

LEARN International Workshop

Brussels, 4 and 5 April 2017



Reducing the Logistics Carbon Footprint through improved Emissions Accounting

How can better emissions accounting help businesses to reduce their logistics carbon footprint?

Freight and logistics contributes to about 7% of global carbon emissions and the sector's footprint must be reduced by at least 20% to stay within the 2-degrees scenario of the Paris Climate Agreement. The EC-funded project Logistics Emissions Accounting and Reduction Network (LEARN) is carried out by 13 partners and this workshop was a first opportunity for stakeholders to get involved.

Setting the scene

Szymon Oscislawski of the European Commission's DGMove underscored that industry should lead emission reduction efforts but the EC plays a key role in setting the right policy framework and through projects like LEARN. Sophie Punte of Smart Freight Centre (SFC) introduced the Smart Freight Leadership framework with five leadership behaviors that companies and green freight programs can adopt, including emissions accounting using the GLEC Framework as a universal method. Nicolette van der Jagt of freight forwarders' association CLECAT explained how the LEARN project aims to help businesses improve their emissions accounting with the support of a growing stakeholder network.

Panel discussion: how to empower businesses to improve logistics emissions accounting

Denis Choumert of the European Shippers Council led the panel discussion, stating that it is never too late to LEARN. Green freight programs take a central role. Nico Anten of Dutch NGO Connekt said that the biggest value of the Lean and Green program lies in a growing community of companies working and innovating together, initially reducing 12% emissions but aiming for zero emissions. Karl Simon of USEPA said that SmartWay combines sharing emissions data in a confidential and useful way with helping carriers find technologies to improve efficiency, and giving recognition to companies through a label and rewards.

Companies are doing their share too. Blair Chikasuye explained HP's Global Logistics Sustainability Roadmap to reduce emissions, and that programs like SmartWay and Clean Cargo Working Group help get the right carrier information and connect with likeminded companies. Anne Dubost pointed out that logistics represents about 12% of Heineken's carbon footprint, and that the GLEC Framework will allow them to communicate with companies around the world at the same level and work towards zero emissions.

Research can help advance emissions accounting. Verena Ehrler from DLR explained how the research project Cofret contributed to the GLEC Framework by getting a better understanding of what should be measured to give meaningful information to companies. Susana Val mentioned that the Zaragoza Research Institute started a Masters in Sustainable Logistics and works with Spanish carriers to measure emissions and understand how to save fuel, for example, through better distribution or more efficient transport equipment.

Live voting session: how can different stakeholders help maximize business uptake of logistics carbon accounting and reduction?

Iraklis Stamos of IRU and Eszter Toth-Weedon of SFC facilitated a live voting session where participants were asked to state their opinions on 30 statements and map stakeholder involvements via a live voting. Most respondents represented businesses (41%), followed by associations, networks, programs, organizations, forums (39%), research, standardization and certification bodies (14%) and government (6%).

A vast majority of 76% found application and verification guidelines, data exchange, practical testing, training and a label useful or very useful. The direction on standards and a label was less clear, which suggests that this needs to be further explored and explained. The GLEC Framework should be turned into an ISO standard as soon possible according to 49%. Most (71%) also agreed that a sound label helps mobilize emissions MRV by companies, although 20% questioned the usefulness of a label. Half of the participants (51%) found that labels should reward businesses on real carbon footprints rather than relative reductions.

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Cargo owners need to lead but need help from others. Participants (89%) found that cargo owners take responsibility for emissions accounting even if their subcontractors don't, while 68% agreed that carriers and logistics service providers will only take MRV seriously if there is a clear demand from cargo owners. They also found that associations and green freight programs should support SMEs with emissions accounting to reduce emissions. More than 85% finds business' input into policy and research useful and about two-thirds indicated that industry associations and business networks are best placed to help with this.



It is not correct that businesses don't want government to get involved (12%) but opinions were split on how far to go: 55% felt that governments must legislate emissions reporting for businesses to move, while 29% disagreed. At the same time, there was wide agreement that international organizations and forums should put logistics emissions accounting higher on the policy agenda (92%) and connect policy makers and businesses better (86%).

There was also wide consensus that research institutes must make a clearer link between their research and practical use for businesses (92%). On green freight programs the message is clear: they play an important role in ensuring emissions accounting by companies (84%) and are only successful if they link emissions accounting to efforts that reduce emissions (88%). Benchmarking carbon footprints between comparable companies is important to drive emission reductions (72%). And government backing makes industry programs work better according to 53%.

Keynote speech by Karl Simon, USEPA: 'What is required for effective emissions accounting and reduction? The government perspective'.

Karl Simon, Director Transport and Climate Division, Office of Transportation and Air Quality at the US Environmental Protection Agency started his speech with one of the US' greatest success stories, the Clean Air Act, which over the past five decades realized a remarkable air pollution reduction coupled with economy growth and improved public health. The SmartWay program has its roots here too.

He led the audience through some of the lessons learned from SmartWay. The first is the ability to listen and take on board solutions brought forward by different stakeholders. A roundtable with businesses in 2002 created energy among 15 leading charter companies, and collaboration with the USEPA built trust over time, which accelerated change. The program now has more than 3500 members and many companies make it a condition in contracts with their carriers to be a SmartWay member.

Programs need to add value to business. SmartWay's tools to measure and report emissions allows participating companies to focus on outcomes rather than process. This is combined with testing and verifying available and emerging technologies and providing companies with neutral and credible information to increase their confidence to invest in technologies. This started with emission retrofit devices and then moved on to fuel and vehicle improvement technologies.

Flexibility around a core set of principles has allowed USEPA to grow along with the freight industry. This has enabled SmartWay's methodologies to be adopted and aligned globally, working with SFC's Global Logistics Emissions Council (GLEC) and the Global Green Freight Action Plan. This also points to the broader role of government: add real value by bringing stakeholders together and pull the best minds from different sectors together to work towards a common goal.

He then commented on the four concepts discussed at the LEARN workshop. First, methodologies provide a seedbed for a technology verification program: assessment methods, performance standards, technology harmonization and link to regulations. Second, on data exchange, government can act as an honest broker using its broad reach for collecting and disseminating information. Challenges are to avoid asking for more data than needed to reach an intended outcome and keeping ahead with the industry to set benchmarks that are credible and trustworthy. Third, on verification, data is only as good as what partners are willing to put into it and therefore verification does help for users to have confidence in the data. Fourth, awards and recognition is what partners value most highly and it does encourage competition as EPA has seen among SmartWay partners.

He closed with considerations on moving forward. He encouraged stakeholders to continue to work with each other to push boundaries, and when something doesn't work then learn from it and try a different way. Put one foot in the past and make use of what has been developed, but put one foot in the future to anticipate what industry needs because the near-term opportunities are incredible. On the question if SmartWay is interested in Europe he replied that EPA is working with the GLEC and other groups to ensure that the same methodology is used, and then it does not have to be called SmartWay.

What is required for effective emissions accounting and reduction?

Four presentations and panel discussions sought to clarify and align stakeholders around four concepts underpinning the LEARN project: methodology, data collection and exchange, verification and certification, and labels to reward businesses. A diagram linking data types with different business uses was an input for all panels.



The session methodology development for logistics emissions measurement was moderated by Alan Lewis of SFC and panelists included Andrea Shön of DB Schenker, Kerstin Dobers of Fraunhofer IML and Magnus Swahn of the Network for Transport Measures (NTM). Panelists commented that carriers do not need to disclose raw fuel data but can use averages, as long as data are consistent between carriers. Companies should set baselines and calculate emissions with flexibility, focusing on the intended uses and making improvements in time. Communication messages should be different when targeting businesses, governments and researchers. A harmonized methodology is critical for comparability, and programs and tools can compete based on the service provided. The main message for the LEARN project was to get the GLEC Framework applied in practice and use this experience to develop version 2.0.

The session data collection and exchange was moderated by Sophie Punte of SFC and panelists included Sergio Barbarino of Procter & Gamble, Patric Pütz of DPDHL, Lina Konstantinopoulou of Ertico, Richard Smokers of TNO Netherlands, and Nate Springer of BSR Clean Cargo Working Group (CCWG). Today, carriers cannot do business with major customers if they are not part of SmartWay and CCWG that provide cargo owners with emissions data. It was noted that centralized databases are a temporary situation because ICT on vehicles and vessels can generate detailed data. What matters is that cargo-owners and LSPs with outsourced freight transport know the CO₂ emissions of their shipments so that they can report these, set targets, analyze supply chains, identify improvement options and track emission. Carriers on the other hand need to be convinced that they will benefit from sharing their data too. The reality is that centralized databases will continue to exist in parallel to other forms of data exchange. The LEARN project and GLEC should therefore not give preference to one form but make sure that a harmonized emission calculation methods fit with all options. Another focus is to ensure that CO₂ is included as a KPI in broader ICT systems for logistics operations, such as developed under the EC-projects AEOLIX and Selis, and Blockchain.

The session verification and certification was moderated by Colin Smith of the Energy Saving Trust (EST). Panelists included Marc Cottignies of ADEME France, Jennifer Iansen-Rogers of ERM Certification and Verification Services, and Sebastian Backström of the Swedish Environmental Research Institute (IVL). Verification is a critical piece in making reported data credible and depends on what companies find important: completeness, accuracy, consistency and comparability. Companies can opt for pre-assurance help prepare for external verification. Verification standards should be the basis for certification and controlled by a body that is not one of the stakeholders, such as the CEN or in France ADEME who are issuing verification standards for data reported under the French Grenelle legislation. The LEARN project should focus on developing verification guidelines that builds on existing assurance standards and adds considerations for verifying logistics emissions. By extension, verifiers can involve experienced assurance providers and people with a more technical background.

The session labels to reward business was moderated by Stewart Muir of Energy Saving Trust. Panelists included Bjarne Pedersen of Clean Air Asia, Fer van der Laar of International Association for Ports and Harbors (IAPH), Arnaud Chatin of Michelin Europe, and Marina Bylinsky of Airports Council International (ACI) Europe. Labels are popular because at their core they have the potential to transform the market and improve environmental and social conditions. There are ample examples to learn from, such as the Airport Carbon Accreditation scheme, labels for tires covering fuel efficiency, safety and noise, and the Environmental Shipping Index. The LEARN project and GLEC should focus on what option is best to communicate emissions data to users. As the focus of logistics emissions data is business-to-business, a declaration that communicates data may be sufficient. This declaration can then be used by businesses, green freight programs and other initiatives, and product labels such as EnergyStar.

Closing remarks

Sophie Punte of Smart Freight Centre gave closing remarks. She said that it was clear that businesses want to move on from methodology development to its application in practice, taking into account SMEs and developing regions. Clear boundaries should be put around what is done on the four concepts through the LEARN project, always linking back to improving logistics emissions accounting and how businesses can use results to report, manage risks and find ways to reduce emissions. Stakeholders should all be involved in emissions accounting and reductions but have different roles to play. She encouraged participants to connect with the LEARN partners – in essence we are forming a network of networks around logistics emissions accounting and reduction.