PEMBINA FOUNDATION

The State of Freight

Understanding greenhouse gas emissions from goods movement in Canada

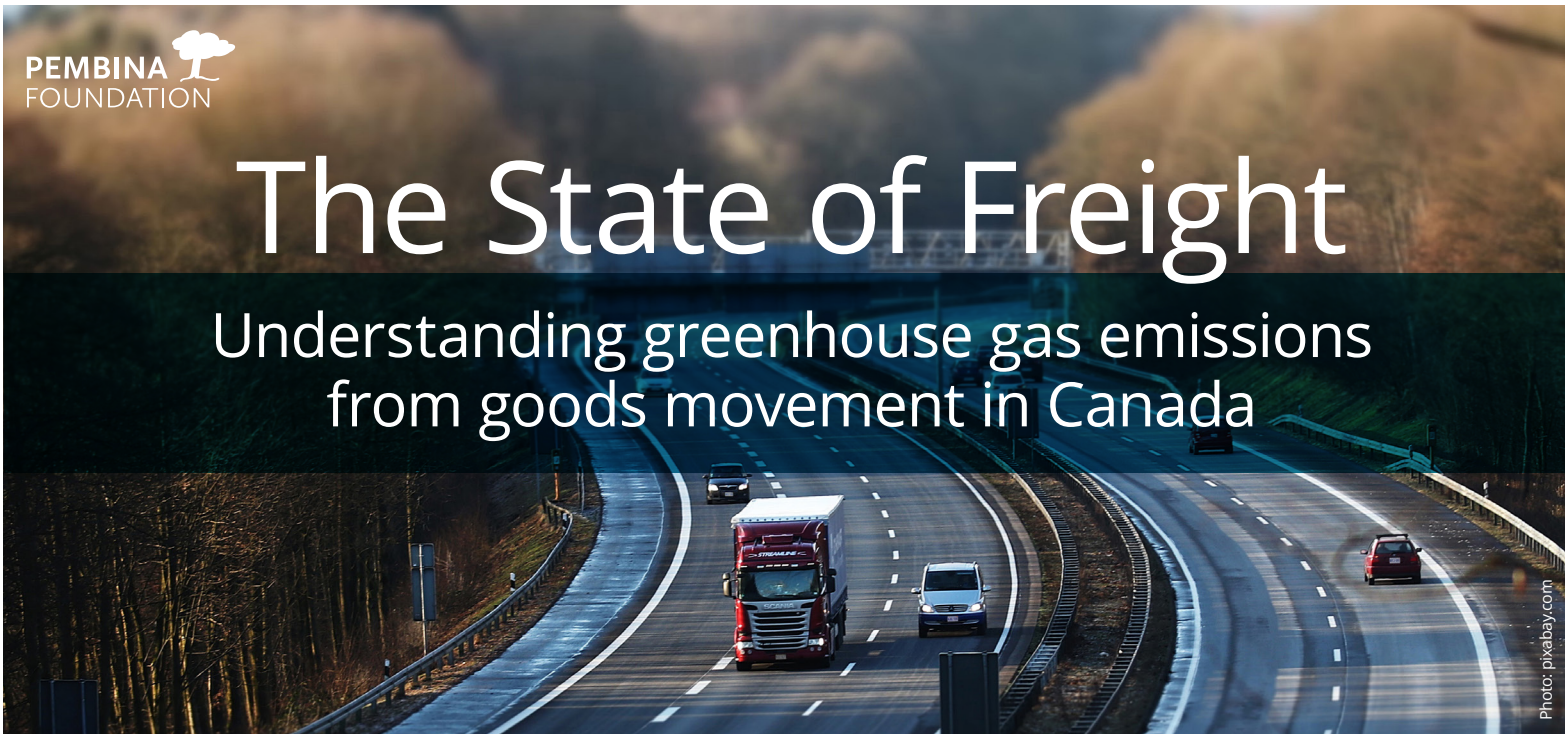


Photo: pixabay.com

Freight, or goods movement, is a too-often overlooked source of carbon emissions. As of 2015 it accounted for 10.5% of total emissions in Canada, which is barely less than emissions from the electricity sector. Within the transportation sector – which, at 24% is the second highest source of emissions in Canada – freight is the fastest growing segment. In fact, Canada's 2nd Biennial Report on Climate Change projects that freight emissions will eclipse passenger emissions around 2030. These largely unchecked emissions could prove to be a huge roadblock for Canada to meet its climate targets and live up to its Paris Agreement commitment.

Freight and the economy

At the same time, we have an interconnected and globalized economy that depends on the smooth and efficient movement of goods around the world. With annual exports and imports in 2016 valued at $521.3 billion and $547.3 billion, respectively, the Canadian economy relies on freight. The freight sector is critical to maintaining our everyday lifestyles and consumer habits.

The growth of the freight sector is due to a number of factors: increasing population and economic growth, more international manufacturing and global supply chains, the increasing presence of online shopping, and the consumer expectation to receive goods quickly. However, we don't have to sacrifice economic growth to achieve deep emission cuts in the freight sector. Successful strategies for the decarbonization of goods movement can revolve around actions to reduce the carbon intensity of freight transport, and not necessarily require decreasing the volume of goods moved.

Growing freight emissions

To date, much public and policy attention has been centred on emissions from passenger vehicles, illustrated through progress in the growth of electric vehicles, and expansion of rapid transit. This is of course highly justified as passenger emissions represent more than half of transportation emissions.

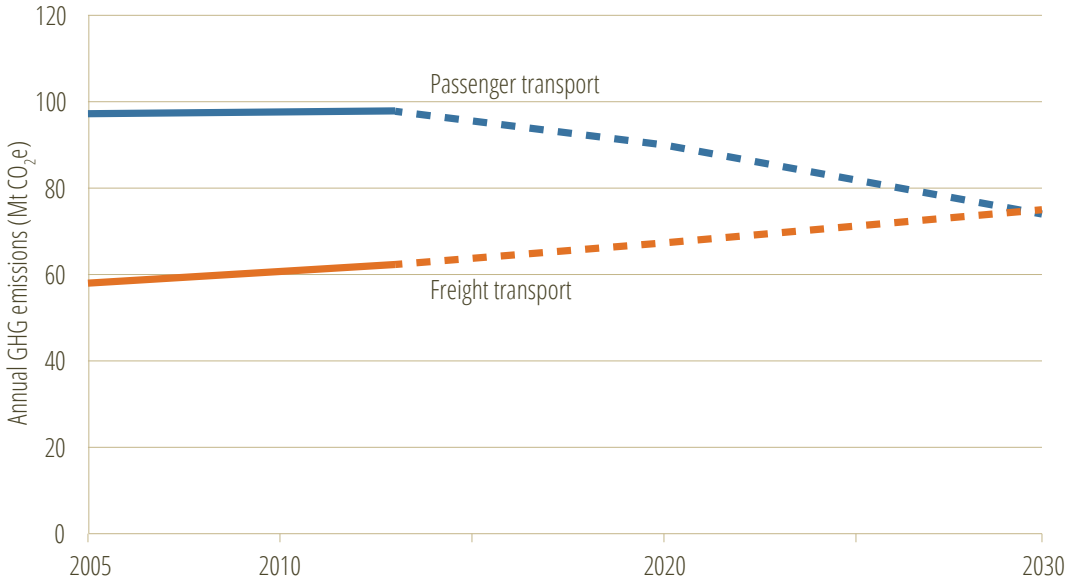
However, as illustrated in the graph on the next page, Canada's 2nd Biennial Report on Climate Change projects that freight emissions will eclipse passenger emisisons around 2030. Due to the growing proportion of GHG emissions, equal attention needs to be paid to the environmental impact of freight. Addressing the emissions from goods movement and making the sector more efficient will also bring additional benefits: relieving road congestion, cleaner air, more cost-efficient business practices, and more.

The path forward

Now is the time to make real progress and policy change on freight emissions that has environmental, social and economic wins. The following are key opportunities to reduce emissions from freight:

- Climate policies that broadly impact the Canadian economy and will drive long term reductions in GHG emissions (e.g. federal carbon pricing and the forthcoming federal Clean Fuels Standard).
- Phase 2 HDV efficiency regulations. These provide a backstop of improvement out to model year 2027.
- Continued rollout and adoption of available and emerging efficiency technologies.
- Build out of fueling infrastructure across a range of options with biofuels and natural gas in the short term, and electric and hydrogen following closely behind.
- Integrating goods movement into land use planning at the regional and municipal level.

There is no silver bullet to reducing emissions from freight. Instead, governments, industry, civil society and consumers must partner in an ongoing collaboration to accelerate the adoption of the practices, technologies, and policies that will collectively enhance environmental and competitive performance of the freight sector in Canada. A coordinated, climate-conscious freight policy is one that will not only promote the various proposed solutions, but that will constructively manage their interactions.



Emissions projections to 2030 for passenger and freight transport

Data source: Government of Canada

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