All Together Now

A provincial scorecard on shared responsibility to reduce greenhouse gas emissions in Canada

July 2024

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PEMBINA Institute

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ISBN 1-897390-69-6

Acknowledgements

This report is a collaborative undertaking between the Pembina Institute and the Sustainable Planning Research Group in the School of Resource and Environmental Management, Simon Fraser University (SFU). We thank co-authors Thomas Gunton, Chelsea Mathieson, and Martha Kilian for their invaluable contributions.

We would like to thank the following Pembina Institute colleagues for their research, review and writing contributions: Adam Thorn, Betsy Agar, Chris Severson-Baker, Amanda Bryant, Emily He, Hongyu Xiao, Janetta McKenzie, Jason Wang, Jessica McIlroy, John Van Ham, Kendall Anderson, Lia Codrington, MC Bouchard, Megan Gordon, Monica Curtis, Raidin Blue, Scott MacDougall.

We also wish to extend our gratitude to the government officials from across the country who reviewed the data collected to evaluate their jurisdiction.

The Pembina Institute acknowledges that the work we steward and those we serve span across many Nations. We respectfully acknowledge the space our organization is headquartered in as the traditional and ancestral territories of the Blackfoot Confederacy, comprised of the bands Siksika, Piikani, and Kainai, the Îyârhe Nakoda Nations, including the bands of Goodstoney, Chiniki, and Bearspaw, and the Tsuut'ina Dené. These Lands are also home to the Métis Nation of Alberta — Region 3 whose Peoples have deep relationships with the Land.

These acknowledgements are some of the beginning steps on a journey of several generations. We share them in the spirit of truth, justice, reconciliation, and to contribute to a more equitable and inclusive future for all of society.

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Executive summary

Whose responsibility is it to reduce emissions in Canada, and ensure a safe climate and prosperous low-carbon future for Canadians?

In 2021, we concluded that success required all hands on deck.[1] Our assessment of climate policy-making across Canada's federal, provincial and territorial governments found that the approach to climate action in Canada was piecemeal, with glaring gaps that urgently needed to be filled with credible climate plans and actionable policies.

Today, with a little over five years left until the crucial climate milestone year of 2030, we are updating our assessment. With the effects of climate change being felt across the globe — including in Canada — the urgency of this task has only intensified. We found promising signs of progress since our last report: as climate policies have taken effect, Canada's overall emissions have begun to meaningfully decline. Nevertheless, it remains the case that some governments are still doing far less than others to take action on delivering clean, prosperous, equitable economies for their citizens.

Why point out these differences? For those governments that are making proactive progress, we hope this report will encourage them to stay the course, especially given the modelling that shows current and announced policies — if implemented — will lead to significant emissions reductions across Canada by 2030. For those governments that are currently falling behind, we hope this report will demonstrate that well-designed policies have already led to meaningful emissions reductions, and those emissions reductions have come with social, economic and environmental benefits. Above all, we hope to demonstrate that no government can deliver Canada's climate commitments alone, and that all governments should be held equally accountable and work together on this task.

It is also the case that climate success requires an innovative, place-based approach that includes core elements, but is designed for the unique needs and circumstances of each jurisdiction. That is why, in addition to reducing emissions across every sector, governments must also consider how the energy transition will impact their workforces and populations, particularly equity-deserving groups and Indigenous Peoples, and take steps to prepare. In the short time we have left to 2030, we encourage policy-makers to prioritize action in the areas where there is the greatest scope for rapid, deep emissions reductions. This requires careful examination of the emissions profile of each jurisdiction, and we hope our report can be helpful there too.

But one thing is clear: a lack of planning, or a lack of action, will not stop the effects of climate change and the energy transition coming to every corner of Canada. That is why, in 2024, we are encouraging governments to think of climate policy as economic policy. Citizens and communities across this country expect their leaders to think ahead about how their needs will be met through the clean economies of the future. Governments that do not take action today to reduce emissions in line with Canada's international commitments are not only leaving their populations vulnerable to the most devastating impacts of climate change, they are doing a disservice to the future competitiveness of their jurisdictions and their industries in the global marketplace. Although the time left to plan is rapidly running out, there are still opportunities to accelerate emissions reductions across Canada. We will continue to work alongside all jurisdictions that are interested in designing and implementing innovative, people-centred climate and energy policies, and we hope this report provides another chance for dialogue and for progress.

Photo: David Dodge

Assessing climate leadership

This report assesses the performance of Canada's provincial and federal governments on 23 policy indicators across 12 criteria categories (eight general and four sector-specific). The indicators used in this report represent best practices in climate policies and measures deemed to be key components for the reduction of emissions, both broadly and within key economic sectors.

The criteria and evaluation framework were developed based on a review of the literature and input from subject matter experts. Evaluation was based on publicly available information. In the process, all jurisdictions were given the opportunity to review and supplement the information included in the analysis. For detailed methodology and evaluation criteria, see Appendix A.

In addition to our evaluation and ratings, this report also reviews the state of climate action in each province and territory and at the federal level. We look at each jurisdiction's emissions performance since 2005 (the baseline year against which Canada's progress on its international climate commitments is measured) and summarize key features of energy and climate policy against our policy indicators. Overall, we sought to highlight cases where policies were insufficient to address the highest-emitting sectors in the jurisdiction. For those jurisdictions with a stronger climate framework already in place, we illuminated areas where progress has been made and where it could be further strengthened.

For Canada's territorial governments, we have summarized highlights of leadership and priorities for action, although a full evaluation was not carried out.

Table 1. Evaluation criteria and ratings

	CAN federal	BC	AB	SK	MB	ON	QC	NB	NS	PE	NL
Emissions reduction targets											
Has a 2030 target aligned with a 40–45% reduction (below 2005 levels)	🟢	🟢	🔴	🔴	🔴	🟡	🟡	🟢	🟢	🟢	🟡
Has or is in the process of legislating a net-zero by 2050 target	🟢	🟢	🟡	🔴	🔴	🔴	🟢	🟡	🟢	🟡	🟡
Has interim emissions reduction targets	🟢	🟢	🔴	🔴	🔴	🔴	🟡	🔴	🔴	🔴	🔴
Climate action plan											
Has a climate plan	🟢	🟢	🟢	🟡	🟢	🟡	🟢	🟢	🟢	🟢	🟢
Has a plan to meet net-zero by 2050	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴
Climate accountability and governance											
Has a legislative requirement to prepare a climate plan, set reduction targets, and monitor and report	🟢	🟢	🔴	🟡	🟢	🟢	🟢	🟢	🟢	🟢	🔴
Has an independent accountability process to advise and evaluate the climate plan	🟢	🟡	🔴	🔴	🟡	🔴	🟡	🔴	🟡	🟡	🟡
Has a public monitoring and reporting program for the climate plan	🟢	🟢	🔴	🟡	🟢	🟡	🟢	🟡	🟡	🟡	🟡
Climate adaptation											
Has a climate adaptation strategy	🟢	🟢	🔴	🟡	🟡	🟡	🟢	🟡	🟢	🟢	🟡
Reconciliation											
Has legislated UNDRIP	🟢	🟢	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴
Equity											
Has a plan to assess and mitigate climate equity impacts	🟢	🟢	🔴	🔴	🟡	🟡	🟡	🟡	🟢	🟡	🟡

LEGEND

🟢 Strong leadership 🟡 Some leadership 🔴 Little or no policy in place ⚪ Not applicable

	CAN federal	BC	AB	SK	MB	ON	QC	NB	NS	PE	NL
Clean economy transition											
Has a comprehensive plan and policy to support the transition to a clean economy	🟡	🟢	🟡	🔴	🟡	🟡	🟡	🟡	🟡	🟡	🟡
Carbon price											
Supports carbon pricing in principal and has an end-use carbon price that meets federal benchmark	🟡	🟢	🔴	🔴	🟡	🔴	🟢	🔴	🔴	🟡	🟡
Has a carbon price on industrial emitters that meets federal benchmark	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
Buildings											
Has adopted standards for all new buildings to be zero-carbon ready by 2030	🟢	🟢	🔴	🔴	🔴	🔴	🔴	🟢	🔴	🟢	🔴
Has a plan to retrofit existing buildings to be zero-carbon ready, with supporting measures	🟡	🟢	🔴	🔴	🟡	🔴	🟡	🟡	🟡	🟡	🟡
Transportation											
Has a sales regulation for zero-emission light-duty vehicles, and supporting incentives	🟢	🟢	🔴	🔴	🟡	🔴	🟢	🟡	🟡	🟡	🟡
Has a sales regulation for zero-emission medium/heavy-duty vehicles, and supporting measures	🟡	🟡	🔴	🔴	🔴	🔴	🟡	🟡	🟡	🟡	🔴
Has comprehensive public transit and active transportation policy	🟡	🟢	🔴	🔴	🔴	🟡	🟢	🔴	🟡	🟡	🟡
Electricity											
Has decarbonized or has a plan for net-zero electricity generation by 2035	🟡	🟢	🔴	🔴	🟢	🔴	🟢	🟡	🔴	🟢	🟢
Has a plan to phase out coal by 2030	🟢	⚪	🟢	🔴	🟢	🟢	⚪	🟢	🟢	⚪	⚪
Oil and gas											
Has legislated methane emissions reduction targets	🟢	🟢	🟡	🟡	⚪	⚪	⚪	⚪	⚪	⚪	⚪
Has legislated oil and gas emissions reduction targets	🟢	🟢	🔴	🔴	⚪	⚪	⚪	⚪	⚪	⚪	⚪

Note: Not applicable (blue) refers to provinces that have not historically had coal as part of their electricity mix, and/or oil and gas industry.

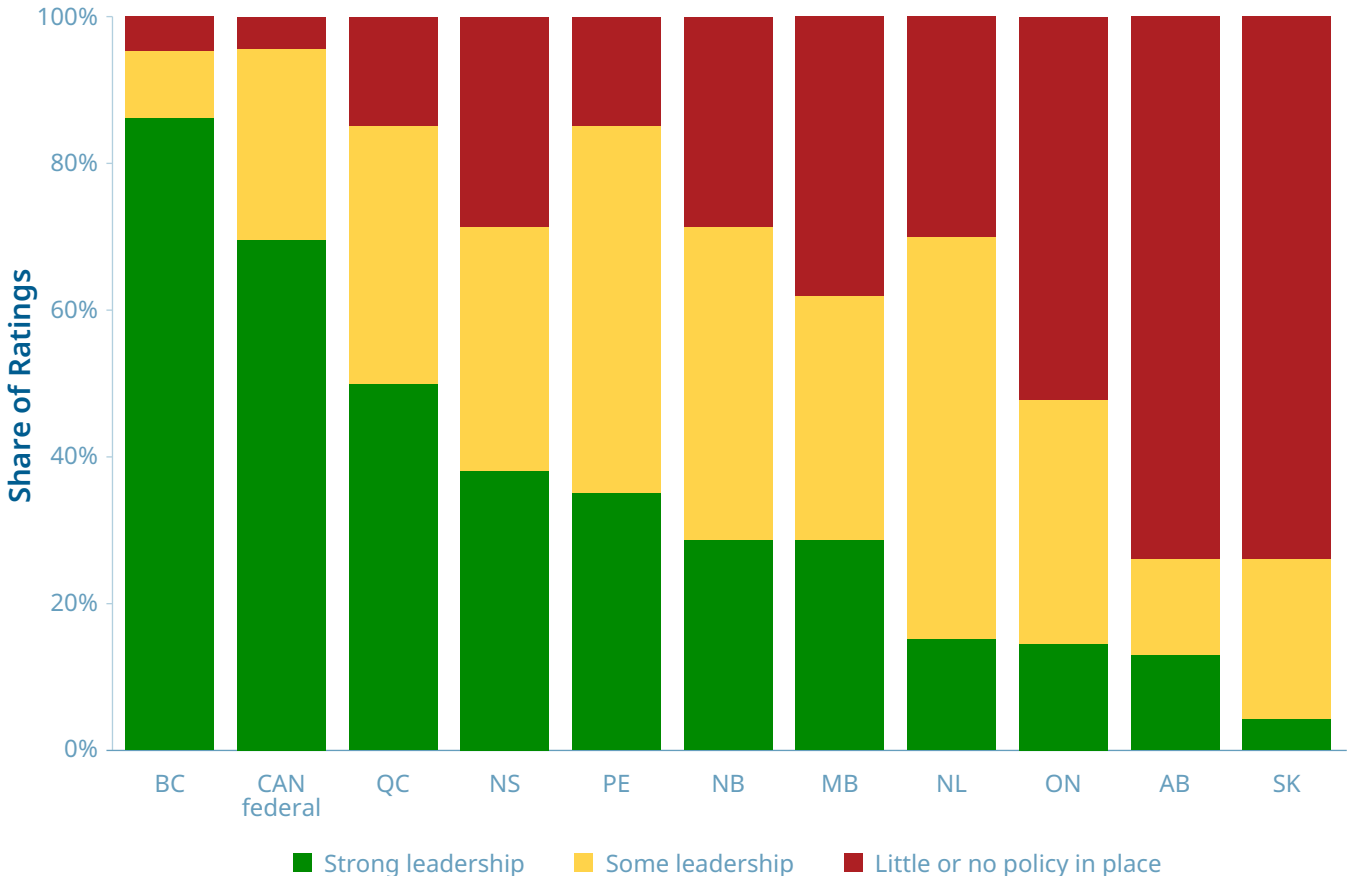


Figure 1. Summary of ratings by overall performance for provinces and the federal government

Note: Provinces were scored based on applicable criteria; not applicable values were not included.

Photo: Chih Chieh Hsiao, iStock

Recommendations

Reducing emissions in Canada is a shared responsibility among ten provincial governments, three territories, and the federal government.

Canada will not be able to meet its international commitment to reduce emissions by 40–45% below 2005 levels by 2030 unless all governments take on their appropriate share of this work. Overall, we recommend that when the public, media and regulators assess Canada's progress against its targets, an equal level of scrutiny is applied to both provincial and federal governments. In 2024, all elected leaders in Canada should be strongly engaged with the process of making and implementing policies designed to reduce emissions and grow a clean, equitable economic future for Canadians.

Our assessments of different jurisdictions found some common themes of what climate policy leadership looks like. As their plans develop, we recommend all governments incorporate the following aspects:

- Set short- and longer-term emissions reduction targets and establish a clear pathway to achieve them
- Plan ahead to ensure all communities and groups are well served through good jobs in the energy transition
- Foster meaningful reconciliation
- Invest in a low-carbon, modernized electricity grid that will underpin Canada's clean economy
- Advance the switch to a clean transportation sector
- Accelerate the push toward zero-carbon buildings
- Take urgent steps to cap and cut oil and gas emissions, including methane
- Maintain and enhance carbon pricing

Set short- and longer-term emissions reduction targets and establish a clear pathway to achieve them

Setting emissions reduction targets is an essential part of effective climate policy-making. All governments should:

- Commit to net-zero emissions by 2050, with an interim 2030 target that is aligned with a 40–45% reduction in emissions (below 2005 levels). These commitments should be enshrined in legislation.
- Define a pathway to achieving these 2030 and 2050 targets by establishing additional interim targets, underpinned by sector-by-sector targets and pathways.
- Create an independent accountability body, appointed and mandated by the legislature to evaluate and advise on plans and progress.

Plan ahead to ensure all communities and groups are well served through good jobs in the energy transition

The transformation to a cleaner economy will create growth in many sectors and transition in others. To support this, governments need to:

- Assess the distributional impacts of climate change and policies among key stakeholders and equity-deserving groups.
- Plan for and develop skills training to meet the demand for new jobs, and support workers who will need to transition from areas of declining employment to clean growth sectors.

Foster meaningful reconciliation

To begin the process of building reconciliation into climate policy, only British Columbia and the federal government have so far legislated the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). All governments need to follow this lead and:

- Respect, promote and consider Indigenous rights by passing legislation committing to full implementation of UNDRIP.
- Commit to monitoring, publicly reporting on, and mitigating the impacts of climate change and climate change policy on Indigenous Peoples and their rights.

Invest in a low-carbon, modernized electricity grid that will underpin Canada's clean economy

Considerable progress has been made in reducing electricity sector emissions by phasing out coal generation, but the entirety of Canada's grid must be decarbonized if it is to properly support emissions reductions across a range of other sectors, all of which require electricity as industrial inputs. Governments must:

- Ensure coal-generated electricity is fully phased out by 2030, and mitigate against the risk of coal being replaced with other emitting forms of generation (such as unabated natural gas).
- Develop plans to achieve net-zero electricity generation by 2035, including an interim target of 90% non-emitting electricity by 2030, and modernization of the grid through upgrades to interties, transmission and storage.

Advance the switch to a clean transportation sector

Transportation accounts for 22% of Canada's emissions and is the highest or second-highest-emitting sector in most provinces. All governments should:

- Establish incentives for the purchase of zero-emission vehicles and associated infrastructure, such as charging.
- Develop stronger polices with targets to advance the share of trips by public transit and active transportation.
- Require 100% light-duty zero-emission vehicle sales by 2035 and 100% zero-emission medium- and heavy-duty vehicle sales by 2040.

Accelerate the push toward zero-carbon buildings

Buildings account for 13% of Canadian emissions and as much as 65% of emissions in some cities. To reduce emissions in the building sector, all governments should:

- Have requirements for all new buildings to be zero-carbon ready by 2030.
- Establish a plan with targets to retrofit existing buildings to be zero-carbon ready, supported by incentives for installation of heat pumps and the phase-out of fossil fuel-based heating and cooling systems.

Take urgent steps to cap and cut oil and gas emissions, including methane

The oil and gas sector is responsible for 31% of Canada's emissions. Emissions have increased in this sector by 11% overall, and 15% in the upstream, from 2005 to 2022 — even while emissions have fallen in other heavy industries. This is a reminder that the oil and gas sector needs stronger policies to drive emissions reductions.

Pembina Institute research and analysis has shown that the industry has a range of technologies at its disposal to feasibly reduce emissions this decade. All governments, and especially those with significant oil and gas production in their jurisdictions, should:

- Implement regulations designed to meet or exceed the federal target of a 75% reduction in oil and gas methane emissions (from 2012 levels).
- Design and implement policy aimed at capping and cutting emissions in the upstream, based on technically achievable emissions reductions.
- Maintain stringent industrial carbon pricing systems, which should be reviewed and strengthened as necessary to achieve net-zero by 2050 and interim targets.

Maintain and enhance carbon pricing

Carbon pricing is a proven, effective tool to reduce emissions. The federal pricing system consists of two parts: the federal fuel charge for consumers and its associated rebate system, and a separate pricing system for industry. Governments should maintain and enhance consumer and industrial carbon pricing systems.

Photo: David Dodge

Canada's emissions: a snapshot

According to Canada's most recent National Inventory Report[2] (published in May 2024, covering the period 1990–2022), in 2022 Canada emitted 708 million tonnes (Mt) of greenhouse gases (Table 2). This represents a 7.1% reduction in emissions since 2005, the baseline year against which Canada's progress on its international climate commitments is measured.

The release of the 2022 data was an important moment, as it was the first opportunity to compare emissions from the first 'true' post-pandemic year (2022) with the last pre-pandemic year (2019), where levels of economic activity were broadly comparable. The fact that overall emissions in 2022 were lower than in 2019 is a positive sign that climate policies in Canada are starting to work to reduce emissions.

Table 2. Canada's emissions by economic sector in key years

Economic sector	Emissions (Mt CO_2e)			% Change 2005–2022
	2005 Canada's baseline year	2019 pre-pandemic	2022 post-pandemic	
Canada total	761	752	708	-7.1%
Oil and Gas	195	226	217	11.0%
Electricity	117	61	47	-59.4%
Transport	156	170	156	0.1%
Heavy Industry	88	79	78	-11.5%
Buildings	85	94	89	4.5%
Agriculture	66	69	70	7.0%
Waste and Others	55	52	51	-7.8%

Note: Waste and Others includes Coal Production, and Light Manufacturing, Construction and Forest Resources

Data source: 2024 National Inventory Report[3]

Nevertheless, Canada's per capita emissions are the second highest among the G-7 countries, and a 7.1% reduction from 2005 levels still leaves Canada with a considerable amount of work to do to achieve its commitment of a 40%–45% reduction below 2005 levels by 2030.[4] If all current climate policies in Canada (those in place as of August 2023, as well as other new policies that have since been announced) are fully implemented, a reduction of 36% below 2005 levels by 2030 is forecast. As illustrated in Figure 2, if Canada is to meet its 2030 commitment, not only must it fully implement all current and announced policies, it will need to introduce further measures. Therefore, while Canada as a whole has made significant progress in its climate policy-making since our last report (in 2021) and is now on an improved emissions reduction trajectory, all governments and all economic sectors will need to participate in the full implementation of current and announced measures and propose new actions to reduce emissions. This is particularly pertinent to jurisdictions and sectors that, as this report will demonstrate, are underperforming in terms of necessary emissions reductions.

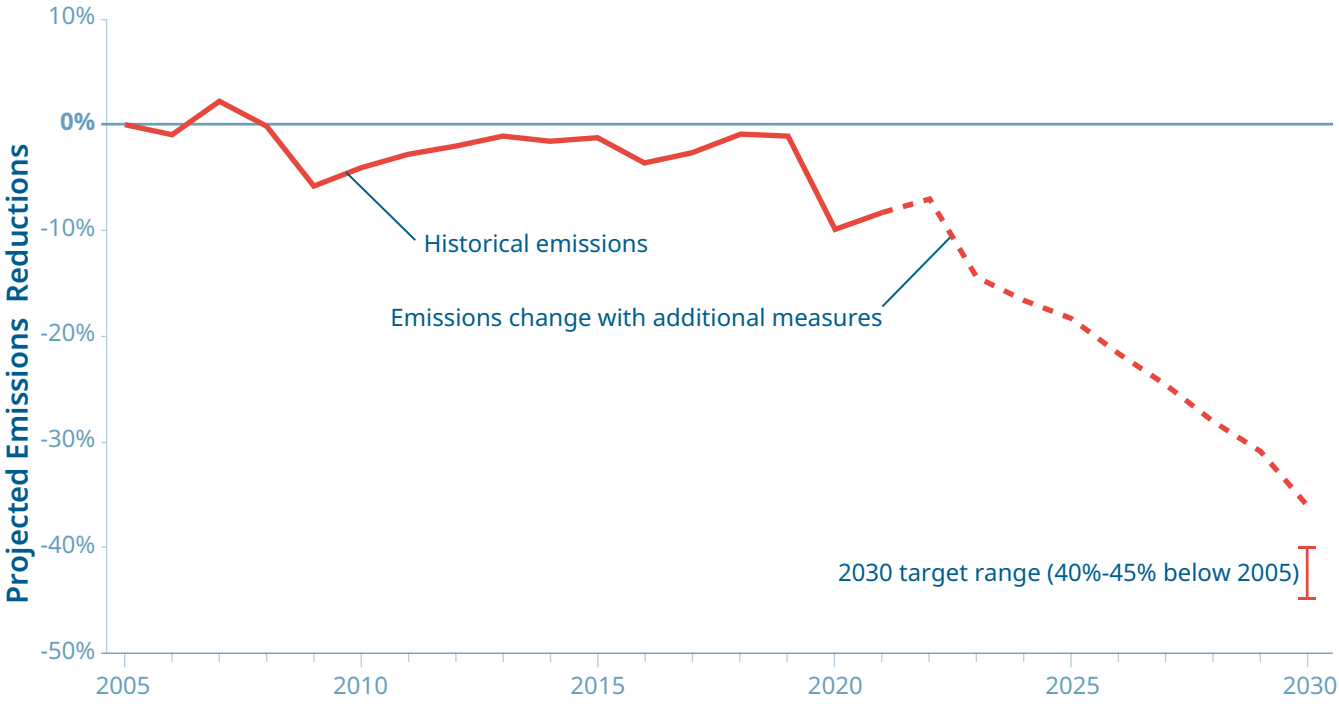


Figure 2. Historical and projected emissions in Canada, 2005–2030

Data sources: 2024 National Inventory Report; Canada's Greenhouse Gas and Air Pollutant Emissions Projections[5]

Provincial trends

Of Canada's ten provinces, two are responsible for a majority of the country's overall emissions: Alberta accounts for the largest share (38%), while Ontario accounts for the second largest (22%) (Figure 3).

Saskatchewan and Alberta, where the majority of Canada's oil and gas production is located, have the highest emissions intensity in Canada: emissions per unit of GDP in these two provinces is more than double the Canadian average, and the per capita rate is more than treble (Appendix B). By contrast, Ontario and Quebec have the lowest emissions intensity on a per unit of GDP basis.

Since 2005, the emissions record of Canada's top five emitting provinces has been mixed: emissions increased by 7% in Alberta and by 3% in B.C., while they decreased by 23% in Ontario, by 8% in Quebec, and by 6% in Saskatchewan.

Figure 4 illustrates the importance of considering these changes in absolute emissions since 2005 in the context of each province's share of Canada's emissions.

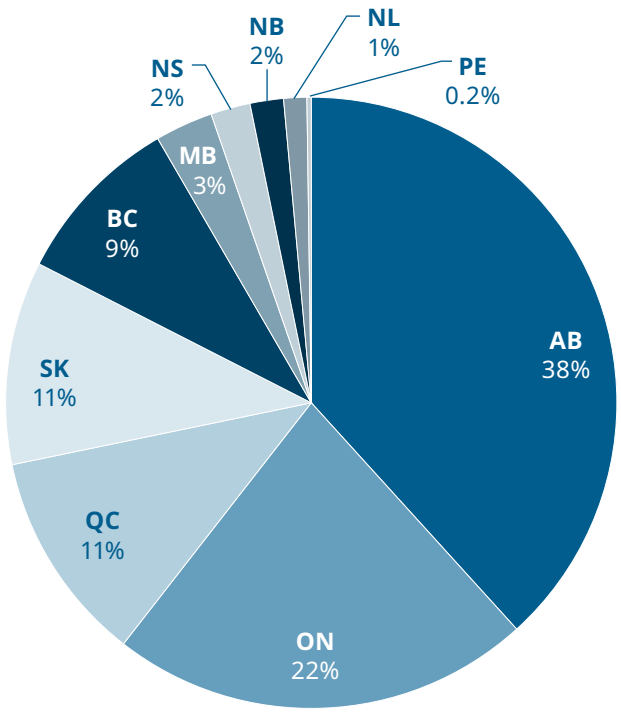


Figure 3. Provincial share of national emissions in 2022

Data source: 2024 National Inventory Report[6]

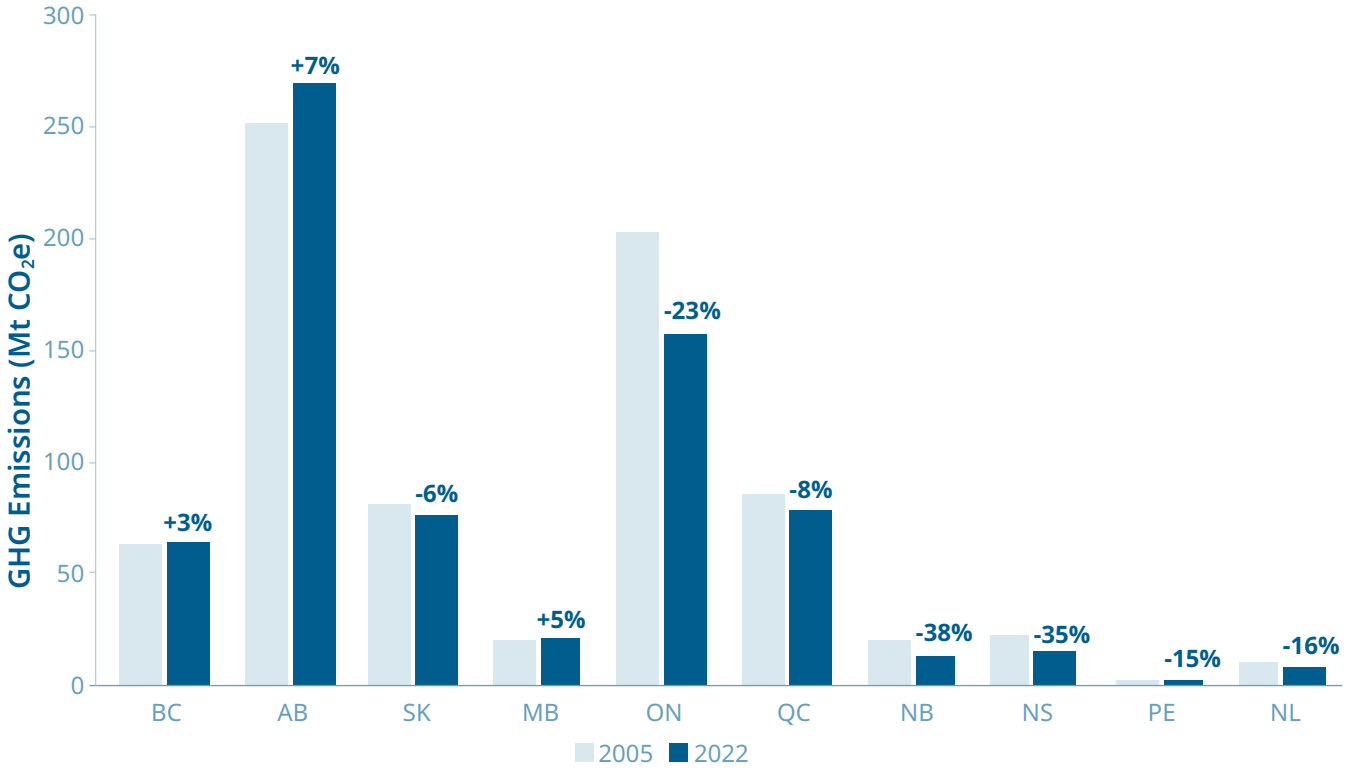


Figure 4. Provincial emissions for 2005 and 2022 with percent change

Note: P.E.I. has very low emissions, so small changes in measurement could significantly change the overall emissions trends. Trends shown here may differ from provincial modelling.

Data source: 2024 National Inventory Report[7]

Progress across different sectors

The oil and gas and transportation sectors account for around half of all emissions in Canada (30.6% and 22.1% respectively). This is followed by buildings (12.5%), heavy industry (11.0%), agriculture (9.9%), electricity (6.7%) and waste and other sources (6.8%) (Figure 5).

Since 2005, there has been varied progress across these different sectors. Emissions increased from oil and gas, buildings and agriculture; decreased from electricity, heavy industry and waste/others; and remained flat for the transportation sector.

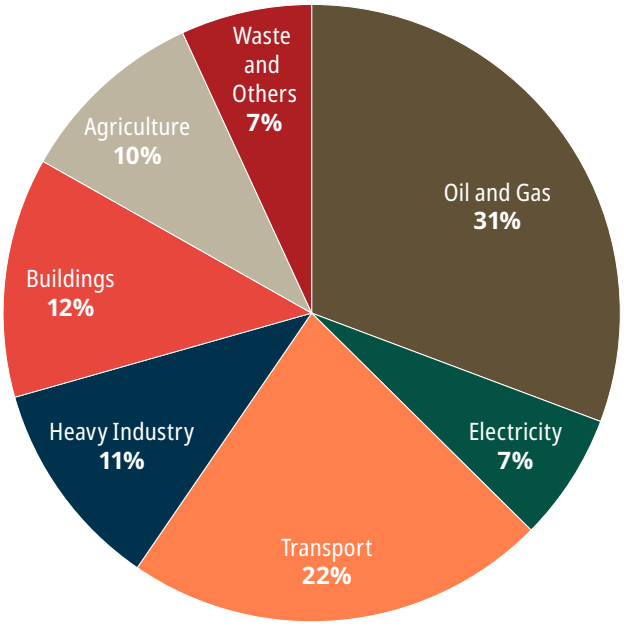


Figure 5. Canada's emissions by economic sector

Note: Waste and Others includes Coal Production, and Light Manufacturing, Construction and Forest Resources

Data source: 2024 National Inventory Report[8]

Photo: Roberta Franchuk

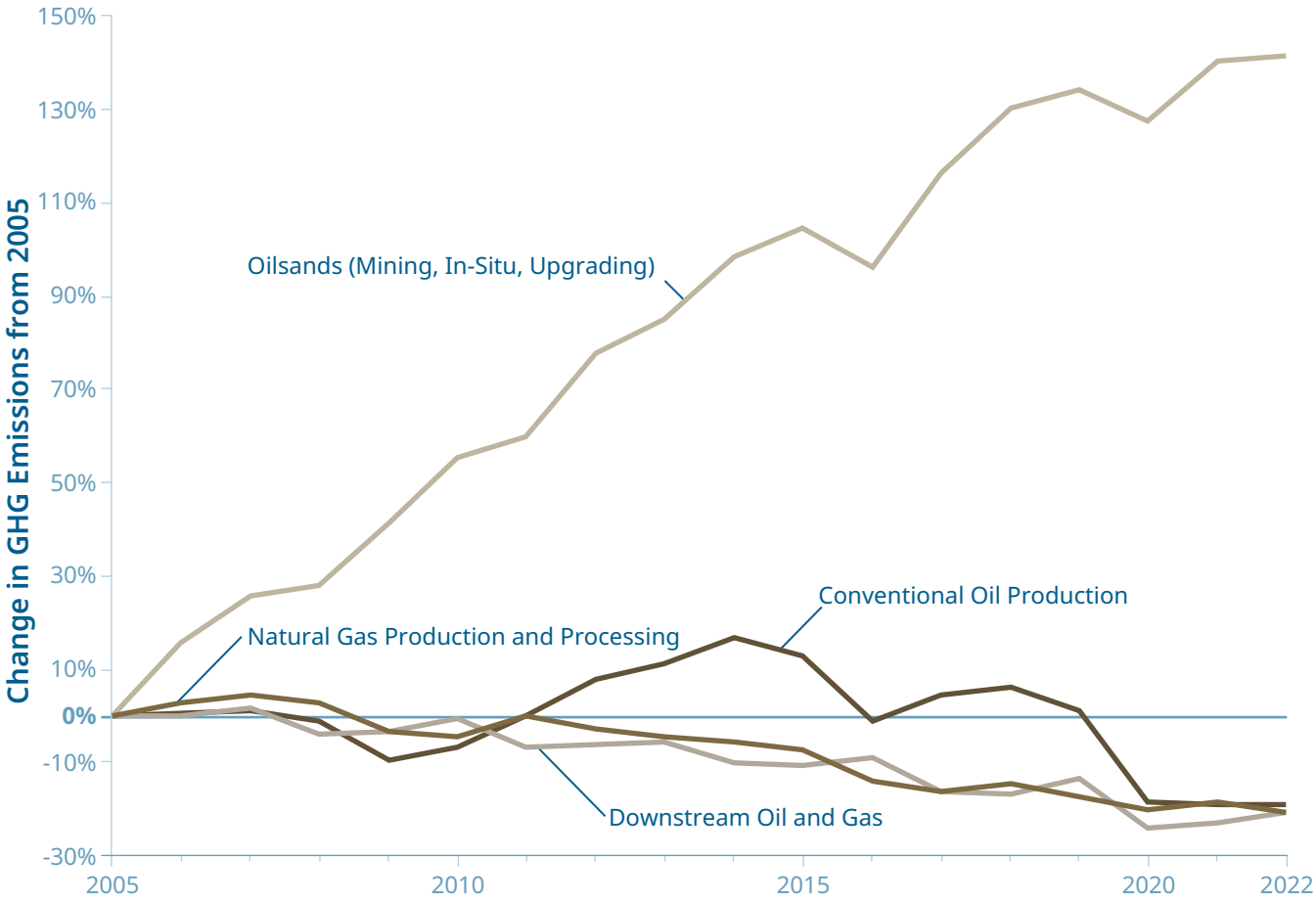


Figure 6. Oil and gas sector emissions trajectory, by sub-sector

Data source: 2024 National Inventory Report[9]

However, a closer examination of sub-sectors provides a clearer picture of how climate policies are affecting these emissions trajectories. For example, in addition to accounting for more emissions than any other sector, oil and gas also saw the largest increase since 2005, at 11%. As Figure 6 shows, this is largely driven by the oilsands sub-sector, where emissions have increased 142% since 2005.[10] However, as Figure 6 also shows, over the same period all other oil and gas sub-sectors made progress to reduce emissions. Some of these reductions can likely be attributed to the successful implementation of federal and provincial methane regulations, which have had a greater impact on emissions from conventional oil and gas production, given the scope for methane abatement in that sub-sector. As such, Figure 6 both demonstrates the positive impact that well-designed regulations can have, and underscores the need for policies to drive emissions reductions in the oilsands, such as a strong oil and gas emissions cap, which would also cover the oilsands sub-sector.

Although oil and gas is the highest-emitting sector in Canada, it is the highest-emitting sector in only two provinces: Alberta (where it represents 59% of emissions) and Saskatchewan (36% of emissions). In five of the remaining eight provinces, transportation is the highest-emitting sector, accounting for between 32% and 58% of total emissions.

Compared with 2005, total transportation sector emissions have not changed. The passenger transportation sub-sector accounts for nearly 60% of total transportation emissions, while the freight transportation sub-sector accounts for the remaining approximately 40%. Most passenger and freight transportation emissions stem from on-road vehicles.

As Figure 7 shows, both of these sub-sectors experienced a sharp decline during the peak pandemic year 2020, reflecting the decreased movement of both goods and people during that period. It is notable though that the fall in passenger emissions was sharper than freight — reflecting the critical role that freight movement plays in Canada's economy and the rise in demand for goods delivery services during the pandemic, a social trend which has persisted post-pandemic.

Figure 7 highlights the importance of governments tracking sub-sector emissions trends. For example, the passenger sub-sector currently makes up a larger share of transportation emissions, justifying a policy focus on zero-emission passenger vehicle sales regulation and incentives. However, compared with 2005 levels, freight emissions have increased by 8%, while passenger emissions have decreased by 5%. This, together with the less significant fall in freight emissions during the pandemic, demonstrates the importance of tracking the trajectory of that sub-sector's share of emissions, and using this to inform the focus of future policies.

In this case, Figure 7 highlights the potential for rapidly growing freight emissions to eventually offset any emissions reductions in the passenger sub-sector, unless governments begin to design and implement specific policies targeted at reducing freight emissions.

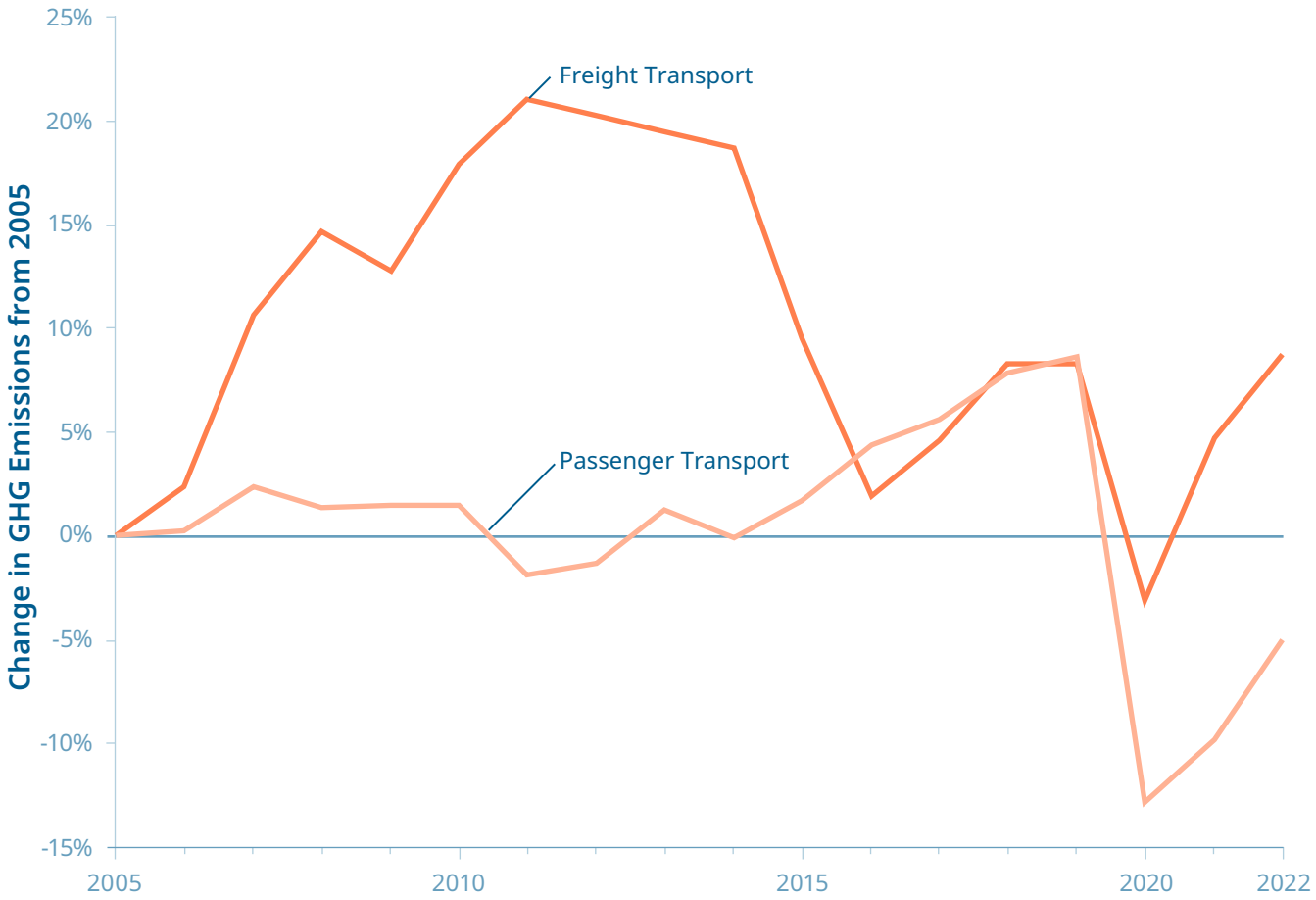


Figure 7. Change in transportation emissions

Data source: 2024 National Inventory Report[11]

Meanwhile, Canada's electricity sector has seen the largest decrease in emissions since 2005 (-59%). As Figure 8 shows, Canada's electricity mix has changed since 2005, seeing an increase in renewable generation coupled with the decline of coal-fired power.

In Alberta, for example, as recently as 2015 the target date for full coal phase-out was 2061. This milestone is now on track to be met in 2024, more than three decades earlier than was previously regarded as possible by many stakeholders. The success story of the coal phase-out and its significant downward impact on electricity sector emissions in Alberta and across several provinces can be attributed to a clearly defined sub-sector target (commitments by the Alberta and federal governments to phase out coal), accompanied by industrial carbon pricing that provided strong, early signals to industry about appropriate electricity investments.

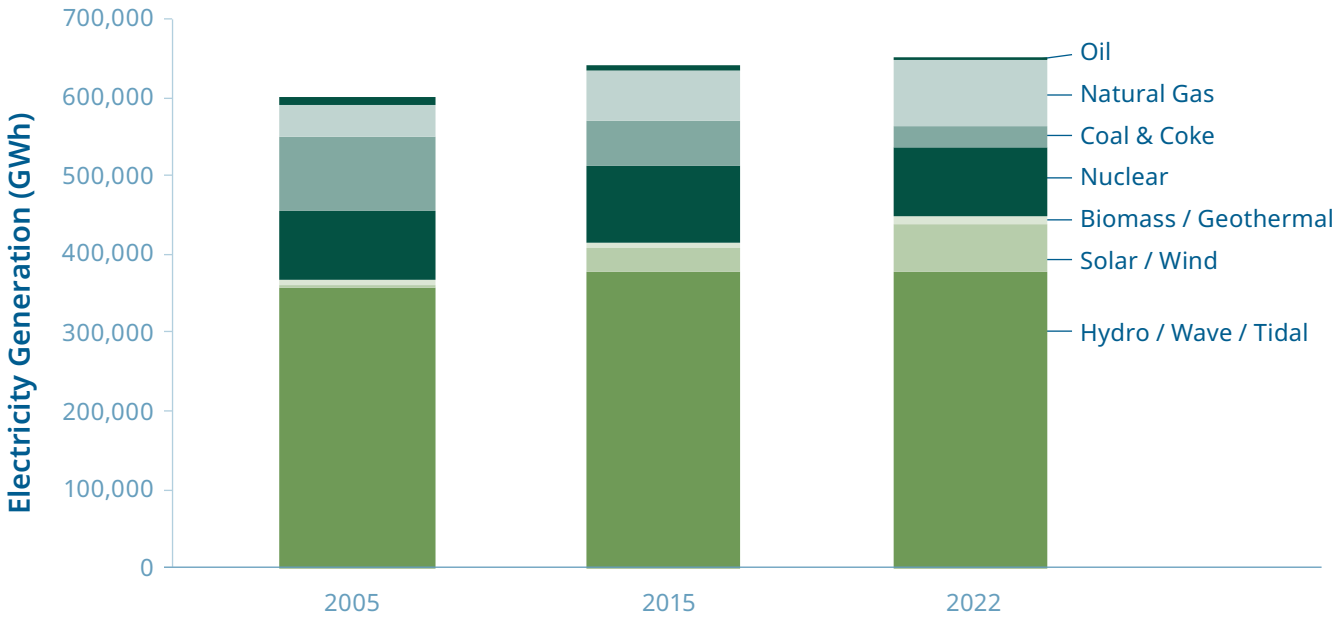


Figure 8. Change in electricity generation mix

Data source: Canada's Energy Future 2023[12]

Provincial reports

Data for all of the figures in these provincial summaries came from *Canada's National Inventory Report 1990–2022* (2024).[13] Provincial and territorial emissions are reported in this section by Canadian economic sector. Pie charts may not add to 100% due to rounding.

British Columbia

B.C. is the fifth-largest-emitting province in absolute terms (64.3 Mt) and the fourth-lowest in per capita terms. It achieves the most green ratings of all jurisdictions, with a total of 21 green or yellow ratings on our 22 applicable climate policy indicators. This reflects the province's leadership in climate policy-making to date.

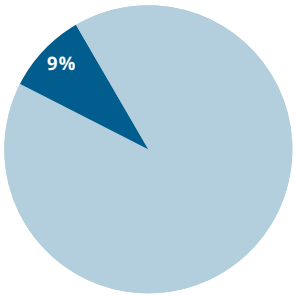
In 2021, B.C. released the CleanBC Roadmap to 2030 which maintained the province's existing emissions reduction targets of 40% by 2030 and 60% by 2040 (compared to 2007 levels), and its net-zero 2050 target. B.C. also has an interim target of a 16% reduction by 2025, and targets for all sectors.[14] Through its Climate Change Accountability Act, the province has an advisory committee and requirements for annual progress reports on meeting these targets.

B.C.'s provincial consumer carbon price increased to $65/tonne of CO_2e in 2023 and is set to incrementally increase to $170/tonne in 2030. In April 2024 B.C. also implemented its new Output-Based Pricing System, replacing the CleanBC Industrial Incentive Program. The new system prices emissions based on performance and type of product and is mandatory for large emitters.

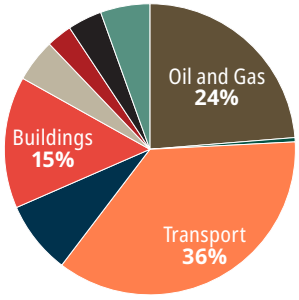
The province has legislated a zero-emission vehicle (ZEV) sales regulation, the targets for which were strengthened in 2023 (to 26% of new light-duty vehicle sales by 2026, 90% by 2030, and 100% by 2035), as well as ZEV purchase incentives and investments in charging infrastructure. There are also funded initiatives to support the transition to zero-emission (ZE) medium- and heavy-duty vehicles (MHDVs) — and a commitment to develop a ZE MHDV sales regulation.

Measures in the building sector include the Better Homes BC program, which provides grants and loans for building retrofits, including significant rebates for heat pumps. Tools such as virtual home energy labelling and a highest efficiency equipment standard (HEES), to be implemented in 2030, will be used to advance the performance of existing buildings. In May 2023 the Zero Carbon Step Code (ZCSC) was also introduced, with a commitment to making all new buildings zero-carbon by 2030.

Provincial share of national emissions in 2022

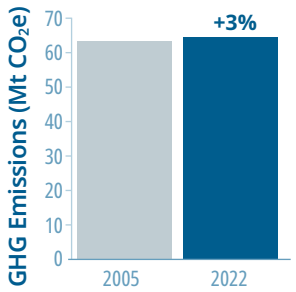


Provincial GHG emissions by sector in 2022



- Electricity **0%**
- Heavy Industry **8%**
- Agriculture **5%**
- Waste **3%**
- Coal Production **4%**
- Light Manufacturing, Construction and Forest Resources **5%**

Change in emissions from 2005 to 2022



Currently 98% of electricity in B.C. is generated from clean or renewable sources and the province has committed to 100% clean electricity by 2030, meaning remaining gas-fired power will be phased out. In April 2024, BC Hydro put out a call for a significant amount of clean energy generation to ensure the province will have sufficient clean electricity to meet its future needs.

In the oil and gas sector, the Roadmap to 2030 strengthened the methane emissions reduction target (to 75% below 2014 levels by 2030) and committed to achieving near-zero methane by 2035. The province has also proposed implementing a backstop to the federal cap on emissions from the oil and gas sector.

However, B.C.'s oil and gas sector targets are particularly sensitive to the province's growing liquefied natural gas (LNG) industry. Although its Net-Zero New Industry policy will require all proposed LNG facilities in or entering the environmental assessment process to have a credible plan to be net-zero by 2030, four of the six LNG terminals now in development are exempt. B.C. will need to ensure that all terminals — and associated upstream natural gas production — are able to fit under the sectoral emissions cap, and as the Pembina Institute has reported, extensive electrification buildout would be required to meet stated emissions targets if further growth is seen in this industry.[15]

In 2022, B.C. released the B.C. Climate Preparedness and Adaptation Strategy, which outlines actions that will help anticipate, reduce, and manage climate impacts. The province also undertook an assessment of how diverse and marginalized populations are affected by climate change. To mitigate inequities, the province has increased the climate action tax credits and funding for projects among various equity-deserving groups. The Roadmap to 2030 provides an estimate of the number of jobs that initiatives in the climate plan will generate and there are several training and reskilling policies and programs to facilitate the transition to a clean economy.

Climate progress

As the previous section shows, B.C. has made several significant improvements to its climate policy framework in the last few years and remains a climate policy leader in Canada. Most crucially perhaps, it has enshrined key features of climate accountability into law, including interim targets and the development of sectoral targets, which distinguishes B.C.'s accountability legislation from that of other jurisdictions in Canada. In combination, these measures make B.C. a jurisdiction that is enabling the clean energy transition.

Priorities for action

Increasing stringency and ensuring the timely implementation of policies will be critical to ensuring B.C. achieves its objectives. This includes prioritizing the implementation of the following commitments: adopting legislation and developing a plan to meet the 2050 net-zero target; implementing a ZEV sales regulation for medium- and heavy-duty vehicles; developing a Clean Transportation Action Plan; finalizing more stringent methane regulations; and finalizing a regulatory emissions cap for the oil and gas industry. Other policies and regulations such as the HEES, highest tiers of the ZCSC, and the greenhouse gas reduction standard for natural gas utilities need to be finalized.

B.C. should also continue with its long-term plans to enable electricity grid modernization, including energy storage capacity, transmission, and distribution-level grid enhancements via the energy distributors and suppliers.

Emissions reduction targets	
Has a 2030 target aligned with a 40–45% reduction (below 2005 levels)	●
Has or is in the process of legislating a net-zero by 2050 target	●
Has interim emissions reduction targets	●
Climate action plan	
Has a climate plan	●
Has a plan to meet net-zero by 2050	●
Climate accountability and governance	
Has a legislative requirement to prepare a climate plan, set reduction targets, and monitor and report	●
Has an independent accountability process to advise and evaluate the climate plan	●
Has a public monitoring and reporting program for the climate plan	●
Climate adaptation	
Has a climate adaptation strategy	●
Reconciliation	
Has legislated UNDRIP	●
Equity	
Has a plan to assess and mitigate climate equity impacts	●
Clean economy transition	
Has a comprehensive plan and policy to support the transition to a clean economy	●

Carbon price	
Supports carbon pricing in principal and has an end-use carbon price that meets federal benchmark	●
Has a carbon price on industrial emitters that meets federal benchmark	●
Buildings	
Has adopted standards for all new buildings to be zero-carbon ready by 2030	●
Has a plan to retrofit existing buildings to be zero-carbon ready, with supporting measures	●
Transportation	
Has a sales regulation for zero-emission light-duty vehicles, and supporting incentives	●
Has a sales regulation for zero-emission medium/heavy-duty vehicles, and supporting measures	●
Has comprehensive public transit and active transportation policy	●
Electricity	
Has decarbonized or has a plan for net-zero electricity generation by 2035	●
Has a plan to phase out coal by 2030	●
Oil and gas	
Has legislated methane emissions reduction targets	●
Has legislated oil and gas emissions reduction targets	●

LEGEND

● Strong leadership ● Little or no policy in place

● Some leadership ● Not applicable

Alberta

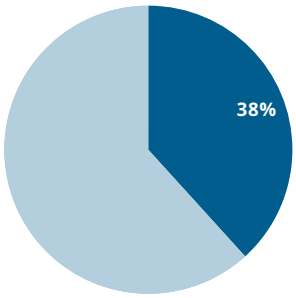
Alberta fails to achieve a green or yellow rating on 17 of our 23 applicable climate policy indicators. This reflects the province's lack of focus on climate policy development to date. Alberta is the highest-emitting province in terms of absolute emissions (270 Mt) and has the second-highest per capita emissions (59.4 tonnes per person).

In April 2023, the Government of Alberta published its Emissions Reduction and Energy Development (ERED) plan.[16] The plan included an "aspiration" for the province's economy to become carbon neutral by 2050, and as such represented an important moment in Alberta officially acknowledging, for the first time, its responsibility to work towards this internationally recognized climate target. However, the plan lacked interim emissions reduction targets or any other roadmap to achieving this aspiration. A year on from its release, the plan has yet to be accompanied by tangible actions — such as preliminary stakeholder engagement, or basic sector-by-sector emissions analysis — that would represent the first elements of groundwork towards the plan's stated aspiration.

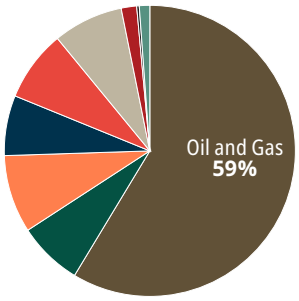
Where Alberta does have climate policies in place, a lack of suitable ambition undermines their utility. For example, the province's Oil Sands Emissions Limit Act commits to capping oilsands emissions at 100 Mt per year. With current oilsands emissions at approximately 87 Mt, this 'cap' in fact allows for significant emissions growth. While the provincial government committed in its climate plan to "exploring" the reduction of this limit, no evidence of progress on this commitment is publicly available. Similarly, Alberta's methane regulations aim to reduce methane emissions from upstream oil and gas production by 45% below 2014 levels by 2025 — a target that the government has in fact declared that it has already achieved. Again, the climate plan stated that the province will assess potential pathways to achieve a 75–80% methane reduction target by 2030 (from 2014 levels). However, Alberta's February 2024 submission regarding proposed upgraded federal methane regulations indicated that Alberta is in fact opposed to the way the federal government has calculated its proposed target of a 75% reduction from 2012 levels by 2030.[17] Finally, to reduce emissions in the transportation sector, Alberta is exploring the use of hydrogen fuel cell electric vehicles in heavy-duty transportation — but the province does not have zero-emission vehicle sales regulations or purchase incentives that would tackle emissions from passenger vehicles.

There is also evidence that government decisions have actively damaged the growth of clean sectors in Alberta — notably the Government of Alberta's imposition in 2023 of a seven-month moratorium on renewable energy development. Pembina Institute analysis found that the moratorium directly affected 118 proposed projects in the province, representing at least $33 billion in investment.[18] The moratorium was particularly unfortunate

Provincial share of national emissions in 2022

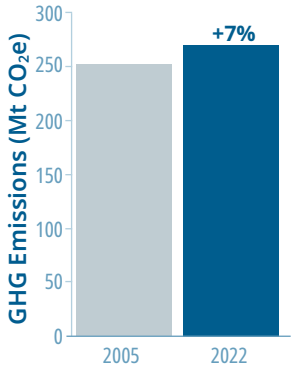


Provincial GHG emissions by sector in 2022



- Electricity **7%**
- Transport **9%**
- Heavy Industry **7%**
- Buildings **8%**
- Agriculture **8%**
- Waste **2%**
- Coal Production **0%**
- Light Manufacturing, Construction and Forest Resources **1%**

Change in emissions from 2005 to 2022



given the progress Alberta has made in phasing out coal from its electricity grid. Alberta's deregulated electricity market — where organizations can buy energy directly from sellers without going through a centralized utility — had otherwise facilitated a major renewables boom in the province (over 90% of Canada's wind, solar and energy storage additions in 2023 were in Alberta).[19]

In 2018, Alberta (along with Ontario and Saskatchewan) brought an ultimately unsuccessful legal challenge against the federal consumer carbon price. The province continues to oppose the consumer carbon pricing system and so the federal backstop is in place.

Climate progress

In December 2022, the provincial government announced some important updates to its industrial carbon pricing system, the Technology Innovation and Emissions Reduction (TIER) regulation. Among other things, the price of carbon pollution is going to gradually increase, reaching $170/tonne in 2030. These updates were a positive step and strengthened the signal for companies to invest in emissions reductions.

In addition, in the 2024 provincial budget, a greater proportion of TIER revenues were allocated to enabling emissions reduction projects rather than towards debt reduction; this trend needs to continue.

In November 2023, the Government of Alberta announced the Alberta Carbon Capture Incentive Program, which will provide grants of 12% for eligible capital project costs. This supplements the federal 50% Investment Tax Credit for carbon capture projects and further bolsters the investment environment for carbon capture in Alberta, especially in the oilsands where this technology will play an important role if these investments go ahead.

Priorities for action

A Pembina Institute assessment at the one-year anniversary of Alberta's ERED plan noted six urgent actions the province could undertake in 2024.[20] These were:

1. Conduct sectoral analysis and set emissions reduction targets.
2. Strengthen the industrial carbon pricing regulation to align it with Alberta's stated target of net-zero by 2050.
3. Lower the Oil Sands Emissions Limit and enable enforcement through effective regulations.
4. Modernize the mandate for the provincial utility regulator (the Alberta Utilities Commission) and the Alberta Electric System Operator to give them direction to fully decarbonize the grid.
5. Re-establish Alberta as a leader on tackling oil and gas methane by formally adopting a 75%–80% reduction from 2014 levels by 2030 and seeking equivalency with proposed federal regulations.
6. Implement measures that would pave the way for cost-effective demand-side management for electricity use.

In addition, we recommend the province adopt measures to encourage sales and purchases of ZEVs. This should be accompanied by measures that expand charging infrastructure. In the building sector, Alberta should work with municipalities and leading builders and developers to incorporate net-zero requirements into building codes and support investments in energy efficiency.

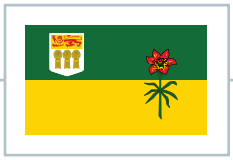
The province should also establish a strategy to support workers, recognizing the impact declining fossil fuel demand is likely to have on its economy and workforce. Finally, Alberta should develop a climate adaptation plan and invest in equity programs.

Emissions reduction targets	
Has a 2030 target aligned with a 40–45% reduction (below 2005 levels)	
Has or is in the process of legislating a net-zero by 2050 target	
Has interim emissions reduction targets	
Climate action plan	
Has a climate plan	
Has a plan to meet net-zero by 2050	
Climate accountability and governance	
Has a legislative requirement to prepare a climate plan, set reduction targets, and monitor and report	
Has an independent accountability process to advise and evaluate the climate plan	
Has a public monitoring and reporting program for the climate plan	
Climate adaptation	
Has a climate adaptation strategy	
Reconciliation	
Has legislated UNDRIP	
Equity	
Has a plan to assess and mitigate climate equity impacts	
Clean economy transition	
Has a comprehensive plan and policy to support the transition to a clean economy	

Carbon price	
Supports carbon pricing in principal and has an end-use carbon price that meets federal benchmark	
Has a carbon price on industrial emitters that meets federal benchmark	
Buildings	
Has adopted standards for all new buildings to be zero-carbon ready by 2030	
Has a plan to retrofit existing buildings to be zero-carbon ready, with supporting measures	
Transportation	
Has a sales regulation for zero-emission light-duty vehicles, and supporting incentives	
Has a sales regulation for zero-emission medium/heavy-duty vehicles, and supporting measures	
Has comprehensive public transit and active transportation policy	
Electricity	
Has decarbonized or has a plan for net-zero electricity generation by 2035	
Has a plan to phase out coal by 2030	
Oil and gas	
Has legislated methane emissions reduction targets	
Has legislated oil and gas emissions reduction targets	

LEGEND

Strong leadership
Some leadership
Little or no policy in place
Not applicable



Saskatchewan

Saskatchewan is the fourth-highest-emitting province in terms of absolute emissions (75.9 Mt) and the highest in Canada on a per capita basis (63.5 tonnes per person). It ties with Alberta for the fewest number of green and yellow ratings on our 23 applicable climate policy indicators, which is indicative of the province's lack of progress to date on climate policy-making. The province reluctantly complies with and in some cases, actively opposes several federal climate regulations.

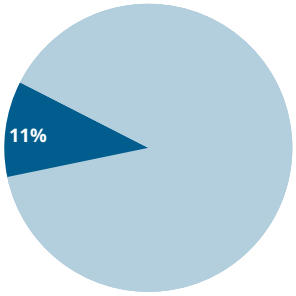
Saskatchewan's climate plan was published over seven years ago, in 2017.[21] Although the province has a legislated requirement to set province-wide climate targets, it has yet to do so. However, its climate plan includes short- and medium-term targets for electricity and oil and gas, and outlines that proposed initiatives in the electricity sector — including expanding the role of renewable energy sources to account for 50% of electricity production capacity and meeting emission regulations for coal by 2030 — will result in a 40% reduction in electricity sector emissions by 2030 (from 2005 levels, equivalent to 6 Mt). In Saskatchewan's 2023 Climate Resilience report, this target was increased to a 50% reduction from 2005 levels by 2030 (7.1 Mt).[22]

Although SaskPower has committed to meeting equivalency with the federal coal phase-out legislation (either by retiring coal-fired power plants, or by adding carbon capture technology to abate the emissions),[23] the deadline to add carbon capture in time to meet the regulations has now passed.[24] Recent statements from the Premier of Saskatchewan also indicate he wants the province to run its coal plants until end-of-life, indicating that Saskatchewan may ultimately end up in contravention of federal coal phase-out regulations.[25]

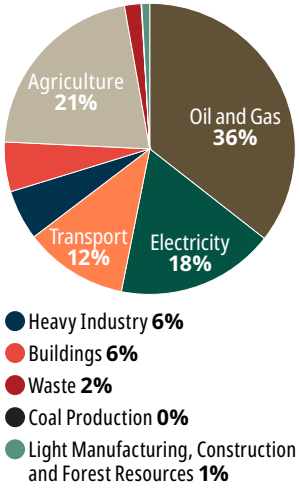
The province opposes the federal government's proposed Clean Electricity Regulations (which aim to facilitate the creation of an affordable and reliable clean grid across Canada by 2035), and intends to replace coal power with a combination of natural gas, imported hydroelectricity, and renewables.[26,27]

The Saskatchewan Output-Based Performance Standards Program for industrial carbon pricing was expanded and approved by the federal government in 2022 and updated in 2023 to cover more industrial sectors and emissions.[28,29] In 2018, Saskatchewan (along with Ontario and Alberta) brought an ultimately unsuccessful legal challenge against the federal consumer carbon price. The province continues to oppose consumer carbon pricing system and so the federal backstop is in place.

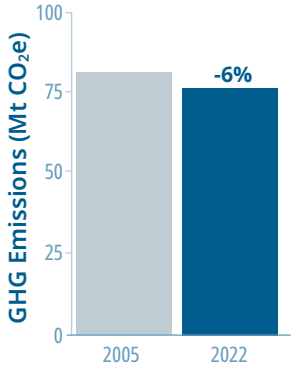
Provincial share of national emissions in 2022

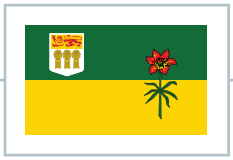


Provincial GHG emissions by sector in 2022



Change in emissions from 2005 to 2022





Oil and gas production accounts for 36% of Saskatchewan's emissions, its highest-emitting sector. However, the province opposes the federal government's proposed oil and gas emissions cap, as well as federal methane regulations.[30] Saskatchewan's 2019 Methane Action Plan proposes to reduce methane emissions from venting and flaring by 45% from 2015 levels by 2025 (or 4.5 Mt of CO_2e annually by 2025). This is significantly less ambitious than the currently proposed federal target (75% from 2012 levels by 2030).

In 2023, the province released its fifth annual report tracking progress on its climate change plan. These reports are not reviewed by an independent entity. Despite mention of the importance of climate adaptation in Saskatchewan's climate plan and annual progress reports, the province has not published an adaptation plan.

Climate progress

Saskatchewan launched an initiative in 2023 to make $25 million available for funding industry-driven projects that reduce, sequester and capture emissions.[31] The province's 2023 Climate Resilience report set a target for a 50% reduction in emissions generated from the province's electricity sector (from 2005 levels), which is more ambitious than its previous target set out in its 2017 climate plan.

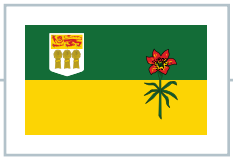
Priorities for action

Saskatchewan urgently needs to adopt economy-wide and sectoral emissions reduction targets, and develop a clear plan to achieve them.

As an oil and gas producing province, Saskatchewan should outline how it intends to rapidly reduce emissions from the sector, especially given its current vocal opposition to proposed federal oil and gas emissions regulations.

In addition to urgent progress that must be made on meeting federal coal regulations, the province requires a broader plan indicating how it will accelerate renewable energy generation, expand storage, and enhance energy efficiency to decarbonize its electricity grid.

To reduce emissions in the transportation sector, Saskatchewan should support the implementation of measures to encourage the sales and purchase of ZEVs along with plans and policies to increase public and active transportation use. In addition, the province should develop a climate adaptation plan and a plan to address the equity impacts of climate policies and help facilitate the transition to a cleaner economy.



Emissions reduction targets	
Has a 2030 target aligned with a 40–45% reduction (below 2005 levels)	
Has or is in the process of legislating a net-zero by 2050 target	
Has interim emissions reduction targets	
Climate action plan	
Has a climate plan	
Has a plan to meet net-zero by 2050	
Climate accountability and governance	
Has a legislative requirement to prepare a climate plan, set reduction targets, and monitor and report	
Has an independent accountability process to advise and evaluate the climate plan	
Has a public monitoring and reporting program for the climate plan	
Climate adaptation	
Has a climate adaptation strategy	
Reconciliation	
Has legislated UNDRIP	
Equity	
Has a plan to assess and mitigate climate equity impacts	
Clean economy transition	
Has a comprehensive plan and policy to support the transition to a clean economy	

Carbon price	
Supports carbon pricing in principal and has an end-use carbon price that meets federal benchmark	
Has a carbon price on industrial emitters that meets federal benchmark	
Buildings	
Has adopted standards for all new buildings to be zero-carbon ready by 2030	
Has a plan to retrofit existing buildings to be zero-carbon ready, with supporting measures	
Transportation	
Has a sales regulation for zero-emission light-duty vehicles, and supporting incentives	
Has a sales regulation for zero-emission medium/heavy-duty vehicles, and supporting measures	
Has comprehensive public transit and active transportation policy	
Electricity	
Has decarbonized or has a plan for net-zero electricity generation by 2035	
Has a plan to phase out coal by 2030	
Oil and gas	
Has legislated methane emissions reduction targets	
Has legislated oil and gas emissions reduction targets	

LEGEND

- Strong leadership
- Some leadership
- Little or no policy in place
- Not applicable

Manitoba

Manitoba is the sixth-highest-emitting province in terms of absolute emissions (21.6 Mt) and the fifth-highest emitter on a per capita basis (15.3 tonnes per person). Manitoba receives a green or yellow rating on 13 of our 21 applicable climate policy indicators, putting the province ahead of Alberta, Saskatchewan and Ontario in policies to advance climate action. The province has taken steps to advance climate accountability and policy in some key sectors, but more work is needed.

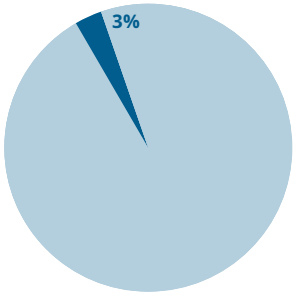
Manitoba's climate plan was published seven years ago, in 2017.[32] It identifies key priorities across the four pillars of climate, jobs, water, and nature, but does not include a province-wide or sector-by-sector emissions reduction targets for 2030. Manitoba's Climate and Green Plan Act requires annual reporting on progress against the province's climate plan and established the Expert Advisory Council to provide advice and recommendations to the Minister of Environment, Climate and Parks on implementing the province's climate plan. Instead of emissions reduction targets, the Act requires the minister to establish and maintain carbon savings accounts — that is, specified cumulative emissions reductions — for the 2018–2022 period and for each five-year period after that. The Advisory Council's 2022 report recommends a cumulative emissions reduction goal of 5.6 Mt of CO_2e for the 2023–2027 period.[33] This falls well below Canada's international climate commitment to achieve a 40–45% reduction from 2005 to 2030 (see Appendix C).

In 2021, the province referenced the development of a Green Transportation Strategy to advance the shift to low- and zero-emission transportation modes. More recently, investments have been put in place to expand and strengthen public transit.[34] In 2024, Manitoba introduced the new Electric Vehicle Incentive Program offering sales rebates and incentives.[35] Additional initiatives to reduce emissions in the transportation sector include the Efficient Trucking Program, which provides rebates for fuel-saving devices and technologies for heavy-duty trucks.

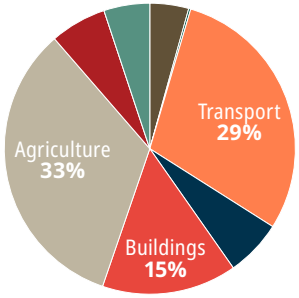
In the buildings sector, Manitoba adopted baseline Tier 1 codes under the National Energy Code for Buildings in 2024 and noted that it would work with the federal government to develop a roadmap to build capacity in Manitoba for higher tier adoption in the future.[36] Manitoba provides incentives for heat pump installation and is working towards additional retrofit targets and incentives.

With jobs as one of the main pillars, the climate plan identified opportunities, policies, and measures to meet the demand for new employment opportunities that result from climate policies. However, the plan lacks comprehensive and concrete training initiatives to align

Provincial share of national emissions in 2022

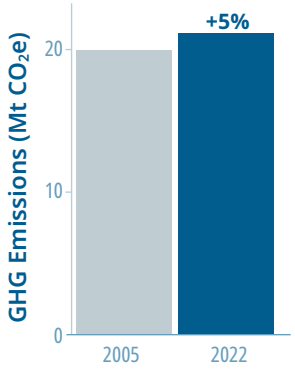


Provincial GHG emissions by sector in 2022



- Oil and Gas **4%**
- Electricity **0%**
- Heavy Industry **6%**
- Waste **6%**
- Coal Production **0%**
- Light Manufacturing, Construction and Forest Resources **5%**

Change in emissions from 2005 to 2022



with growth in new employment areas. Within the 2020–2021 Climate and Green Plan Annual report, Manitoba published a report on climate adaptation which identified climate impacts and adaptation initiatives and actions and commits to developing a broad adaptation strategy.

The federal consumer carbon pricing system is implemented in full in Manitoba, but its impact has been weakened by the province removing its fuel tax. Manitoba has addressed equity impacts of carbon pricing by establishing a Carbon Tax Relief Fund to assist lower-income residents.

Climate progress

Manitoba has been a leader in clean electricity generation, with renewable sources, primarily hydroelectricity, accounting for 99.9% of electricity generated in 2022. The province exports clean electricity to neighbouring jurisdictions and is working on additional demand-side management conservation initiatives to reduce consumption.

Manitoba continues to produce annual reports on its climate progress and receives advice from its Expert Advisory Council. The provision of rebates for light-duty ZEVs represents important progress in the province toward tackling transportation emissions.

Priorities for action

Manitoba's current approach to setting carbon budgets just before the start of each five-year period does not provide the policy certainty needed for long-term planning by the public or private sector. Its climate planning could be significantly improved by the addition of province-wide and sectoral emissions reduction targets that are consistent with Canada's international commitments for 2030 and beyond. The province should also legislate a commitment to reaching net-zero emissions across its economy by 2050.

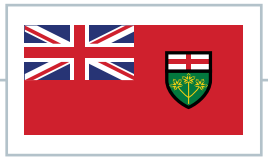
Manitoba should focus on accelerating action to tackle its heaviest-emitting sectors, transportation and buildings. For example, the new provincial light-duty ZEV sales incentives should be supported by provincial measures to ensure ZEV sales, the implementation of the Green Transportation Strategy, and policies to increase public and active transportation. The province should also build on its Efficient Trucking Program by implementing measures to support the sales and purchase of zero-emission medium- and heavy-duty vehicles. Manitoba should also adopt higher tiers of the national building code and commit to a target of zero-carbon ready requirements being incorporated into its building code by 2030.

Emissions reduction targets	
Has a 2030 target aligned with a 40–45% reduction (below 2005 levels)	
Has or is in the process of legislating a net-zero by 2050 target	
Has interim emissions reduction targets	
Climate action plan	
Has a climate plan	
Has a plan to meet net-zero by 2050	
Climate accountability and governance	
Has a legislative requirement to prepare a climate plan, set reduction targets, and monitor and report	
Has an independent accountability process to advise and evaluate the climate plan	
Has a public monitoring and reporting program for the climate plan	
Climate adaptation	
Has a climate adaptation strategy	
Reconciliation	
Has legislated UNDRIP	
Equity	
Has a plan to assess and mitigate climate equity impacts	
Clean economy transition	
Has a comprehensive plan and policy to support the transition to a clean economy	

Carbon price	
Supports carbon pricing in principal and has an end-use carbon price that meets federal benchmark	
Has a carbon price on industrial emitters that meets federal benchmark	
Buildings	
Has adopted standards for all new buildings to be zero-carbon ready by 2030	
Has a plan to retrofit existing buildings to be zero-carbon ready, with supporting measures	
Transportation	
Has a sales regulation for zero-emission light-duty vehicles, and supporting incentives	
Has a sales regulation for zero-emission medium/heavy-duty vehicles, and supporting measures	
Has comprehensive public transit and active transportation policy	
Electricity	
Has decarbonized or has a plan for net-zero electricity generation by 2035	
Has a plan to phase out coal by 2030	
Oil and gas	
Has legislated methane emissions reduction targets	
Has legislated oil and gas emissions reduction targets	

LEGEND

- Strong leadership
- Some leadership
- Little or no policy in place
- Not applicable



Ontario

Ontario is the second-highest-emitting province in Canada in terms of absolute emissions (157.0 Mt) but, given its large population, has the third-lowest per capita emissions (10.4 tonnes per person). It achieves a green or yellow rating on 10 of our 21 applicable climate policy indicators. This indicates there is scope for Ontario to build on the steps it has taken so far to reduce emissions across its economy and, in doing so, demonstrate a greater capacity for climate policy leadership.

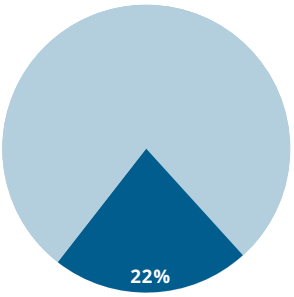
The Made-in-Ontario Environment Plan was published six years ago, in 2018, and included a target to reduce emissions by 30% below 2005 levels by 2030.[37] However, the province's target is not enshrined in legislation, nor are there dates or timelines to meet the requirements of the climate plan. The province has reported on progress since 2018; however, the reporting is not independently reviewed, nor does it provide sufficient details on the status of measures to implement the plan.

While the province has not set long-term or sectoral emissions reduction targets, it has sought to reduce emissions in its transportation sector through investing in initiatives to expand and increase public transportation and offering EV infrastructure incentives for eligible communities. For heavy-duty vehicles, the province has a program for emissions testing and strengthening the on-road enforcement of emissions standards and is interested in the use of hydrogen fuel cell vehicles. However, the province lacks measures to advance the sales and purchase of ZEVs. Ontario is also seeking to grow its clean economy by pursuing industrial policies that provide financial assistance to the auto manufacturing sector to support the transition to ZEV production, and has an objective to produce at least 400,000 electric and hybrid vehicles by 2030.

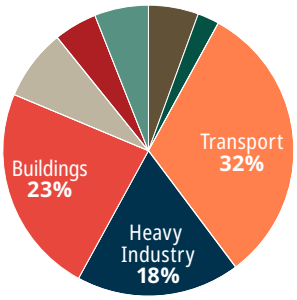
Ontario phased out coal-fired electricity generation in 2014 and, in 2022, 94% of electricity was produced from non-emitting sources, primarily nuclear and hydroelectricity. However, the province has not committed to fully decarbonizing its electricity sector. Ontario has recently completed large procurements for battery energy storage and is looking to further expand its clean energy capabilities through implementing actions in its system operator's Pathways to Decarbonization report and in the 2023 Power Ontario's Growth plan.[38] At the same time, the province is also expanding its use of unabated natural gas generation and is projected to become the second-highest user of natural gas generation in Canada.[39]

In 2023, the Ontario Provincial Climate Change Impact Assessment report was published. It identifies current and future climate change impacts across the province and includes an assessment of equity impacts and

Provincial share of national emissions in 2022

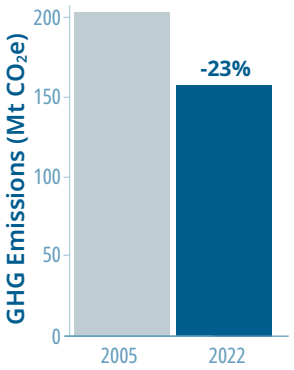


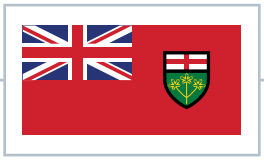
Provincial GHG emissions by sector in 2022



- Oil and Gas **6%**
- Electricity **2%**
- Agriculture **8%**
- Waste **5%**
- Coal Production **0%**
- Light Manufacturing, Construction and Forest Resources **6%**

Change in emissions from 2005 to 2022





how certain populations may be disproportionately impacted. However, Ontario has not committed to developing a climate adaptation plan to address these.

In 2018, Ontario (along with Saskatchewan and Alberta) brought an ultimately unsuccessful legal challenge against the federal consumer carbon price. The province continues to oppose consumer carbon pricing system and so the federal backstop is in place, though its impact has been weakened by the province reducing its fuel tax. Ontario's industrial carbon pricing system, the Emissions Performance Standards program, was approved by the federal government in 2020.

Climate progress

Ontario's comprehensive climate change impact assessment report provides a strong foundation for it to move forward with climate adaptation measures. The province has made progress toward ensuring climate accountability through putting in place a legislative requirement to prepare a climate plan, monitor progress, and report on outcomes. Ontario's investments in an emerging EV auto sector and objective to build at least 400,000 electric and hybrid vehicles by 2030 are promising steps toward supporting the transition to ZEVs via industrial policies in strategic sectors.

Priorities for action

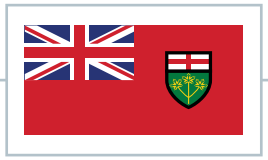
To strengthen its climate plan, Ontario should develop sectoral targets and commit to additional measures to reduce emissions in its highest-emitting sectors. Ontario should commit to net-zero emissions by 2050 and develop and legislate a pathway to reach this goal. Ontario should strengthen its public monitoring and reporting program and increase the involvement and role of the Ontario Advisory Panel on Climate Change.

The province should adopt measures that encourage the sales and purchase of ZEVs, and enable utility support to expand charging infrastructure. In the building sector, the province should adopt a target of net-zero-carbon ready requirements into building codes and expand heat pump incentives.

Ontario should commit to fully decarbonizing electricity generation by 2035, focusing first on proven, lower-cost technologies, primarily wind and solar generation with electricity storage. In addition, the Independent Electric System Operator (IESO) of Ontario should expedite calls for additional non-emitting power generation.

Utilities are critical partners in energy decarbonization needed to reduce emissions. Ontario should explore mandating implementation of cost-effective utility demand side management, reducing existing building energy use, and expanding options to meet peak demand, including electricity storage. This makes existing energy resources available to support electrification of transport, heating, and industry, while also supporting affordability objectives.

Building on its own 2023 Climate Change Impact Assessment, Ontario should develop a climate adaptation plan and invest in equity programs to address identified vulnerabilities. The province should also conduct an assessment of its climate plan that considers the economic impact on vulnerable populations and workers. Based on these findings, the province can prioritize training policies to mitigate impacts on workers and employment in the transition to a clean economy. Ontario should also assess impacts, including opportunities, for Indigenous populations and communities and legislate the United Nations Declaration on the Rights of Indigenous People (UNDRIP).



Emissions reduction targets	
Has a 2030 target aligned with a 40–45% reduction (below 2005 levels)	Some leadership
Has or is in the process of legislating a net-zero by 2050 target	Little or no policy in place
Has interim emissions reduction targets	Little or no policy in place
Climate action plan	
Has a climate plan	Some leadership
Has a plan to meet net-zero by 2050	Little or no policy in place
Climate accountability and governance	
Has a legislative requirement to prepare a climate plan, set reduction targets, and monitor and report	Strong leadership
Has an independent accountability process to advise and evaluate the climate plan	Little or no policy in place
Has a public monitoring and reporting program for the climate plan	Some leadership
Climate adaptation	
Has a climate adaptation strategy	Some leadership
Reconciliation	
Has legislated UNDRIP	Little or no policy in place
Equity	
Has a plan to assess and mitigate climate equity impacts	Some leadership
Clean economy transition	
Has a comprehensive plan and policy to support the transition to a clean economy	Some leadership

Carbon price	
Supports carbon pricing in principal and has an end-use carbon price that meets federal benchmark	Little or no policy in place
Has a carbon price on industrial emitters that meets federal benchmark	Strong leadership
Buildings	
Has adopted standards for all new buildings to be zero-carbon ready by 2030	Little or no policy in place
Has a plan to retrofit existing buildings to be zero-carbon ready, with supporting measures	Little or no policy in place
Transportation	
Has a sales regulation for zero-emission light-duty vehicles, and supporting incentives	Little or no policy in place
Has a sales regulation for zero-emission medium/heavy-duty vehicles, and supporting measures	Little or no policy in place
Has comprehensive public transit and active transportation policy	Some leadership
Electricity	
Has decarbonized or has a plan for net-zero electricity generation by 2035	Little or no policy in place
Has a plan to phase out coal by 2030	Strong leadership
Oil and gas	
Has legislated methane emissions reduction targets	Not applicable
Has legislated oil and gas emissions reduction targets	Not applicable

LEGEND

- Strong leadership
- Some leadership
- Little or no policy in place
- Not applicable

Quebec

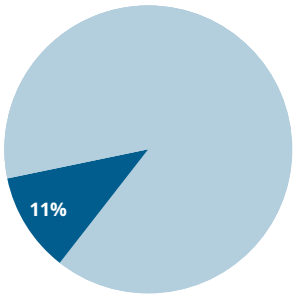
Quebec is the third-highest-emitting province in terms of absolute emissions (79.1 Mt) and the lowest emitter on a per capita basis (9.1 tonnes per person). Quebec receives a green or yellow rating in 17 of our 20 applicable climate policy indicators — and places among the top three jurisdictions with the highest number of green ratings. Interim emissions reduction targets, establishing a climate adaptation strategy, commitments to development of a plan and monitoring of climate progress, and the advancement of transportation decarbonization policies are some of the actions that set Quebec apart from other jurisdictions.

Quebec published its climate plan in 2020 and releases yearly implementation plans that outline actions for the next five years (currently covering the 2023–2028 period, supported by the provincial budget).[40,41] The province has published additional supporting plans including an Energy Transition, Innovation and Efficiency Master Plan, a Sustainable Mobility Policy, a Sustainable Development Strategy, and a Green Hydrogen and Bioenergy Strategy. Quebec has a target to reduce emissions by 37.5% below 1990 levels by 2030 (which our calculations indicate is slightly below Canada's international commitments) and an objective to achieve carbon neutrality by 2050.

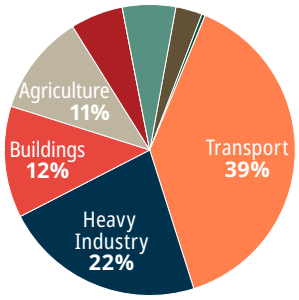
To reduce emissions in its largest-emitting sector, transportation, Quebec has a target of two million electric vehicles by 2030 and has a legislated regulation for 100% new light-duty ZEV sales by 2035. These targets are supported by sales and charging station incentives and rebates. For medium- and heavy-duty vehicles, the province offers ZEV purchase incentives and is in the process of developing a ZEV sales requirement. In addition, the Sustainable Mobility Policy outlines the province's initiatives, investments, and targets to increase public and active transportation use.

To reduce emissions from the building sector, Quebec (through Hydro-Quebec) offers multiple residential retrofit programs, including heat pump rebates. As of December 2023, Quebec has banned the installation of oil-powered heating in new and existing buildings and has banned the installation of fossil fuel heating to replace appliances powered by oil in existing residential buildings. In Quebec, electricity is produced from more than 99.8% renewable sources, mainly hydroelectricity. The province has invested $280.3 million to support off-grid communities that are mainly reliant on diesel generation to transition to renewable energy systems and reach a target of 80% renewable energy supply for off-grid systems by 2030. The climate plan and implementation plan also identify major climate impacts and vulnerabilities and allocate funding for climate adaptation measures.

Provincial share of national emissions in 2022

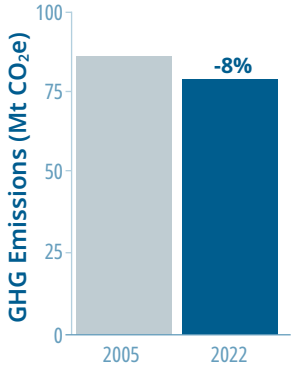


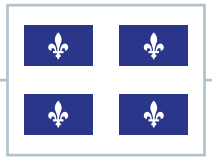
Provincial GHG emissions by sector in 2022



- Oil and Gas **3%**
- Electricity **0%**
- Waste **6%**
- Coal Production **0%**
- Light Manufacturing, Construction and Forest Resources **6%**

Change in emissions from 2005 to 2022





Quebec led the way in Canada by implementing a carbon levy in 2007, which was replaced by a cap-and-trade program in 2013. The latter features declining annual caps, covers 80% of provincial emissions and meets the federal carbon pricing benchmark. The implementation plan commits to optimizing the cap-and-trade system to ensure it remains an effective tool in reducing emissions and achieving targets.

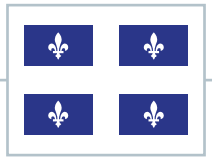
In Quebec, the Environment Quality Act and Bill 44 legislate the 2030 emissions reduction target, the development of a climate plan, annual reporting requirements, and the creation of the Advisory Committee on Climate, which advises on climate action and issues.

Climate progress

Quebec has a comprehensive climate plan, publishes yearly implementation reports to track and strengthen climate actions, and has enshrined its climate planning in legislation. The province has taken significant action to reduce emissions from the transportation sector. The recent addition of measures to reduce building sector emissions, including a legislated ban on oil powered heating equipment, is a positive step, as are strengthened targets to increase renewable capacity for off-grid systems. Quebec is also the first jurisdiction to ban new oil and gas development.[42]

Priorities for action

Quebec needs to set stronger sectoral emissions reduction targets with additional measures in key sectors. It should prioritize the implementation of a ZEV sales requirement for medium- and heavy-duty vehicles to reduce transportation emissions, and in the building sector, should commit to zero-carbon-ready buildings by 2030 and fully ban the installation of fossil fuel heating systems by 2035. Quebec has yet to legislate UNDRIP, and the province should prioritize the implementation of its commitments and identified measures to support all communities through the energy transition. Quebec also needs to begin developing a plan to reach net-zero by 2050.



Emissions reduction targets	
Has a 2030 target aligned with a 40–45% reduction (below 2005 levels)	Some leadership
Has or is in the process of legislating a net-zero by 2050 target	Strong leadership
Has interim emissions reduction targets	Some leadership
Climate action plan	
Has a climate plan	Strong leadership
Has a plan to meet net-zero by 2050	Little or no policy in place
Climate accountability and governance	
Has a legislative requirement to prepare a climate plan, set reduction targets, and monitor and report	Strong leadership
Has an independent accountability process to advise and evaluate the climate plan	Some leadership
Has a public monitoring and reporting program for the climate plan	Strong leadership
Climate adaptation	
Has a climate adaptation strategy	Strong leadership
Reconciliation	
Has legislated UNDRIP	Little or no policy in place
Equity	
Has a plan to assess and mitigate climate equity impacts	Some leadership
Clean economy transition	
Has a comprehensive plan and policy to support the transition to a clean economy	Some leadership

Carbon price	
Supports carbon pricing in principal and has an end-use carbon price that meets federal benchmark	Strong leadership
Has a carbon price on industrial emitters that meets federal benchmark	Strong leadership
Buildings	
Has adopted standards for all new buildings to be zero-carbon ready by 2030	Little or no policy in place
Has a plan to retrofit existing buildings to be zero-carbon ready, with supporting measures	Some leadership
Transportation	
Has a sales regulation for zero-emission light-duty vehicles, and supporting incentives	Strong leadership
Has a sales regulation for zero-emission medium/heavy-duty vehicles, and supporting measures	Some leadership
Has comprehensive public transit and active transportation policy	Strong leadership
Electricity	
Has decarbonized or has a plan for net-zero electricity generation by 2035	Strong leadership
Has a plan to phase out coal by 2030	Not applicable
Oil and gas	
Has legislated methane emissions reduction targets	Not applicable
Has legislated oil and gas emissions reduction targets	Not applicable

LEGEND

Strong leadership
Some leadership
Little or no policy in place
Not applicable

New Brunswick

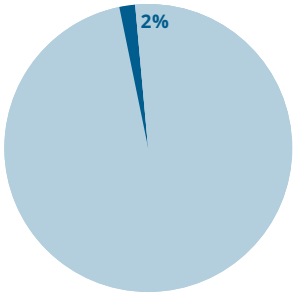
New Brunswick is the eighth-highest-emitting province in terms of absolute emissions (12.5 Mt) and the fifth-highest emitter on a per capita basis (15.4 tonnes per person). Of 22 applicable climate policy indicators, New Brunswick receives 15 green and yellow ratings, indicating some evidence of climate policy leadership. However, its six red ratings reflect key areas of concern where the province must prioritize action.

New Brunswick published its new climate change plan in 2022 and a progress report for 2022–2023.[43,44] The climate plan builds upon the previous plan published in 2016 and identifies 30 new climate actions centered around three pillars: government leadership and accountability, reducing emissions, and preparing for climate change. The province has set targets to reduce emissions by 46% below 2005 levels by 2030 and achieve net-zero by 2050, which are consistent with Canada's international commitments. Through its Climate Change Act, which came into force in 2018, the province has legislated requirements to prepare a climate plan, meet emissions reduction targets, and monitor and report outcomes.

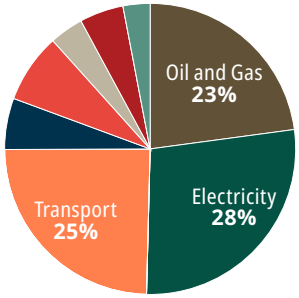
In the building sector, the province provides rebates for home retrofits including heat pumps, and the climate plan sets an objective to achieve net-zero-ready construction by 2030 and work with the federal government to phase out heating oil use in all buildings by 2030. To reduce emissions in the transportation sector, the province provides rebates and incentives for light-duty ZEVs and charging equipment and has set a target of 50% light-duty ZEV sales by 2030. Crucially though, this is not a sales requirement backed by legislation, and the target is not stringent enough to reduce emissions from transportation in line with a net-zero pathway. For freight transportation, New Brunswick has introduced incentive programs for fuel saving measures and has committed to develop a zero-emission freight strategy by 2024 and a target for zero-emission freight transportation by 2025. New Brunswick is working towards decarbonizing its electricity generation and has committed to develop a clean electricity strategy by 2025 for achieving net-zero electricity emissions by 2035, and to phase out coal-fired power plants by 2030.

The province opposes the consumer carbon pricing system and so the federal backstop is in place, although many citizens are currently benefiting from a temporary three-year exemption for home heating oil. In 2021, the final proposal for the New Brunswick Output-Based Pricing System (NB OBPS) for heavy emitters was approved by the federal government. It includes industrial and electricity generation sectors and commits to a NB OBPS total emissions intensity reduction of 18% by 2030.

Provincial share of national emissions in 2022

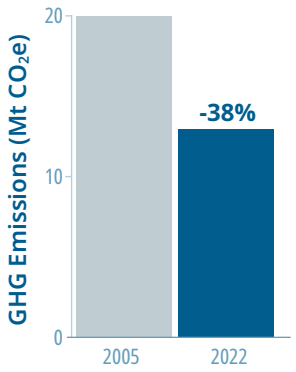


Provincial GHG emissions by sector in 2022



- Heavy Industry **6%**
- Buildings **8%**
- Agriculture **4%**
- Waste **5%**
- Coal Production **0%**
- Light Manufacturing, Construction and Forest Resources **3%**

Change in emissions from 2005 to 2022



New Brunswick is currently working to conduct a comprehensive provincial climate change risk assessment by 2025 and has committed to developing a provincial climate change adaptation plan by 2026. To support the transition to a low-carbon economy, the climate plan commits to conducting a Clean Technology Skills Gap Assessment by 2025 and developing training programs and policies.

Climate progress

New Brunswick has recorded Canada's largest emissions reduction, on a percentage basis, since the baseline year of 2005. The province has set strong emissions reduction targets for 2030 and 2050 which are consistent with Canada's international commitments. New objectives and commitments include achieving net-zero energy-ready construction by 2030, as well as a phase-out of home heating oil by 2030. The province is working to develop additional climate plans and policies including a Zero-Emission Freight Strategy by 2024, a Clean Technology Skills Gap Assessment by 2025, a Clean Electricity Strategy by 2025, and a provincial climate change adaptation plan by 2026.

Priorities for action

New Brunswick's climate plan could be improved by developing sectoral and interim emissions reduction targets and establishing an independent body to evaluate the climate plan and progress reporting. The province is yet to legislate UNDRIP and can take additional actions to assess and mitigate the equity impacts of climate impacts and policies across the province. New Brunswick could also strengthen transition to ZEVs by legislating an ambitious light-duty ZEV sales requirement and supporting the transition to medium- and heavy-duty ZEVs with incentives and targets. New Brunswick should also legislate its 2050 net-zero target and continue to develop a plan to meet this goal.

Emissions reduction targets	
Has a 2030 target aligned with a 40–45% reduction (below 2005 levels)	
Has or is in the process of legislating a net-zero by 2050 target	
Has interim emissions reduction targets	
Climate action plan	
Has a climate plan	
Has a plan to meet net-zero by 2050	
Climate accountability and governance	
Has a legislative requirement to prepare a climate plan, set reduction targets, and monitor and report	
Has an independent accountability process to advise and evaluate the climate plan	
Has a public monitoring and reporting program for the climate plan	
Climate adaptation	
Has a climate adaptation strategy	
Reconciliation	
Has legislated UNDRIP	
Equity	
Has a plan to assess and mitigate climate equity impacts	
Clean economy transition	
Has a comprehensive plan and policy to support the transition to a clean economy	

Carbon price	
Supports carbon pricing in principal and has an end-use carbon price that meets federal benchmark	
Has a carbon price on industrial emitters that meets federal benchmark	
Buildings	
Has adopted standards for all new buildings to be zero-carbon ready by 2030	
Has a plan to retrofit existing buildings to be zero-carbon ready, with supporting measures	
Transportation	
Has a sales regulation for zero-emission light-duty vehicles, and supporting incentives	
Has a sales regulation for zero-emission medium/heavy-duty vehicles, and supporting measures	
Has comprehensive public transit and active transportation policy	
Electricity	
Has decarbonized or has a plan for net-zero electricity generation by 2035	
Has a plan to phase out coal by 2030	
Oil and gas	
Has legislated methane emissions reduction targets	
Has legislated oil and gas emissions reduction targets	

LEGEND

Strong leadership
Some leadership
Little or no policy in place
Not applicable

Nova Scotia

Nova Scotia is the seventh-highest-emitting province in terms of absolute emissions (14.8 Mt) and the sixth-highest emitter on a per capita basis (14.5 tonnes per person). Nova Scotia achieves 15 green and yellow ratings across our 21 applicable climate policy indicators — with a near-even split between green and yellow ratings. However, its six red ratings reflect key areas of concern where the province must prioritize action.

Nova Scotia released its new climate plan in 2022 and a detailed progress report in 2023.[45,46] The province has set the most ambitious legislated 2030 emissions reduction target of any Canadian jurisdiction, of 53% from 2005 levels, as well as net-zero by 2050. The province's climate plan identifies measures to reduce emissions in key sectors. In 2021 Nova Scotia legislated its climate targets and sectoral goals, as well as a requirement to prepare a climate plan and release annual progress reports. The province has also legislated the creation of the Round Table on Environment and Sustainable Prosperity which advises the government on these broad issues.

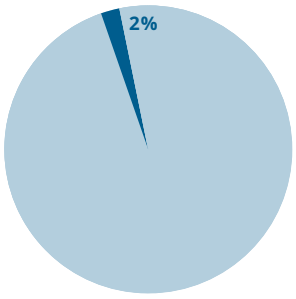
The climate plan contains a legislated goal to have 80% of electricity supplied by renewable generation by 2030 (as of 2023, 36% came from renewables), and to phase out coal-fired electricity generation by 2030. The 2030 Clean Power Plan outlines the province's roadmap to achieve clean electricity targets, which includes increasing wind and solar capacity.[47] In early 2024, Nova Scotia put into legislation the Energy Reform Act, which includes splitting the Nova Scotia Utility and Review Board into two new boards, including one focused on considering the Environmental Goals and Climate Change Reduction Act in its decisions.[48]

To reduce transportation emissions, the province has invested in active and public transportation and has committed to establishing a provincial active transportation strategy. Nova Scotia has implemented ZEV incentives for light-, medium-, and heavy-duty vehicles and has committed to developing a light-duty ZEV sales requirement. However, the province's current target (of 30% of new light-duty vehicle sales being ZEVs by 2030) falls short of aligning with a net-zero pathway.

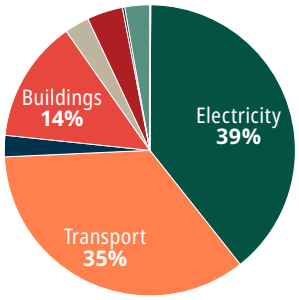
To reduce building sector emissions, Nova Scotia has banned the installation of heating oil equipment in new buildings by 2025. There is also a target to reduce heating oil use by at least 20% by 2030 through 60,000 home retrofits.

The province opposes the consumer carbon pricing system and so the federal backstop is in place, although many citizens are currently benefiting from a temporary three-year exemption for home heating oil. The provincial Output-Based Pricing System regulates emissions from large emitters including industrial and electricity generation sectors.

Provincial share of national emissions in 2022

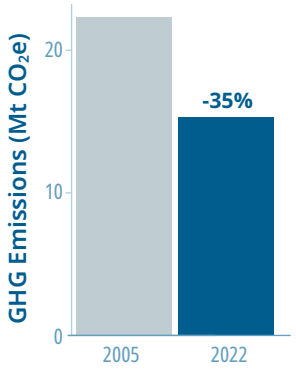


Provincial GHG emissions by sector in 2022



- Oil and Gas **0%**
- Heavy Industry **2%**
- Agriculture **3%**
- Waste **4%**
- Coal Production **0%**
- Light Manufacturing, Construction and Forest Resources **3%**

Change in emissions from 2005 to 2022



In 2022, Nova Scotia completed a provincial climate change risk assessment and is developing measures to address vulnerabilities identified in the report. The province is supporting the transition to a clean economy through training policies; from 2020 to 2021, there was an 8.5% increase in Nova Scotians employed in clean jobs.

Nova Scotia is a leader in addressing climate equity impacts. Equity is a principle of the 2021 Environmental Goals and Climate Change Reduction Act, and is applied to all commitments and actions in the climate plan.[49] In 2023, the province appointed eight members to the new Environmental Racism Panel and conducted a comprehensive assessment of climate impacts and policies.

Climate progress

With the release of a new climate plan and climate legislation, Nova Scotia has continued to make progress towards achieving ambitious emissions reduction targets. Notably Nova Scotia has been a leader in addressing inequities that result from climate impacts and policies through the integration of equity as a core principle throughout its climate plan, legislation, and climate actions. The province is also one of three provinces in Canada to offer incentives for the purchase of medium- and heavy-duty ZEVs.

Priorities for action

Nova Scotia should focus on reducing emissions from its highest-emitting sector, electricity production. It should urgently take steps to commit to fully decarbonizing its electricity sector by 2035 and developing a plan to achieve this goal. To further reduce emissions, Nova Scotia's climate plan could be improved by legislating a provincial ZEV sales requirement for light- medium- and heavy-duty vehicles, and adopting a target of zero-carbon-ready requirements for new buildings by 2030. In addition, Nova Scotia has yet to legislate UNDRIP and can further support a transition to a clean economy by completing an economic impact assessment of its climate plan. Nova Scotia also should begin to develop a plan to meet its 2050 net-zero target.

Emissions reduction targets	
Has a 2030 target aligned with a 40–45% reduction (below 2005 levels)	Strong leadership
Has or is in the process of legislating a net-zero by 2050 target	Strong leadership
Has interim emissions reduction targets	Little or no policy in place
Climate action plan	
Has a climate plan	Strong leadership
Has a plan to meet net-zero by 2050	Little or no policy in place
Climate accountability and governance	
Has a legislative requirement to prepare a climate plan, set reduction targets, and monitor and report	Strong leadership
Has an independent accountability process to advise and evaluate the climate plan	Some leadership
Has a public monitoring and reporting program for the climate plan	Some leadership
Climate adaptation	
Has a climate adaptation strategy	Strong leadership
Reconciliation	
Has legislated UNDRIP	Little or no policy in place
Equity	
Has a plan to assess and mitigate climate equity impacts	Strong leadership
Clean economy transition	
Has a comprehensive plan and policy to support the transition to a clean economy	Some leadership

Carbon price	
Supports carbon pricing in principal and has an end-use carbon price that meets federal benchmark	Little or no policy in place
Has a carbon price on industrial emitters that meets federal benchmark	Strong leadership
Buildings	
Has adopted standards for all new buildings to be zero-carbon ready by 2030	Little or no policy in place
Has a plan to retrofit existing buildings to be zero-carbon ready, with supporting measures	Some leadership
Transportation	
Has a sales regulation for zero-emission light-duty vehicles, and supporting incentives	Some leadership
Has a sales regulation for zero-emission medium/heavy-duty vehicles, and supporting measures	Some leadership
Has comprehensive public transit and active transportation policy	Some leadership
Electricity	
Has decarbonized or has a plan for net-zero electricity generation by 2035	Little or no policy in place
Has a plan to phase out coal by 2030	Strong leadership
Oil and gas	
Has legislated methane emissions reduction targets	Not applicable
Has legislated oil and gas emissions reduction targets	Not applicable

LEGEND

- Strong leadership
- Some leadership
- Little or no policy in place
- Not applicable

Prince Edward Island

Prince Edward Island is the lowest provincial emitter in terms of absolute emissions (1.6 Mt) and the second-lowest on a per capita basis (9.4 tonnes per person). The province's progress on climate action places it among the top performing jurisdictions, receiving a total of 17 green and yellow ratings across 20 of our applicable climate policy indicators. It should now concentrate on improving some of its yellow ratings by increasing its level of ambition. In particular, there is significant opportunity to address the province's highest-emitting sector by further advancing transportation policies.

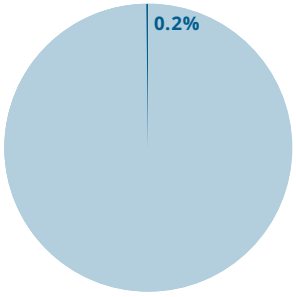
In 2022, P.E.I. published two new climate plans, the 2040 Net Zero Framework and the Building Resilience: Climate Adaptation Plan.[50,51] P.E.I. has set targets to reduce emissions by 40% below 2005 levels by 2030 (in alignment with Canada's international commitments) and achieve net-zero emissions by 2040 — the most ambitious net-zero target in Canada. The new climate plan also sets emissions reduction targets in key sectors including transportation, buildings, agriculture, industry and waste, and energy. The Net-Zero Carbon Act, which came into effect in December 2021, is P.E.I.'s primary climate legislation. It legislates emissions reduction targets and requires preparation of a climate plan and monitoring outcomes. The Act also legislated the new Net Zero Advisory Committee which is a multistakeholder advisory body for climate change.

To reduce emissions from its highest-emitting sector, transportation, P.E.I. offers incentives and rebates for ZEVs and charging infrastructure and funds initiatives to increase public and active transportation use. There is a commitment to establish a ZEV sales requirement and there are 2040 ZEV registration targets for light-, medium-, and heavy-duty vehicles. In the building sector, the climate plan includes commitments to net-zero ready for all new residential construction as of 2030 and for 90% of the housing stock to use non-emitting heat sources by 2040. The province provides incentives for home retrofits, including heat pumps. Electricity generation is almost fully decarbonized in P.E.I. and there is a target to achieve net-zero energy by 2030. However, P.E.I. imports 68.8% of its electricity from New Brunswick.

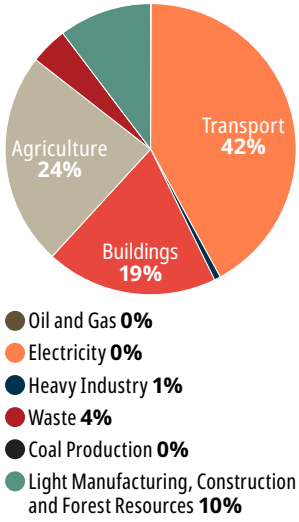
The federal consumer and industrial carbon pricing systems are both applied in P.E.I. In 2023, a temporary three-year carbon tax exemption for home heating oil was implemented.

The climate change risk assessment completed in 2021 and the climate change adaptation plan published in 2022 assess the distribution of climate impacts across the province, and P.E.I. has funded several projects to address equity concerns. The province has also set targets to expand jobs in the cleantech sector and is expanding training programs to facilitate the transition to a clean economy.

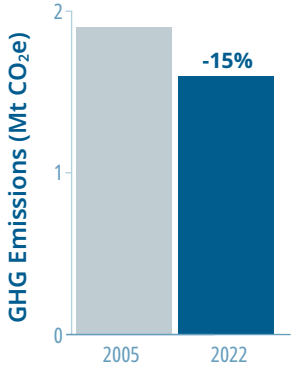
Provincial share of national emissions in 2022



Provincial GHG emissions by sector in 2022



Change in emissions from 2005 to 2022



Climate progress

P.E.I.'s net-zero by 2040 target is the most ambitious of any jurisdiction. The province has made significant progress towards achieving its emissions reduction targets with a new published climate adaptation plan and a climate action plan that includes comprehensive sectoral emissions reduction targets, with supporting actions, and incentives. New commitments in key sectors include incentives for light-duty ZEV purchases, home retrofits and heat pumps, net-zero-ready requirements for all new residential construction as of 2030, and achieving net-zero electricity by 2030. P.E.I. has also enshrined its climate planning in legislation and introduced a multistakeholder advisory body.

Priorities for action

As transportation is the highest-emitting sector, P.E.I. should prioritize the implementation of provincial measures to encourage the sale and supply of light-duty ZEVs. The province could further reduce emissions by implementing a ZEV sales requirement with incentives for zero-emission medium- and heavy-duty vehicles. P.E.I. has yet to legislate UNDRIP and could further improve its climate planning by completing an economic impact assessment of its climate plan and taking more action to assess and address the equity impacts of climate change and climate policy.

Emissions reduction targets	
Has a 2030 target aligned with a 40–45% reduction (below 2005 levels)	Strong leadership
Has or is in the process of legislating a net-zero by 2050 target	Some leadership
Has interim emissions reduction targets	Little or no policy in place
Climate action plan	
Has a climate plan	Strong leadership
Has a plan to meet net-zero by 2050	Little or no policy in place
Climate accountability and governance	
Has a legislative requirement to prepare a climate plan, set reduction targets, and monitor and report	Strong leadership
Has an independent accountability process to advise and evaluate the climate plan	Some leadership
Has a public monitoring and reporting program for the climate plan	Some leadership
Climate adaptation	
Has a climate adaptation strategy	Strong leadership
Reconciliation	
Has legislated UNDRIP	Little or no policy in place
Equity	
Has a plan to assess and mitigate climate equity impacts	Some leadership
Clean economy transition	
Has a comprehensive plan and policy to support the transition to a clean economy	Some leadership

Carbon price	
Supports carbon pricing in principal and has an end-use carbon price that meets federal benchmark	Some leadership
Has a carbon price on industrial emitters that meets federal benchmark	Strong leadership
Buildings	
Has adopted standards for all new buildings to be zero-carbon ready by 2030	Strong leadership
Has a plan to retrofit existing buildings to be zero-carbon ready, with supporting measures	Some leadership
Transportation	
Has a sales regulation for zero-emission light-duty vehicles, and supporting incentives	Some leadership
Has a sales regulation for zero-emission medium/heavy-duty vehicles, and supporting measures	Some leadership
Has comprehensive public transit and active transportation policy	Some leadership
Electricity	
Has decarbonized or has a plan for net-zero electricity generation by 2035	Strong leadership
Has a plan to phase out coal by 2030	Not applicable
Oil and gas	
Has legislated methane emissions reduction targets	Not applicable
Has legislated oil and gas emissions reduction targets	Not applicable

LEGEND

Strong leadership · Little or no policy in place · Some leadership · Not applicable

Newfoundland & Labrador

Newfoundland and Labrador is the ninth-highest-emitting province in terms of absolute emissions (8.6 Mt) and the third-highest emitter in Canada on a per capita basis (16.4 tonnes per person). The province receives a yellow rating on the majority of our 20 applicable climate policy indicators — achieving in total 14 green or yellow ratings. Newfoundland and Labrador's performance signals that there have been steps in the right direction, but strengthening of existing policy action and commitment towards new measures will better position the province in its responsibility for taking climate action.

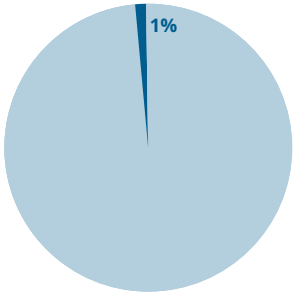
Newfoundland and Labrador released its five-year climate plan in 2019.[52] The province is currently in the process of developing a new Climate Change Mitigation Action Plan (2025–2030) and a new Climate Change Adaptation Action Plan (2025–2030). The province has emissions reduction targets of 30% below 2005 levels by 2030 and net-zero by 2050. The Net-Zero Advisory Council was established in December 2021 with a mandate to advise the government on policies and measures to reduce emissions, with a particular focus on achieving net-zero by 2050. However, the province has not legislated its climate plan or emissions reduction targets.

For transportation, the province has introduced incentives and rebates for light-duty ZEV purchases and charging infrastructure, has a rebate program to retrofit heavy-duty vehicles to reduce fuel consumption, and has invested in public and active transportation.

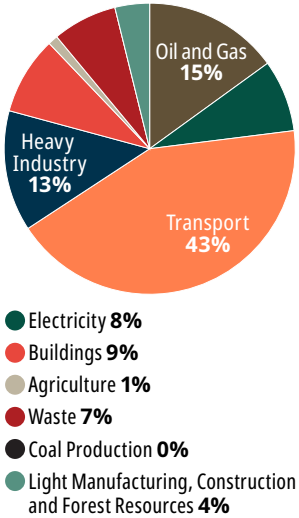
For buildings, the province has energy efficiency retrofit programs including heat pump rebates. As of 2022, more than 97% of electricity generation came from clean sources. The province primarily relies on hydroelectricity and is expanding its hydro capacity, although decommissioning of the Holyrood Thermal (oil) Generating Station, which was scheduled for 2022, has been delayed. To help facilitate the transition to a clean economy, particularly in renewables, the province is aiming to conduct a long-term labour market assessment and create new green jobs and training opportunities.

The federal consumer carbon pricing system is applied in Newfoundland and Labrador. In 2023, a temporary three-year carbon tax exemption for home heating oil was implemented. The province has a provincial pricing system for large industry that meets federal requirements.

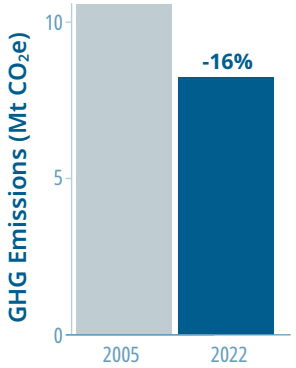
Provincial share of national emissions in 2022

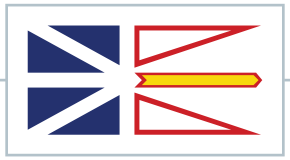


Provincial GHG emissions by sector in 2022



Change in emissions from 2005 to 2022



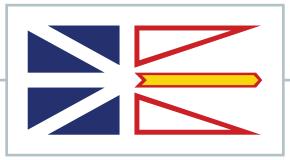


Climate progress

Newfoundland and Labrador decreased emissions by 16% between 2005 and 2022, which is a notable achievement given that emissions previously increased by 5% between 2005 and 2019. By establishing the Net-Zero Advisory Council and developing two new climate plans, the province is taking action to increase climate action measures and further reduce emissions.

Priorities for action

The climate plan midterm report acknowledges that the province will need to take additional and more ambitious measures to achieve its targets. The province's upcoming climate plan should include sectoral emissions reduction targets along with increased monitoring and reporting, and should be enshrined in legislation. To reduce emissions in the building sector, Newfoundland and Labrador should commit to zero-carbon-ready building by 2030. To help tackle emission from its largest-emitting sector, transportation, the province should adopt measures to encourage the sale and supply of light-, medium- and heavy-duty ZEVs and incentive programs targeted towards the purchase of medium- and heavy-duty ZEVs. Newfoundland and Labrador has yet to legislate UNDRIP and the new climate plan should assess and mitigate inequities in the distribution of climate impacts and policies. The province also needs to legislate its 2050 net-zero target and develop a plan to meet this goal.



Emissions reduction targets	
Has a 2030 target aligned with a 40–45% reduction (below 2005 levels)	Some leadership
Has or is in the process of legislating a net-zero by 2050 target	Some leadership
Has interim emissions reduction targets	Little or no policy in place
Climate action plan	
Has a climate plan	Strong leadership
Has a plan to meet net-zero by 2050	Little or no policy in place
Climate accountability and governance	
Has a legislative requirement to prepare a climate plan, set reduction targets, and monitor and report	Little or no policy in place
Has an independent accountability process to advise and evaluate the climate plan	Some leadership
Has a public monitoring and reporting program for the climate plan	Some leadership
Climate adaptation	
Has a climate adaptation strategy	Some leadership
Reconciliation	
Has legislated UNDRIP	Little or no policy in place
Equity	
Has a plan to assess and mitigate climate equity impacts	Some leadership
Clean economy transition	
Has a comprehensive plan and policy to support the transition to a clean economy	Some leadership

Carbon price	
Supports carbon pricing in principal and has an end-use carbon price that meets federal benchmark	Some leadership
Has a carbon price on industrial emitters that meets federal benchmark	Strong leadership
Buildings	
Has adopted standards for all new buildings to be zero-carbon ready by 2030	Little or no policy in place
Has a plan to retrofit existing buildings to be zero-carbon ready, with supporting measures	Some leadership
Transportation	
Has a sales regulation for zero-emission light-duty vehicles, and supporting incentives	Some leadership
Has a sales regulation for zero-emission medium/heavy-duty vehicles, and supporting measures	Little or no policy in place
Has comprehensive public transit and active transportation policy	Some leadership
Electricity	
Has decarbonized or has a plan for net-zero electricity generation by 2035	Strong leadership
Has a plan to phase out coal by 2030	Not applicable
Oil and gas	
Has legislated methane emissions reduction targets	Not applicable
Has legislated oil and gas emissions reduction targets	Not applicable

LEGEND

Strong leadership
Some leadership
Little or no policy in place
Not applicable

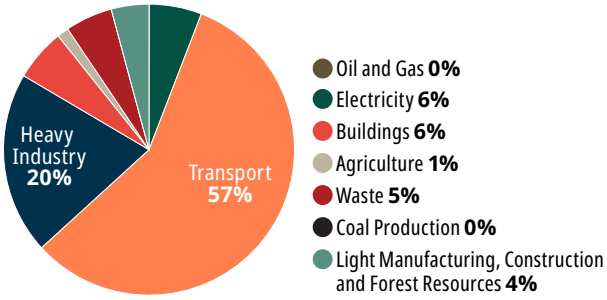
Yukon

The Yukon's emissions account for a very small fraction of Canada's total emissions (0.1%), although they have increased by 18% between 2005 and 2022, primarily attributed to rising emissions in the transportation and heavy industry sectors. The Yukon's largest sources of emissions are road transportation (57%), heavy industry (20%), electricity (6%), and buildings (6%).

Yukon's electrical network is comprised of the Yukon Integrated System, which interconnects the majority of Yukon's population but is not connected to the rest of North America, and four micro-grids that serve five communities not connected to the Yukon grid. 89% of the Yukon's electricity generation on the main grid comes from renewable resources, with the remaining 11% from diesel and natural gas that supply backup and capacity during times of peak energy demand.[53] The four micro-grids are supplied primarily by diesel generation, with the exception of Old Crow, where the Sree Vyàa solar project displaces 190,000 litres of diesel annually.[54]

The Yukon's climate plan, Our Clean Future, was released in 2020 and outlines actions up until 2030.[55] The strategy commits to adapting to climate change and reducing greenhouse gas emissions, among other goals. Progress on actions are reported annually including on a dedicated website. In late 2023, 42 new actions were introduced in response to Yukon's Climate Risk and Resilience Assessment, performance measurement, and expert advice, bringing the total number of actions to 178.

Territorial GHG emissions by sector in 2022



The Clean Energy Act was introduced in 2022 and increases the ambitions set out in Our Clean Future, legislating an emissions reduction target of 45% below 2010 levels by 2030 (not including mining sector emissions) and economy-wide net-zero by 2050. The act also specifies targets for heating and transportation, with a target of 50% renewable heating supply to buildings by 2030 and light-duty vehicle sale targets of at least 10% from 2025 to 2029 and at least 60% in 2030 and each subsequent year. The act enforces accountability measures through requiring the Minister of Energy, Mines and Resources and Minister of Environment to report on GHG emissions and government actions towards progress to meeting Clean Energy Act targets.[56]

The Yukon has two primary policies to enable non-utility entities to produce and sell renewable energy: the Independent Power Producer (IPP) Policy and the Micro-generation Policy. The IPP Policy sets a target for at least 50% of the Yukon's IPP projects to be First Nation owned.

Climate progress

The Yukon is the only territory to have legislated its emissions reduction targets and reporting requirements. The Yukon's Independent Power Producer Policy is a leading example for increasing opportunities for Indigenous and community-led renewable energy projects. Both the Clean Energy Act and IPP Policy demonstrate the government's leadership in designing policies to drive the clean energy transition and support Indigenous Peoples' ambitions to develop and own energy projects for their communities

The Yukon is a leader for electric vehicles, third to British Columbia and Quebec for per capita EV ownership.[57] To enable this, the government has prioritized installing charging infrastructure in all road-connected communities, ensuring access to rebates, and implementing regulatory reform measures to enable the private sector to offer electric vehicle charging services.

Priorities for action

While both the IPP and Micro-generation policies have been successful in increasing renewable energy generation in the Yukon, there is an opportunity for updated mechanisms for renewable energy implementation. As of 2024, the IPP Policy is fully subscribed for Yukon's Integrated System and the Micro-generation Policy is on pause in the greater Whitehorse area, pending grid stability studies. As the government makes progress on plans for net-zero, pathways to re-introduce these programs to meet growing electrification needs should be evaluated. The need for grid studies also emphasizes the importance of government and utility collaboration in implementing clean energy action.

The Yukon's contribution to Canada's total emissions is very small. However, the impacts of climate change disproportionately affect the North. As such, the Yukon's response to climate change should be one of continued and enhanced collaboration with the federal government and industry to prioritize risk assessment, climate adaptation, and energy security, as well as access to clean energy and energy-efficient, affordable, and appropriate housing.

Northwest Territories

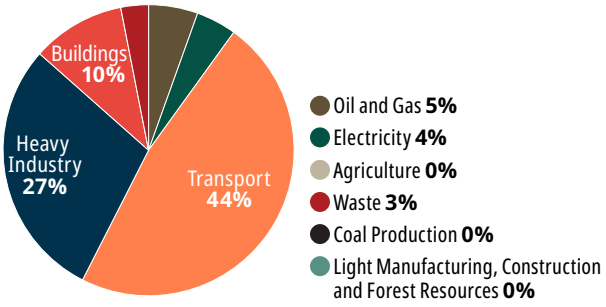
The Northwest Territories' (NWT) emissions account for a very small portion of Canada's GHG inventory (0.2%) and have decreased by 22% since 2005.

Based on 2022 data, transportation accounts for 44% of the territory's emissions, followed by heavy industry (27%) and buildings (10%). In 2022, electricity accounted for 4% of the territory's emissions.[58]

The Northwest Territories' power system is comprised of two hydroelectric grids, which supply about 71% of the territory's community electricity, and 25 isolated diesel and natural gas power plants which account for 21% and 8% of community electricity, respectively.[59]

The 2030 NWT Climate Change Strategic Framework sets the Government of the Northwest Territories' overall approach to address climate change, including both emissions reductions and adaptation. This Framework is complemented by the 2030 Energy Strategy, which was released in 2018, includes six strategic objectives, and is the main mechanism to meet a GHG emissions reduction goal of 30% below 2005 levels by 2030. Details for achieving these objectives are given in Energy Action Plans, with the most recent being in 2022–2025 and committing $194 million over the three-year period.[60] Progress is reported annually in Energy Initiatives Reports, with the latest being in 2022–2023.

Territorial GHG emissions by sector in 2022



The Government of the Northwest Territories is in the midst of its five-year review of the 2030 Energy Strategy. As part of this, in March 2024 it released the Our Energy and Climate Future in a Changing World report which summarizes feedback received in public engagement through the form of submissions, in-person meetings, and a three-day, in-person multilateral dialogue. The five primary ideas that are highlighted for consideration for the renewal of the territory's 2030 Energy Strategy are to increase ambitions for emissions reduction; articulate clear roles and responsibilities for all parties involved in the energy transition, including Indigenous governments and Indigenous organizations; focus planning on economic and affordability impacts; work together with utilities; and implement known, proven clean energy technologies.[61]

Climate progress

In October 2023 the Northwest Territories ascended the United Nations Declaration on the Rights of Indigenous Peoples Implementation Act which affirms UNDRIP, requires that all forthcoming proposed legislation be aligned with UNDRIP, and legislates the creation of an action plan for its adoption in existing laws. Not including the federal government, the Northwest Territories is only the second jurisdiction in Canada to implement UNDRIP after British Columbia. UNDRIP's articles around self-determination; decision-making; free, prior, and informed consent; economic development; and development on Indigenous lands and of Indigenous resources; among others, have clear implications with climate action and the clean energy transition.

Priorities for action

As the Government of the Northwest Territories updates the 2030 Energy Strategy, this must be done in the spirit of partnership, emphasizing the need for meaningful collaboration with Indigenous governments and Indigenous organizations to be more involved in decision-making processes for energy and climate change.

The Northwest Territories has signed four power purchase agreements with Indigenous governments and organizations.[62] The Northwest Territories can further support this momentum by implementing an Independent Power Producer policy, which has proven to be an impactful mechanism for increasing opportunities for Indigenous owned clean energy projects.

The Northwest Territories' contribution to Canada's total emissions is very small. However, the impacts of climate change disproportionately affect the North. As such, the Northwest Territories' continued response to climate change should be one of continued and enhanced collaboration with the federal government and industry to prioritize risk assessment, climate adaptation, and energy security, as well as access to clean energy and energy-efficient, affordable, and appropriate housing.

Nunavut

Nunavut's emissions account for a very small portion of Canada's emissions (0.1%) and have increased by 5% since 2005.

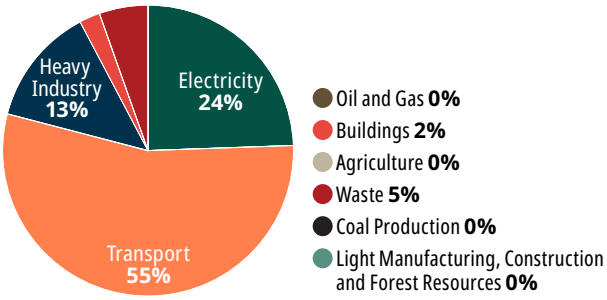
Nunavut's emissions come from transportation (55%) and from generating electricity (24%) and heating. All fossil fuels are shipped during the summer — with implications on energy security and environmental integrity given the risks of price increases, supply disruption and fuel spills.

The Nunavut electrical system consists of isolated diesel generators with no interconnections with neighbouring communities, provinces, or territories. The territorial electric utility, Qulliq Energy Corporation, is responsible for providing energy to 15,000 electrical customers, using 25 diesel power plants.[63]

Nunavut's Energy Strategy, Ikummatiit, was released in 2007 and forecasts up until 2020.[64] Among other priorities, the strategy identified the need to replace inefficient diesel generators, develop renewable energy projects, and encourage energy conservation and efficiency. However, the strategy did not introduce timelines for meeting goals.

QEC operates three programs intended to enable residents and entities outside of the territorial utility to implement renewable energy: the net metering program, the Commercial Institutional Power Production program, and the Independent Power Producer (IPP) program.

Territorial GHG emissions by sector in 2022



The Kivalliq Hydro Fibre Link, a major project being developed by the Nukik Corporation, is currently in the planning stages. This transmission project aims to connect five communities to the Manitoba electricity grid, displacing 26 million litres of diesel and 71,000 tonnes of GHG emissions. It also includes broadband internet connectivity, which is critical for economic development in the region. The Kivalliq Hydro Fibre Link is a 100% Inuit-led project and is expected to begin construction in 2028.[65]

Climate progress

Nunavut signed its first energy purchase agreement in September 2023 for the Sanikiluaq Wind Energy Project. This demonstrates the opportunities and progress resulting from the 2022 implementation of the Independent Power Producer policy, which is intended to facilitate the integration of renewable energy systems to decrease Nunavut's dependency on diesel fuel, reduce GHG emissions, and promote energy self-reliance. The policy specifies that IPP projects must be at least 51% owned by municipalities, Inuit organizations, and/or Inuit-owned companies/entities — a key requirement to ensure this policy supports Indigenous leadership in clean energy development.

Priorities for action

Meeting Nunavut's pressing health, housing, and education needs while also increasing climate resilience and creating economic opportunities for Nunavummiut will require strengthened and continued collaboration across levels of government. Updating Nunavut's energy strategy presents an opportunity to holistically review opportunities as a result of the energy transition in the frame of existing needs and adaptation requirements.

Nunavut's contribution to Canada's total emissions is very small. However, the impacts of climate change disproportionately affect the North. As such, Nunavut's continued response to climate change should be one of continued and enhanced collaboration with the federal government and industry to prioritize risk assessment, climate adaptation, and energy security as well as access to clean energy and energy-efficient, affordable, and appropriate housing.

Canada (federal)

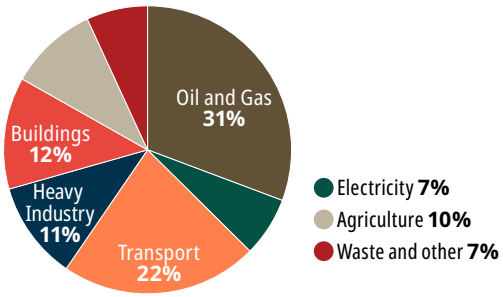
The federal government receives a total of 22 green and yellow ratings across 23 of our applicable climate policy indicators, with just one red rating. This reflects its leadership in climate policy-making and commitment to preparing Canada's economy for the energy transition underway globally.

The Government of Canada has made an international commitment to reduce emissions by 40–45% below 2005 levels by 2030 and reach net-zero by 2050. To help achieve this, the federal government published its 2030 Emissions Reduction Plan (2030 ERP) in 2022. The first climate plan published under the Canadian Net-Zero Emissions Accountability Act, it contains more than 80 measures designed to help Canada reach its emissions reduction targets.[66]

In December 2023, the federal government released the first progress report on the 2030 ERP.[67] Measures mentioned in the report and 2030 ERP include the commitment to increasing Canada's carbon price to $170/tonne by 2030; implementing a cap on emissions from the oil and gas sector; strengthening regulations on heavy-duty vehicles; and phasing out coal-fired power generation by 2030. The plan also commits to developing Canada's first-ever green building strategy and Canada's first-ever clean electricity strategy. Canada's climate plan is bolstered by billions of dollars in investments.[68] However, Canada also approved a new major oil and gas development in April 2022 and provided over $34 billion to complete the building of the Trans Mountain oil pipeline expansion, neither of which could be deemed investments in the clean economy.

In December 2023, the federal government announced new regulations mandating the sale of light-duty ZEVs (20% of new light-duty vehicle sakes by 2026, increasing incrementally to 100% by 2035).[69] This is supported by purchase incentives and charging infrastructure support. Canada also has incentives for the purchase of medium- and heavy-duty ZEVs, is in the process of developing ZEV medium- and heavy-duty sales requirements, and is working on regulations

Canada's emissions by economic sector



aimed at delivering a net-zero electricity grid by 2035 to underpin the electrification of the transportation and other sectors.

In October 2021, the federal government joined the Global Methane Pledge.[70,71] The Pembina Institute's analysis of the latest oil and gas emissions data, released in May 2024, finds that Canada appears to be on track to meet its current target for methane emissions (of a 45% reduction from 2012 levels by 2025).[72] In December 2023, the federal government released draft methane regulations that will strengthen this target to a 75% reduction from 2012 levels by 2030.[73]

The federal government has committed to analyze the gendered impacts of climate policies and measures on different groups using the Gender-based Analysis Plus (GBA+) process designed by Status of Women Canada, and to adjust policies in cases where inequality is increased.[74] The federal government has acknowledged the disproportionate impacts of climate change on Indigenous Peoples, and has committed to respect, promote, and consider the rights of Indigenous Peoples when developing climate policies,[75] for example through measures like Wah-ila-toos: Canada's clean energy initiatives in Indigenous, rural and remote communities.[76] Finally, in February 2023, Canada released its Sustainable Jobs Plan,[77] and is in the final stages of passing Bill C-50, the Canadian Sustainable Jobs Act, both aimed at helping mitigate impacts on workers in the transition to a clean economy.[78]

Climate progress

As Canada returned to more usual levels of economic activity after the pandemic, emissions in 2022 were lower than they had been in 2019. It appears the suite of measures introduced by the Government of Canada over the last several years is starting to make a notable dent in the country's overall emissions. Among these measures are industrial carbon pricing, methane reduction regulations, clean fuel regulations, net-zero energy ready national buildings codes, and a host of other policies that will drive further reductions such as light-duty ZEV sales requirements, proposed clean electricity standards and the upcoming oil and gas emissions cap. Other critical milestones include the development of a national climate adaptation strategy and action plan, and a sustainable jobs plan. A driving force behind this has been the Canadian Net Zero Emissions Accountability Act and 2030 Emissions Reduction Plan, which provide pathways for emissions reductions for all major sectors, and improve transparency through monitoring progress, identifying gaps, and modelling projections. Overall, these federal government initiatives are supporting Canadians in the transition to a prosperous, decarbonized Canada.

Priorities for action

Canada's emissions in 2022 were 7% lower than 2005 levels, meaning there is still a significant amount of work to do to ensure they are 40–45% lower than 2005 levels by 2030. The federal government has committed to a number of policies and plans that are under development; it is now essential that these plans be implemented, and that the federal government and all provinces take steps to move forward on them together. Methane and clean electricity regulations, an oil and gas emissions cap, a green buildings strategy, and ZEV sales requirement for medium- and heavy-duty vehicles — all of which have been promised by the government — will be crucial. Additionally, the federal government's 2023 Sustainable Jobs Plan begins to provide a strong foundation for supporting workers in the transition to a clean economy; however, it is critical that the plan provides the governance structure and labour market analysis that supports clear pathways for the creation of sustainable jobs.

Many of Canada's existing policy actions lack clear goals or targets. For example, there are several incentives for building retrofits, but no targets for retrofit rates; while the federal government has committed funding and incentives towards transit systems and active transportation, there are no targets or estimates for the impacts of these policies. The federal government should work towards adding targets and indicators to help determine if implemented policies are having the desired effect, and how they can be improved. Finally, despite having the 2050 net-zero target enshrined in legislation, Canada does not yet have plans in place to meet that target.

Emissions reduction targets	
Has a 2030 target aligned with a 40–45% reduction (below 2005 levels)	●
Has or is in the process of legislating a net-zero by 2050 target	●
Has interim emissions reduction targets	●
Climate action plan	
Has a climate plan	●
Has a plan to meet net-zero by 2050	●
Climate accountability and governance	
Has a legislative requirement to prepare a climate plan, set reduction targets, and monitor and report	●
Has an independent accountability process to advise and evaluate the climate plan	●
Has a public monitoring and reporting program for the climate plan	●
Climate adaptation	
Has a climate adaptation strategy	●
Reconciliation	
Has legislated UNDRIP	●
Equity	
Has a plan to assess and mitigate climate equity impacts	●
Clean economy transition	
Has a comprehensive plan and policy to support the transition to a clean economy	●

Carbon price	
Supports carbon pricing in principal and has an end-use carbon price that meets federal benchmark	●
Has a carbon price on industrial emitters that meets federal benchmark	●
Buildings	
Has adopted standards for all new buildings to be zero-carbon ready by 2030	●
Has a plan to retrofit existing buildings to be zero-carbon ready, with supporting measures	●
Transportation	
Has a sales regulation for zero-emission light-duty vehicles, and supporting incentives	●
Has a sales regulation for zero-emission medium/heavy-duty vehicles, and supporting measures	●
Has comprehensive public transit and active transportation policy	●
Electricity	
Has decarbonized or has a plan for net-zero electricity generation by 2035	●
Has a plan to phase out coal by 2030	●
Oil and gas	
Has legislated methane emissions reduction targets	●
Has legislated oil and gas emissions reduction targets	●

LEGEND

● Strong leadership ● Little or no policy in place

● Some leadership ● Not applicable

Photo: Sharply_done, iStock

Conclusion

The picture for climate policy-making in Canada in 2024 is still mixed, and far more than it should be at this late stage, when the world's awareness of the impacts of climate change and the need to reduce emissions is well developed and broadly accepted.

Our assessment shows a high level of ambition at the federal level, much of which has been followed through with a range of policies and measures designed to reduce emissions across Canada's regions and key sectors (although there are crucial outstanding policies that the Government of Canada must move quickly to finalize and implement). Some of these federal measures are beginning to move the needle on emissions throughout Canada, including in hard-to-abate sectors such as conventional oil and gas (through progress on methane) and electricity production (with the coal phase-out). Some provincial governments, notably those in British Columbia and Quebec, are also taking up this call to action and moving forward with comprehensive climate plans. But Canada as a whole will not be able to meet its international obligations without all provinces contributing adequately to the challenge ahead.

Nearly half of all Canada's emissions come from and are the responsibility of just two provinces: Alberta and Saskatchewan. Alberta received a green rating on just three of our 23 climate policy indicators, while Saskatchewan received just one green rating. These provinces are not only lagging in development of appropriate policies to reduce emissions in their own jurisdictions, they are also actively opposing some proposed federal policies, especially those that impact the oil and gas sector — still Canada's biggest single source of emissions. But in 2024, maintaining competitive industries means futureproofing them for the energy transition that has already begun. The world is moving to low-carbon forms of energy, and Canada's oil and gas sector needs to be ready to compete in that world. Pembina Institute research shows that the sector has the technologies available to begin to significantly decarbonize our oil and gas supply, but the concerning growth of emissions from the sector underscores that, for companies to move forward with these investments, oil and gas emissions need to be better managed. It is up to the governments of Alberta and Saskatchewan, on behalf of their citizens, to ask more of the oil and gas sectors today, so that they can keep providing good opportunities and revenues into the decarbonized future.

Otherwise, our assessment finds most of the other provincial jurisdictions are in the middle of the pack, with a mixture of green, yellow and red ratings. This means there is still much room for improvement and there are many policy approaches lagging jurisdictions could adopt from other jurisdictions. As we look ahead to the remaining five years of this decade, we hope this assessment will refocus climate policy decision-makers across Canada on the task in hand. Confronting the reality of the global transition to low-carbon economies is not always easy, but the pace and scale of technological development does mean that making meaningful emissions reductions is becoming ever more achievable. This can only be done, however, if all governments are willing to put the right policies, incentives and regulations in place — and act, all together now, to meet Canada's climate promises.

Appendix A. Methodology

Evaluation framework

The evaluation framework used in this report is derived from a number of previous studies based on the following steps.[79]

The first step was a literature review to identify criteria and indicators used to assess climate policy. The criteria and indicators consisted of best-practices planning process criteria (e.g. setting quantifiable objectives and targets with timelines, developing a plan to meet the objectives, monitoring results and making revisions, and engaging with the public); best practices tools for effective climate policy (e.g. carbon pricing, decarbonizing the electricity sector, decarbonizing the transportation sector); and outcome criteria (e.g. GHG emissions).

The second step involved compiling the indicators in a matrix format and refining the list to eliminate overlap and redundancy. With input from subject matter experts, a transparent rating system was developed to measure the degree to which each of the criteria were met. For some criteria, the rating system is a binary yes/no or increasing or decreasing rating, and for other criteria a three-tier rating system is used with a green indicating fully meeting or exceeding the criterion, yellow indicating somewhat meeting the criterion and red meaning not meeting the criterion. For some indicators, major findings of the International Energy Agency's Net Zero RoadMap and Canada Energy Regulator's Canada's Energy Future reports outlining policy initiatives required to achieve a path to net-zero emissions were used to determine evaluation criteria. The indicators and the rating system were pilot tested on several provinces and the results from this test were reviewed and revised by a research team. The details of the rating system for each criterion are outlined below.

The third step was to collect information on climate policies for each jurisdiction. This was initially completed by internet reviews of government sites searching for climate legislation, policies and reports. The relevant information was compiled in a table organized under each of the evaluation criteria categories. The compiled information was sent to all provincial governments and the federal government, who were asked to review the accuracy and completeness of the policies and data.

The fourth step was to complete the ratings for each jurisdiction's climate policy using the rating criteria and the climate policy information. Initial ratings were made by individual researchers and then reviewed by the research team to reach consensus agreement on the ratings. The indicators, ratings, and narrative text for each government were sent to each respective government for a final review of accuracy and completeness.

Finally, the major findings were summarized, and recommendations were developed.

Several qualifications should be noted in reviewing the results of this evaluation. First, climate policy is always changing, and the results are only current to June 1, 2024. Second, judgement is required in defining the rating criteria and ratings for each jurisdiction. Although subjectivity has been reduced by transparently describing the methodology and rating criteria and having the rating criteria and ratings reviewed by experts, different assessors may reach different conclusions. Third, some areas such as equity, clean economy transition, and climate adaptation planning would benefit from more research on evaluation criteria and best practices policy criteria.

As a final note, this study follows two previous Pembina Institute studies that provide comprehensive evaluations of climate policies in Canada and the provinces.[80] This study uses a similar methodology but the criteria have been revised and updated based on recent research findings, so the results of the three studies are not directly comparable.

Ratings criteria

Emissions reduction targets

2030 target

Does the jurisdiction have a target that aligns with the Canada's international commitment for 40–45% emissions reduction from 2005 levels by 2030?

- Target is greater than or equal to 40–45%
- Target is 30% to less than 40% reduction
- No target, or target is less than 30% reduction

2050 target

Does the jurisdiction have a legislated target for net-zero emissions by 2050?

- Legislated (or in the process of legislating) a net-zero target
- Net-zero target, not legislated
- No net-zero target

Interim targets

Does the jurisdiction have interim targets for emissions reductions to supplement a 2030 target?

- Interim targets from 2022 to 2030 and interim targets or a commitment to set interim targets from 2030 to 2050
- Interim targets from 2022 to 2030
- No interim targets

Climate action plan

Climate plan

Does the jurisdiction have a climate plan?

- Has published or updated a plan within the last five years
- Has a plan but the plan has not been published or updated within the last five years
- No plan

Plan to meet net-zero by 2050

Does the jurisdiction have a plan to meet net-zero by 2050?

- Yes
- No

Climate accountability and governance

Legislative certainty

Does the jurisdiction have legislation to enshrine major components of its climate plan:

- Requirement to prepare a plan
- Requirement to set GHG reduction targets
- Reporting and monitoring requirements

- All three major components of climate plan are enshrined in legislation
- One or two major components of the climate plan are enshrined in legislation
- None of the major components of the climate plan are enshrined in legislation

Independent accountability

Does the jurisdiction have an entity in place to provide accountability?

- Has an independent legislated body that is indirectly or directly appointed by and reports to the legislature and is mandated to provide advice and evaluate the climate plan
- Has a multi-stakeholder or expert advisory body to provide advice or to evaluate the climate plan on a regular basis
- No independent multi-stakeholder advisory body

Monitoring and reporting

Does the jurisdiction's public monitoring program contain these features:

- Reports on a regular specified schedule
- Assesses progress in implementing plan components
- Assesses progress in meeting targets
- Identifies measures to address gaps
- Is independently reviewed

- Has all five features
- Has two to four of the features
- No public monitoring program, or the public monitoring program has none or only one of the features

Climate adaptation

Adaptation plan

Does the jurisdiction have a climate adaptation plan?

- Has a comprehensive climate adaptation plan that identifies major geographic, demographic and sectoral vulnerabilities and outlines measures to address major vulnerabilities
- Has a general framework and commitment to develop a comprehensive climate adaptation plan
- No framework for a climate adaptation plan, or no commitment to develop a comprehensive climate adaptation plan

Reconciliation

Legislated United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)

Has the jurisdiction legislated UNDRIP?

- Jurisdiction has legislated UNDRIP
- Jurisdiction has committed to legislating UNDRIP
- No commitment to legislate UNDRIP

Equity

Plan to address equity impacts

Does the jurisdiction have a plan that:

- Assesses the distribution of climate impacts and policies by key stakeholder and equity-deserving groups[81]
- Addresses and mitigates inequities in the distribution of impacts

- Assesses impacts and addresses inequities
- Partially assesses impacts and/or partially mitigates inequities
- Does not assess impacts and does not mitigate inequities

Clean economy transition

Plan for a clean economy transition

Has the jurisdiction:

- Assessed the economic impact of climate impacts and policies to estimate changes in employment, by employment type
- Developed training policies to meet the demand for new employment opportunities created by climate impacts and policies and to mitigate adverse impacts on workers

- Both measures are implemented
- One of the measures is implemented or is in the process of being implemented
- Neither measure is implemented or is in the process of being implemented

Carbon price

Provincial end-use carbon price (fuel charge)

Does the jurisdiction have a carbon price that achieves the federal benchmark requirements?

- Price achieves federal benchmark requirements
- Price excludes some emissions covered by the federal benchmark; or consumers do not pay the full federal benchmark because the jurisdiction either reduced its gas tax or diesel tax or provides rebates of the tax
- The jurisdiction advocates for the elimination and/or weakening of the fuel charge and rebate system for consumers

Price on industrial emitters

Does the jurisdiction have a carbon price on industrial emitters that meets the federal benchmark requirements?

- Price achieves federal benchmark requirements
- Price does not achieve federal benchmark requirements
- The jurisdiction advocates for the removal of the industrial pricing system

Buildings

New buildings

Has the jurisdiction adopted the target of zero-carbon-ready requirements into building code by 2030 for all new buildings?

- Has committed to zero-carbon-ready buildings by 2030
- Has committed to zero-carbon-ready buildings but has no specified implementation date
- Has not committed to zero-carbon-ready buildings

Existing buildings

Does the jurisdiction have:

- Targets and a plan to retrofit existing buildings to zero-carbon ready by at least 20% by 2030; 35% by 2035 and 50% by 2040
- Incentives for the installation of heat pumps to replace fossil fuel heating
- A ban on or commitment to ban installation of standalone new fossil fuel heating systems by 2030

- Has at least two of these measures
- Has one of these measures
- Has none of these measures

Transportation

Light-duty vehicles

Does the jurisdiction have:

- A legislated zero-emission vehicle sales regulation equal to or greater than 60% new zero-emission vehicle sales by 2030 and 100% by 2035
- Incentives for the purchase of a zero-emission vehicle and infrastructure

- Has a legislated ZEV sales regulation equal to or greater than targets with penalties for non-compliance and has ZEV purchase and infrastructure incentives
- Has either a legislated ZEV sales regulation or ZEV purchase and infrastructure incentives
- Has no legislated ZEV sales regulation and no ZEV purchase and infrastructure incentives

Medium- and heavy-duty vehicles

Does the jurisdiction have:

- A legislated zero-emission vehicle sales regulation equal to or greater than 35% new zero-emission vehicle sales by 2030 and 100% by 2040
- Incentives for the purchase of a zero-emission vehicle and infrastructure

- Has a legislated ZEV sales regulation equal to or greater than targets with penalties for non-compliance and has ZEV purchase and infrastructure incentives
- Has or is in the process of developing a legislated ZEV sales regulation and/or ZEV purchase and infrastructure incentives
- Has no legislated ZEV sales regulation and no ZEV purchase and infrastructure incentives

Public transit and active transportation

Does the jurisdiction have:

- Public transit and active transportation policies included in its climate plan
- Targets for significantly increasing public transit and active transportation trips
- Initiatives to increase public transit and active transportation to meet the targets
- An estimate of the impact of the initiatives on public transit and active transportation trips
- A plan to make public transit carbon neutral no later than 2040

- Has four or more measures in place or in development
- Has two to three measures
- Has one or no measures

Electricity

Electricity generation

Does the jurisdiction have a plan to decarbonize its electricity sector by 2035?

- Electricity generation is decarbonized, or there is a plan to decarbonize the electricity sector by 2035
- Electricity generation is not decarbonized, but there is a commitment and a plan under development to decarbonize the electricity sector by 2035
- Electricity generation is not decarbonized and there is no plan to decarbonize by 2035

Coal phase-out

Does the jurisdiction have a plan to phase out unabated coal-fired electricity generation by 2030?

- Has phased out or is committed to phasing out coal by 2030 and has a comprehensive plan for the phase-out
- Has committed to 2030 coal phase-out but does not have a comprehensive plan for the phase out
- No commitment to or plans for 2030 coal phase-out

Oil and gas

Methane

Does the jurisdiction have a plan to reduce methane emissions from 2012 levels by 40% by 2025 and 75% by 2030?

- Has legislated requirements to meet the 40% by 2025 reduction target and has legislated requirements or is in the process of developing legislative requirements to meet the 2030 target
- Has methane reduction targets but has not legislated them and is not in the process of developing legislative requirements to meet the 2030 target
- Has not adopted methane reduction targets

Emissions cap

Does the jurisdiction have a plan to reduce emissions from the oil and gas sector from 2005 levels by 31% by 2030, 60% by 2040 and net-zero by 2050?

- Has adopted or is in the process of adopting legislated reduction targets
- Has adopted or is in the process of adopting reduction targets, but the targets will not reduce emissions at the specified rate and/or is supportive of the federal government's initiative to adopt reduction targets for the oil and gas sector
- Has not adopted and is not in the process of adopting reduction targets for the oil and gas sector

Appendix B. GHG emissions per capita and per unit of GDP

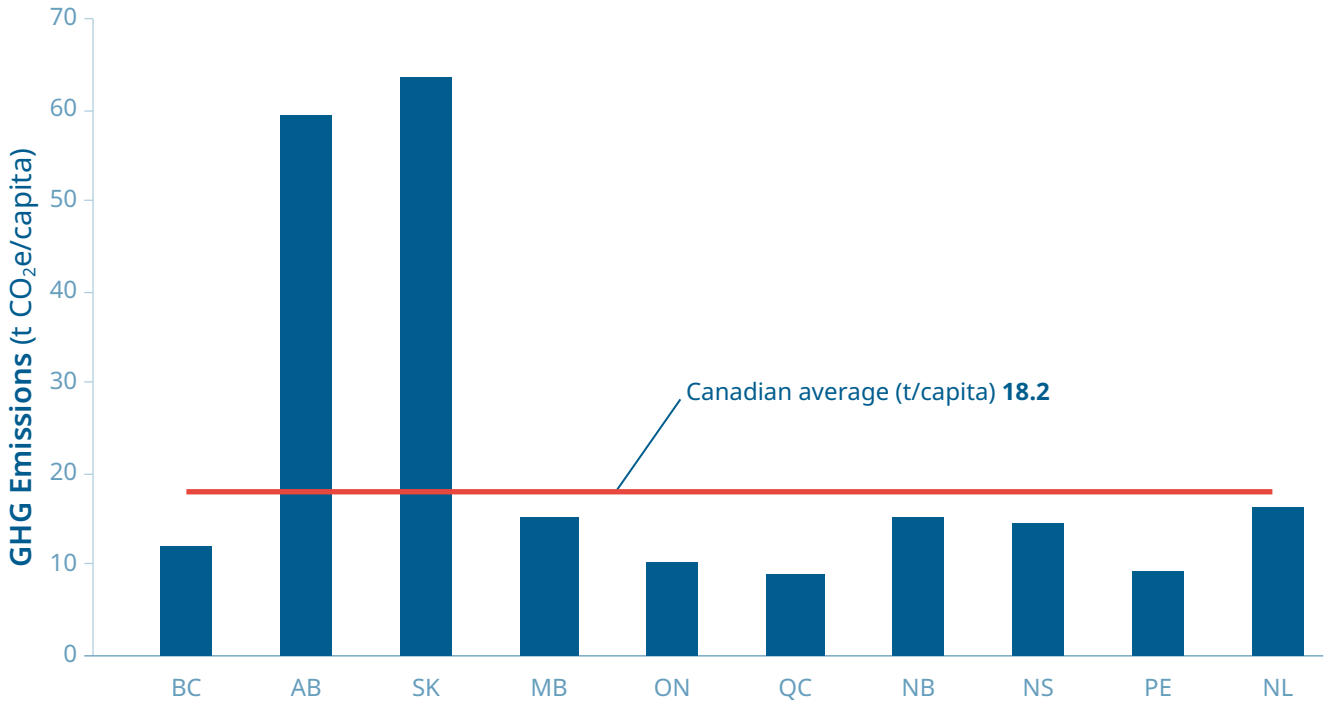


Figure 9. GHG emissions per capita by province in 2022

Data sources: 2024 National Inventory Report, Statistics Canada[82]

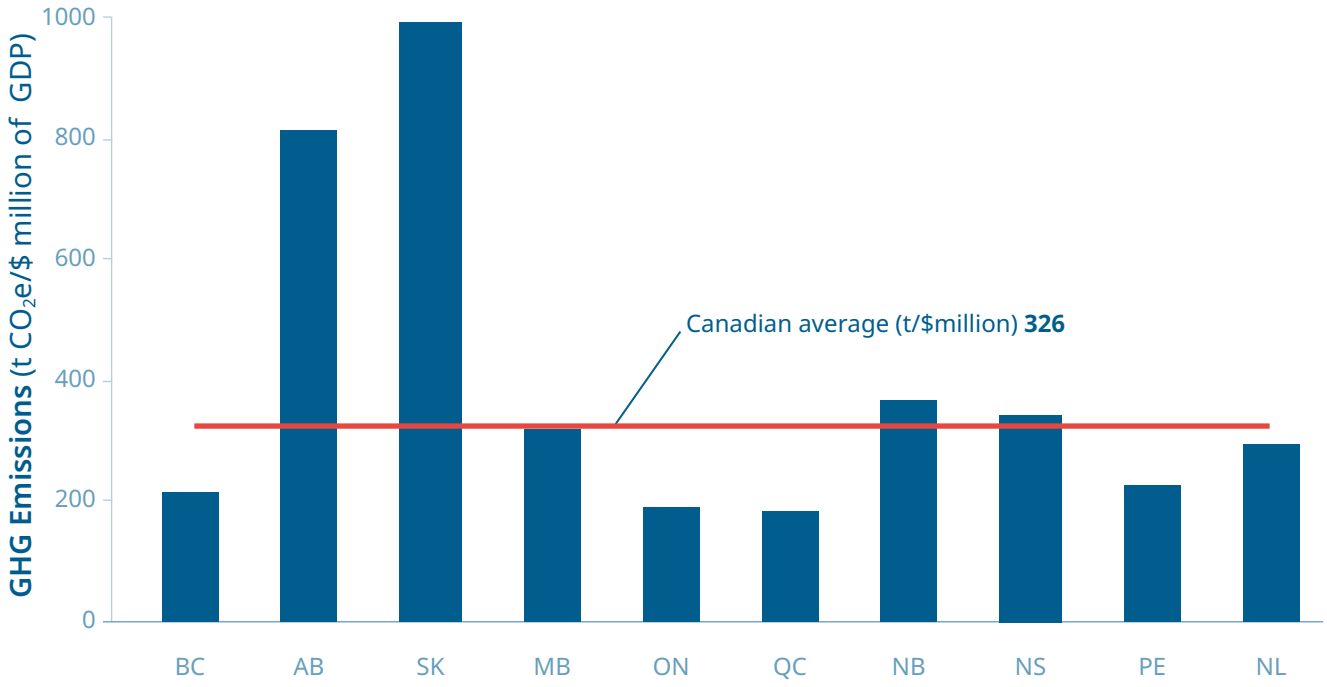


Figure 10. GHG emissions per unit of GDP by province in 2022

Data sources: 2024 National Inventory Report, Statistics Canada[83]

Appendix C. Emissions targets

To evaluate 2030 emissions reduction targets, all targets were translated to a 2005 baseline year.

Jurisdiction	Baseline year of target	Target	Target translated to 2005 baseline
British Columbia	2007	40%	40%
Alberta		No target	No target
Saskatchewan		No target	No target
Manitoba[84]	2023 – 2027	5.6 Mt	5.2%
Ontario	2005	30%	30%
Quebec	1990	37.5%	38%
New Brunswick	2005	46%	46%
Nova Scotia	2005	53%	53%
Prince Edward Island	2005	40%	40%
Newfoundland and Labrador	2005	30%	30%
Canada	2005	40–45%	40–45%

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