

Discussion Starter for Shippers: Achieving Zero Emissions in Road Freight

Who should read this?

This document is a starting point for buyers of road freight services across the globe to engage and collaborate with their service providers on mitigating climate change impact from their trucking operations.

Why act now?

- Society is increasingly aware of products with a reduced carbon footprint (including logistics).
- Regulations related to road freight emissions and mechanisms to price carbon such as [‘Fit for 55’](#) (EU) are becoming more coherent and stricter.
- Heavy duty road freight activity is expected to more than double and greenhouse gas emissions to almost double by 2050.
- Road freight has only about 25% of its carbon budget to stay within the [1.5 °C scenario](#) until 2050.
- A combination of vehicle and operational efficiency improvements, zero emission technology and logistics operation interventions can set the industry on the much needed path to reduce emissions by [10](#) to [30%](#) by 2030.

Key takeaway

- Markets have shifted in favor of clean technology, meaning shipper's have the power to drive fleet decarbonization.
- By working with their carriers, shippers can lead a transition away from the transportation sector's high carbon future.
- Shippers can encourage carriers to make best use of the existing policy framework, which largely favors zero emission vehicle technology.

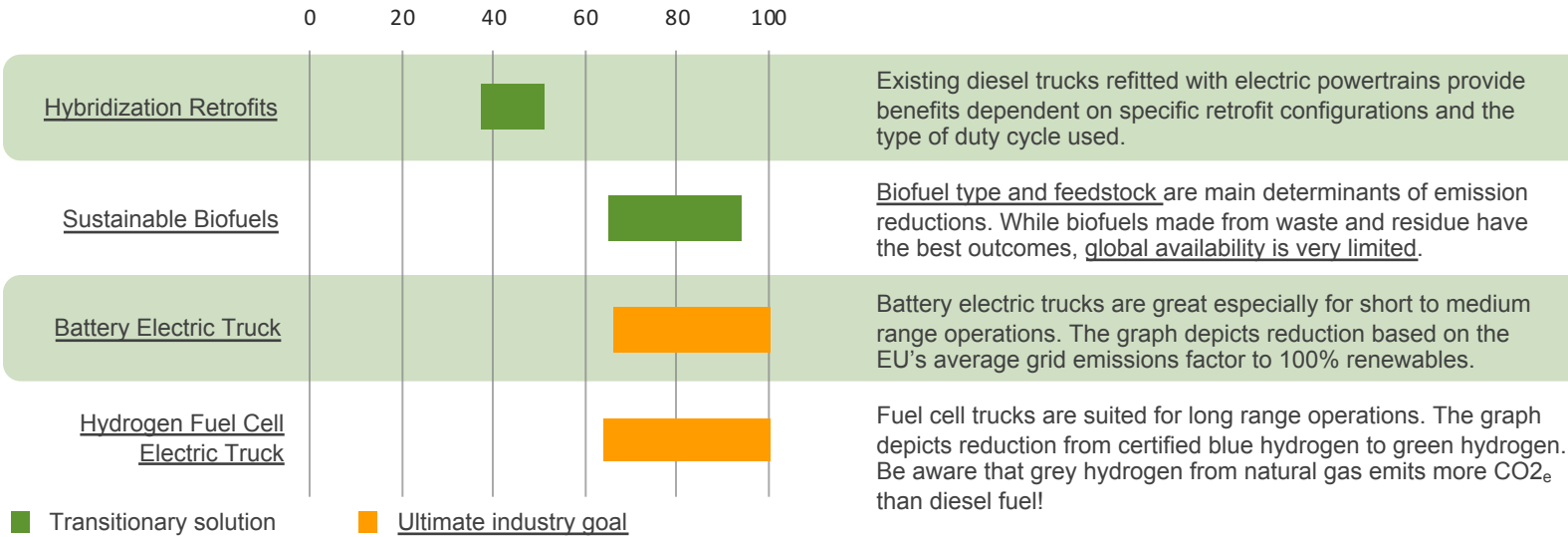
Shippers can decarbonize together with their carriers by focusing on three main areas.



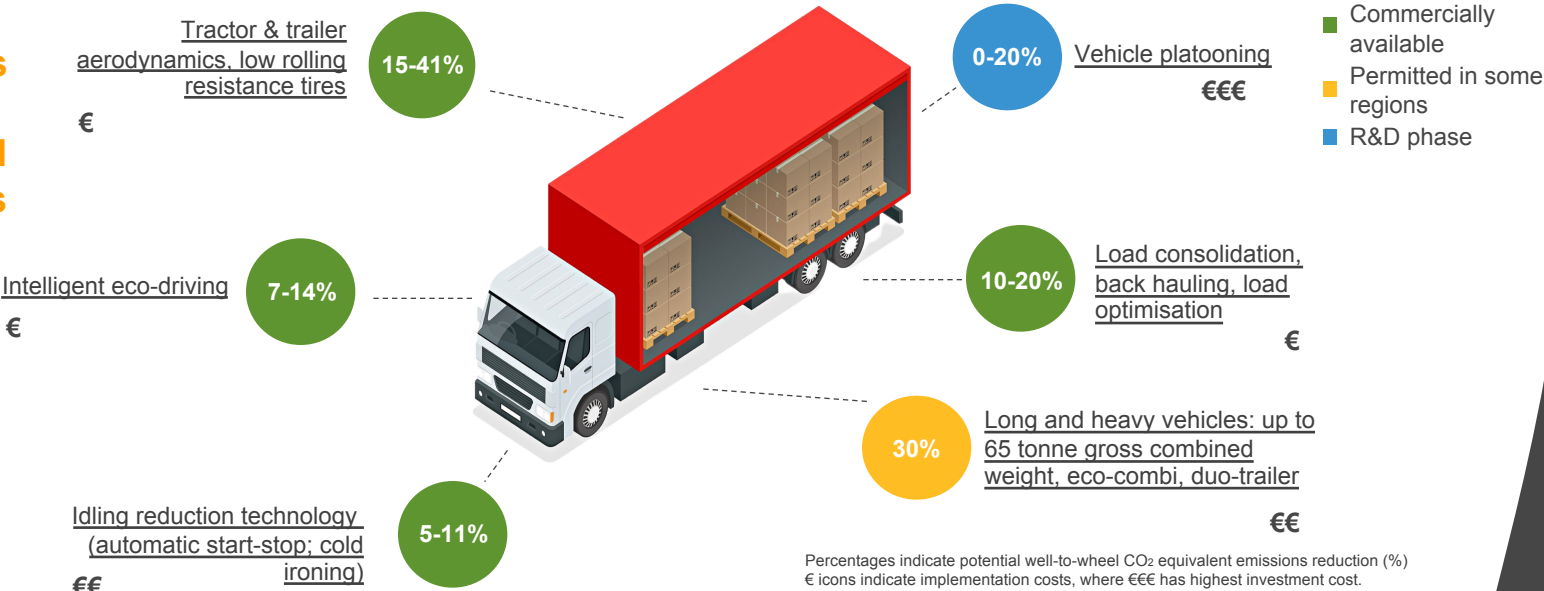
A. Switching your fuel or powertrain can reduce your lifecycle greenhouse gas emissions significantly

Potential well-to-wheel CO₂ equivalent emissions reduction compared to diesel truck operations (%)

Procurement should consider the lifecycle emissions of the actual fuel consumed.



B. Making your company's trucks and operations more efficient will reduce emissions and save you money.



Policy category	EU	US	China
Financial incentive for purchase of zero-tailpipe emission vehicle	Member-state level. Eurovignette based on CO ₂ Emissions.	States level only: CA , NY	Yes
Financial incentive for low- or zero-tailpipe-emissions fuel supply	Member-state level based on RED II carbon credits (e.g., NL , FR , DE). Upcoming EU ETS for Road, 'Fit for 55'	Biomass-based diesel tax credit State-level, such as LCFS	None known
Policy on truck emissions and sales	EU-wide CO2 standards for heavy-duty vehicles . Euro VII proposal.	States level only: CA , NY Upcoming Executive Order	None known
Policy on alternative fuel or charging infrastructure	EU-wide AFI Directive, upcoming Regulation	Upcoming Executive order	None known
Policy on energy mix in transport	EU-wide RED II ; Targets at Member State level	Federal RFS States: LCFS and other states	None known
Vehicle access regulations	City-level	None	Few cities

C. A comprehensive zero-emissions road freight policy framework and supporting institutions will be key to success



Best practices to emulate

- Hewlett Packard Enterprise's** logistics service provider started moving 50 to 100 HPE shipments per month from their distribution hub in Vienna to their customer's hub in Slovakia using electric trucks.
- IKEA's** local transport service provider used 100% biofuels made from waste and residue resulting in an emissions reduction of 90%, i.e., 2,900 tonnes of CO₂ eq.
- UPS** operates at least 57 long and heavy Eco-Trucks in Europe driving almost 5.4 million kilometers less.
- Breytner** operates a successful zero-emissions urban and regional road freight service working closely with shippers, OEMs and making smart use of subsidies and research initiatives in the start-up phase.