Canada making progress on emissions
Economic rebound far bigger than emissions growth

Mia Rabson The Canadian Press

OTTAWA - Canada's latest greenhouse-gas emissions report shows the country making progress toward meeting its next target in 2030 - but there is still a very long way to go.

The 2022 report published Thursday shows that across the board, Canada produced 708 million tonnes of greenhouse gases that year.

That is 53 million tonnes lower than in 2005, or about one-sixth of what has to be cut to hit the 2030 goal. Canada's latest pledge under the Paris climate accord is to cut emissions to 40 to 45 per cent less than they were in 2005 by 2030.

"Emissions are at their lowest they've been in 25 years with the exception of 2020 and 2021 during COVID," said Environment Minister Steven Guilbeault.

One million tonnes is about what 240,000 gas-powered passenger vehicles emit over the course of a year.

From 2022, Canada needs to eliminate more than 251 million tonnes to meet its 2030 target.

Major economic disruptions due to the pandemic saw emissions plummet, particularly in 2020 as planes were grounded, cruise ships moored, and individuals all over the world confined to their homes to try to limit the spread of the virus.

Guilbeault said it was expected that emissions would be higher in 2022 than during the COVID-19 years because people resumed more normal daily routines. But the increase of nine million tonnes between 2021 and 2022 was lower than forecast.

Canada's 2022 emissions were about six per cent lower than they were in 2019, the last full year before COVID-19.

The report also shows the economic rebound post-COVID was far bigger than emissions growth, a sign Canada's economy is no longer relying on fossil fuels as heavily for economic growth, Guilbeault said.

Stewart Elgie, the associate director of the University of Ottawa's Institute of the Environment, said the sharp reduction since 2019 is significant because that's the year the national carbon price began.

He said modelling by the government and the Canadian Climate Institute attribute between one-third and one-half of total emissions cuts to carbon pricing.

A recent analysis by the climate institute said about four-fifths of emissions cuts due to carbon pricing are because of the price being applied to heavy industry, while only one-fifth is attributed to the price on pollution paid by consumers.

The oil and gas sector contributed almost one-third of Canada's emissions in 2022, and transportation contributed about one-fifth. Emissions from the oil-sands in Alberta were almost 2.5 times higher in 2022 than in 2005, and contributed 12 per cent of Canada's total.

Emissions from both conventional oil production and natural gas production fell about 20 per cent each in that same period.
The emissions intensity of the oil and gas sector improved across the board. In 2005, producing one barrel of oil created 75 kilograms of carbon dioxide and its equivalents. In 2005 it was 61 kilograms.

Transportation emissions in 2022 fell back to 156 million tonnes, the same level as 2005, after hitting a high of 170 million tonnes in 2019. Almost 60 per cent of that is from passenger vehicles.

Emissions from passenger vehicles were five per cent lower in 2022 than in 2005, despite a 27 per cent increase in the number of vehicles on the road. That's largely because vehicles themselves are more efficient and the number of kilometres people drive has fallen slightly.

Electricity, however, remains by far the biggest climate success story in Canada, with total emissions 60 per cent lower in 2022 than in 2005. That is due largely to Canada's transition away from coal and natural gas as a power source.

In 2005, electricity contributed more than 15 per cent of Canada's total emissions, while in 2022 it was less than seven per cent.

By comparison in 2005 oil and gas contributed 26 per cent of Canada's total, compared with 31 per cent in 2022.

The other major contributors to Canada emissions are agriculture (10 per cent), heavy industry including mining (11 per cent) and buildings (13 per cent).

Greenhouse gas emissions in Canada mainly include carbon dioxide (78 per cent), methane (17 per cent), and nitrous oxide (four per cent).

Methane emissions showed particular improvement as regulations forced oil and gas companies to reduce the amount of methane that leaks or is purposely released from their operations.

This year's report adjusted the emissions totals from Canada based on updated findings from the United Nations climate change office that methane, one of the main greenhouse gases, has an even greater impact on global warming than was previously thought.

The Canadian Press