge-hub/best-practices/how-to-create-an-effective-transportation-request-for-proposal>

⁴⁰ See <http://www.tlimagazine.com/sections/trucking-and-freight/2236-home-depot>

⁴¹ At the end of the second quarter, the company operated a total of 2,270 retail stores in all 50 U.S. states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, 10 Canadian provinces and Mexico. The company employs more than 370,000 associates. Home Depot is the largest home improvement retailer in the world.

⁴² Eighteen (18) of them are Rapid Deployment Centers (RDCs) and roughly half of Home Depot’s products flow through those RDCs. At the RDCs, vendor freight delivers to Home Depot’s mechanized cross-dock buildings and the company swiftly delivers products straight to stores and places them directly on store shelves. Stores receive daily deliveries from the RDCs, which has allowed Home Depot to cut the amount of inventory each retail location must keep.

⁴³ See https://www.unilever.com/Images/responsible-sourcing-policy-interactive-final_tcm244-504736_en.pdf.

⁴⁴ See <https://www.unilever.com/about/suppliers-centre/unilever-supplier-qualification-system/>.

⁴⁵ See https://www.skao.nl/news_en/%E2%80%98The_CO2_Performance_Ladder_is_a_driver_for_structural_CO2_reduction%E2%80%99_-6666.

⁴⁶ The CO2 Performance Ladder is an accredited certification scheme originally developed by the Dutch railway in 2009; since 2011, the Foundation for Climate Friendly Procurement and Business (SKAO) owns and manages the system. The CO2 Performance Ladder helps organizations gain insights into and reduce their carbon emissions internally, in projects and in their supply chain business sector. It covers energy use and CO2 emissions. The instrument is both a CO2 management system as well as a procurement tool that awards advantages to companies and projects with specific CO2 policies, in accordance with European Union procurement law. The Organisation for Economic Co-operation and Development mentions the Ladder among best practices for sustainable procurement (2015).

⁴⁷ See <https://corporate.walmart.com/2016grr/enhancing-sustainability/reducing-energy-intensity-and-emissions>.

⁴⁸ See <https://www.freightsharelab.com/freightsharelab2018/en/page/home>.

⁴⁹ McKinnon, A. (2018). Decarbonizing Logistics: Distributing Goods in a Low Carbon World. Kogan Page Ltd. ISBN 978-0-7494-8047-9.

⁵⁰ See <https://www.wbcsd.org/Programs/Climate-and-Energy/Climate/Low-Carbon-Freight/Resources/A-Low-Carbon-Freight-report-under-WBCSDs-LCTPi>.

⁵¹ See <http://www.nucms.nl/tpl/learn/upload/LEARN%20Summary%202019%20-%20GLEC%20Declaration%20-%20online%20%281%29.pdf>.

⁵² See <http://www.smartfreightcentre.org/glecframework/glecframework>.

⁵³ See <http://www.learnproject.net/>.

⁵⁴ See <https://www.inboundlogistics.com/cms/article/using-smartway-data-to-inform-transportation-purchasing-decisions>.

⁵⁵ See <https://www.epa.gov/smartway>.

⁵⁶ See <https://practicegreenhealth.org/pubs/epp/FiveEasyWays.pdf> and https://practicegreenhealth.org/sites/default/files/upload-files/smartway_supplier_disclosure.pdf.

⁵⁷ See <https://drivesustainability.org/wp-content/uploads/2017/12/Guiding-Principles.pdf>.

⁵⁸ In October 2017, the Electronic Industry Citizenship Coalition (EICC) became the Responsible Business Alliance (RBA) to reflect its expanded reach and influence.

⁵⁹ The World Ports Climate Initiative’s mission is to:

- Raise awareness of the need for action in the port and maritime community;
- Initiate studies, strategies and actions to reduce GHG emissions and improve air quality;
- Provide a platform for the maritime port sector to exchange information;
- Make information on the effects of climate change on the maritime port environment and measures for its mitigation available.

⁶⁰ The purpose of the International Association of Ports and Harbors (IAPH) Air Quality and Greenhouse Gas Tool Box is to provide ports, both members and non-members of the IAPH, with quick access to the tools needed to start the planning process to address port-related air quality and climate change issues. See <http://wpci.iaphworldports.org/iaphtoolbox/>.



Smart Freight
Centre



wbcsd

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