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Press release

Decarbonization study: a call to focus on SME road freight carriers

- A new study from Smart Freight Centre (SFC) and the Center for Sustainable Logistics and Supply Chains (CSLS) at Kühne Logistics University (KLU) reveals that small road freight operators need to strengthen their commitment to the greening of supply chains.
- As small operators account for 99% of companies in the European road freight sector, they will play a key role in this decarbonization process. For this reason, they will have to be incentivised and strongly supported.
- Transporeon, the global logistics platform, contributed to the research published today by providing anonymised data from over 800 carriers in 32 European countries.

European road freight transport remains one of the most important sectors to decarbonize, with heavy goods vehicles accounting for roughly 20% of transport-related CO₂ emissions. In order to tackle CO₂ emissions from freight transport, governments, shippers, and logistics service providers (LSP’s) are setting ambitious decarbonization targets and strategies. The EU plans to achieve a 90% CO₂ reduction in the transportation sector by 2050.

The study by SFC and KLU shows that there are important differences regarding the ability of carriers to decarbonize, depending on their fleet size. While the vast majority of carriers acknowledge the importance of decarbonising the road freight sector, operators with larger fleets are in a better position to undertake concrete steps to bring down transport-related CO₂ emissions. The majority of carriers with under 20 vehicles, on the other hand, see little or no business opportunity in decarbonising their operations.

The study finds that besides the associated costs, uncertainty about customer demand, emission reduction measures and new energy technologies are clear barriers for the carriers. As a result, many carriers lack basic emission calculation capabilities and available operational and technical fuel efficiency measures are often not implemented. This represents a large untapped potential for saving money as well as CO₂ emissions.
Moritz Tölke, author of the study, KLU alumni & Junior Technical Manager at Smart Freight Centre commented: “The aim of the research was to examine European road freight decarbonization from a carrier perspective. The results highlight the crucial role these carriers play, the current shortcomings and the resulting urgent need for all stakeholders to step up their engagement with this sector.”

The study outlines that the involvement and commitment of small carriers will be essential to reach decarbonization targets. More than half a million companies provide road haulage services for hire in Europe. 99% of them have fewer than 50 employees. As the amount of freight movement on European roads is projected to increase by almost 50% by 2050, crucial support and incentives are needed urgently from a number of stakeholders in the industry.

Prof. Alan McKinnon, co-author of the study, Center for Sustainable Logistics and Supply Chains (CSLS) at Kühne Logistics University (KLU) pointed out: “The discussion on road freight decarbonization in Europe is increasingly dominated by the choice of low carbon truck technology and energy sources – essentially a supply-side issue. This research shows that there will also be a major demand-side challenge in encouraging over half a million small carriers to switch to these new vehicles and, until then, to operate their current diesel-powered ones more energy-efficiently. KLU’s work on this subject recognizes the need for managerial as well as technological change.”

Looking ahead, the study lists recommendations to multiple stakeholders in the industry on how to support and incentivise carriers on their journey towards a lower-emission freight industry.

Eszter Toth-Weedon, Senior Partnership Manager, Smart Freight Centre explained: “This report points out the necessity and value of collaboration. Road freight carriers, especially SMEs, need the support of freight buyers, OEMs and policy makers to ensure timely and efficient decarbonization. SFC will continue enabling these collaborations towards zero-emission freight together with key stakeholders in the Global Logistics Emissions Council (GLEC) community, including KLU and Transporeon.”

Transporeon CEO Stephan Sieber added: “Decarbonization is already a decisive factor determining a business success. And the road freight market is no exception to this. We observe that more and more shippers are requiring their carriers to invest in measures limiting CO₂-emissions. Transporeon supports such efforts with its solutions that allow to reduce the number of empty runs like e.g. with transport assignment best carrier, optimised route planning and real time visibility.”

The study is one of the first to focus on the decarbonization potential of SME carriers in Europe. It provides unique insights into current thinking in the road carrier market on the decarbonization issue. It examines emission calculation capabilities and the rate at which emission reduction measures are being implemented across a sample of more than 800 European carriers in 32 European countries, provided by the global transport platform Transporeon. It also highlights factors driving and constraining efforts to cut fuel consumption and emissions.
The data was supplemented by a more detailed online survey and a series of interviews with a smaller group of carriers to provide additional in-depth qualitative data. The research was carried out as part of Moritz Tölke’s master thesis at KLU.

Download the full report free of charge.

Insights on the decarbonization of European logistics from the perspective of over ninety senior executives can be found in the recent publication of the CSLS: “Measuring Industry’s Temperature – An Environmental Progress Report on European Logistics”.

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About Smart Freight Centre
Smart Freight Centre (SFC) is a global non-profit organisation dedicated to an efficient and zero-emissions freight sector. It covers all freight and only freight. SFC works with the Global Logistics Emissions Council (GLEC) and other stakeholders to drive transparency and industry action – contributing to Paris Climate Agreement targets and Sustainable Development Goals.

SFC’s role is to guide companies and their suppliers on their journey to zero emissions logistics, advocate for supportive policy and programs, and raise awareness. The goal is that 100+ multinationals reduce at least 30% of their logistics emissions by 2030 compared to 2015 and reach net-zero emissions by 2050.

smartfreightcentre.org

About Kühne Logistics University
Kühne Logistics University – Wissenschaftliche Hochschule für Logistik und Unternehmensführung (KLU) – is a private university located in Hamburg’s HafenCity. KLU is one of very few private universities in Germany entitled to confer their own PhDs. The independent, state-certified university’s major research areas are Sustainability, Digital Transformation and Value Creation in the fields of Transport, Global Logistics, and Supply Chain Management. Research on sustainable logistics at KLU and cooperations with the industry in this field are bundled at the Center for Sustainable Logistics and Supply Chains (CSLS).

the-klu.org

About Transporeon
Transporeon boosts logistics performance and profitability with every freight load. Founded in Germany in 2000, Transporeon connects a worldwide network of more than 1,200 industrial shippers and retailers with over 100,000 logistics service providers in 100+ countries in real time. Its security-certified platforms offer digital solutions for freight benchmarking and sourcing, freight assignment and shipment execution, time slot management, shipment tracking, and end-to-end supply chain visibility. By leveraging the latest capabilities, including artificial intelligence and predictive analytics, Transporeon solutions cut CO₂ emissions, empty runs and truck waiting times while digitising manual processes. Transporeon is located across Europe, Russia, Asia and the US.

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