MEI Ideas for a More Prosperous Society

VIEWPOINT

ENVIRONMENT SERIES

FEBRUARY 2023

CANADA'S 2030 GHG EMISSION TARGETS: GLOBALLY INSIGNIFICANT, LIKELY COUNTERPRODUCTIVE

By Krystle Wittevrongel, with the collaboration of Emmanuelle B. Faubert

In early 2019, the MEI released a publication on the size of Quebec's GHG emissions and its reduction targets. Because the province is only a miniscule emitter on a global scale, decades of efforts to reduce emissions could be cancelled out by only a fraction of the growth in emissions in countries like China. At the time, we found that it took just eleven and a half days for China's growing emissions to wipe out 30 years of Quebec's reduction efforts.[1]

Both the provincial and federal governments have now announced new GHG reduction targets for the year 2030. What do these reductions represent from a global perspective?

INCREASINGLY INSIGNIFICANT

In Quebec, the emission reduction target is now 37.5% below 1990 levels by 2030, while for Canada, the target is 40%-45% below 2005 levels.[2] These objectives correspond to a reduction of CO_2 equivalent over the next seven years of 31 megatonnes (Mt) for Quebec and between 287 and 324 Mt for Canada, based on 2019 emissions levels.[3]

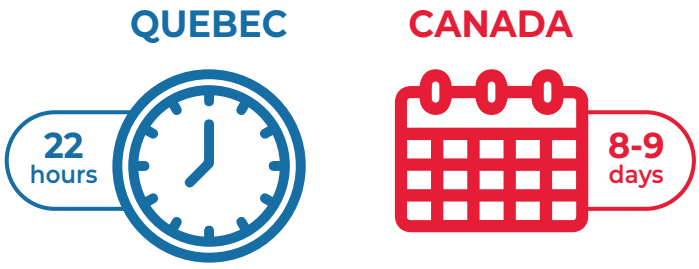
Proportionally speaking, Quebec's share of total global GHG emissions has been falling steadily, from 0.29% in 1990 to 0.18% in 2019, a 38% reduction. Canada's share has fallen as well, from 2.0% to 1.6% between 2005 and 2019, a 20% reduction.[4] This makes Canada a minor emitter on a global level, and Quebec an even smaller one.[5] At the same time, emissions in massive emerging Asian markets like China and India continue to grow year after year.

In comparison, China, the world's largest CO_2 emitter, was responsible for 27.4% of global emissions in 2019—up 41% from its share in 2005.[6] These emissions, in a single year, are over 400 times what Quebec pledges to reduce between now and 2030.[7] Put differently, in 2019, China was emitting in under 22 hours Quebec's entire 2030 reduction target. What the province will sacrifice over the next seven years to meet its target in terms of constraints on production, jobs not materialized, and forgone quality of life improvements (not to mention government revenues) will be wiped out in less than 22 hours of Chinese emissions.

As for Canada, it would take just over a week (between 8.2 and 9.3 days) for China to emit enough CO_2 equivalent to cancel out Canada's

Figure 1

Amount of time at 2019 emission levels for China to cancel 7 years of GHG reduction efforts



Sources: Author's calculations. The World Bank, Total Greenhouse Gas Emissions (kt of CO_2 equivalent) - China, consulted January 19, 2023; Environment and Climate Change Canada, *2030 Emissions Reduction Plan: Canada's Next Steps for Clean Air and a Strong Economy*, March 2022, p. 85; Environment and Climate Change Canada, *National Inventory Report 1990-2020: Greenhouse Gas Sources and Sinks in Canada - Part 3*, 2022, p. 24.

2030 reduction targets (see Figure 1). In fact, even if Canada were to become carbon neutral tomorrow, the emissions saved every year would only represent around 21 days of Chinese emissions.[8]

RISK OF CARBON LEAKAGE

Moreover, when it comes to emissions, the laws of supply and demand must be considered globally. In this case, world demand for fossil fuels is still robust, which is why other countries are still moving forward with resource development. If our governments are unwilling to allow producers to meet domestic and international demand for oil and gas, producers in other jurisdictions will meet it instead.

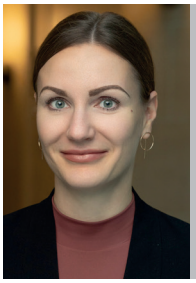
Indeed, if Canada pursues emissions reductions at all costs, businesses are likely to transfer production to a jurisdiction with more lenient standards and emissions constraints, possibly leading to an increase in global emissions.[9] This is known as carbon leakage, and can happen even when production shifts to a country with high environmental standards. For example, even the United States produces natural gas with higher environmental impacts, including emissions, than if the natural gas were to be produced in Quebec.[10]

In sum, Canada's GHG reductions will be insignificant at best, wiped out in a matter of days by big CO_2 emitters in Asia. Even worse, our measures will likely lead to carbon leakage. Even if this only exports Canada's GHG emissions to a country with similar standards, the impact on emissions will then be nil. If that country's standards are not as strict as Canada's, however, it could actually lead to increased global emissions. So, either it is economically destructive for little to no environmental gain, or the planet is actually worse off in terms of global emissions for all our trouble.

Our governments need to re-examine their targets through a global lens. As energy insecurity and high energy prices prevail and our quality of life hangs in the balance, they need to realize that the sacrifices of Quebecers and all Canadians may well be in vain, and are more likely counterproductive from a global perspective.

REFERENCES

1. Germain Belzile, "GHG Reductions: Ambitious Targets for an Insignificant Impact," MEI, Viewpoint, January 2019, p. 1.
2. Government of Quebec, Department of the Environment, the Fight Against Climate Change, Wildlife and Parks, Changements climatiques, Engagements du Québec, consulted January 18, 2023; Environment and Climate Change Canada, *2030 Emissions Reduction Plan: Canada's Next Steps for Clean Air and a Strong Economy*, March 2022, p. 7.
3. Author's calculations. Environment and Climate Change Canada, *ibid.*, p. 85; Environment and Climate Change Canada, *National Inventory Report 1990-2020: Greenhouse Gas Sources and Sinks in Canada – Part 3*, 2022, p. 24.
4. Author's calculations. *Ibid*.
5. To put the 2030 reductions targets in perspective, they amount to global declines of 0.62% - 0.70% for Canada's reductions and 0.07% for Quebec's. Author's calculations, based on current (2019) emission levels.
6. Author's calculations. China emitted 19.4% of global total in 2005. The World Bank, Total Greenhouse Gas Emissions (kt of CO2 equivalent) – China, consulted January 19, 2023; The World Bank, Total Greenhouse Gas Emissions (kt of CO_2 equivalent), consulted January 19, 2023.
7. Author's calculations.
8. Author's calculations, based on current (2019) emission levels.
9. CLEAR Center at UC Davis, "What is Carbon Leakage?" April 24, 2022.
10. Pierre-Olivier Roy and Jean-François Ménard, *Technical Report: Environmental Profile of the Quebec Gas Initiative and Comparison with Other Chains*, CIRAIG, June 2019, p. 51.



This Viewpoint was prepared by **Krystle Wittevrongel**, Senior Policy Analyst and Alberta Project Lead at the MEI, in collaboration with **Emmanuelle B. Faubert**, Economist at the MEI. The MEI's Environment Series aims to explore the economic aspects of policies designed to protect the natural world in order to encourage the most cost-effective responses to our environmental challenges.

The MEI is an independent public policy think tank with offices in Montreal and Calgary. Through its publications, media appearances, and advisory services to policy-makers, the MEI stimulates public policy debate and reforms based on sound economics and entrepreneurship. It neither solicits nor accepts any government funding.

910 Peel Street, Suite 600, Montreal QC H3C 2H8 T 514.273.0969
150 9th Avenue SW, Suite 2010, Calgary (Alberta) T2P 3H9 T 403.478.3488
iedm.org