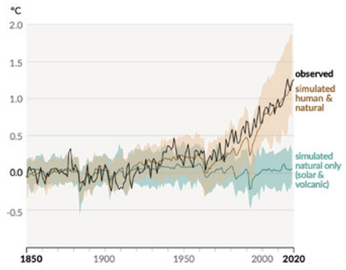
CLIMATE CHANGE AT A GLANCE

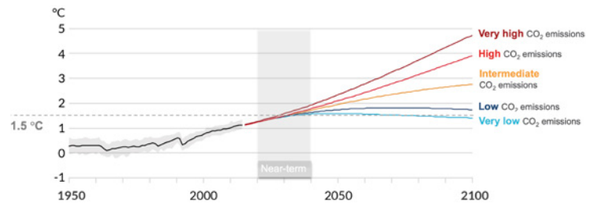
Climate science confirms need to reduce greenhouse gas emissions.

It is unequivocal that human influence has warmed the atmosphere, ocean and land – the scale of recent change is unprecedented.



Source: IPCC, 2021

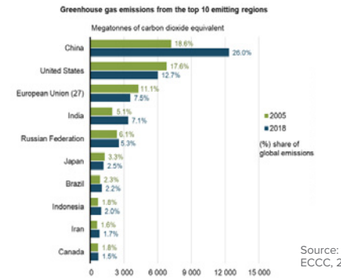
Rapid, large-scale and sustained reductions are needed to limit global warming below 2°C – net zero emissions by 2050 are required to stabilize global temperature.



Source: IPCC, 2021

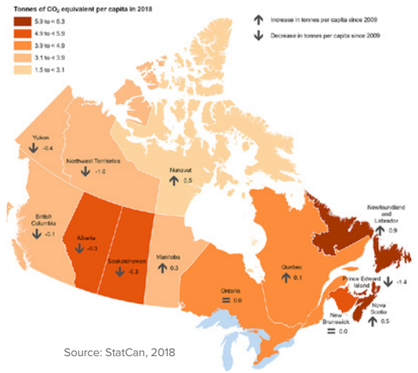
Canada represents a small share of global emissions, but remains one of the highest emitters per capita.

In 2018, Canada ranked 10th GHG emitting country/region.



Source: ECCC, 2018

In 2018, Canada's per capita household GHG emissions increased 3.5% to 4.1 tonnes per person when other countries (i.e. UK, France Norway and Germany) per capita household emissions ranged from 1.0 to 2.3 tonnes.



Source: StatCan, 2018

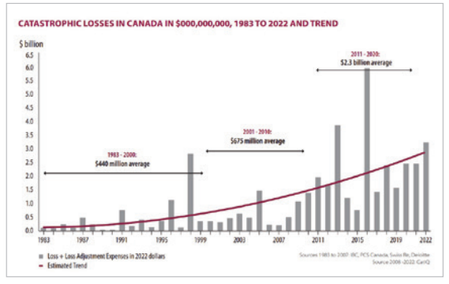
The costs of climate change

Canada is experiencing warming at 2x the global rate, with the north warming at almost 3x.

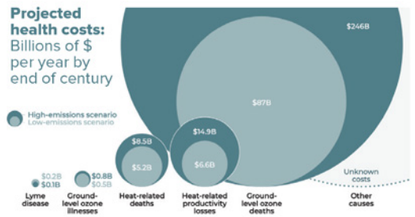
Source: ECCC, 2019

- The year 2022 saw $3.4 billion in insured losses from catastrophic weather across the country.
- 2022 now ranks as the third-worst year for insured losses in Canadian history. No single catastrophic event or specific region accounted for the majority of losses, 2022 saw disasters in nearly every part of the country.

Source: Insurance Bureau of Canada 2023 Fact Book



In the decades to come, health impacts of climate change will intensify and costs will increase. The magnitude of costs will depend on mitigation and adaptation decisions made today.



Source: Canadian Climate Institute, 2021

Clean technology and climate action

Global clean technology activity is expected to exceed **$3.6 trillion by 2030**.

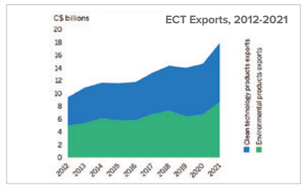
The **environmental and clean tech sector grew at 25%** from 2012 to 2019, outpacing the overall Canadian economy.

In 2023, **12 Canadian companies** were named to the Global Cleantech 100 list, second after the United States.

Text source: Smart Prosperity, 2018

Environment and Clean Tech exports have consistently trended upwards since 2012, and in 2021, hit the highest level on record.

Source: Canadian Cleantech: powering progress (2023), p.18).

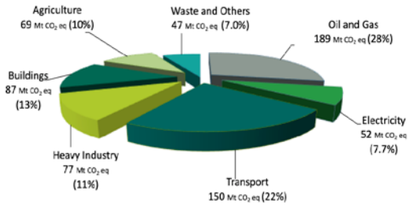


Source: Statistics Canada, EDC Economics

Canada's efforts to address climate change reflects its emissions reality.

Canada's largest emitting economic sectors are Oil and Gas, Transportation and Buildings.

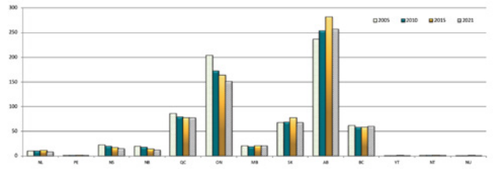
Breakdown of Canada's Emissions by Economic Sector



Source: ECCC, 2021 (2021 NIR)

Each jurisdiction faces unique circumstances, including demographics, geography, and economic fundamentals.

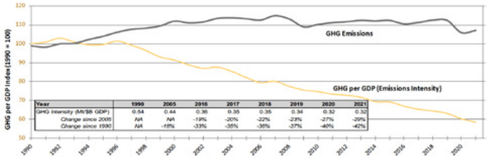
GHG Emissions by Jurisdiction



Source: ECCC, 2021 (2021 NIR)

Efforts to address climate change are projected to reduce Canada's GHG emissions.

Greenhouse Gas Emissions and Indexed Trend in Emission Intensity

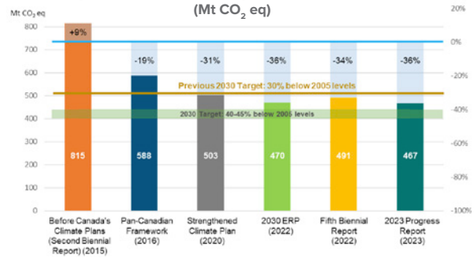


Year	1990	2005	2015	2017	2018	2019	2020	2021
GHG Intensity (Mt/$B GDP)	0.54	0.44	0.36	0.35	0.35	0.34	0.32	0.32
Change since 2005	NA	NA	-19%	-20%	-22%	-23%	-27%	-29%
Change since 1990	NA	-19%	-33%	-35%	-36%	-37%	-40%	-42%

Source: ECCC, 2021 (Canada's 2021 NDC)

Canada's economy is growing more rapidly than its GHG emissions.

Progression of Canada's Projected Emissions in 2030 (Mt CO_2 eq)



Source: ECCC, 2021

Canada and 194 other countries adopted the **Paris Agreement in 2015**, committing to reduce GHG emissions and hold the global average temperature increase to **well below 2°C** above pre-industrial levels, and pursuing efforts to limit the increase to **1.5°C**.