

Welcome to this week's presentation & conversation hosted by the **Canadian Association for the Club of Rome**, a Club dedicated to intelligent debate & action on global issues.



The views and opinions expressed in this presentation are those of the speaker & do not necessarily reflect the views or positions of CACOR.

## Old Fashioned Trade War Trumps Climate Change

**Description:** Climate change considerations have been trumped in the decision by Canada to align with punitive American tariffs on affordable electric vehicles from China. On closer scrutiny, the official rationale for denying Canadians access to affordable EVs does not stand up well. The tariffs all but eliminate hope that Canada can meet its greenhouse gas emission targets for the transportation sector. As Canadian canola farmers brace for the inevitable Chinese retaliation, the question arises: who benefits from the tariffs, and at whose cost?

**Biography:** Ralph Torrie is the Director of Research for Corporate Knights, a Toronto-based media and research company. He has been developing, implementing, and advocating for sustainable energy policies and business strategies for 45 years. In addition to founding a successful research and software firm, he served as Assistant Coordinator of the Energy Research Group of the United Nations University and the International Development Research Centre, director of the Suzuki Foundation's Trottier Energy Project, Vice President of ICF International, and Managing Director of Navigant, both publicly traded management consulting firms. He lives with his partner Judy Smith in Cobourg, Ontario.

The presentation will be followed by a conversation, questions, & observations from the participants.

CACOR acknowledges that we all benefit from sharing the traditional territories of local Indigenous peoples (First Nations, Métis, & Inuit in Canada) and their descendants.



Website: [canadiancor.com](http://canadiancor.com)  
YouTube: [Canadian Association for the Club of Rome](https://www.youtube.com/channel/UC...)

2024 Oct 23 Zoom #218

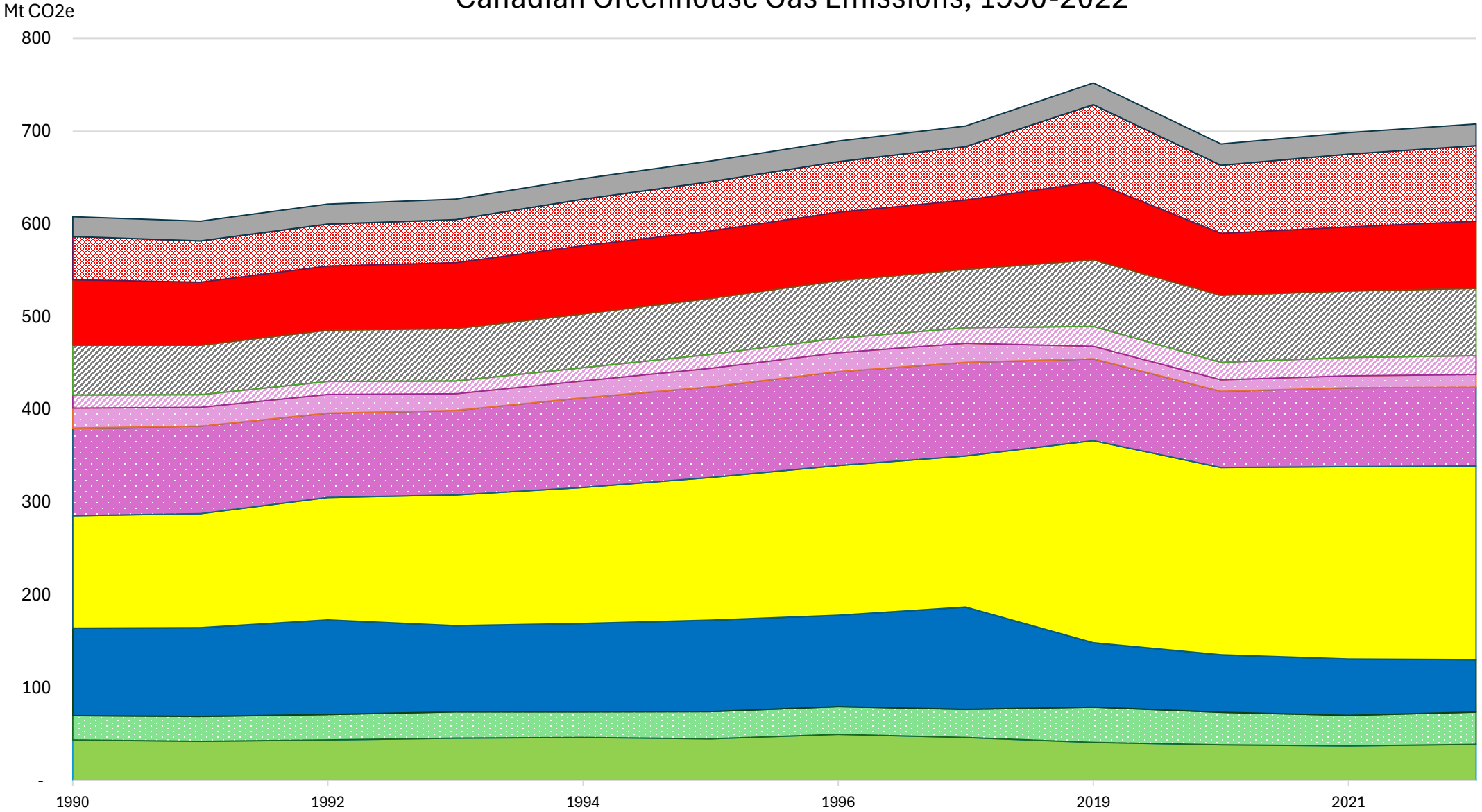


CORPORATE KNIGHTS INC.

# Canadian tariffs on Chinese EVs

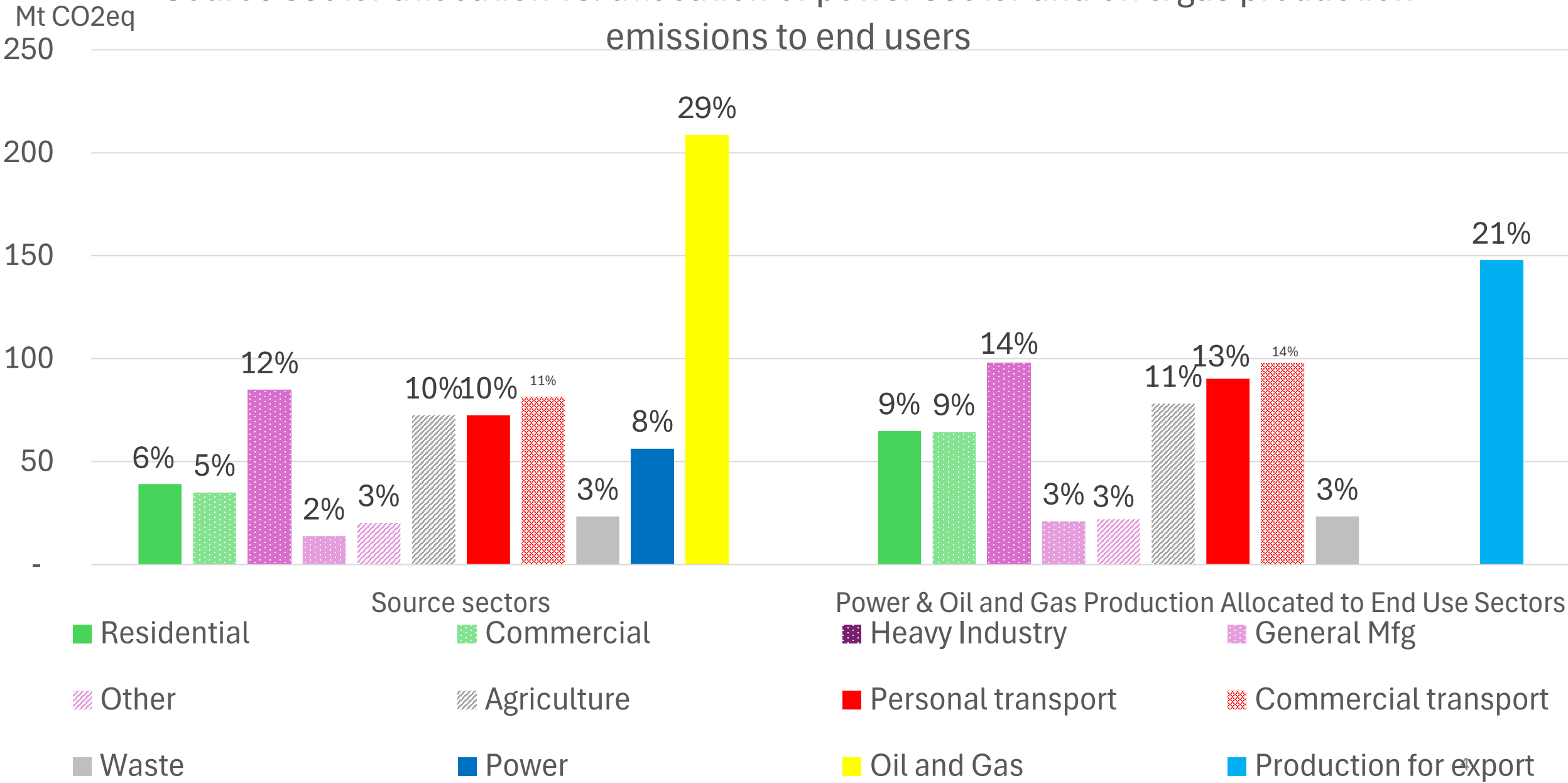
**Sides for a presentation to the Canadian  
Association for the Club of Rome  
October 23, 2024**

# Canadian Greenhouse Gas Emissions, 1990-2022



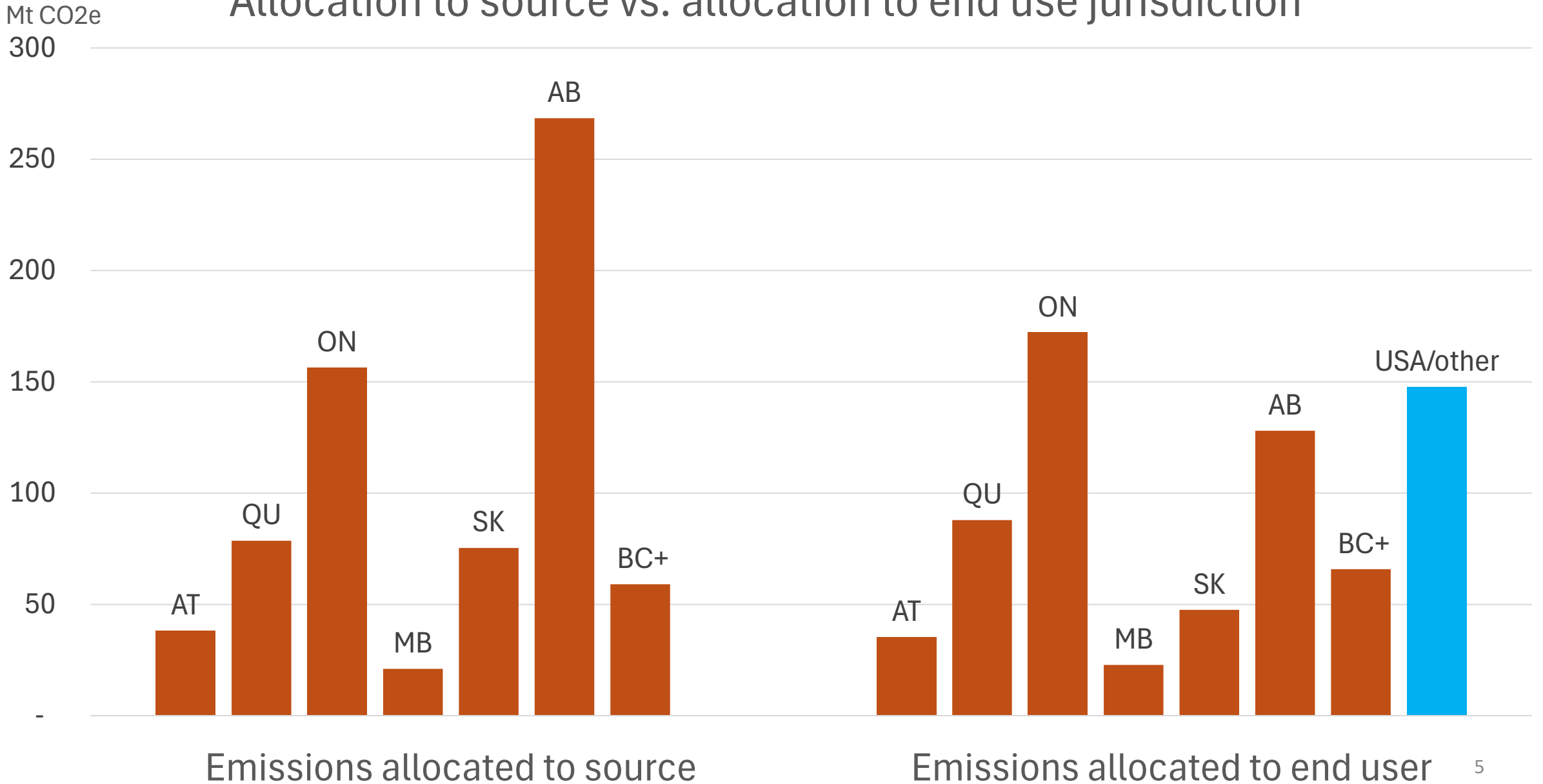
# GHG Emissions in Canada, 2022

## Source sector allocation vs. allocation of power sector and oil & gas production emissions to end users

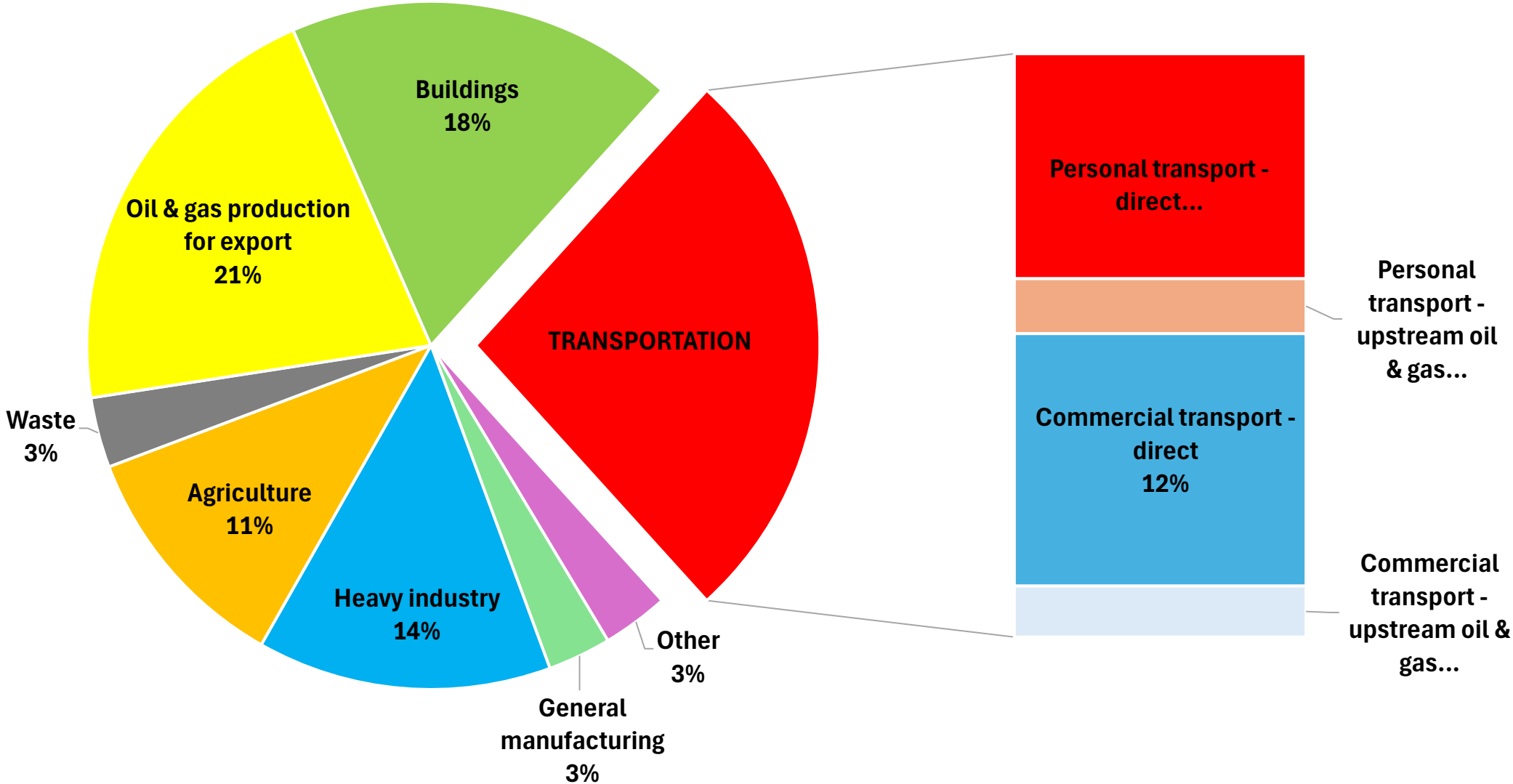


# GHG Emissions in Canada, 2022

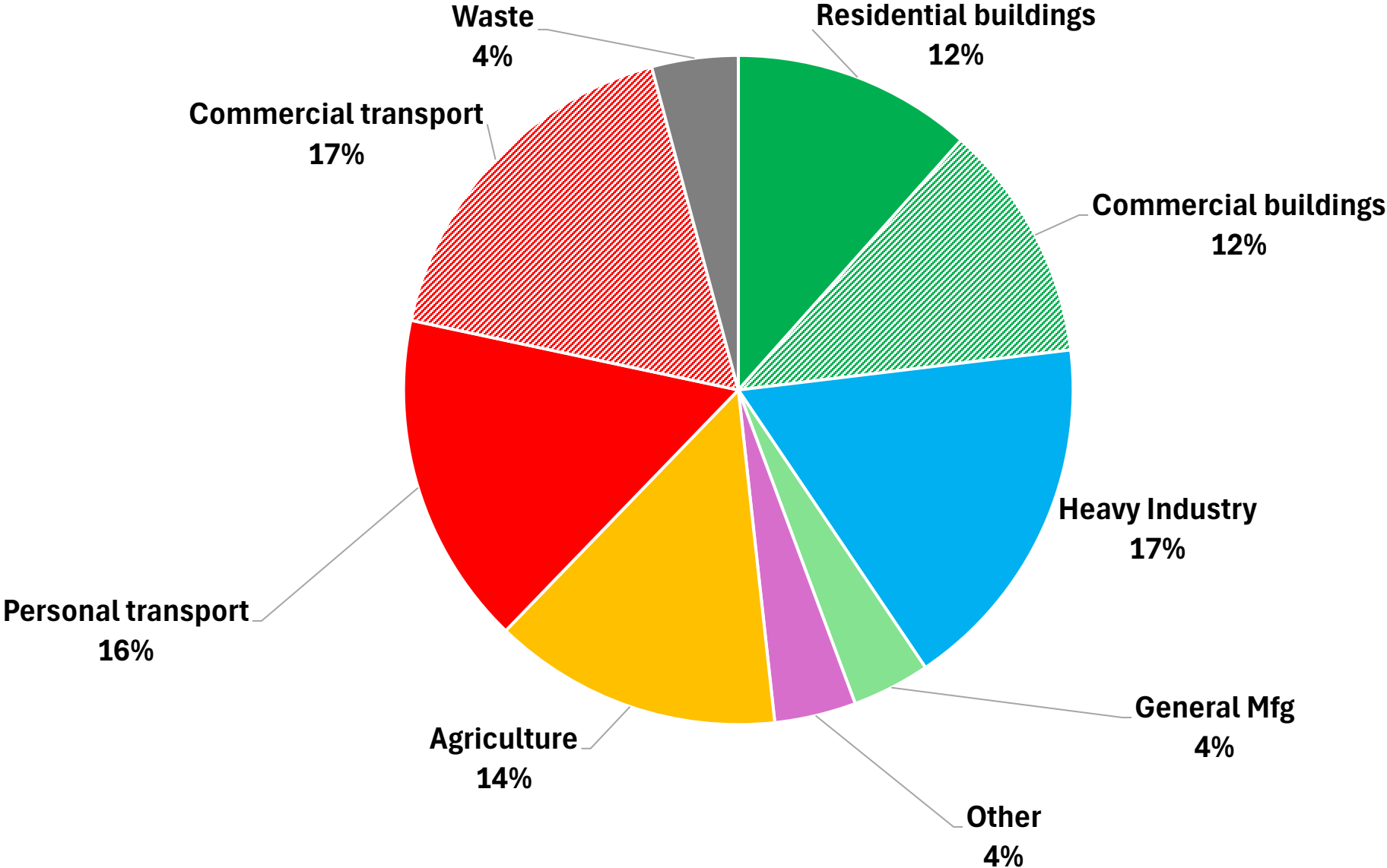
## Allocation to source vs. allocation to end use jurisdiction



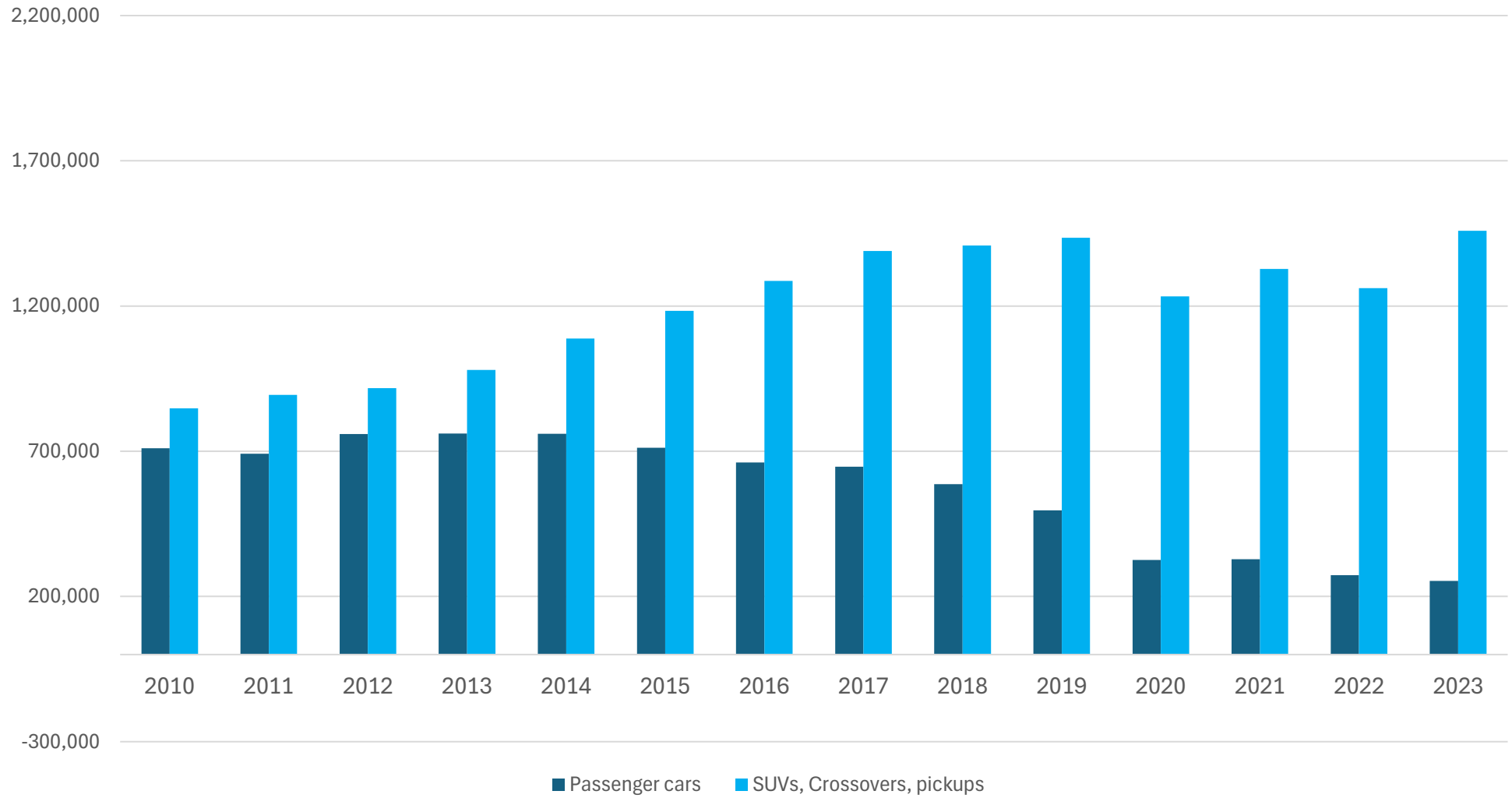
# Transportation is the source of 27% of Canada's greenhouse gas emissions:



Considering only emissions that are driven by Canadian end use demand, transportation makes up a third of the total:



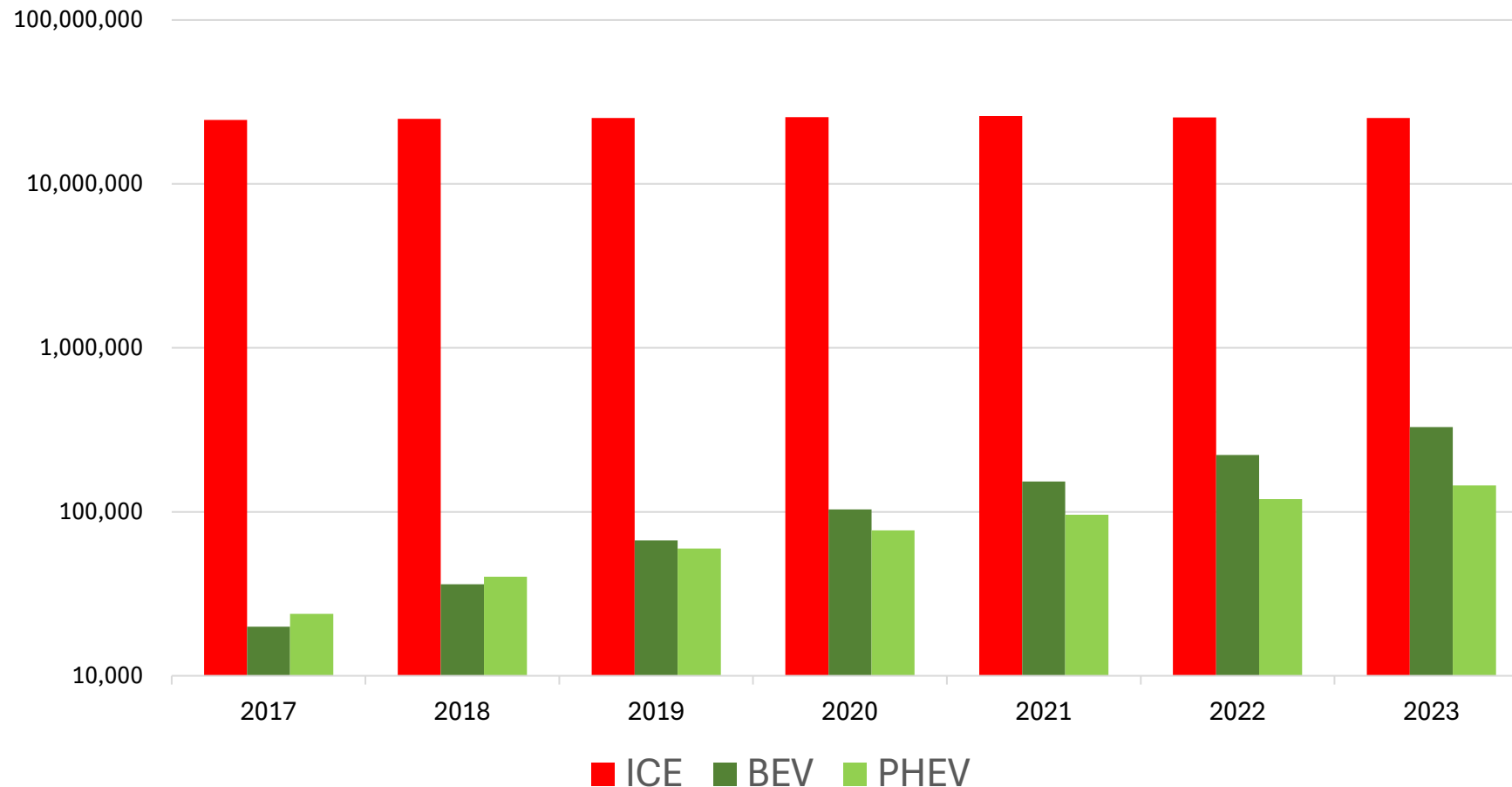
Annual sales of personal vehicles in Canada, 2010-2023





Total vehicle registrations have stalled, reflecting declining affordability and household downsizing of vehicle ownership.  
Battery electric vehicles growing exponentially, but still only 1.3% of total in 2023.  
BEVs now outnumber PHEV 2:1; PHEV growth is falling off while BEV accelerates.

Total personal vehicle registrations, 2017-2023, by fuel type  
(logarithmic scale)



# The road transportation decarbonization capex gap: \$607 billion



In the 5% of the year when their cars are not parked, Canadians drive more than 400 billion kilometres – over 2,500 times the distance to the Sun.

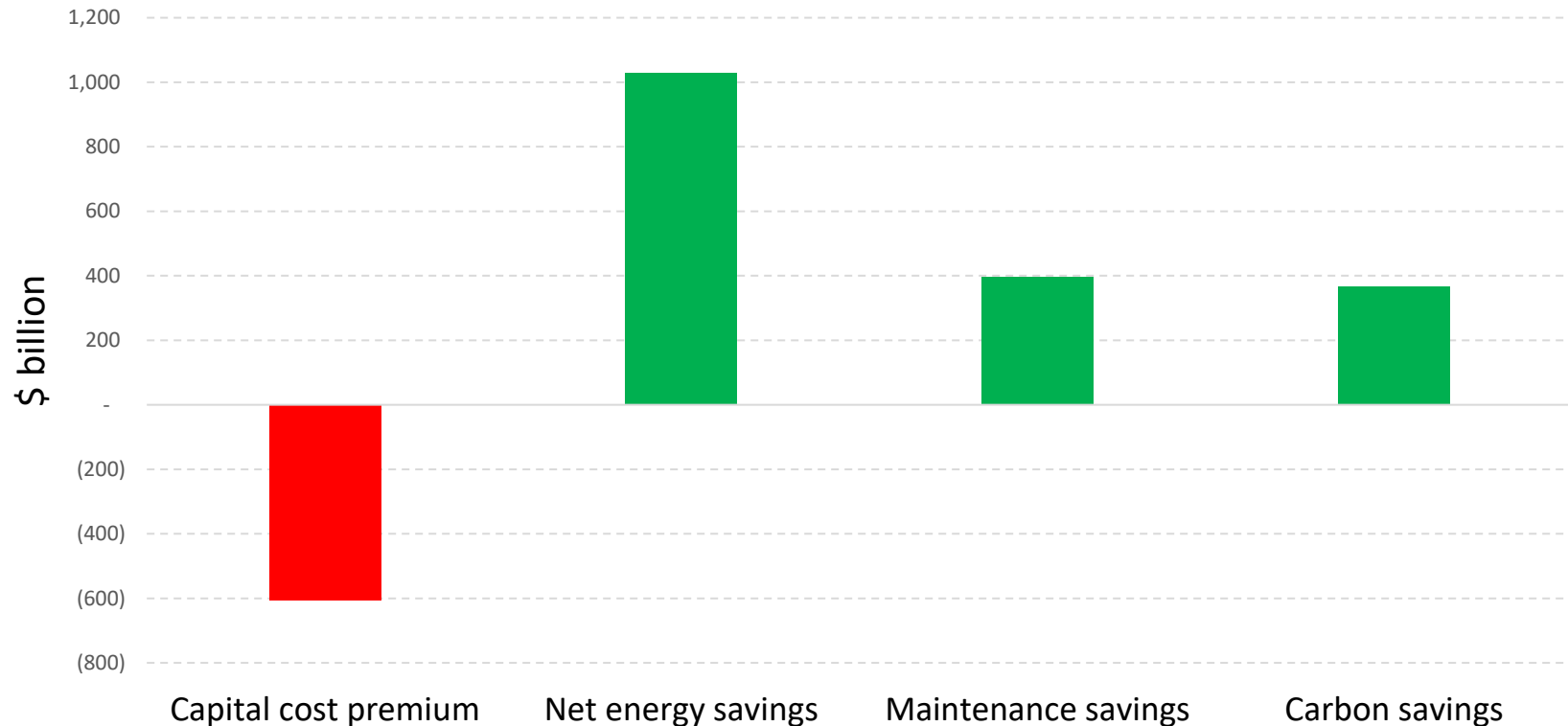
To decarbonize road transportation in Canada by 2050, it will take up to \$600 billion in capital investments, less if the price premium for EVs can be reduced or eliminated. With status quo policies and investment levels, we will invest perhaps \$100 billion. The difference is what we call the capex gap.



*The decarbonization scenario of road transportation has a positive economic benefit, even when narrowly defined to include only the direct energy, carbon, and maintenance costs, and even if only modest declines are assumed for EV price premiums.*

### Costs and savings from decarbonizing Canada's road transportation sector by 2050

*The net benefits are very sensitive to the assumed price premiums for EVs. If price parity with ICEs is approached by the mid-2030s, the total capital cost premium drops to less than \$200 billion and the net benefits of electrification increase to \$2 trillion.*



# Enter the affordable Chinese EV:



**\$32,990**

2024 BYD Dolphin Dynamic



**\$42,880**

2023 BYD Atto 3 Superior  
(extended)



**\$59,888**

2023 BYD Seal Premium



**\$44,990**

DRIVE AWAY

2023 BYD Atto 3 Extended



**\$30,212**

DRIVE AWAY

2021 BYD E6 GEN 2 GLX



**\$25,990**

2021 BYD E6 GEN 2 GLX

*Figure 1 Some Chinese EV's on sale in Australia, July 2024*

Only 12% of vehicles made by Canadian autoworkers are not sold to Canadians, and most Canadians do not buy Canadian-made vehicles.

Top selling vehicles in Canada in 2023					
Model	Type	Made where?	Units sold in 2023	MRSP low	MRSP High
Ford F-150	pickup	USA/Tennessee	123,267	\$ 49,955	\$ 106,975
RAM P/U	pickup	USA/Michigan	75,257	\$ 60,445	\$ 112,945
Toyota RAV4	SUV/crossover	CANADA	74,688	\$ 33,150	\$ 44,750
GM Sierra	pickup	USA/Indiana	59,696	\$ 45,899	\$ 103,499
Chev Silverado	pickup	CANADA	53,266	\$ 44,899	\$ 86,699
Honda CR-V	SUV/crossover	CANADA	52,146	\$ 35,725	\$ 42,125
Toyota Corolla	car	USA/Mississippi	28,260	\$ 23,490	\$ 31,150
Honda Civic	car	CANADA	27,803	\$ 27,540	\$ 36,800
Nissan Rogue	SUV/crossover	USA/Tennessee	26,665	\$ 33,648	\$ 44,988
Hyundai Tucson	SUV	USA/Alabama	26,209	\$ 34,199	\$ 49,499

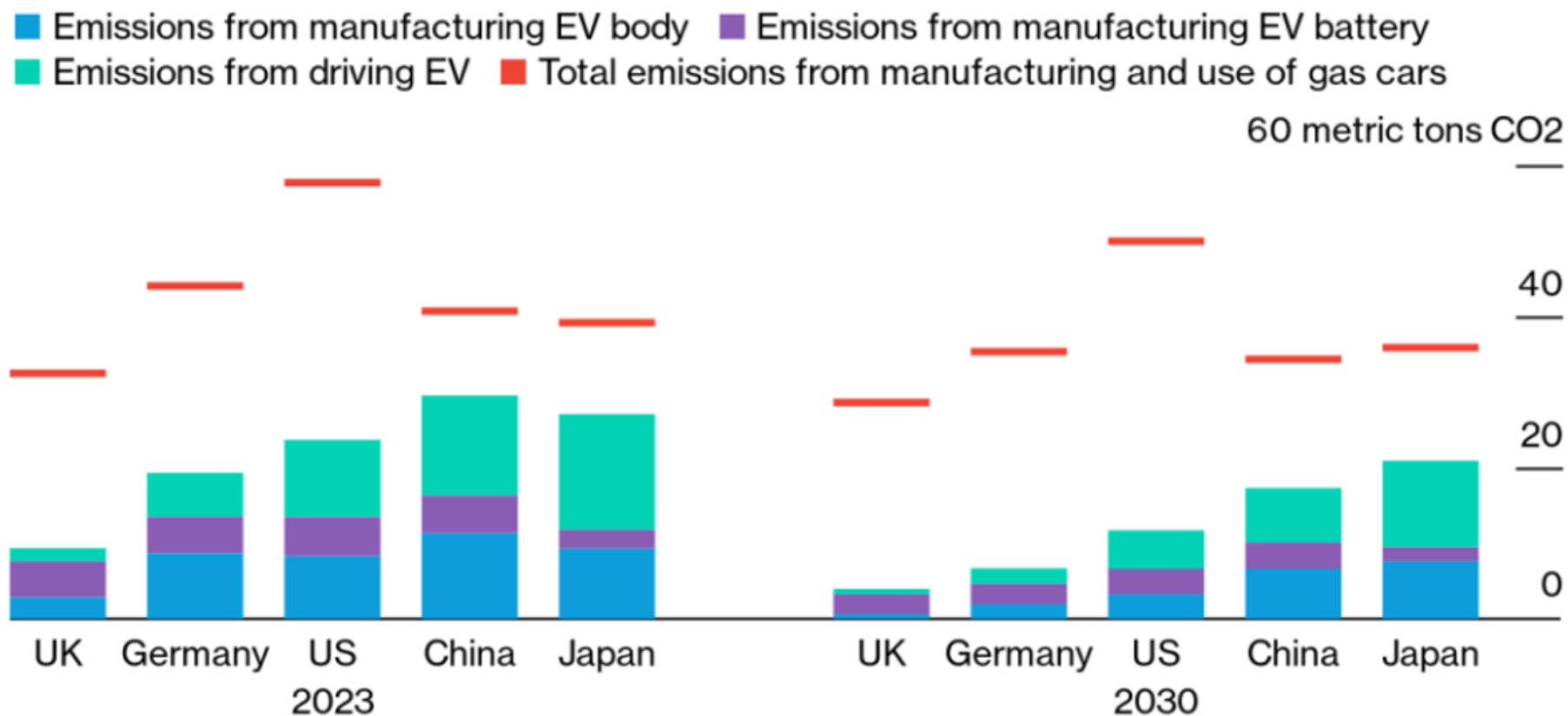


In a scenario where Chinese EVs were allowed into Canada now and gradually gained 20% market share by 2030, the families that bought them would save Canadian families \$8 billion per year (\$41 billion by 2035) which would be reinvested in local economies, generate billions in utility revenue to support the electrification transition, and reduce annual GHG emissions by 10.6 Mt (53 Mt cumulative).

	2024	2030	2035
New light vehicle purchases in Canada	1,700,000	1,804,584	1,896,636
Chinese market share	1%	20%	20%
Total sales of Chinese Evs	17,000	360,917	379,327
Cumulative Chinese EV sales	17,000	1,365,837	3,225,286
Net annual savings in fuel and maint, millions of \$	\$ 43	\$ 3,490	\$ 8,241
Net annual GHG reductions, Mt CO2e	0.06	4.47	10.55
<b>Cumulative Results</b>			
Net dollar savings in fuel and electricity, millions	\$ 43	\$ 9,480	\$ 41,087
Utility revenue, millions	\$ 7	\$ 1,558	\$ 6,754
GHG reduction, Mt	0.06	12.14	52.62
<b>Impact on Canadian autoworkers</b>			
Cdn light vehicle production	1,785,000	1,894,813	1,991,468
Percent sold in Canada	12%	12%	12%
No. of Cdn made light vehicles sold in Canada	214,200	227,378	238,976
Estimated share exposed to Chinese competition (i.e. net of pickup trucks)	80%	75%	75%
No. of Cdn made vehicle sales lost to Chines EV's	1,714	34,107	35,846
As a share of Cdn production	0.1%	1.8%	1.8%
No. of autoworker jobs	135,000	135,000	135,000
Jobs lost because of Chinese sales	130	2,430	2,430
As a percent of all autoworker jobs			1.8%

## EVs Made Today Are Cleaner Than Gas Cars. By 2030, the Difference Will Be Even Starker

Emissions from new electric and gas cars after driving 250,000 kilometers, by market



Source: BloombergNEF, International Council on Clean Transportation.

Note: Takes into account the changing grid emissions over the time it takes to drive 250,000 km, which varies by market. For this analysis, EVs are battery-electric vehicles.

# Some links to other materials and opinions:

- [Martin Wolf on tariffs as policy instruments](#)
- [CSIS on Chinese EV subsidy](#)
- [Chinese EVs may be coming to the US – Through Mexico](#)
- [How China's tech-forward EVs are dominating the industry](#)
- [What the EU's tariffs on electric vehicles mean for China](#)
- [Chinese EV laser maker fights back against Pentagon blacklisting](#)
- [Asleep at the Wheel: Car Companies' Complicity in Forced Labor in China](#)
- <https://www.motortrend.com/news/secret-affordable-ford-evs-coming-to-take-on-tesla-and-china/>
- <https://canada.autonews.com/canada-conversations/anc-podcast-june-7-2024-gms-marissa-west-hybrids-affordable-evs-and-company>
- <https://www.ft.com/content/c77fef3-7f47-429b-8149-50aa60f39498>
- <https://www.theguardian.com/business/2024/oct/20/is-china-cannibalising-the-eu-car-industry>