

# State of long-haul freight transportation in Ontario and Québec

Pierre-Olivier Pineau

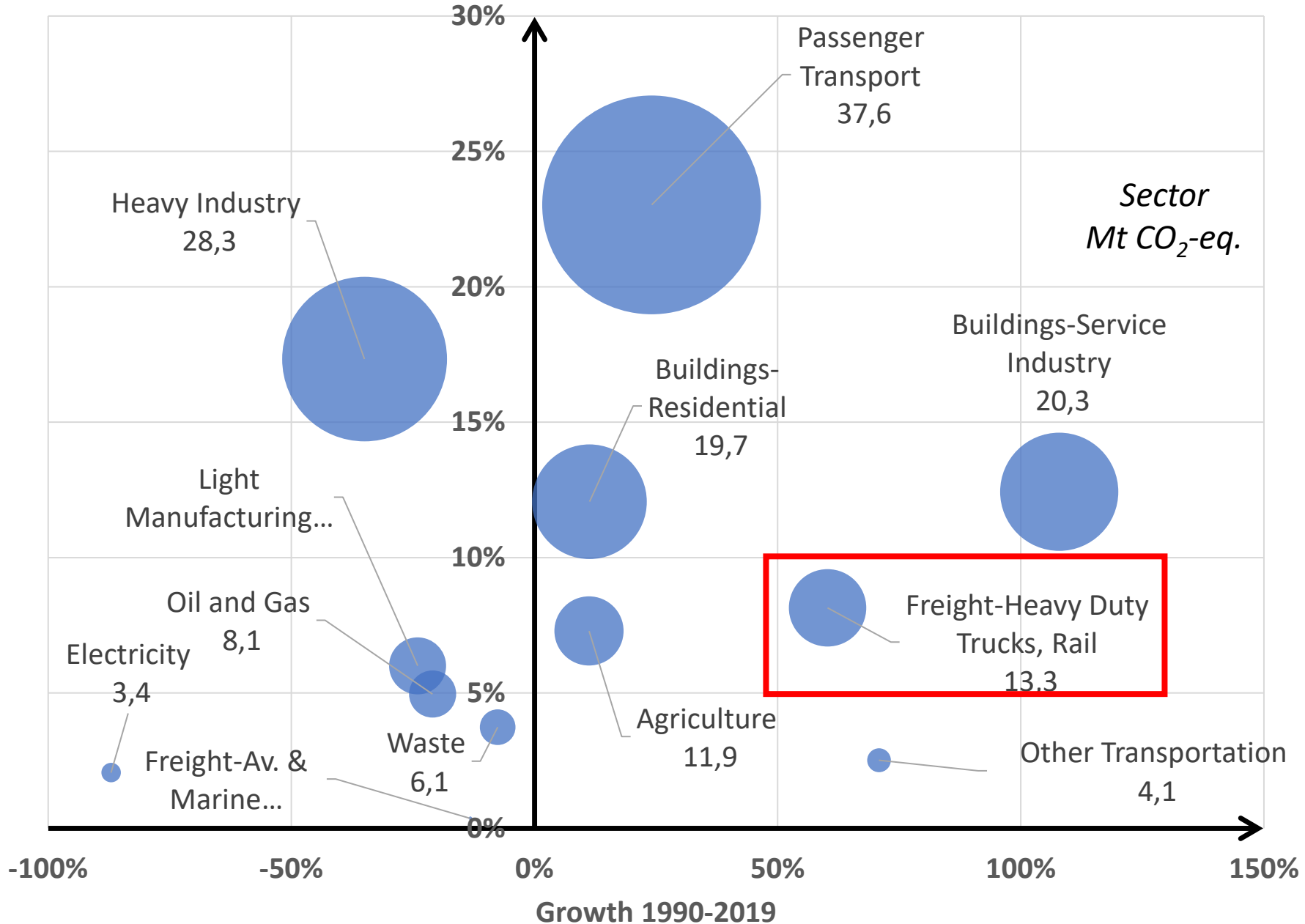
April 25, 2023

Part 1. General Overview – State of long-haul freight transportation

*Decarbonizing long-haul trucking in Eastern Canada*

# Ontario GHG Emissions Growth 1990-2019

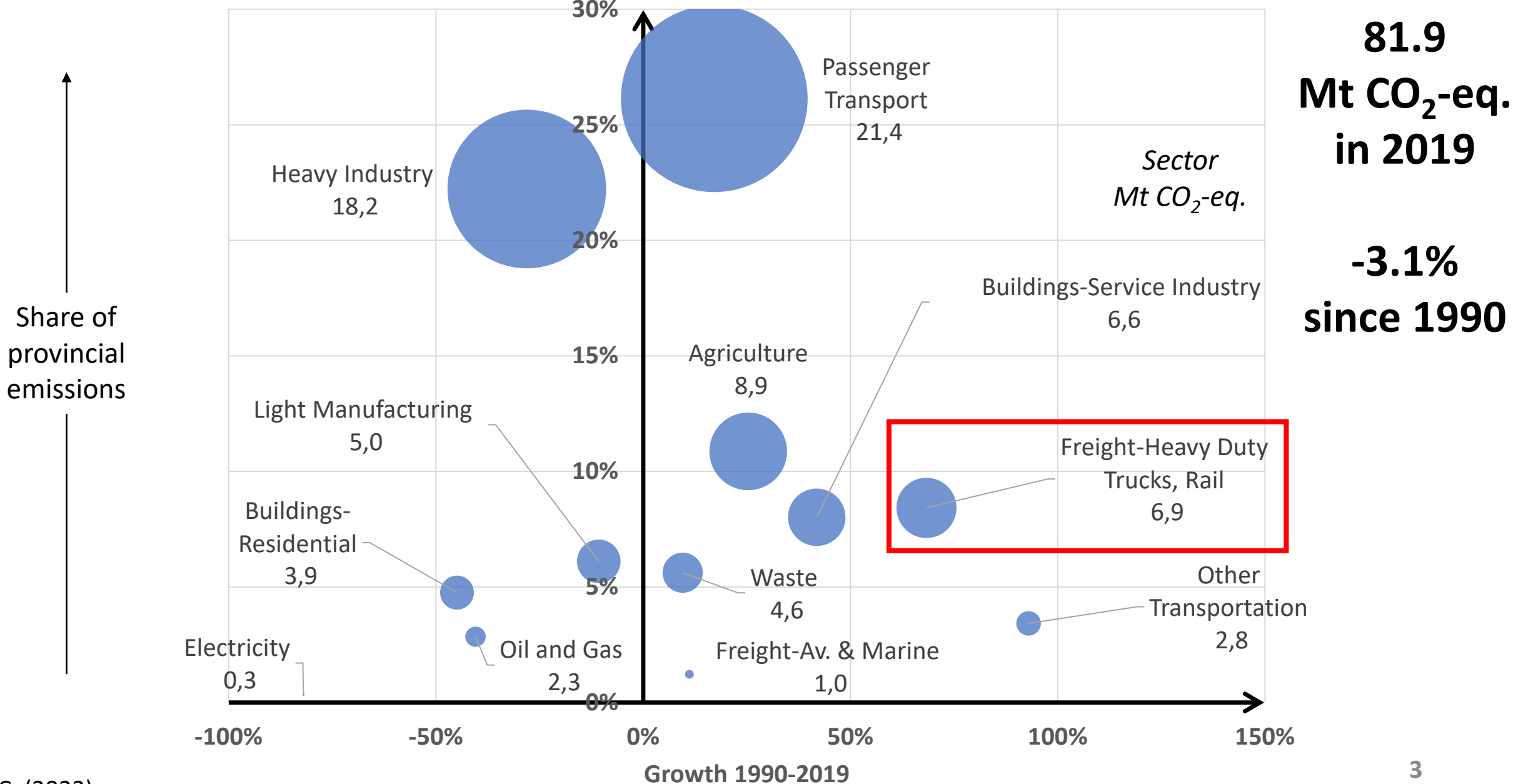
Share of provincial emissions



**163.3**  
**Mt CO<sub>2</sub>-eq.**  
**in 2019**

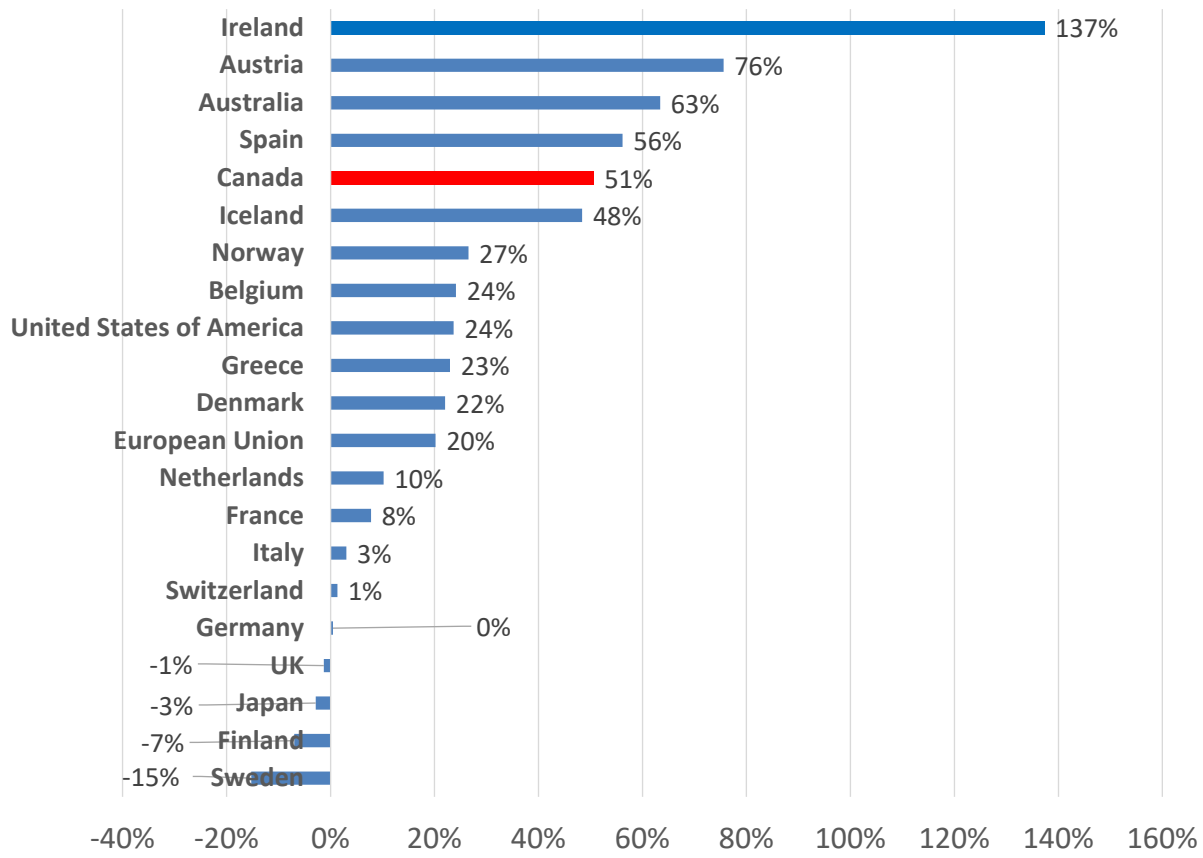
**-8.8%**  
**since 1990**

# Québec GHG Emissions Growth 1990-2019

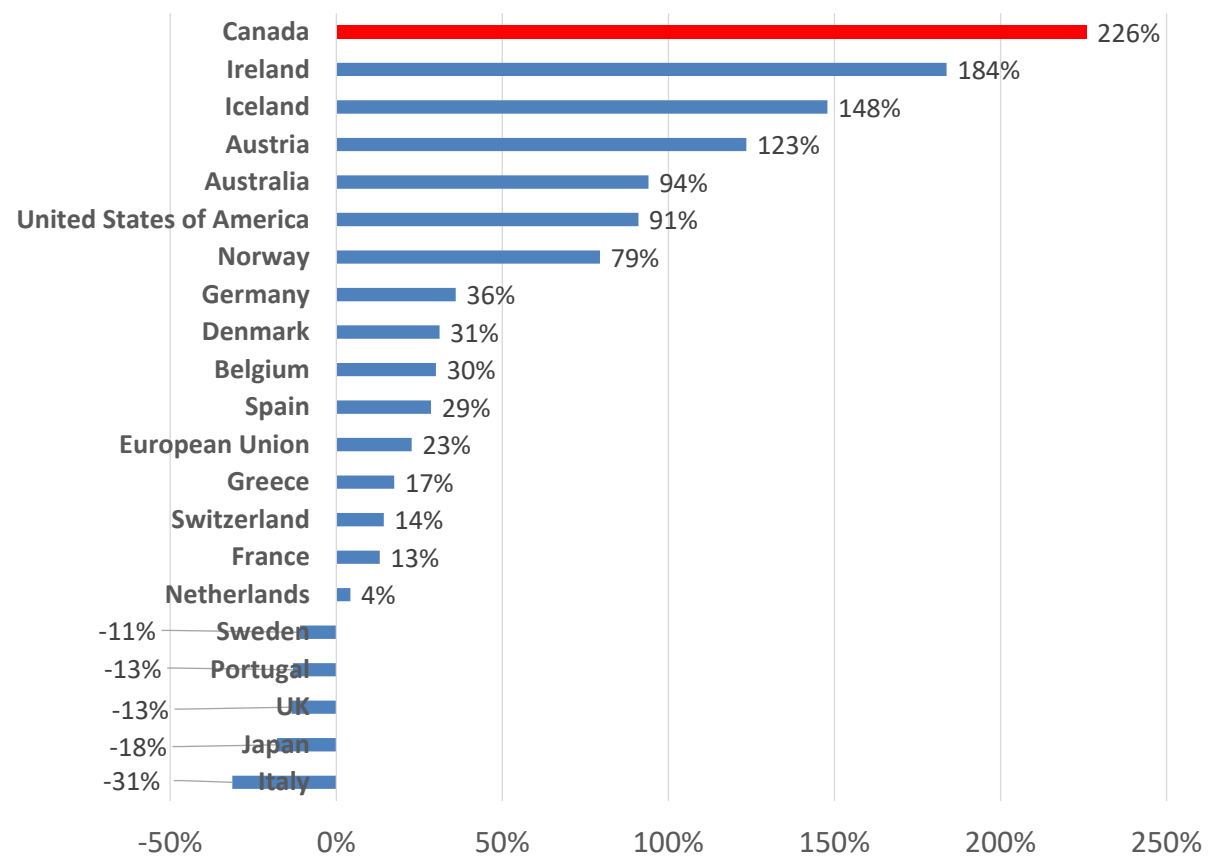


# Change in GHG Emissions in Transportation OECD countries, 1990-2019

## Transport



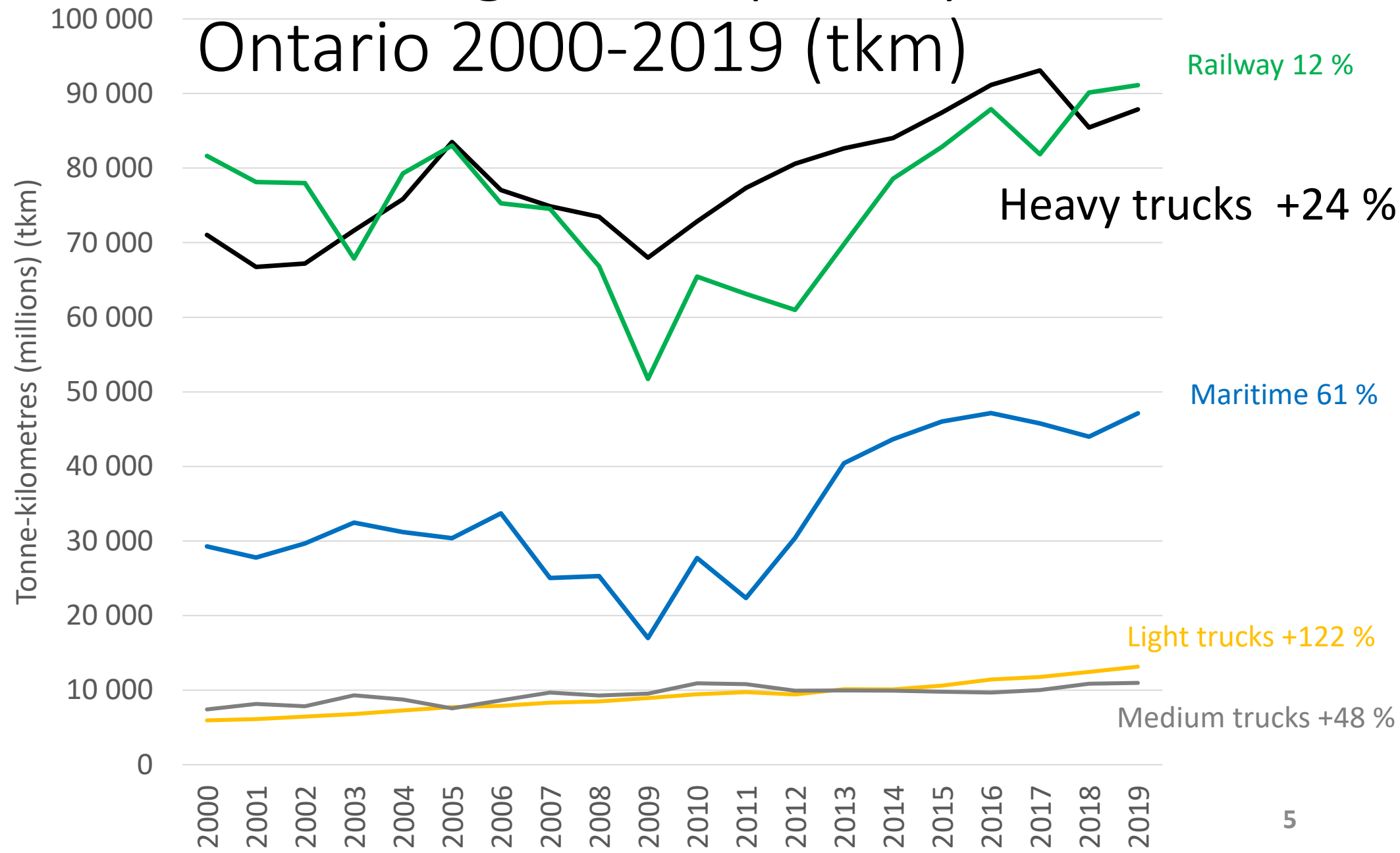
## Freight trucks





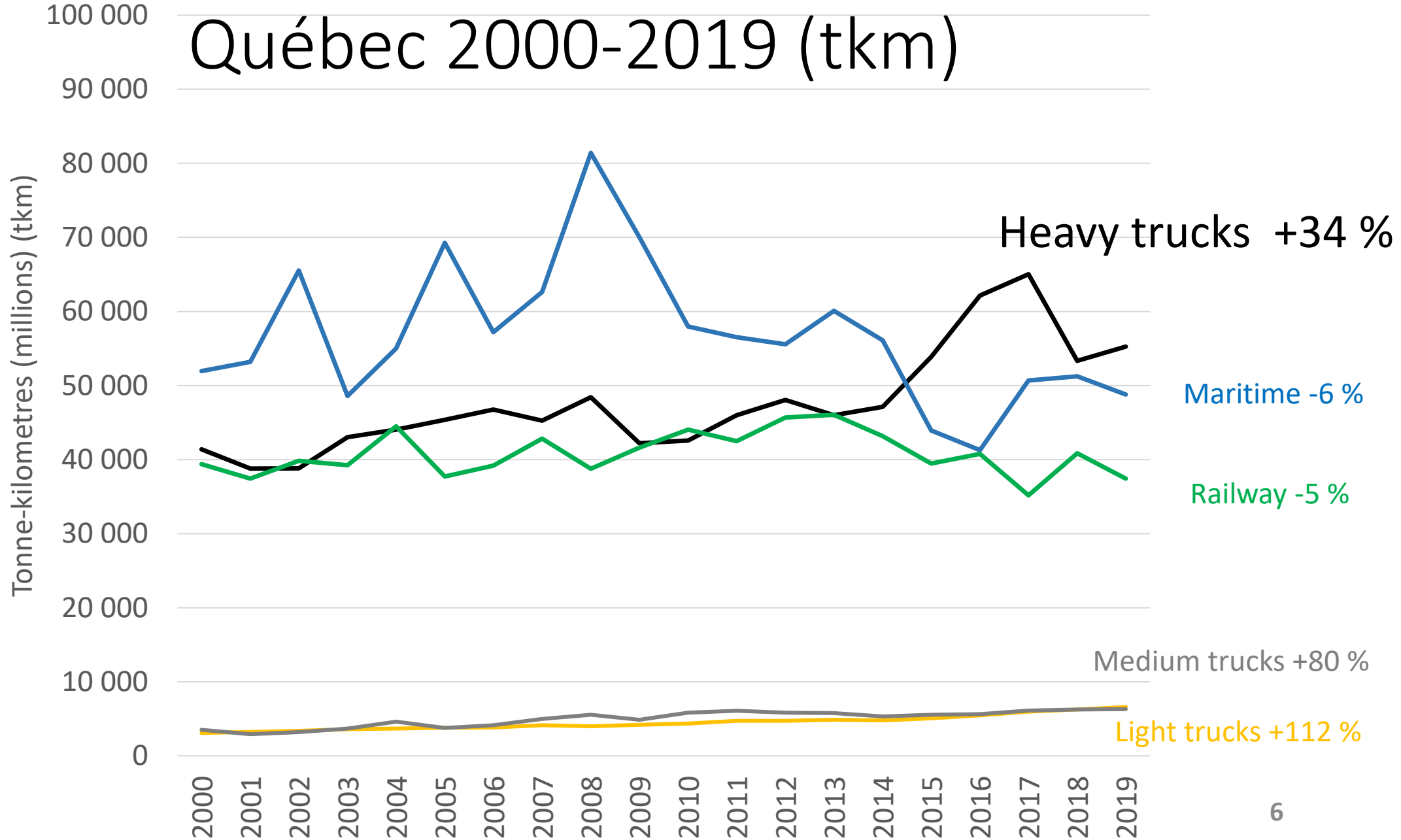
Population  
2000-2019  
+25%

# Evolution of freight transport by mode, Ontario 2000-2019 (tkm)



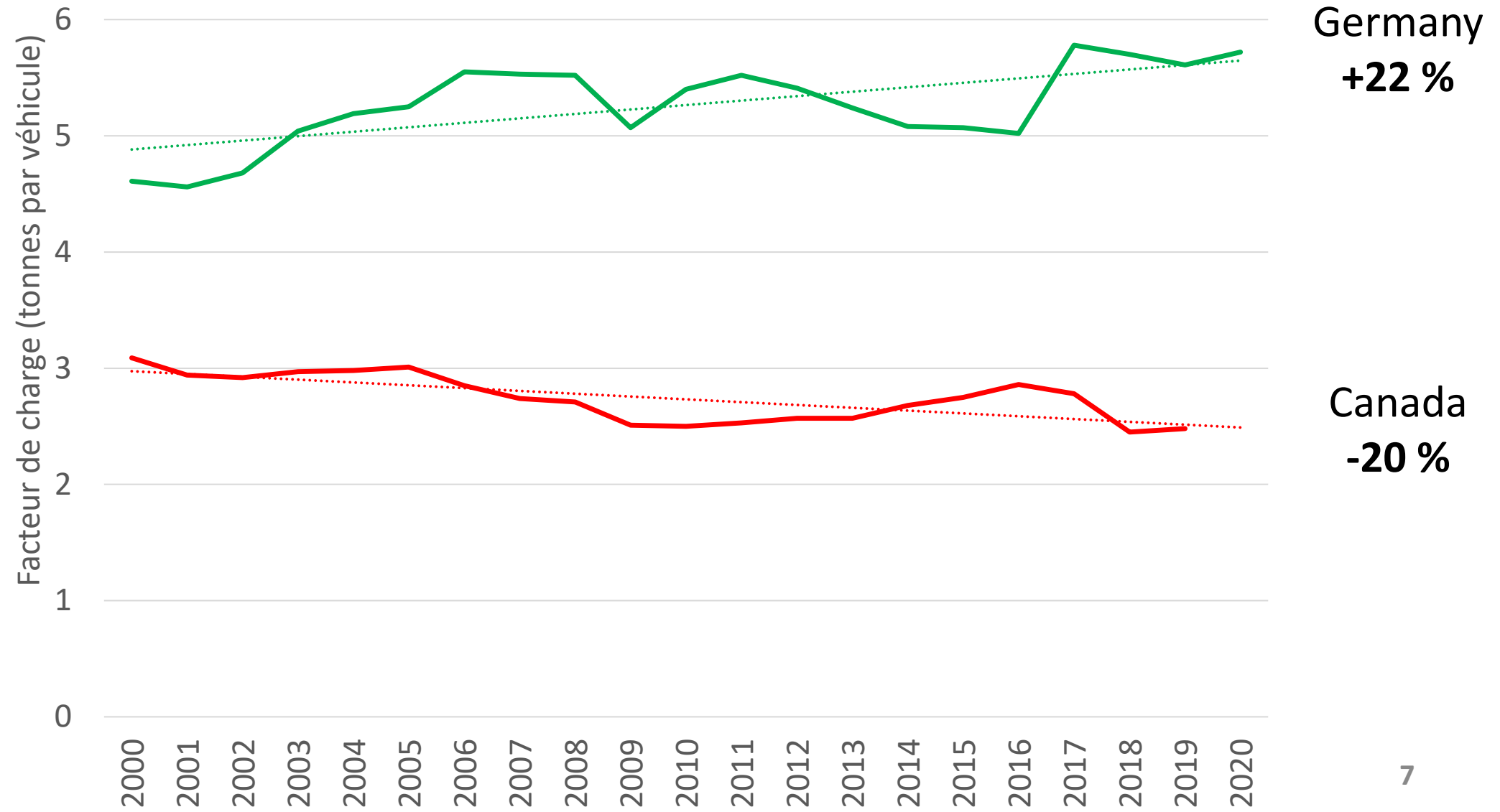
# Evolution of freight transport by mode, Québec 2000-2019 (tkm)

Population  
2000-2019  
+16%





# Road freight transport: Evolution of the load factor (2000-2020)



# Energy intensity of different modes of freight transport

Data from 26 countries in 2019  
MJ per tonne-km

	Truck	Train	Boat
<i>Min</i>	0,51	0,11	0,04
<b>Canada</b>		<b>0,20</b>	<b>0,38</b>
<b>Average</b>	<b>2,43</b>	<b>0,29</b>	<b>0,61</b>
<b>Canada</b>	<b>2,66</b>		
<i>Max</i>	4,23	0,64	1,48

-88 %      -75 %



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# Thanks ! Merci !

Partners of the Chair in Energy Sector Management:

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