

RAILWAY
ASSOCIATION
OF CANADA



ASSOCIATION DES
CHEMINS DE FER
DU CANADA

YEARS/ANS
2017

Part of the problem or part of the solution?

How Canada's railways can help address climate
change

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 www.facebook.com/RailCanada

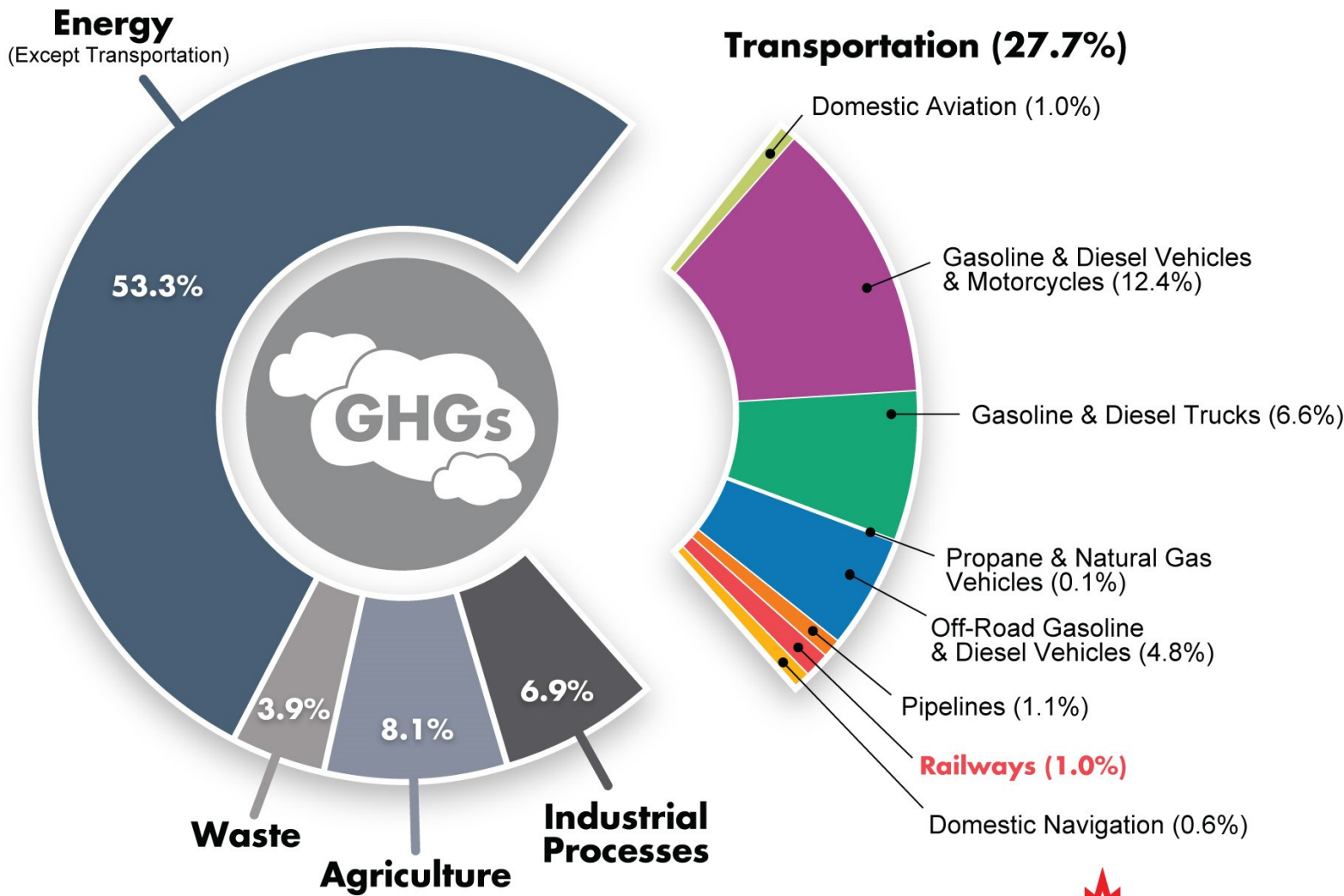
www.railcan.ca

Canadian Rail Network



Source: RAC Geospatial Database

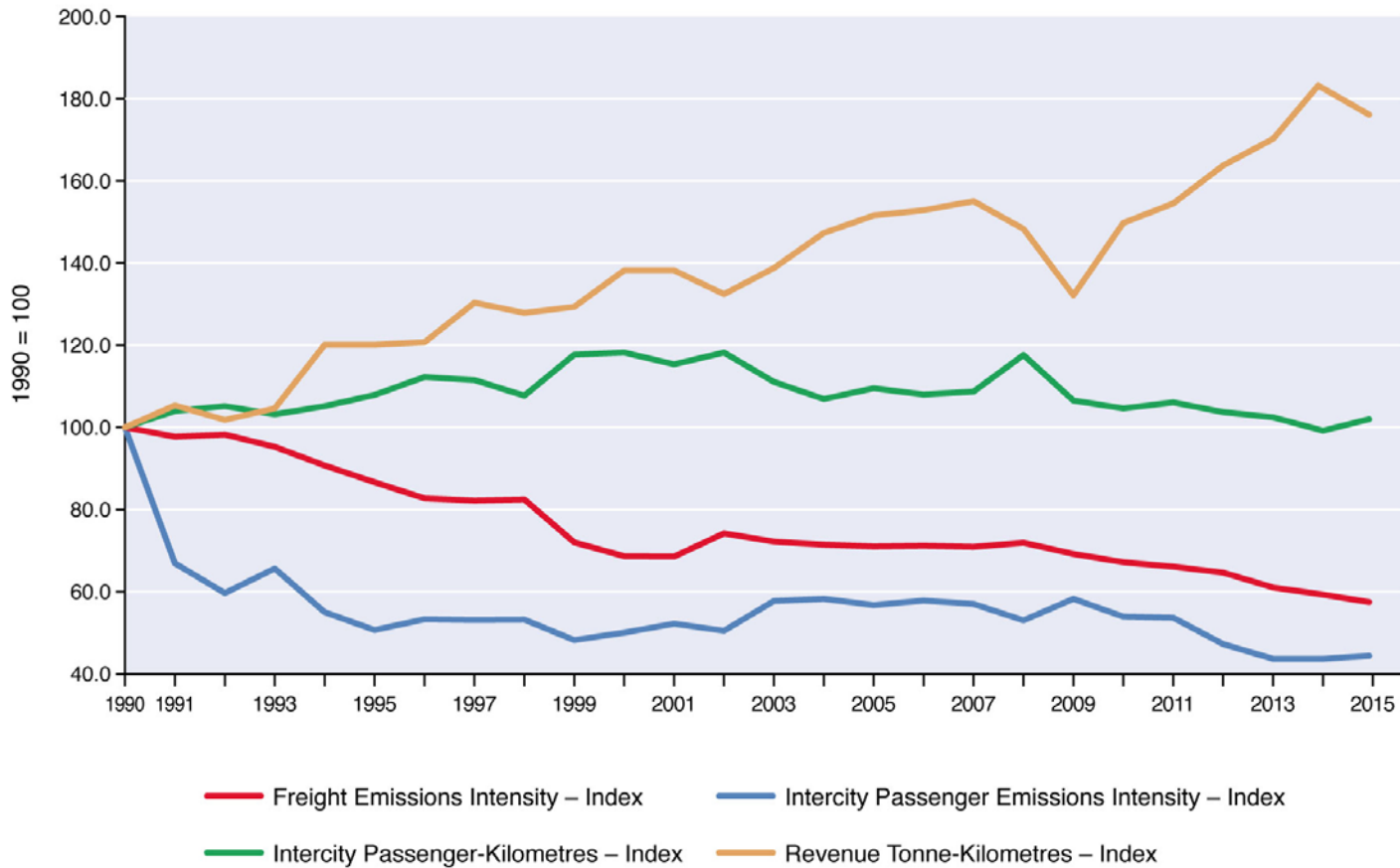
Greenhouse Gas Emissions by Sector* – 2014



*based on IPCC sectors of activity



Canadian Rail - Emissions Performance



Sources: LEM Dataset

Canadian Carbon Policy

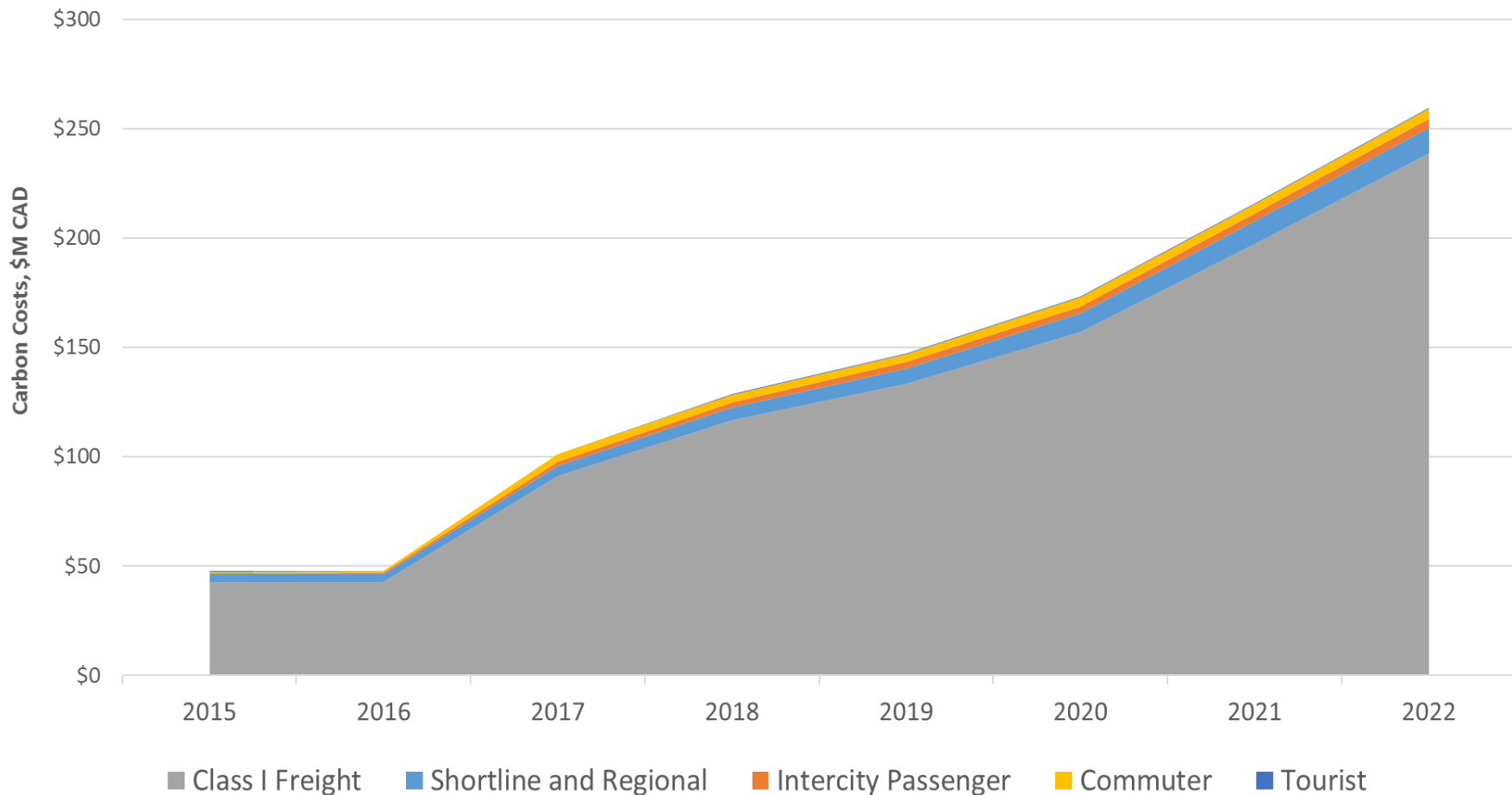
- Announced in October 2016
- Seeks to price carbon emissions and impose floor price
- Each province will define its pricing scheme that needs to at least meet the floor
- The plans need to be in place by the end of 2018

Canadian Carbon Schemes*

Carbon Tax	Cap and Trade	Unannounced
<ul style="list-style-type: none">• British Columbia• Alberta	<ul style="list-style-type: none">• Quebec• Ontario• Nova Scotia	<ul style="list-style-type: none">• Saskatchewan• Manitoba• New Brunswick• Prince-Edward-Island• Newfoundland & Labrador

*: As of October 11, 2017

Forecasted Annual Cap & Trade and Carbon Tax Costs by Rail Carrier Type



Source: The Delphi Group

Freight Modal Shift Model

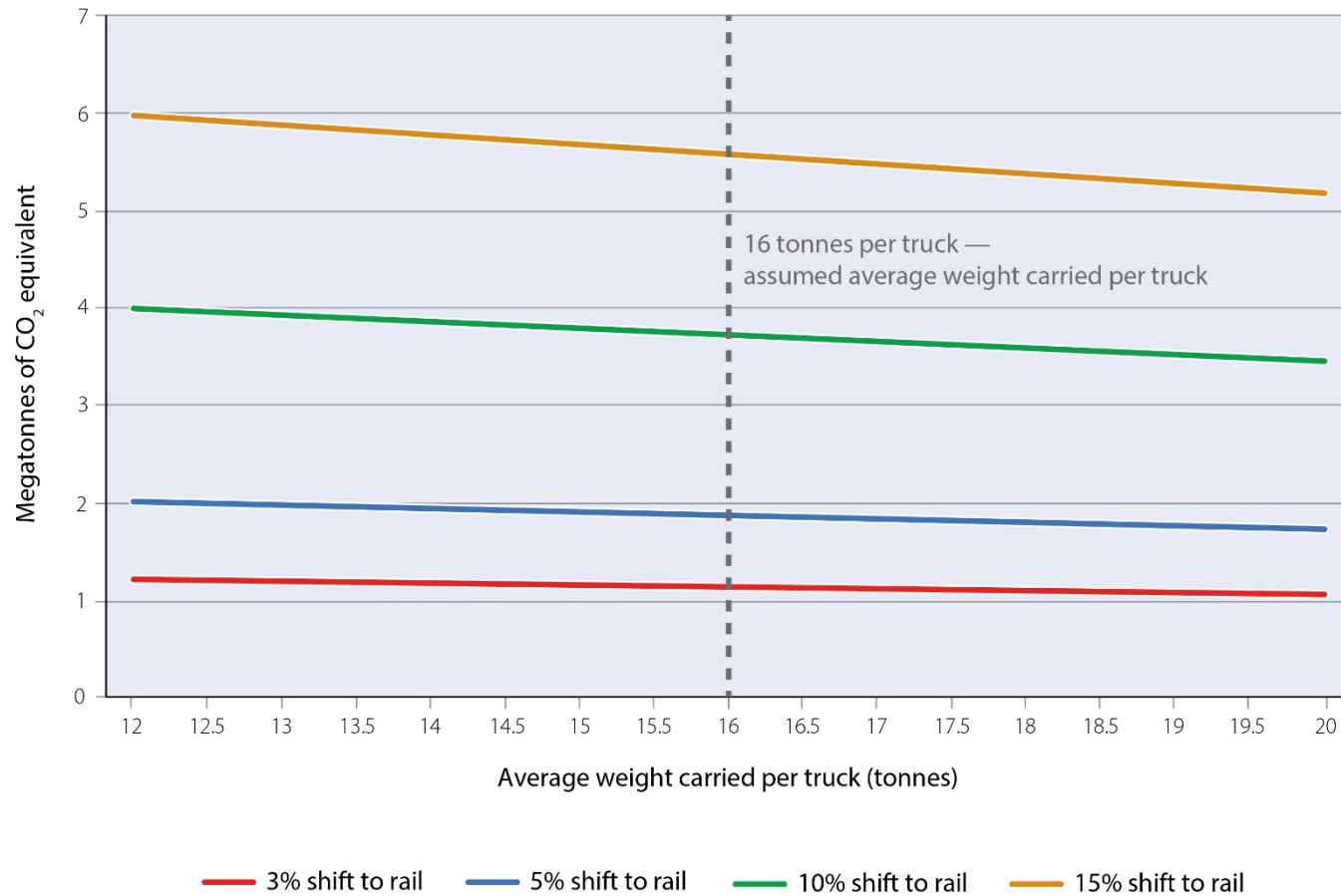
of litres required to move 1 tonne of freight 200+ klms

1

How much more efficient is rail than truck?

~2 to 5.5x

Impact of Modal Shift on GHGs



Sources: Environment and Climate Change Canada's National Inventory Submission to the UNFCCC, LEM Dataset, Rail Trends Database, US EPA, NRCAN's Fuel Efficiency Benchmark for Canada's Trucking Industry, Transport Canada's Statistical Addendum to the 2014 Annual Report