Climate friendly freight traffic in India (Green Freight)

SITUATION

Freight sector in India is inefficient and the logistics cost is estimated at approximately 14 per cent of the Gross Domestic Product (GDP), which is higher than that observed for most developed countries (<10% of GDP). Transportation and inventory costs account for more than 90 per cent of these costs. With rising income levels, rapidly growing e-commerce sector and a projected GDP growth of seven to eight per cent, the demand for goods movement is expected to reach 15.6 trillion ton km by 2050 (NITI Aayog and RMI India 2021).

Currently, 71 per cent of goods is carried by road; 18 per cent by railways; 4 per cent each by pipeline and inland waterways and 3 per cent by domestic aviation (NITI Aayog and RMI India 2021). Trucks are the largest energy consumer in this sector, using an estimated 1.3 EJ in 2020, with over 70 per cent of all energy used to transport freight and is the fastest growing segment in freight transport energy use, doubling since 2010 (International Transport Forum (ITF), 2021). Apart from this, productivity of Indian trucks is lower as compared to global standards as i) travel 300 km/day as compared to global average of 500 to 800 km/day; ii) truck sizes are smaller and are often overloaded; and iii) approximately 40 per cent of truck trips are empty trips (NITI Aayog and RMI India 2021).

India is therefore faced with twin challenge of disproportionately large traffic volumes and high energy consumption. This makes the freight transport sector one of the sectors with currently the highest potential for reducing greenhouse gas (GHG) emissions and other climate-relevant pollutants and the trend is rising. Energy efficiency in freight transport and improved logistics processes were laid down in the Indian Nationally Determined Contributions (NDCs) as important reduction strategies. However, these ambitions are not yet reflected in the sectoral programs and policies for freight transport.

Objective

The project aims to provide strategies and technical solutions to the decision-making agencies at the national, regional/local level to develop freight
transport in India in a climate friendly and efficient manner to contribute to India’s Nationally Determined Contributions (NDCs).

**APPROACH**

The project partners with the Logistics Division, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry (MoCI), Government of India and relevant authorities responsible for the freight sector in developing climate-friendly standards and regulations at national, state and city level. Measures for improving the logistics management and introducing climate-friendly measures will be largely implemented in a selected region.

To ensure the sustainable implementation of national strategies, the competences of state and city level authorities, as well as private sector operators, will be strengthened. At the same time, the partners at national, state and city level will receive support in development of digital tools that will support in decision making for the reduction of greenhouse gas emissions.

**EXPECTED ACHIEVEMENTS**

- Institutionalise two measures for the efficient and climate-friendly freight traffic according to the international discussion on the issue are integrated into a national logistics plan.
- Establish a multi-sectoral and participatory mechanism for coordinating relevant stakeholders at both national level and at regional level will be used to monitor climate-friendly freight transport policies.
- Implement three measures for the reduction of greenhouse gas and pollutant emissions, which are provided by competent actors.
- Build capacity of logistics companies, drivers, mechanics, public inspectors (administrators) and policymakers for implementing climate friendly and efficient freight traffic measures on an operational level.
- Build a guideline/manual/tool for measuring GHG emissions and other climate pollutants in the freight sector and is applied in reporting of NDCs.