

Practical freight industry solutions to meet SA's environmental challenges

Rampant cable theft and destruction across South Africa's beleaguered rail network may drive growth in the road freight space. Still, it is coming at a high environmental cost.

Earlier this year, Rirhandzu Mashava, the Department of Transport's deputy director general for transport planning, revealed that between 2017/18 and 2022/23, about a third of long-distance freight had moved from rail to road.

The country's rail infrastructure woes manifest at locations like Durban Container Terminal Pier 2. According to figures released by the South African Association of Freight Forwarders/Business Unity South Africa, during the week ending July 12, the site had 65 over-border units with a dwell time of 22 days.

Supply chains can ill-afford such delays, hence the huge shift to transporting goods by truck. This is despite the rising cost of fuel and a need for more skilled personnel within the sector, not to mention that deteriorating infrastructure and poor road conditions put drivers and vehicles at risk.

From an environmental perspective, the situation is far from ideal.

Transport is the third largest emitting sector in South Africa, with almost 55 megatons of CO² emissions contributing more than 10% to the country's national gross emissions. Road transport accounts for 91.2% of that percentage.

While the Department of Transport set in motion a Green Transport Strategy in 2018 to minimise the adverse impact of transport on the environment by reducing emissions by 5% annually, high volumes of greenhouse gas are still being pumped into the atmosphere.

The question then becomes what else can be done to reduce emissions.

According to Bidvest International Logistics (BIL), solutions must come from both the road and rail freight sectors.

BIL's Overland Logistics Director Marcus Ellappan suggests some "quick wins" in reducing CO² emissions, including policies around behaviour changes to promote more efficient driving habits and optimising routes with the use of various software platforms.

"Maintaining vehicles properly and upgrading to more fuel-efficient vehicles can also reduce fuel consumption."

Ellappan says electric trucks, compressed natural gas vehicles and a move to Euro 5 engines (where diesel vehicles are equipped with particulate filters to trap tiny soot particles) and Euro 6 engines (mandatory use of selective catalytic reduction for diesel cars to reduce nitrous oxide emissions) are all viable options.

Such measures will benefit road freight companies in several ways, including environmental, social, and governance (ESG) wins, reduced carbon tax, and reduced maintenance, resulting in less downtime, noise pollution and air pollution.

BIL Business Development Executive Ntombimpela Non-support the efforts the rail reform and capacity growth initiative driven by government and Transnet. The

reduction in rail capacity in has resulted in, increase reliance on road transport, and put additional pressure on road infrastructure and the environment.

“This can lead to higher transport costs, reduced competitiveness of South African goods, and missed economic opportunities,” she says.

However, Nong believes the rail freight industry can be crucial in driving a turnaround. She suggests that future investment on the railway should focus on modernising the rail infrastructure, together with green technologies such as hydrogen-powered and electric locomotives

Earlier this year, it was announced that by April 2025, Transnet Freight Rail will have to compete with private companies to manage the country’s rail infrastructure. This comes after the government decided to open the space to private players to participate in the significant investment required for the railway network in south Africa.

“The Integrated Transport Plan (ITP) emphasises developing an interconnected multimodal transport system where rail and road work together to enhance overall efficiency and sustainability. A strengthened rail freight system can support and complement road transport, which remains crucial for last-mile deliveries, remote deliveries and shorter routes.”

She does not doubt that there is significant room for collaboration. Road freight can handle short-haul and remote deliveries, while rail can manage long-haul routes, optimising the strengths of both modes. As a result, the road and rail industries can create a more resilient and eco-friendly transport system.

Source: <https://infrastructurenews.co.za/2024/08/07/practical-freight-industry-solutions-to-meet-sas-environmental-challenges/>

Date Published: August 07, 2024