International Post Corporation

DHL and Grundfos pilot Bio-LNG in road freight with promising results

16-11-2021

In June 2021, DHL Freight started piloting a Bio-LNG solution (Bio-Liquefied Natural Gas from sustainable biomass) with Shell on three haulier trucks to sustainably reduce CO2 emissions in road freight transport for DHL's customer Grundfos. In the first five months, the volume of Bio-LNG lifted has reduced 87 tons of CO2 eq. This corresponds to the emissions of over 89,900 km driven by a Diesel truck and represents 85% of CO2 savings compared to a traditional diesel engine.

"The logistics industry is currently responsible for 11 percent of global carbon emissions. To fight against climate change, the transport sector needs true decarbonization. For us at DHL Freight, sustainable fuel solutions are a key lever to change the fuel mix and ultimately reduce carbon emissions in road freight", says Uwe Brinks, CEO DHL Freight. "By investing not only in sustainable fuel but also in fleet renewal, engine retrofitting, and efficiency projects, we tackle the impact of the logistics supply chain. We are happy to have partners at our side who share our vision and join us on the journey towards a sustainable future."

The fuel alternative is being implemented to improve Grundfos' linehaul between its production sites Bjerringbro, Denmark and Longeville-Les-Saint-Avold, France. By offering the option of using greener alternatives, the company is taking another step towards cleaner road freight, in line with Deutsche Post DHL Group's sustainability roadmap 2030.

"Our commitment and ambitions for sustainability are fully anchored across our value chain, and in close collaboration with our suppliers and logistics partners, working in unison, we achieve our sustainability targets, achieving a 50% CO2 emissions reduction by 2025. We therefore see the sustainable fuel solutions proposed by DHL Freight as a significant step in the right direction for lowering carbon emissions in road freight," says Stéphane Simonetta, Group Executive Vice President and COO at Grundfos.

The Bio-LNG used by Shell in the test is produced from agricultural waste. It meets the criteria of the Renewable Energy Directive 2 (REDII) of the European Union and is a product of a sustainable circular economy.

The pilot project has been running for over five months now and will continue for approx. one year. The reduction in emissions is attributed to the customer accordingly. In this way customers can successfully decarbonize their supply chains.

Fabian Ziegler, Managing Director of Shell Germany, says: "Running pilots like this with customers like DHL is a fantastic opportunity for both of us to test and learn, but also to jointly drive the decarbonization of the sector as it proves that new concepts work and deliver positive impact on climate targets in a commercially viable way. The pilot results indicate that Bio-LNG can already today reduce CO2 emissions to contribute to the GHG reductions needed to reach the EU's 2030 climate targets. That is very promising and good news to the sector."

In the meantime, Shell is scaling up the supply of Bio-LNG to offer further emission reductions up to carbon neutrality. As of early 2022, Shell will offer a blend of Bio-LNG to the entire network in the Netherlands, offering further carbon reduction to all customers. As of 2023 Shell plans to offer Bio-LNG produced in a new gas liquefaction plant at Shell's Energy and Chemicals Park Rheinland to the entire network in Germany. The company will start construction of liquefaction plant later this year, provided permits are granted in time. The volume of 100.000 tons per year from Rheinland could help to reduce the carbon emissions caused by long-distance haulage by up to a million tones.

Offering a sustainable fuel alternative for road freight is another step within Deutsche Post DHL Group's sustainability efforts. By 2030, the Group wants to invest 7 billion euros in climate-neutral logistics solutions, and at least 30 percent of fuel requirements in aviation and line haul are to be covered by sustainable fuels, according to their recently published sustainability roadmap. Deutsche Post DHL Group considers biofuels decisive to decarbonize transport right now and expects hydrogen as a power based sustainable fuel to be a promising alternative in the long-term.

Source: Deutsche Post DHL