#TransformingFreightTransport

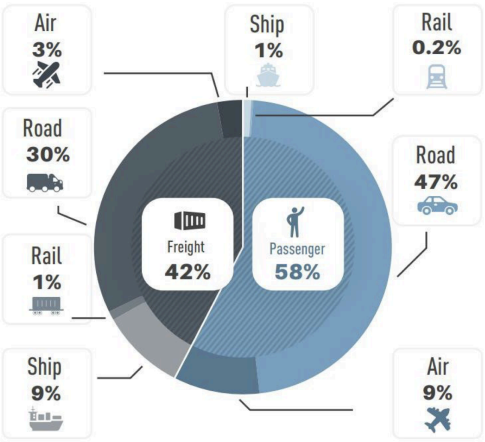
Manifesto for intermodal, low-carbon, efficient and resilient freight transport and logistics

Facts and figures

Freight transport emissions

Because of its near complete dependence on fossil fuels and the growing demand for transport, the transport sector accounted for 20.7% of global fossil CO_2 emissions in 2022. **Freight transport accounted for 42% of global transport CO_2 emissions** in 2019.

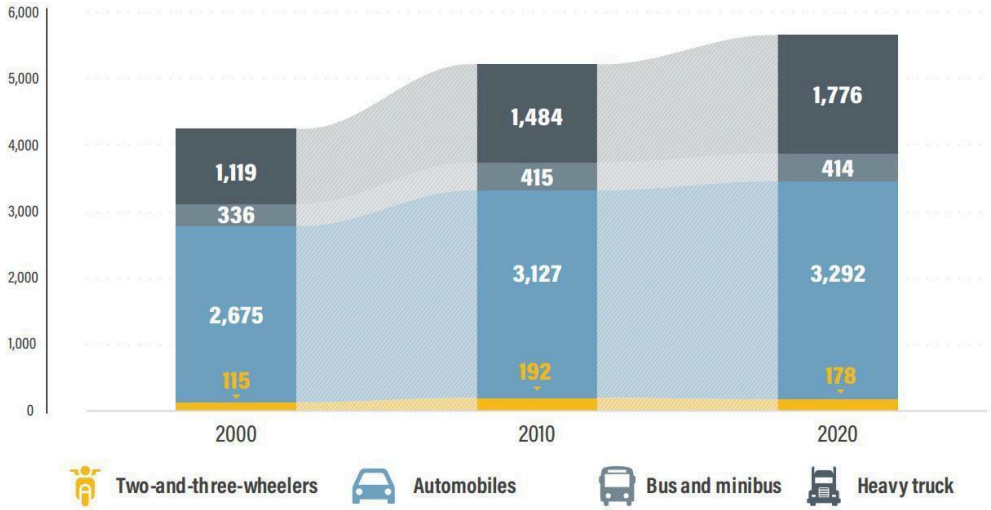
Figure 1: Transport CO2 emissions by activity and mode, 2019



An increasingly significant share of urban transport is related to moving goods. **Urban freight transport contributed 25% of transport-related CO_2 emissions** and accounted for **30-50% of other transport-related pollutants** in 2015.

Road transport is the largest emitter of CO_2 among all transport modes, contributing 78% of total transport emissions in 2020. **Road freight accounted for nearly one-third of the emissions from road transport**. In 2019, road transport was responsible for 82% of passenger transport emissions and **69% of freight transport emissions**.

Figure 2: CO_2 emissions from road transport, by vehicle type, 2000-2020 (in Mt CO_2)



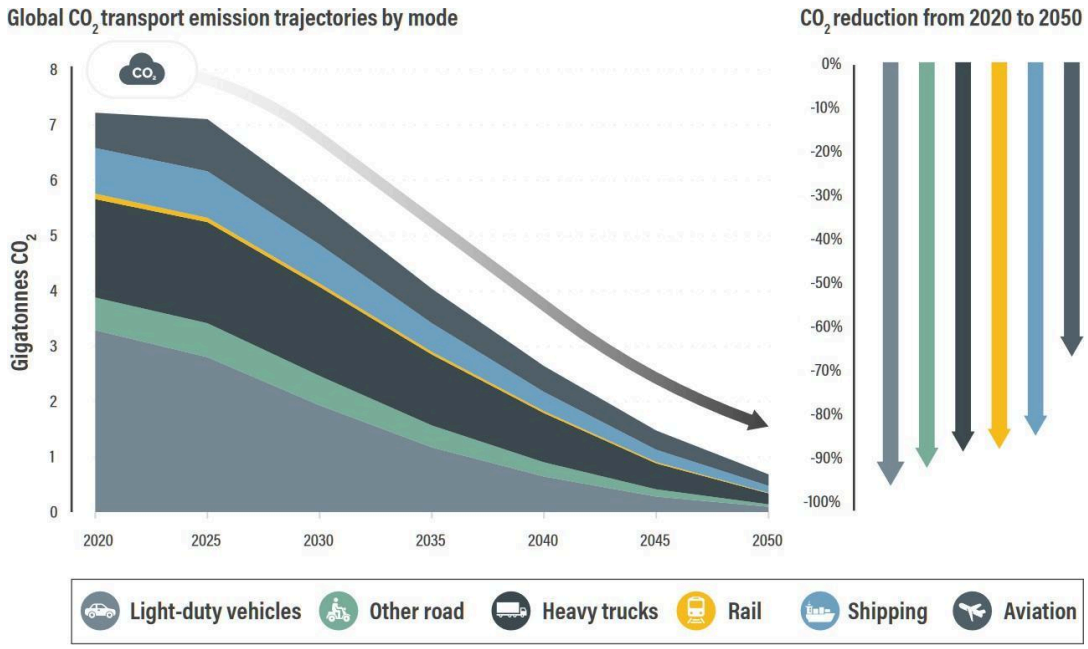
Global freight transport activity, measured in tonne-kilometres, grew 68% between 2000 and 2015, and an additional 7% between 2019 and 2022 to surpass 179 trillion tonne-kilometres. The demand for global freight transportation is projected to further increase 2.0 times from 2019 to 2050. If unchecked, this growth poses a critical challenge to efforts to decarbonise freight transport. International trade and the geographically long global supply chains of many industries have contributed greatly to the rapid increase in emissions from freight transport.

Without more ambitious policies, transport CO_2 emissions could grow 16-50% by 2050. As a result, **CO_2 emissions from freight transport would be 22% higher in 2050 than in 2015.**

(icon) Pathways for decarbonising freight transport

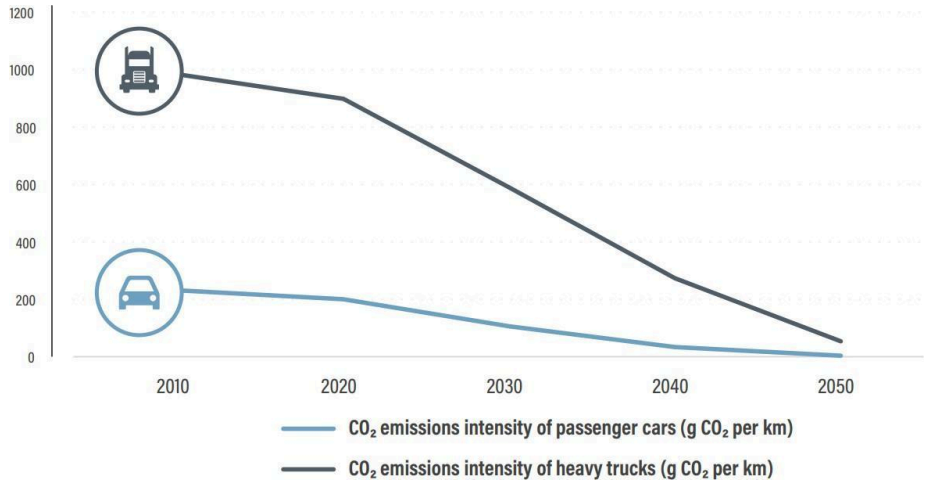
Achieving low-carbon transport pathways that limit global warming to 1.5°C (with no or limited overshoot) will require a **59% reduction in transport-related CO_2 emissions by 2050**, compared to 2020 levels.

Figure 3: Global CO_2 transport emission trajectories by mode required to achieve IEA Net Zero emissions scenario



CO_2 emissions intensity must be **reduced** by more than **94% for trucks and 98% for cars** compared to 2020 levels, according to the IEA's Net Zero scenario.

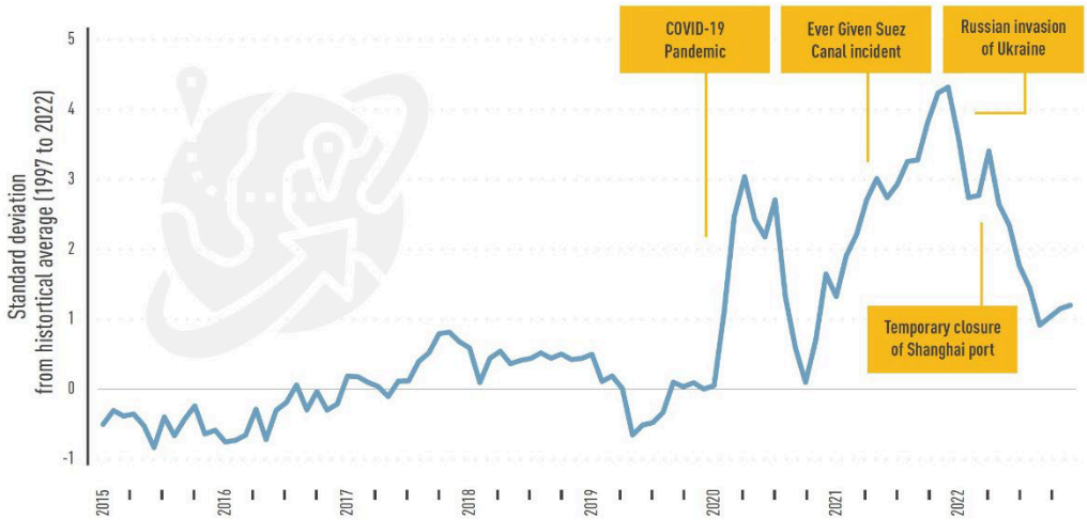
Figure 4. Required emissions intensity pathway to 2050 according to the IEA's Net Zero scenario



Global supply chains

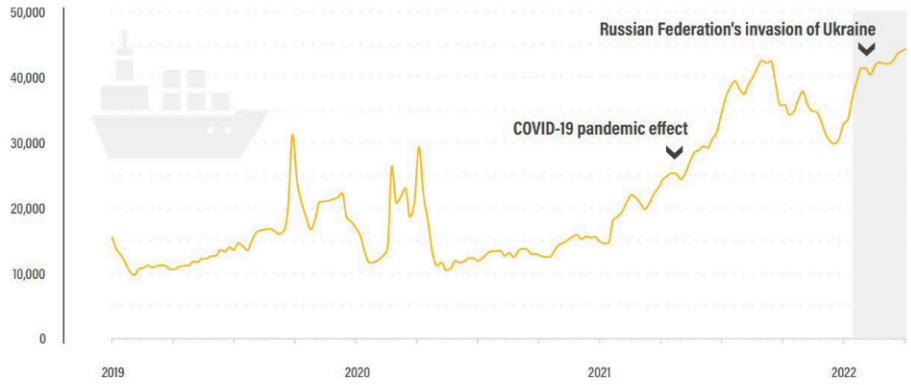
In recent years, multiple crises such as the COVID-19 pandemic, the Russian Federation's invasion of Ukraine, and the blockage of the Suez Canal caused supply shortages, raising awareness of the fragility of global supply and logistics chains and their international dependencies. **These disruptions resulted in the Global Supply Chain Pressure Index recording an all-time high value of 4.3 above the historical average of 1997 to 2022**. It will be necessary to give greater attention to the systemic reorganisation of global supply chains in the effort to reach net zero emissions, and to minimise risks to industry during the energy transition.

Figure 5. Global supply chain pressure index (higher value means higher pressure), 2015 to 2022



Since mid-2020, higher shipping costs have been driven by events such as the COVID-19 pandemic and the Russian Federation's invasion of Ukraine. High energy prices are a key contributor to increased maritime shipping costs. **The average price of fuel oil increased nearly two-thirds from January to May 2022. The average fuel surcharge by container shipping lines rose nearly 50% during this period.**

Figure 6. Rising costs of shipping, 2019 to mid-2022 (in USD per day)



Source:
Zooming in: Freight transport and logistics
SLOCAT Transport, Climate and Sustainability Global Status Report, 3rd edition and its Takeaways for Decision Makers
Spotlight 4 on Shortening Global Supply Chains as a Key to Decarbonising Transport