Fact sheet: Early Estimate of National Emissions 2023

September 19, 2024

An overview of the central findings from the Canadian Climate Institute's 2023 Early Estimate of National Emissions is outlined below.. By providing this early estimate seven months ahead of Canada's official National Inventory Report, the Institute aims to support more timely and evidence-based decision making about Canada's climate progress.

Emissions in 2023 were down slightly from 2022, but need to fall faster to reach the 2030 target

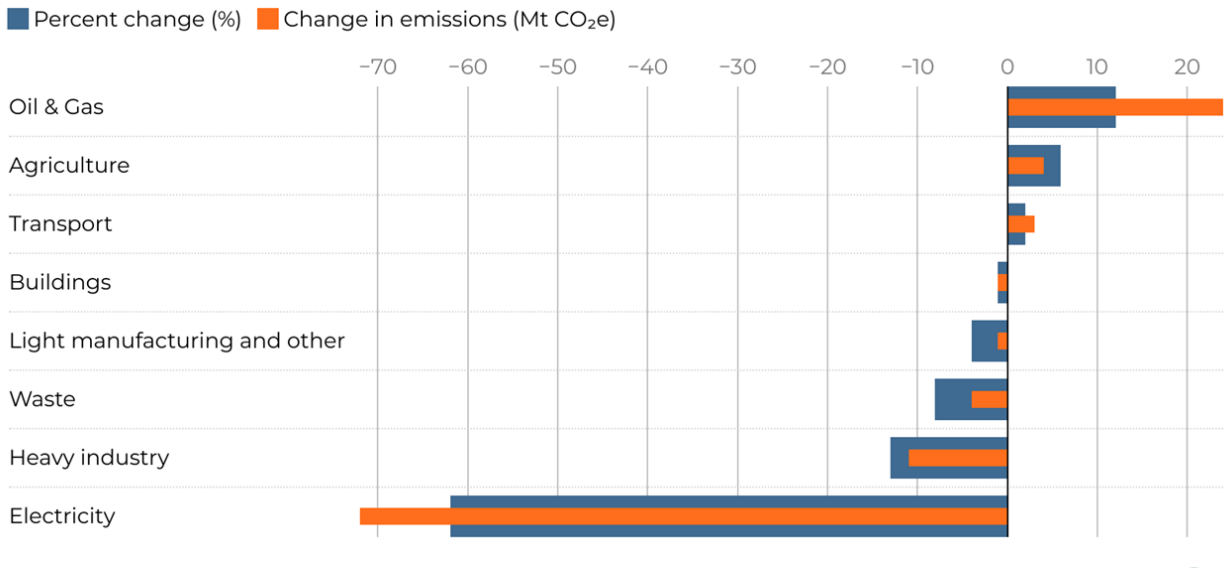
- Canada's total emissions in 2023 were an estimated 702 megatonnes of carbon dioxide-equivalent (Mt), a decrease of 0.8 per cent from the previous year (-5.6 Mt).
- Emissions are now 7.8 per cent below 2005 levels.
- Canada's target for 2030 is a 40–45 per cent reduction below 2005 levels.

Oil and gas emissions continued to rise, and now make up nearly a third of Canada's emissions

- Emissions from oil and gas production increased by 2.2 Mt from the previous year, driven by increased production, and now make up 31 per cent of Canada's national tally.

- Oil and gas continues a longer-term trend of rising emissions. Emissions from the oil and gas sector have increased by 12.1 per cent since 2005—and now sit at 219 Mt CO_2e.

Figure 1: Change in emissions by sector from 2005 to 2023



The electricity sector continues to make the most progress on emissions

- Emissions from the electricity sector continue to come down and are now less than 40 per cent of what they were in 2005—a reduction of 62 per cent.

While most sectors cut emissions in 2023, progress was uneven

- Emissions from buildings decreased 5.6 per cent from the previous year (down 5 Mt), largely due to warmer weather from El Niño that was supercharged by climate change.
- While the electricity sector saw big emissions drops between 2022 and 2023 (-6.2 per cent; -2.9 Mt), other key sectors like transport (+1.6 per cent; +2.5 Mt), oil and gas (+1 per cent; 2.2 Mt), and heavy industry (-1.7 per cent; -1.3 Mt) are either seeing emissions go up or aren't cutting emissions fast enough.
- Emissions increases in the transport sector were largely driven by domestic air travel (+17.9 per cent; +1.3 Mt), as it returned to pre-COVID

levels, as well as rail (+8.2 per cent; 0.5 Mt). Emissions from road transportation were flat compared to 2022.

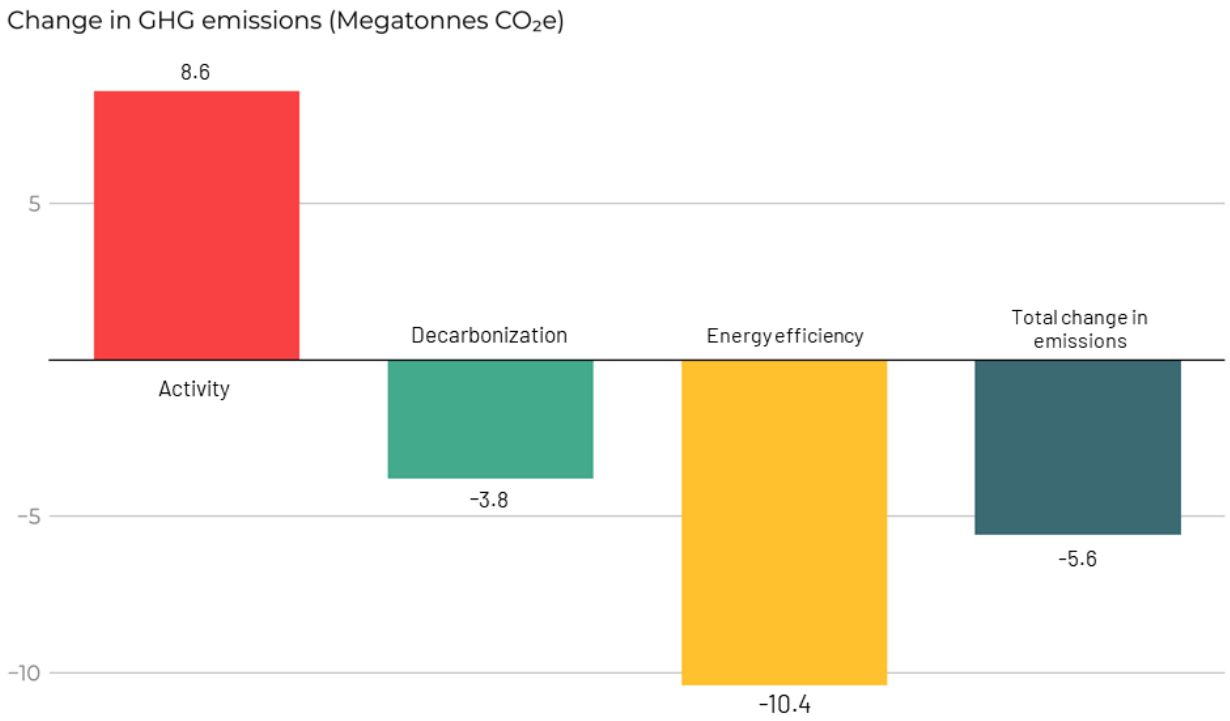
Emissions dropped despite strong growth in the economy and population

- Canada's economy was 1.2 per cent larger in 2023 than the year before, while the population grew by 1.16 million (+3 per cent) people during that same period, the highest annual growth rate since 1957.
- Despite these strong economic and population growth, national emissions dropped in 2023 by an estimated 0.8 per cent.
- Emissions per unit of GDP fell by 3 per cent, improving on the historical trend of 2 per cent.
- However, a 7 per cent annual reduction in emissions per unit of GDP will be needed to hit Canada’s 2030 emissions target.

Climate policy and market drivers are driving progress in emissions reductions

- While strong economic growth in 2023 pushed emissions up by 8.6 Mt from 2022, the impact of climate policy and market drivers, including clean technology deployment, reduced emissions by 14.2 Mt, resulting in an overall net decrease of 5.6 Mt.

Figure 2: Emissions reductions from energy efficiency and decarbonization were larger than increases from activity (2022 to 2023)



Canada's emissions remained significantly lower than they were pre-pandemic

- Despite seeing significant economic and population growth since the COVID-19 pandemic, 2023 emissions remained 49.8 Mt lower (-6.6 per cent) than they were in 2019.

About the Early Estimate of National Emissions

- The Early Estimate of National Emissions is published annually, usually in September, seven months ahead of Canada's official National Inventory Report.

- The 2021 and 2022 Early Estimate of National Emissions was largely in line with official data later released by the federal government as part of its national inventory.

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Full details on the 2023 Early Estimate of National Emissions are available at 440Megatonnes.ca, a project of the Canadian Climate Institute.