Smart Freight Centre
Annual Report 2019
Leading the way to efficient and zero emissions freight and logistics
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Let’s face it. The corona crisis lays bare all the vulnerabilities of global supply chains that we will also experience as a result of the climate crisis. Companies and governments may be tempted to resort to quick fixes now. It takes a true leader, however, to realize that rethinking the global supply chain could be an opportunity to also prepare for longterm resilience to climate impacts.

Smart Freight Centre’s aim is to make the logistics supply chain more sustainable. Specifically, we help companies on their journey to zero emissions logistics. Firstly, by making their supply chains more visible through carbon footprinting using the GLEC Framework. Secondly, by developing a company-specific ‘Sustainable Logistics Roadmap’ that translates corporate targets into concrete climate action. And finally, by connecting companies with other stakeholders and working together for supportive policies and programs.

Our prize: 100+ multinational reduce their logistics emissions by 30% by 2030 and reach net-zero emissions by 2050!

I thank our funders, partners and leading multinationals who have stood by our side for the past seven years. I invite you to read our Annual Report 2019 and join our journey!

Sophie Punte
Executive Director

Achievements in numbers 2019

<table>
<thead>
<tr>
<th>Freight and logistics emissions made transparent</th>
<th>Road freight carriers take concrete action</th>
<th>Bringing together the global logistics community</th>
<th>Impacted the reduction of</th>
</tr>
</thead>
<tbody>
<tr>
<td>40+ multinational are using the GLEC Framework to calculate and report global logistics emissions consistently</td>
<td>116 carriers with trained fleet managers and action plans for fuel efficiency across China, Ireland, South Africa, Brazil, Uruguay</td>
<td>50+ companies, associations, programs and other organisations joined the Global Logistics Emissions Council (GLEC)</td>
<td>3 MILLION tonnes of CO₂e between 2016-2018 (reported by companies who have adopted the GLEC Framework)</td>
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Towards zero emissions freight and logistics

Every day goods are delivered to millions of customers around the world, and demand continues to grow.

Freight transportation generates 8% of global CO₂ emissions and as much as 11% if logistics sites are also considered. Between now and 2050 the world will see a doubling in the freight emissions, according to the International Transport Forum. Freight transportation is also a major contributor to air pollution, noise and congestion. We cannot meet our climate and sustainability goals without efforts in this sector.

Yet, it is not high enough on the sustainability agenda of government and business. Key reasons are that the sector is fragmented, freight transportation is largely an outsourced service, and harmonized approaches and policies are lacking.

The good news is that solutions already exist for many stakeholders, sectors and countries. These solutions combined can reduce emissions by at least 80% by 2050. What is needed is sector-wide uptake of these solutions at a faster pace. We can make this happen if we ride the wave of three broader developments that are already transforming the sector: globalization, digitalization and sustainability.

**FREIGHT DEMAND GROWTH IS MANAGED**
- Supply chain restructuring
- Localization and nearshoring
- 3D printing
- Dematerialization
- Consumer behavior

**TRANSPORT MODES ARE SMARTLY USED AND COMBINED**
- Increased use of rail
- Increase use of short sea shipping and inland waterways
- Modular road transport
- Cargo bikes
- Multi-modal optimalization
- Synchronodality

**FLEETS AND ASSETS ARE SHARED AND USED TO THE MAX**
- Load optimization
- Load consolidation and asset sharing
- Reduce empty moves
- Modular packaging and boxes
- Open transport networks and warehouses
- Increase storage density and energy efficiency

**FLEETS AND ASSETS ARE ENERGY EFFICIENT**
- Cleaner and efficient technologies
- Efficient vehicles and vessels
- High capacity vessels, vehicles, duo-trailers
- Driving behavior
- Fleet operation
- Fleet maintenance

**FLEETS AND ASSETS USE LOWEST EMISSIONS ENERGY SOURCE FEASIBLE**
- Electric / hybrids
- Solar / wind
- Biofuels
- Hydrogen
- CNG / bio-LNG
- Cleaner diesel
- Fuel management

© Smart Freight Centre and ALICE-ETP based on A. McKinnon ‘Decarbonizing Logistics’ (2018)
Only through the collaboration of businesses, governments, research and civil society can a sector transformation be realized. However, in this highly commercial sector, the trigger lies predominantly with businesses, especially multinationals with global brands and value chains. As buyers ('shippers') or suppliers ('carriers') of freight transport and logistics services, they have the power to take action and consider climate and sustainability in their business decisions. By acting as leaders, they both inspire others and set the norm for industry, while society also benefits from the improvement in climate and health.

Companies can act in four ways: report, set targets, reduce and collaborate. This approach is called Smart Freight Leadership which was developed by Smart Freight Centre with our Advisory Council of leading experts.

Companies that take action can benefit as they
• Contribute to the Paris Climate Agreement and Sustainable Development Goals
• Improve operational efficiency and reduce associated costs
• Improve customer service and value
• Reduce exposure to climate and air quality-related risks and regulations

**Smart Freight Leadership©**

1. **Report**
   - credible emissions across the multimodal supply chain

2. **Set targets**
   - for emission reduction that are science-based

3. **Reduce**
   - emissions by implementing solutions as buyer or supplier

4. **Collaborate**
   - and advocate for sector-wide action and supportive policy

© developed by Smart Freight Centre with our SFC Advisory Council of leading experts
Smart Freight Centre (SFC) was established in 2013 as a global non-profit organization dedicated to sustainable freight. We cover all freight and only freight.

Our vision
Our vision is ‘Smart Freight’: an efficient and zero-emissions global logistics sector - contributing to Paris Climate Agreement targets and Sustainable Development Goals.

Our mission
Our mission is to bring together the global logistics community through our Global Logistics Emissions Council (GLEC) to work towards this vision.

We believe that increased transparency and collaboration will mobilize companies to reduce the climate and pollution impact arising from global freight.

Our goal
Our goal is that 100+ multinationals reduce at least 30% of logistics emissions by 2030 compared to 2015 across their global logistics supply chains reach net-zero emissions by 2050. Concretely this means at least 80 million tonnes annual CO₂eq emission reductions by 2030.

Our strategy
Our strategy builds on ‘Smart Freight Leadership’ or the four steps by which companies can decarbonize their global logistics supply chain: report emissions, set targets, reduce emissions and collaborate.

Our role is to guide companies on their journey towards zero emissions logistics, advocate for supportive policy and programs, and raise awareness.

We put this into practice through four activities:
• Guide and train multinationals and their logistics partners on how to report, set targets, reduce emissions and collaborate
• Projects on key business barriers to develop guidelines that work for industry, the first of which was the GLEC Framework
• Advocacy with governments and organizations for supportive policy, programs and strategies in order to scale industry action
• Raise awareness through events, workshops and webinars and by publishing stories of companies that demonstrate leadership

All our activities are geared towards impact at scale (ultimately GHG reductions), generating knowledge to guide companies, and financial sustainability.
Carriers & Customers

The Problem

- Freight transport and logistics has a growing impact on climate, air quality and congestion
- Government and business are insufficiently aware or able to take action at scale

SFC’s Role

- Bring together and work with the global logistics community to:
  - Guide multinationals and their logistics partners through global standardized guidelines, workshops and training
  - Advocate supportive policy, programs and strategies
  - Raise awareness and recognize leaders
- Established Global Logistics Emissions Council (GLEC) with over 50 companies, associations, programs, experts and other stakeholders
- Developed GLEC Framework as universal method for logistics emissions calculation and reporting
- Other guidelines: target-setting, procurement, roadmap, carrier training, programs & initiatives
- SFC has voice in 7 leading organizations and presence in key events

Output

- Companies report, set targets, implement solutions to reduce emissions, and collaborate and advocate for sector-wide action
- Leading companies spread the message to get other companies and stakeholders to act
- Governments and organizations other than companies have aligned policies, programs and strategies
- 40+ multinationals use GLEC Framework to calculate and report logistics emissions
- 20 multinationals recognized for leadership: report & targets + reduce + collaborate
- 116 carriers with trained fleet managers and action plans across China, Ireland, South Africa, Brazil and Uruguay
- 22 initiatives and organizations other than businesses that have adopted GLEC Framework or aligned policies, programs and strategies

Outcome

- Companies’ logistics GHG emissions reduced and supply chains are optimized and more sustainable

Impact

- The logistics sector makes a stronger contribution to staying within Paris Climate Agreement targets and to achieving Sustainable Development Goals

Smart Freight Centre’s Achievements

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Who we work with

Our people

Driven, professional and collaborative – the people behind SFC are all propelled by a belief in what we do. Our team, Board, SFC Advisory Council and other councils share a sense of urgency that the global freight transport and logistics sector must make a bigger contribution to the climate and sustainability movement.

SFC’s dedicated purpose is to reduce emissions resulting from freight transportation. The SFC team is comprised of technical and sector experts, skilled moderators and networkers. This enables us to bring the right parties to the table and collaborate deeply across sectors.

Our funders and partners

To scale our impact we partner with organizations and initiatives worldwide. SFC formed the Global Logistics Emissions Council (GLEC) in 2014 with more than 50 leading companies, industry associations, programs, experts and other organizations. We have formal partnerships with BSR, CDP, World Business Council for Sustainable Development, and take part in various platforms, including the WEF Global Future Council on Mobility, the UN-led Global Green Freight Action Plan, the Action towards Climate-friendly Transport Initiative (ACT), and the ALICE European technology platform for logistics.

SFC is a non-profit organization for the benefit of society as a whole. Charitable funds therefore continue to be essential for us to develop global standardized guidelines and advocacy work where the sector and society as a whole benefits. Our funders in 2019 were Shell Foundation, Hewlett Foundation, Trafigura Foundation, UPS Foundation, Oak Foundation, Energy Foundation China, WeMeanBusiness and the European Commission.

Companies and organizations contribute to projects financially or in kind, and pay for services that benefit them directly, such as advice, assessments, training and workshops.

SFC’s annual budget is about 1.6 million Euros. A financial summary will be added to this report in June 2020 after completion of the financial audit.
To manage and improve something you need a performance indicator. At the start of Smart Freight Centre’s journey, we focused on the first barrier: the lack of globally harmonized guidelines to calculate emissions. Secondly, we recognized that to address this barrier coordination and collaboration are required across the industry.

Together with leading companies, industry associations, green freight programs, experts and other organizations, SFC formed the Global Logistics Emissions Council (or GLEC) in 2014. Since then it has grown to include more than 50 partners.

The aim of the GLEC is to develop and implement global harmonized guidelines to calculate, report and reduce logistics emissions throughout the industry.

GLEC partners contribute and benefit in multiple ways:

- Projects on reporting, target setting and reduction help to improve companies’ performance and visibility
- Guidelines that result from these projects help other companies and will influence future standards and policy direction
- Webinars, workshops and other ways of information sharing ensure that partners are kept informed on key developments
- Affiliate partners can position their programs and tools with companies that want to report and reduce emissions
Our main role is to guide and train multinationals and their logistics partners on their journey towards zero emissions logistics.

Many companies are already reporting taking action to reduce emissions. Other companies realize that they should act but don’t know where to start. To support a company’s sustainability strategy, all of them can benefit from developing a roadmap that builds on what the company already has in place and fills the gaps. A Sustainable Logistics Roadmap has 4 steps: where are we now, where are we going, how do we get there, and what do we need.

1. **WHERE ARE WE NOW**
   - **Report** credible emissions across the multi-modal supply chain

2. **WHERE ARE WE GOING**
   - **Set targets** for emission reduction that are science-based

3. **HOW DO WE GET THERE**
   - **Reduce** emissions by implementing solutions as buyer or supplier

4. **WHAT DO WE NEED**
   - **Collaborate** and advocate for sector-wide action and supportive policy

Our guidelines and support tools are a really good basis for companies to develop such a roadmap. For example, the GLEC Framework helps companies to determine their current carbon footprint. But this is not enough. Companies can also follow our e-training courses or we can facilitate an in-company workshop or feedback session. We can partner with associations or programs to reach more companies, for example, within one sector or country.
With the release of the updated GLEC Framework in July 2019, we tackled an important barrier: calculating one global GHG footprint. But there are more barriers. At the GLEC partners meeting in May 2019, we identified the most pressing challenges companies and their stakeholders face next. Some of these relate to rolling out the GLEC Framework, such as data access. Other barriers include emission reduction solutions, procurement practices, or local implementation.

To move fast, we develop concrete projects, big and small, around specific barriers. Leading companies and other partners work with us on these projects that make use of their experience and test what works in practice. Guidelines, case studies and any other materials that are produced are shared with all stakeholders.

Highlights from projects in 2019 are:

- Advanced the implementation of: the GLEC Framework at companies by accrediting 2 programs and 6 calculation tools that can provide emissions calculation in conformance with the GLEC Framework.
- Launched a 3-year process to develop a new ISO standard that builds on the GLEC Framework supported by GLEC members and with 10 governments pledging active support.
- Kicked off the drafting of Bulk Shipping Guidelines, together with the Global Maritime Forum and nine companies, on how to calculate emissions from transporting commodities such as oil, grain, sugar and iron ore.
- Smart Freight Procurement Guidelines, published with WBCSD and allow companies and other organizations to leverage climate action through their supplier contracts. An accompanying questionnaire will be released in 2020 in coordination with Clean Cargo.
- Expanded our Smart Transport Manager training across China, Ireland, South Africa, Brazil and Uruguay and launched an online version to reach other markets.
- To advance collaboration and supportive policy, we held forums with our Smart Freight Alliance China on urban freight, emissions accounting, carrier services and fleet efficiency.
Advocacy and Awareness

A key part of Smart Freight Centre’s mission is advocacy and raising awareness in order to scale industry action. We continue to increase our impact on global, country and sector levels. The objectives are that more governments and organizations as well as companies have aligned policies, programs and strategies, and more companies collaborate and show leadership.

“The updated GLEC Framework is designed to be easy for companies to implement, with clear calculation steps, guidance on reporting and target-setting, and new data on the average emissions from logistics activities.”

- Alan Lewis and Suzanne Greene
Smart Freight Centre
Co-authors of the GLEC Framework

SFC’s Smart Freight Alliance brings together multinationals, government and other stakeholders to advance climate action through collaboration and supportive policy.
Advocacy and Awareness

Launch of the ALICE Roadmap towards Emissions Logistics 2050 led by Sophie Punte

Rubbing shoulders with CEOs and announcing milestone of 26 countries with green freight programs during UN Climate Week

SFC coordinates (with BSR) the logistics working group of the UN-backed "Fashion Industry Charter for Climate Action" with 95+ company signatories

Raising awareness of the urgency to reduce freight emissions and the importance of transparency and collaboration to achieve this

As member of the WEF Future Council on Mobility SFC gave shape to the Corporate Mobility Challenge and the Davos agenda in a WEF panel, Dubai

Supply Chain Logistics Summit & Expo, Antwerp

Global Maritime Forum, Singapore

BearingPoint, Paris

World Bank, Transforming Transportation, Washington DC

VERGE 2019, Oakland and Clean Cargo, autumn meeting, Portland
At the current pace, logistics emissions will double by 2050

Source: ITF Transport Outlook 2019