Report 5

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Carbon Pricing—Environment and Climate Change Canada

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Introduction

Background

Carbon pricing

5.1 The United Nations' Conference of the Parties held in Paris in 2015 brought together Canada and 194 other countries in signing the Paris Agreement, a historic international effort to reduce greenhouse gas emissions. Signatories committed to strengthening the effort to limit the global average temperature rise to well below 2°C, preferably to 1.5°C.

5.2 In December 2016, the Government of Canada adopted the Pan-Canadian Framework on Clean Growth and Climate Change to deliver on Canada's international commitments under the Paris Agreement. This framework included Canada's target to reduce Canada's greenhouse gas emissions by 30% from 2005 levels by 2030. The federal government updated its target in July 2021, aiming to reduce emissions by 40% to 45% below 2005 levels by 2030.

5.3 There is a broad consensus among expert international bodies, such as the World Bank, the Organisation for Economic Co-operation and Development, and the International Monetary Fund, that carbon pricing is critical to reducing greenhouse gas emissions. Carbon pricing puts a price on emissions, which can motivate individuals and businesses to make more environmentally sustainable purchasing and consumption choices, to redirect their financial investments, and to reduce their emissions by substituting carbon-intensive goods with cleaner alternatives.

5.4 Carbon pricing also follows the "polluter pays" principle by placing the responsibility on those who generate carbon emissions or purchase polluting products such as oil and gas. However, additional costs that apply to facilities that generate carbon emissions are often passed along to consumers.

5.5 The *Greenhouse Gas Pollution Pricing Act*, which came into force in June 2018, requires all provinces and territories to implement carbon pricing systems that meet federal benchmarking criteria or be subject to the federal pricing system. Following court challenges by some provinces, the Supreme Court

of Canada upheld the constitutionality of the act in March 2021. The court found that establishing minimum national standards for carbon pricing, with the aim of reducing emissions, was of concern to Canada as a whole. The Supreme Court's decision stated, "This matter is critical to our response to an existential threat to human life in Canada and around the world."

5.6 Carbon pricing is one of several measures Canada uses to reduce emissions, along with

- regulations, for example to phase out coal-fired electricity
- incentives, such as rebates on electric vehicle purchases
- innovation programs, such as funding for clean technology demonstration projects

5.7 Canada's A Healthy Environment and a Healthy Economy plan, launched in 2020, builds on the Pan-Canadian Framework by proposing new and strengthened federal policies, programs, and investments to cut emissions. In 2022, the Emissions Reduction Plan outlined the federal government's plan for achieving its most recent 2030 target.

Roles and responsibilities

5.8 Environment and Climate Change Canada is the lead department on the issue of climate change and leads the implementation of the Pan-Canadian Framework. The department is responsible for putting in place measures to reduce emissions, including carbon pricing, reporting on current greenhouse gas emissions, estimating future emissions, and leading the coordination of action on climate change with provincial and territorial officials.

5.9 The department also leads the implementation of the pan-Canadian approach to pricing carbon pollution, including key elements of federal carbon pricing. The department is responsible for developing and implementing the federal carbon pricing benchmark, and works with provinces and territories in developing their carbon pricing systems. The department worked with the Department of Finance Canada and the Canada Revenue Agency to establish a federal backstop, which applies in provinces or territories that do not have a carbon pricing system that aligns with the federal standard. Finally, the department administers the federal Output-Based Pricing System for industrial emitters.

Focus of the audit

5.10 This audit focused on whether Environment and Climate Change Canada ensured that carbon pricing systems in Canada were applied effectively, fairly, and transparently.

5.11 This audit is important because carbon pricing is broadly recognized as one of the most efficient policy approaches to reducing greenhouse gas emissions. Emission reductions therefore depend strongly on ensuring that the pan-Canadian approach to carbon pricing is implemented effectively—which in turn requires that it be applied broadly and promptly—and becomes increasingly stringent. Transparent implementation helps to demonstrate what measures are the most effective over time, guiding future adjustments. Finally, fairness helps provinces, territories, and Canadians across the country appreciate that they are not being disproportionately burdened by carbon pricing.

5.12 We did not examine the effectiveness of the federal approach to carbon pricing in terms of the amount of emissions reduced, as it was still too early for results to be measurable.

5.13 More details about the audit objective, scope, approach, and criteria are in **About the Audit** at the end of this report.

Findings, Recommendations, and Responses

Overall message

5.14 Overall, we found that Environment and Climate Change Canada had ensured that carbon pricing systems were in place in all provinces and territories. However, weaknesses in these systems could limit Canada's ability to meet its emission reduction targets. For example, due to weak minimum national standards for large emitters, the department recommended less effective carbon pricing programs developed by some provinces. These programs were approved by the Minister of Environment and Climate Change Canada.

5.15 The government made efforts to lessen the burden of carbon pricing on some groups of people and industry, but Indigenous groups and smaller enterprises remained disproportionately affected. Moreover, the department had not established a requirement for provinces and territories to assess

and identify measures that would mitigate the burden of their carbon pricing systems on these groups.

5.16 Though the department did report publicly on carbon pricing, we found several weaknesses in the information needed to demonstrate the effectiveness of the existing systems and to guide policy changes. Notably, there was a lack of transparency on how the provincial and territorial systems compared to the federal benchmark. Additionally, there was not enough publicly available information on the various large-emitter programs to provide an understanding of the effectiveness of the systems.

5.17 In 2021, the department updated the federal requirements for carbon pricing systems, addressing several shortcomings. These updates will be applied from 2023 to 2030.For example, this update will raise the price of carbon and prevent jurisdictions from providing rebates that have countered the effect of the carbon price. However, the update did not fully address the shortcomings of the large-emitter programs. For example, there will still be no requirement for industrial performance standards to be tightened over time, which may impact the effectiveness of the carbon pricing system. Likewise, though provinces and territories will have to report on how they use the revenues from carbon pricing, there will still be uncertainty about how the revenues will be used to alleviate the disproportionate burden felt by some groups across Canada.

Federal benchmark criteria

Environment and Climate Change Canada implemented carbon pricing

What we found

5.18 We found that Environment and Climate Change Canada ensured that all jurisdictions had carbon pricing in place by 2019. Although there were shortcomings in the initial criteria, the department strengthened them in August 2021.

5.19 The analysis supporting this finding discusses the following topics:

- Carbon pricing in place in every province and territory
- Inconsistent emission coverage
- Strengthened benchmark criteria

Why this finding matters

5.20 This finding matters because weak or non-existent carbon pricing systems in some provinces or territories could contribute to significant harmful effects on the environment, on human health and safety, and on economic prosperity. Establishing minimum national standards for pricing carbon pollution is of concern for Canada as a whole.

Context

5.21 Addressing the climate change crisis requires leadership and coordination among many government actors—not only federal organizations, but also the provincial, territorial, and municipal governments. Some responsibilities relevant to climate change fall under provincial and territorial jurisdiction, and climate actions are often subject to divergent regional interests.

5.22 The Pan-Canadian Framework, signed by the federal government and most provinces and territories, includes a commitment to pricing carbon emissions in all jurisdictions, starting at $10 per tonne in 2018. Some provinces already had carbon pricing systems when the federal government announced a federal carbon price. Environment and Climate Change Canada established national minimum standards—the "carbon pricing benchmark"—that provincial and territorial carbon pricing systems had to meet. The guidance for assessing systems from other jurisdictions against the benchmark included criteria for

- types of systems
- levels of emission coverage
- increasing stringency

Stringency is a measurement of a policy's ability to drive emission reductions.

5.23 To establish carbon pricing effectively, fairly, and transparently, the framework stated that carbon pricing would follow principles proposed by the federal, provincial and territorial

Working Group on Carbon Pricing Mechanisms—notably, that pricing should

- be flexible and recognize pricing policies already implemented or in development by provinces and territories
- be applied to a broad set of emission sources
- be introduced in a timely manner
- increase predictably and gradually
- be reported on consistently, regularly, transparently, and verifiably
- minimize competitiveness impacts and carbon leakage, particularly for emission-intensive, trade-exposed sectors
- include revenue recycling to avoid a disproportionate burden on vulnerable groups and Indigenous peoples

5.24 As we noted in our Lessons Learned from Canada's Record on Climate Change report, carbon pricing is an example of the federal government instituting climate policy that could be applied at the provincial and territorial level, given the flexibility that the policy allows provinces and territories in managing their own systems, so long as they adhere to the federal benchmark. The March 2021 Supreme Court of Canada decision that upheld the constitutionality of the *Greenhouse Gas Pollution Pricing Act* provided some certainty about federal power and responsibility.

Recommendations

5.25 We made no recommendations in this area of examination.

Analysis to support this finding

Carbon pricing in place in every province and territory

5.26 Environment and Climate Change Canada assesses provincial and territorial pricing systems to determine whether they meet the minimum national stringency standard. On the basis of the assessment, the Minister of Environment and Climate Change provides a recommendation to the **Governor in Council**,[1] who

[1] **Governor in Council**—The Governor General, acting on the advice of Cabinet, as the formal executive body that gives legal effect to those decisions of Cabinet that are to have the force of law.

decides whether to apply the federal backstop pricing system. Environment and Climate Change Canada established minimum standards, known as the benchmark criteria, for the initial 2018–22 period. Provinces and territories were required to submit their systems to the federal government by September 2018. We found that the department has since undertaken 4 annual assessments of all of the provincial and territorial systems, as well as assessments due to major changes to a system, to determine whether a system met the federal benchmark criteria.

5.27 The benchmark criteria allowed each province and territory the flexibility in the type of pricing system it could implement. The system could be

- a carbon levy (a tax or charge per amount of greenhouse gases emitted from burning fossil fuels)
- a combination of a carbon levy and a large-emitter program (which applies the same price per tonne to a small proportion of emissions from some facilities that would otherwise be threatened with competition issues from other jurisdictions)
- a cap-and-trade system (which sets a cap on the amount of greenhouse gas emissions in a defined market and provides emission allowances that can be traded within that market).

By 2017, British Columbia already had a carbon tax, while Alberta had a hybrid system that included a carbon levy and a large-emitter program, and Quebec had a cap-and-trade system. The department determined that these existing systems met the federal benchmark criteria.

5.28 The Pan-Canadian Framework stated that all jurisdictions would have carbon pricing by 2018. We found that all provinces had systems in place by April 2019, and all territories by September 2019 (Exhibit 5.1). Delays in implementing pricing systems were due to design details and corresponding legislation taking longer than expected, as well as the unique circumstances of the territories, such as the consensus style of government in the Northwest Territories.

Inconsistent emission coverage

5.29 For carbon pricing to be effective, it must apply to a large proportion of emissions. The federal benchmark requires that

pricing be based on a common and broad scope of emission sources.

Exhibit 5.1–Provinces and territories implemented a variety of carbon pricing systems or relied on the federal system

Type of system	Jurisdiction	System
Provincial/territorial system applied	British Columbia	Provincial carbon tax
	Northwest Territories	Territorial carbon tax
	Quebec	Cap-and-trade
	New Brunswick	Provincial fuel charge and large-emitter program
	Nova Scotia	Cap-and-trade
	Newfoundland and Labrador	Provincial carbon tax and large-emitter program
Federal backstop applied in part	Alberta	Federal fuel charge and provincial large-emitter program
	Saskatchewan	Federal fuel charge and provincial large-emitter program in some sectors, federal large-emitter program in others
	Ontario	Federal fuel charge and provincial large-emitter program
	Prince Edward Island	Provincial fuel charge and federal large-emitter program
Federal backstop applied in full	Yukon	Large-emitter program and a fuel charge
	Nunavut	
	Manitoba	

Source: Adapted from Environment and Climate Change Canada

5.30 Environment and Climate Change Canada engaged an independent third party to assess carbon pricing systems. The resulting expert review, published in 2021, showed that the provinces' and territories' coverage of emission sources varied (Exhibit 5.2). This could, in part, be attributed to considerable differences in the economic structures and emission sources across the provinces and territories. Some provinces have larger sources of emissions from activities that no jurisdictions had included in carbon pricing, such as non-energy agricultural emissions and some industrial process emissions.

Exhibit 5.2–Emission coverage varied across provincial and territorial carbon pricing systems

Jurisdiction	Portion of emissions covered by pricing
Nova Scotia	87%
British Columbia	84%
Ontario	84%
Yukon	84%
New Brunswick	80%
Newfoundland and Labrador	80%
Quebec	80%
Alberta	79%
Northwest Territories	78%
Nunavut	67%
Saskatchewan	59%
Manitoba	57%
Prince Edward Island	54%

Source: Adapted from the Canadian Climate Institute

5.31 According to the benchmark criteria for the 2018–22 period, systems should cover substantively the same sources of emissions as British Columbia's carbon tax, established in 2008. We found that Environment and Climate Change Canada recommended some jurisdictions' systems as sufficiently stringent, despite their having exempted sources that were covered under British Columbia's system. For example, Newfoundland and Labrador, Prince Edward Island, and New Brunswick had exemptions related to home heating fuels, whereas the British Columbia benchmark standard did not. In our view, these systems did not meet the federal benchmark criteria and Environment and Climate Change Canada recommending them reduced the effectiveness of carbon pricing.

Strengthened benchmark criteria

5.32 In August 2021, after the independent expert review, Environment and Climate Change Canada published an updated benchmark to be used from 2023 to 2030. We found that the update addressed many of the concerns identified by the expert review and others about the original benchmark criteria. To

address concerns about the need for more predictability the following measures were put in place:

- The federal government confirmed in the updated benchmark that the cost of carbon would rise from $65 per tonne in 2023 to $170 per tonne in 2030.
- The department stated that it would perform multi-year assessments instead of the current annual assessments.
- Wherever the federal backstop applies in 2023, it will remain in place until at least the end of 2026.

5.33 Another issue with the initial benchmark criteria was that they did not specifically prohibit jurisdictions from providing rebates tied to the amount of fuel consumed. For example, some provinces, such as Newfoundland and Labrador, New Brunswick, and Prince Edward Island, reduced an existing provincial tax on gasoline when adding the carbon tax. These actions meant that there was little change to the price of gasoline, weakening the incentive for consumers to change behaviour. This issue had been raised by the independent expert and other stakeholders. We found that this practice of negating the carbon price signal would be prohibited under the updated benchmarking criteria starting in 2023.

5.34 The department also updated the criteria for emission coverage, so that the carbon pollution price in a given jurisdiction applies to an equivalent percentage of emissions from combustion sources as would be covered by the federal backstop system. The updated criteria provides flexibility for the provinces and territories to tailor source coverage, while maintaining an incentive to change consumer behaviour as it applies to an equivalent percentage of emissions.

Large greenhouse gas emitters

Weak requirements for large-emitter programs reduced the effectiveness of the carbon price

What we found

5.35 We found that Environment and Climate Change Canada had established weak requirements for provincial and territorial large-emitter programs. We also found that the department had recommended these weaker programs, which allowed some

industries to benefit from larger breaks in carbon costs and would reduce the effectiveness of the carbon price.

5.36 The analysis supporting this finding discusses the following topics:

- Competiveness risks assessed
- Weak requirements for provincial large-emitter programs

Why this finding matters

5.37 This finding is important because Canada's industrial sector is a major source of carbon emissions. For example, in 2019, the oil and gas industry amounted to 26% of Canada's emissions, while heavy industry (such as cement and paper) amounted to 11%. Many of these are "emission-intensive trade-exposed industries": They are important to Canada's export market, and therefore Canada's economy. However, if carbon pricing raises these industries' production costs, they may move production to other countries or provinces where a carbon pricing system is weaker or does not apply. This is called "carbon leakage," which would harm the economy without an overall reduction of emissions.

5.38 This finding is also important because large-emitter programs constitute a partial exemption from the "polluter pays" principle. If the programs are not sufficiently stringent, the long-term incentive to reduce carbon emissions will be weaker for a large amount of Canada's carbon emissions. Moreover, the overall burden for reducing Canada's carbon emissions could shift from producers to consumers.

Context

5.39 To minimize potential adverse competitiveness effects and the risk of carbon leakage to emission-intensive, trade-exposed industries, most provinces and territories have large-emitter programs. Though the programs differ, they generally waive the price on a proportion of the emissions of a given facility (such as a chemical refinery or cement factory) up to an established threshold, above which the emitter must pay the full price per tonne. Facilities can earn credits if their emissions are below the threshold, and they can sell these credits to other facilities. Because the credits are tradable, facilities have an incentive to take any action that reduces emissions.

5.40 Provinces and territories are implementing large-emitter systems with varying design details, which affects the policies' stringency and complicates comparisons. Some of the measurements of stringency are marginal cost, average cost, and expected emission reductions:

- The marginal cost is the cost of reducing 1 more tonne of emissions. For carbon levy systems, the marginal cost is the carbon price, because a facility would choose to pay the carbon price instead of making other incremental changes to reduce emissions that would be more costly than the carbon price.
- The average cost is the overall cost to facilities on a per-tonne basis. It is calculated as the total costs incurred by emitters divided by total covered emissions.
- Expected emission reductions rely on modelling to project future emissions. These can be used to compare different policies.

Large-emitter programs aim to incentivize increases in efficiency (by maintaining a marginal cost) without discouraging increases in production by decreasing the average cost a facility pays.

5.41 These programs are intended to apply only to facilities that can demonstrate that they face risks from competitors that do not have equivalent carbon pricing.

5.42 Facilities have other means of complying than just by paying the full carbon price on the emissions above the threshold. They can also trade from facilities that have generated credits, or use credits they have banked from previous years. Some provinces also allow purchases of offset credits. These design details can also affect the stringency of carbon pricing.

Recommendations

5.43 Our recommendations in this area of examination appear at paragraphs 5.58 and 5.59.

Analysis to support this finding

Competitiveness risks assessed

5.44 Minimizing competitiveness effects and carbon leakage for emission-intensive, trade-exposed industries is a principle of the national carbon pricing approach. Accordingly, the *Greenhouse Gas Pollution Pricing Act* provides for a federal large-emitter program, the Output-Based Pricing System, which aims to create a price incentive for eligible emitters to reduce emission intensity of production, while mitigating the risks of carbon leakage and decreased domestic production. According to Environment and Climate Change Canada, by subjecting industry to the federal large-emitter program, Canada's cumulative emissions from 2019 to 2030 were expected to be 22 megatonnes higher than if the federal fuel charge of $50 per tonne applied.

5.45 We found that for administrative simplicity, the department determined which industries would be subject to the regulations on the basis of a threshold of annual emissions. However, some small facilities with significant competitiveness risks, such as small oil and gas producers, would not meet the threshold. These facilities could opt into the federal large-emitter program, instead of being subject to the more stringent fuel charge. Small facilities that could not opt into the federal program, but had a risk of competitiveness impacts, may face a disproportionate burden of carbon pricing (discussed in paragraphs 5.73–5.74).

5.46 We found that Environment and Climate Change Canada then assessed competitiveness effects due to carbon pricing for the industrial sectors subject to the program. The department's approach drew on advice from external experts and was similar to methods used by other jurisdictions, such as Alberta. The department used the results of its assessment to guide the setting of performance standards for each industry, expressed in emission intensity of production.

5.47 Under the criteria updated in 2021, provincial and territorial large-emitter programs will, as of 2023, have to apply only to sectors that the provincial or territorial government assesses as at risk of being competitively affected by carbon pricing. However, there will be no requirement for the results of the assessments to affect the performance standards for each industry. In our view, the different approaches to designing programs for large industry will likely lead to inconsistencies and misaligned carbon costs across Canada.

Weak requirements for provincial large-emitter programs

5.48 Some provinces—Alberta, Saskatchewan, Newfoundland and Labrador, New Brunswick, and Ontario—have chosen to implement their own large-emitter programs as part of their carbon pricing systems. The federal government has performed benchmark assessments to determine whether the provincial systems met the minimum national stringency standards.

5.49 We found that the federal benchmark criteria and guidance for provincial and territorial large-emitter programs was weak. For example, there were no requirements or minimum levels for setting the performance standards for large emitters. Instead, the guidance suggested that standards should be at levels that encourage a decrease in emissions per amount of product (such as tonnes of cement).

5.50 We also found that the tests used in the department's assessments of provincial large-emitter programs were weak. For example, Environment and Climate Change Canada determined that provincial programs were sufficiently stringent so long as the assessments showed that the programs were not expected to have higher emissions than a scenario with no pricing would.

5.51 The expert review had found that the average costs for large emitters varied significantly among industrial sectors and jurisdictions (Exhibit 5.3). This variation is largely due to provinces with large-emitter programs pricing only a small amount of a facility's emissions. Average cost is important, as it contributes to long-term investment decisions, and differences in them could incentivize facilities to relocate. Furthermore, if average costs remain low, they could reduce the effectiveness of carbon pricing.

Exhibit 5.3–Average costs varied significantly among industrial sectors and jurisdictions

Industrial sector	Cost per tonne of emissions in provinces and territories		
	Lowest	Average	Highest
Pulp and paper	1.82	13.31	34.04
Electricity	1.82	8.80	40.00
Cement	0.54	7.28	17.94
Mining	0.07	6.88	11.36
Petroleum refining	1.55	4.59	32.34

Industrial sector	Cost per tonne of emissions in provinces and territories		
	Lowest	Average	Highest
Iron and steel	3.00	3.75	30.00
Non-ferrous metals	1.86	3.66	10.27
Oil and gas	0.68	3.15	30.92
Chemicals	1.03	2.33	32.77

Source: Adapted from the Canadian Climate Institute

5.52 Furthermore, we found that the benchmark criteria did not require the provincial large-emitter programs to cause emission reductions equivalent to that of the federal Output-Based Pricing System. The department performed modelling analysis to compare some of the provincial large-emitter programs with the federal version. As the benchmark criteria did not require equivalent outcomes, the department recommended the weaker systems in Ontario and New Brunswick.

5.53 This arrangement is unlike other key emission-reduction measures under the *Canadian Environmental Protection Act, 1999*, under which certain regulations do not apply in jurisdictions with equivalent ones in place. The federal government has allowed some provinces, such as Alberta and Nova Scotia, to replace federal regulations with their own systems that reflect their own circumstances, but which are expected to generate equivalent reductions.

5.54 As a result of the 2021 review, the department included additional guidance and tests related to large-emitter programs. In particular, the new guidance will require that the provincial and territorial large-emitter programs set the performance standards at levels that should cause the demand for credits to exceed the supply. It will also require that large-emitter programs cover industrial process emissions.

5.55 However, in our view, these updates are not sufficient to address the issues outlined above. Provinces and territories will still be permitted to tailor performance standards to their own circumstances, without a requirement either to be as effective as the federal program or to meet a minimum performance standard. The experts who conducted the review also cautioned that this update to the benchmark criteria did not adequately address the issue of weak performance standards.

5.56 Furthermore, the update does not mandate that these industrial performance standards be tightened over time. As more countries implement policies such as carbon pricing, the potential for carbon leakage should decrease. Accordingly, programs that buffer costs to industry should become increasingly stringent or be phased out.

5.57 The next interim review of the benchmark is not expected until 2026. As part of this review, the department plans to consider impacts on domestic competition from carbon pricing and whether additional criteria are needed to address the significant differences in average costs to industry between provinces and territories. In our view, this is a long time to wait to address a known issue related to effectiveness and fairness during a climate emergency.

5.58 Recommendation. Environment and Climate Change Canada should work with provinces and territories to determine an approach to minimizing domestic competitiveness risks while improving effectiveness. This work should

- assess setting minimum performance standards
- assess aligning average costs
- engage an expert to independently assess risks to effectiveness and domestic competitiveness from federal, provincial, and territorial pricing systems

The department's response. *Agreed.*

See the **List of Recommendations** at the end of this report for detailed responses.

5.59 Recommendation. To improve the effectiveness of carbon pricing and the stringency of provincial or territorial large-emitter programs, Environment and Climate Change Canada should assess, on the basis of federal modelling, whether each provincial or territorial system is sufficiently stringent in that it would be expected to lead to reductions that correspond, at a minimum, to the projected emission reductions that would result from the application of the federal backstop system, and report publicly on the results of their analysis.

The department's response. *Agreed.*

See the **List of Recommendations** at the end of this report for detailed responses.

Supporting burdened groups

Some groups remained disproportionately burdened by carbon pricing

What we found

5.60 The federal government implemented measures to mitigate the burden of the federal backstop on some groups that would be disproportionately burdened by carbon pricing. However, we found that even with these measures, Indigenous groups and small- and medium-sized enterprises were still disproportionately burdened. We also found that Environment and Climate Change Canada had not established any criteria for their assessment of provincial and territorial systems in the federal benchmark to consider the potential disproportionate burden of carbon pricing for all jurisdictions.

5.61 The analysis supporting this finding discusses the following topics:

- Efforts made to reduce disproportionate burdens
- Indigenous groups and smaller enterprises still disproportionately burdened
- No federal benchmark criteria to consider the disproportionate burden of carbon pricing

Why this finding matters

5.62 This finding matters because carbon pricing systems have the potential to disproportionately affect certain groups, such as low-income households, northern and remote communities, and Indigenous peoples. For example, living in remote communities generally requires more travel, and options to switch to low-carbon forms of travel, such as buses or electric vehicles, are less available. Measures such as targeted exemptions or the redistribution of proceeds generated from carbon pricing could be used to mitigate negative effects and promote fairness.

Context

5.63 One of the principles used to guide the pan-Canadian approach to pricing carbon pollution was that carbon pricing

policies should use some of the revenue from carbon pricing to avoid a disproportionate burden on certain groups, including Indigenous peoples. The federal government has acknowledged that implementing carbon pricing could disproportionately affect certain groups. The decision of how to implement measures to reduce the burden of carbon pricing has a significant effect on fairness. Also, under the *Canadian Gender Budgeting Act*, the federal government must consider the effects of new budget measures on various demographics. Under the federal benchmark criteria, proceeds from carbon pricing are to be returned to the jurisdiction of origin. If a jurisdiction has developed its own carbon pricing system or opted for the federal pricing system, the jurisdiction would decide how to reinvest the proceeds.

Recommendation

5.64 Our recommendation in this area of examination appears at paragraph 5.79.

Analysis to support this finding

Efforts made to reduce disproportionate burdens

5.65 We found that Environment and Climate Change Canada made efforts to identify groups that could be disproportionately burdened by carbon pricing. The department conducted multiple **gender-based analysis plus**[2] assessments for the federal approach to carbon pricing. To recognize the unique circumstances of some groups, support was directed to the following:

- low-income households
- Indigenous peoples
- northern and remote communities
- emission-intensive, trade-exposed industries
- small- and medium-sized enterprises

[2] **Gender-based analysis plus**—An analytical process that provides a rigorous method for the assessment of systemic inequalities, as well as a means to assess how diverse groups of women, men, and gender-diverse people may experience policies, programs, and initiatives. The "plus" acknowledges that gender-based analysis goes beyond biological (sex) and socio-cultural (gender) differences and considers many other identity factors, such as race, ethnicity, religion, age, and mental or physical ability.

Source: Adapted from Women and Gender Equality Canada

Without mitigating measures, these burdens could include an increase in the cost of living, potential employment losses, and increases in operating costs for some trade-exposed industries (discussed in paragraphs 5.48–5.57).

5.66 We also found that the department undertook additional studies to gain a better understanding of the effects of carbon pricing on northern and remote communities. As a result of these studies, the department provided exemptions to the fuel charge for aviation fuels in the territories and for power plants in remote communities.

5.67 We found that the department had not assessed the effects of the scheduled price increases beyond the price of $50 per tonne in 2022 (the updated price schedule will rise to $170 per tonne in 2030). The relative effects of carbon pricing systems on burdened groups and Indigenous peoples will not be assessed until the next interim review of the benchmark in 2026. In our view, given the updated price schedule for carbon pricing systems, this assessment should be completed earlier, so that the department can understand the effects and make timely adjustments.

5.68 For the 2019–20 fiscal year, the proceeds of the federal fuel charge from jurisdictions that did not meet the federal benchmark criteria—Ontario, New Brunswick, Manitoba, Alberta, and Saskatchewan—totalled $2.63 billion. We found that 90% of the federal fuel-charge proceeds were to be used to mitigate the disproportionate burden to low-income individuals and households by providing a tax credit to individual taxpayers, depending on the household size and province of residence. Approximately $2.4 billion of the proceeds were to be returned to Canadians in these jurisdictions through the Climate Action Incentive payment, a refundable tax credit, in 2020 and 2021. Beginning in July 2022, the Climate Action Incentive payment will be paid as a quarterly benefit.

5.69 The remaining 10% of the fuel-charge proceeds was to be delivered through federal programming for some groups and organizations that could be disproportionately burdened by carbon pricing. Environment and Climate Change Canada, Natural Resources Canada, Indigenous Services Canada, and Crown-Indigenous Relations and Northern Affairs Canada were responsible for these programs. We found that approximately $228 million of the 2019–20 federal fuel-charge proceeds was allocated to

- the Climate Action Incentive Fund ($218 million)

- the Energy Manager Program ($3.1 million)
- top-ups to programming to support Indigenous peoples ($7.3 million)

Indigenous groups and smaller enterprises still disproportionally burdened

5.70 In jurisdictions where the federal backstop applies, individuals who do not file income tax cannot benefit from the Climate Action Incentive payment. Tax-filing rates are lower among certain groups, such as low-income households and Indigenous peoples living on reserves, than in the general population. Reports from those jurisdictions have stated that Indigenous groups remain disproportionally burdened by carbon pricing. Tax filing is a broader issue across government and measures are being implemented by other departments to increase tax filing.

5.71 For the 2019–20 fiscal year, the department told us that $7 million of the fuel-charge proceeds were returned through existing federal government programming delivered by Crown-Indigenous Relations and Northern Affairs Canada, Indigenous Services Canada, and Natural Resources Canada to support Indigenous communities. This amount represented 0.33% of total fuel-charge proceeds (or approximately 3% of the total allocated to federal programming). For the 2020–21 proceeds, the department planned to increase the portion allocated to programming to support Indigenous peoples—from 0.33% to 1% of total fuel-charge proceeds.

5.72 The department committed to engaging with Indigenous partners, in order to co-develop solutions to return a portion of fuel-charge proceeds to their respective jurisdictions where the federal backstop applied. However, while the department continued to work toward the co-development of mechanisms to deliver this programming, we found that establishing these mechanisms is expected to delay implementing measures to address the burden of carbon pricing on Indigenous groups.

5.73 To support certain organizations, $218 million of the fuel-charge proceeds was allocated to Environment and Climate Change Canada to be delivered through the Climate Action Incentive Fund over 2 years. The fund was created to help organizations make energy-efficiency improvements and retrofits to reduce energy use, costs, and carbon pollution, with funding delivered through 3 separate funding streams. Eligible recipients

included small- and medium-sized enterprises, as well as municipalities, universities, schools, and hospitals.

5.74 We found that the department had not delivered all of the allocated funds for these 3 funding streams, because of delivery challenges, such as low program uptake due to the pandemic, and failed partnerships. In the 2019–20 fiscal year, none of the funds allocated to the Climate Action Incentive Fund had been spent. In the 2020–21 fiscal year, approximately $95 million (44%) of the allocated funding had been spent. The department told us that modifications aimed to address these issues were not implemented because the Climate Action Incentive Fund was sunsetting. The department was looking at other options to deliver these funds. In our view, due to the issues encountered in delivering the funding, the department had not addressed the burden from carbon pricing faced by small- and medium-sized enterprises.

No federal benchmark criteria to consider the disproportionate burden of carbon pricing

5.75 We found that Environment and Climate Change Canada did not establish criteria in the federal benchmark that would require jurisdictions to assess and identify measures to mitigate the disproportionate burden of carbon pricing on vulnerable groups. There is a risk that provincial and territorial systems might not consistently identify relief measures for vulnerable groups, which could be perceived as unfair.

5.76 According to the benchmark guidance, revenues were to remain in the jurisdiction of origin and could be used to meet its needs, including supporting vulnerable populations. The department told us that the federal government does not have the authority to compel other jurisdictions to use carbon pricing proceeds in any particular way.

5.77 Another means of providing relief is through the use of exemptions. We found that that these also differed across carbon pricing systems. The expert review stated that, specifically for Indigenous groups, these differences may pose challenges for fairness and reconciliation. For example, British Columbia has a carbon tax, which eligible First Nations individuals or bands are exempt from paying when purchasing fuel on First Nations lands under the *Indian Act*. However, for provinces under the federal backstop, it is a fuel levy, and Indigenous peoples are not exempt.

5.78 The department did not require reporting on revenue recycling from provinces and territories that had their own pricing systems. Nor did the department require these jurisdictions to report on how revenues would be used to address potentially disproportionate burdens. Under the updated benchmark criteria published in 2021, provinces and territories have to publicly report how these revenues are used. The department has provided guidance on how to address disproportionate burdens—but, in jurisdictions with their own carbon pricing systems, the federal government cannot ensure that the revenues will be used to counter such burdens.

5.79 **Recommendation.** To address the disproportionate burden that carbon pricing may have on certain groups and Indigenous peoples, Environment and Climate Change Canada should work with provinces and territories to

- assess the burden of carbon pricing systems on certain groups, including Indigenous peoples
- report publicly on measures implemented in jurisdictions to mitigate the burden of carbon pricing on these groups

The department's response. *Agreed.*

See the **List of Recommendations** at the end of this report for detailed responses.

Reporting

Carbon pricing systems lacked transparency

What we found

5.80 We found that Environment and Climate Change Canada reported publicly on the implementation of carbon pricing. However, the lack of reporting on benchmark assessments, measures to support industry, or modelling of the expected emission reductions meant that carbon pricing systems lacked transparency. We also found a lack of consolidated data or information needed to assess progress under carbon pricing.

5.81 The analysis supporting this finding discusses the following topics:

- Departmental reports published

- Weak benchmark criteria on reporting
- Lack of transparency

Why this finding matters

5.82 This finding matters because regular, consistent, verifiable, and transparent reporting on key features and outcomes of carbon pricing are needed to support ongoing assessments to improve the effectiveness of carbon pricing systems. It also matters because transparent reporting helps Canadians hold government to account.

Context

5.83 One of the principles of the Pan-Canadian Framework's approach to carbon pricing was that it would be reported on consistently, regularly, transparently, and verifiably.

5.84 Under the *Canadian Net-Zero Emissions Accountability Act*, Environment and Climate Change Canada is responsible for publishing plans to achieve the 5-year emission-reduction targets, interim progress reports, and final reports that will assess how the measures and strategies described in the plans, including carbon pricing, contributed to meeting the relevant emission targets.

5.85 Furthermore, in 2015, Canada committed to achieving the United Nations' 2030 Agenda for Sustainable Development. Goal 13 (climate action) calls for countries to take urgent action to combat climate change and its effects. The strengthened 2020 federal climate plan, A Healthy Environment and a Healthy Economy, included a commitment to concrete actions to advance the 2030 Agenda. As a measure to reduce emissions, carbon pricing contributes to Goal 13. Reporting on progress is central to the 2030 Agenda, and having access to detailed data would allow organizations to tailor policies and programs to support Canada's vulnerable populations.

Take urgent action to combat climate change and its impacts

Source: United Nations

Recommendation

5.86 Our recommendation in this area of examination appears at paragraph 5.101.

Analysis to support this finding

Departmental reports published

5.87 Environment and Climate Change Canada has committed to reporting publicly on carbon pricing. We found that the department reported publicly on the implementation of carbon pricing. However, it is too early to determine whether the reporting was regular, consistent, and verifiable.

5.88 The department is also required to report on the administration of the *Greenhouse Gas Pollution Pricing Act* annually. In 2020, the department published its first (2019) annual report. The 2020 annual report, which was supposed to be published by the end of 2021, was delayed and published in March 2022.

5.89 The 2019 annual report was limited to the jurisdictions subject to at least one component of the federal pricing system. The report provided information on the amount of fuel charge proceeds individuals received, by province, through their tax returns. Due to the pandemic, the department extended the deadline for the regulated facilities to submit their 2019 compliance and verification reports. Because of this, the department could not report on the federal large-emitter program. While the department had planned to review the compliance reports and the verification reports submitted by the regulated facilities for the 2020 report, reporting on these results was further delayed. According to the 2020 report, the results of how facilities compensated for excess emissions above their annual limits will be reported in the 2021 annual report.

5.90 The Pan-Canadian Framework states that federal, provincial, and territorial governments would work together to establish an approach to reviewing carbon pricing. As part of the first interim review of carbon pricing, the federal government committed to publishing several reports. We found that the department worked with provincial and territorial governments through a steering committee to guide the publication of the following reports:

- An interim report—Published in 2021, this report provided an update on the status of carbon pricing systems across Canada. The report described the carbon pricing systems in each jurisdiction and how the revenue was expected to be recycled, and estimated the percentage of emissions

covered by each jurisdiction, but did not report on outcomes, such as emission reductions or actual amounts of revenue recycled.

- A 2019 review of measures to support industry—This report, published as an annex to the 2021 interim report, found that the risk of carbon leakage had been successfully mitigated with the implemented approaches, such as large-emitter programs. However, we found that the evidence for that conclusion was not related to the federal large-emitter program, since it had only been recently implemented.
- An expert review of carbon pricing systems by an independent third party—This assessment was published in 2021. In our view, regular independent assessments can help the government take stock of outcomes, promote transparency, and improve effectiveness.

5.91 We found that to report on Sustainable Development Goal 13, the federal government used the 2030 greenhouse gas emission-reduction target. The indicator used to track progress is total greenhouse gas emissions per year, which was reported annually in April in the National Inventory Report. Our Lessons Learned from Canada's Record on Climate Change report and our recent audit on the Emissions Reduction Fund have shown that Canada's emissions have increased by 21% between 1990 and 2019.

Weak benchmark criteria on reporting

5.92 The initial benchmark criteria for provincial and territorial systems stated that these systems should provide regular, transparent, and verifiable reports on the outcomes of their carbon pricing policies. We found that, to guide its assessment of a jurisdiction's system, Environment and Climate Change Canada's template listed the elements on which the system should publicly report, such as revenue generated and annual emissions from regulated facilities under a large-emitter system. However, department officials told us that without minimum reporting standards, a jurisdiction would meet the reporting criteria in the benchmark assessments so long as it had developed or was developing a system for public reporting.

5.93 All jurisdictions that had their own carbon pricing systems had established public reporting systems. In our review of publicly available information, we found that there was no consistency in the timing, location, and content of existing or planned reporting. For example, provinces and territories reported or intended to

report through various mechanisms, including progress reports on their climate change plans, annual budget documents, and other reports required as part of legislation and regulations.

5.94 In the 2021 update to the carbon pricing benchmark criteria, provinces and territories will be required to publish regular and transparent reports on the outcomes of their carbon pricing policies, beginning in 2023. The department told us that it was developing its approach to assessing provincial and territorial systems against the updated public reporting criteria.

Lack of transparency

5.95 We found several weaknesses in the transparency of information needed to demonstrate the effectiveness of existing systems and to guide changes to carbon pricing.

5.96 We found that the public information needed to compare provincial or territorial systems against the benchmark criteria was limited. For example, the department did not publish the results of its modelling of the systems' emission reductions. Nor did it publish how jurisdictions' emission coverage compared with the benchmark standard. Without this information, it is difficult for the public to determine whether provincial or territorial pricing systems are sufficiently stringent.

5.97 We found that information on how and why certain industries received breaks on carbon costs was not publicly available. The lack of transparency in the large-emitter programs had already been raised during the expert assessment commissioned by the department. The experts cautioned that having insufficient information on large-emitter programs affected their ability to assess possible risks to policy effectiveness. So, they recommended more transparency in the approaches used to set standards for industry and that more data be collected and published on the performance of these systems and the costs imposed on industry across jurisdictions.

5.98 The department had committed to taking regular stock of progress under carbon pricing, in order to report to Canadians and to inform Canada's future commitments to emission-reduction targets. However, we found that information on the expected contribution of carbon pricing toward Canada's targets was limited. For example:

- The effect of provincial or territorial systems in comparison with the federal system was not made public.

- The expected emission reductions from the new price schedule, announced in December 2020, was not made public.
- The department had last reported on expected emission reductions from carbon pricing in the 2019 biennial reports to the United Nations Framework Convention on Climate Change. However, this information was outdated.

5.99 The 2021 expert review also stressed the importance of emission modelling for comparing the effectiveness of each jurisdiction's pricing system. The experts suggested that modelling should reflect the detailed design choices and how the systems are implemented in each jurisdiction. They also stated that modelling should isolate the effect of pricing by jurisdiction from other policies and from market drivers such as the price of oil.

5.100 Finally, we found that there was no consolidation of the data or information needed to assess progress under carbon pricing. Although all provinces and territories established reporting systems, there was no centralized reporting, which could facilitate aggregation and comparison of system characteristics and expected and actual results.

5.101 Recommendation. To increase the transparency of carbon pricing systems across Canada, Environment and Climate Change Canada should collect key information on provincial and territorial carbon pricing systems, make it publicly available in a central location, and regularly report on their results. This information should include

- emission coverage from each jurisdiction, compared with the federal backstop system
- compliance data and emission-trading market data
- average cost imposed on large emitters
- expected emission reductions

The department's response. *Agreed.*

See the **List of Recommendations** at the end of this report for detailed responses.

Conclusion

5.102 We concluded that Environment and Climate Change Canada had some weaknesses in its initial standards, which allowed some less effective provincial carbon pricing systems to be accepted. The department had since strengthened its approach to improving the effectiveness, fairness, and transparency of carbon pricing systems in Canada. However, more work remained to be done to ensure that large emitters support the achievement of Canada's national emission-reduction target, to alleviate the disproportionate burden felt by some groups, and to improve the transparency of reporting.

About the Audit

This independent assurance report was prepared by the Office of the Auditor General of Canada on carbon pricing. Our responsibility was to provide objective information, advice, and assurance to assist Parliament in its scrutiny of the government's management of resources and programs, and to conclude on whether Environment and Climate Change Canada complied in all significant respects with the applicable criteria.

All work in this audit was performed to a reasonable level of assurance in accordance with the Canadian Standard on Assurance Engagements (CSAE) 3001—Direct Engagements, set out by the Chartered Professional Accountants of Canada (CPA Canada) in the CPA Canada Handbook—Assurance.

The Office of the Auditor General of Canada applies the Canadian Standard on Quality Control 1 and, accordingly, maintains a comprehensive system of quality control, including documented policies and procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements.

In conducting the audit work, we complied with the independence and other ethical requirements of the relevant rules of professional conduct applicable to the practice of public accounting in Canada, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality, and professional behaviour.

In accordance with our regular audit process, we obtained the following from entity management:

- confirmation of management's responsibility for the subject under audit
- acknowledgement of the suitability of the criteria used in the audit
- confirmation that all known information that has been requested, or that could affect the findings or audit conclusion, has been provided
- confirmation that the audit report is factually accurate

Audit objective

The objective of this audit was to determine whether Environment and Climate Change Canada ensured that carbon pricing systems in Canada were applied effectively, fairly, and transparently (as defined in the Pan-Canadian Framework on Clean Growth and Climate Change).

Scope and approach

The audit focused on Environment and Climate Change Canada. The audit examined whether the department was implementing carbon pricing in a manner consistent with the principles outlined in the Pan-Canadian Framework on Clean Growth and Climate Change.

We did not examine whether the carbon pricing affected investments, stranded assets, caused competitiveness issues, led to carbon leakage, or realized reductions in greenhouse gases since the first years of implementation. Nor did we examine the delivery of the Climate Action Incentive payment or the Climate Action Incentive Fund, carried out by the Department of Finance Canada and the Canada Revenue Agency.

Criteria

Criteria	Sources
We used the following criteria to determine whether Environment and Climate Change Canada ensured that carbon pricing systems in Canada were applied effectively, fairly, and transparently.	
Environment and Climate Change Canada ensures that carbon pricing is effective in that it has developed and implemented an approach that • is flexible and recognizes pricing policies already implemented by provinces and territories • broadly applies to emission sources across the economy • is timely • is increasingly stringent over time	• Pan-Canadian Framework on Clean Growth and Climate Change, Environment and Climate Change Canada, 2016 • Working Group on Carbon Pricing Mechanisms: Final Report, Environment and Climate Change Canada, 2016 • Vancouver Declaration on Clean Growth and Climate Change, First Ministers of Canada, 2016 • *Greenhouse Gas Pollution Pricing Act* • Achieving a Sustainable Future: A Federal Sustainable Development Strategy for Canada: 2019 to 2022, Environment and Climate Change Canada, 2019 • Pan-Canadian Approach to Pricing Carbon Pollution: Backgrounder, Environment and Climate Change Canada, 2016 • A Healthy Environment and a Healthy Economy, Environment and Climate Change Canada, 2020
Environment and Climate Change Canada assesses the competitiveness impacts and potential for carbon leakage and, where appropriate, develops supporting measures.	• Pan-Canadian Framework on Clean Growth and Climate Change, Environment and Climate Change Canada, 2016 • Working Group on Carbon Pricing Mechanisms: Final Report, Environment and Climate Change Canada, 2016
Environment and Climate Change Canada, working with federal departments, has developed supporting measures, where appropriate, to mitigate disproportionate impacts on Indigenous peoples and vulnerable groups by the federal carbon pricing system.	• Pan-Canadian Framework on Clean Growth and Climate Change, Environment and Climate Change Canada, 2016 • Updated Guidelines for Federal Officials to Fulfill the Duty to Consult, Crown-Indigenous Relations and Northern Affairs Canada, 2011

Criteria	Sources
	• Working Group on Carbon Pricing Mechanisms: Final Report, Environment and Climate Change Canada, 2016 • 2015 Fall Reports of the Office of the Auditor General, Report 1—Implementing Gender-Based Analysis • GBA+: Step by Step, Women and Gender Equality
Environment and Climate Change Canada publicly reports on carbon pricing policies and their results in a consistent, regular, transparent, and verifiable manner.	• Pan-Canadian Framework on Clean Growth and Climate Change, Environment and Climate Change Canada, 2016 • *Greenhouse Gas Pollution Pricing Act* • Working Group on Carbon Pricing Mechanisms: Final Report, Environment and Climate Change Canada, 2016 • Directive on Results, Treasury Board, 2016

Period covered by the audit

The audit covered the period from January 2018 to September 2021. This is the period to which the audit conclusion applies. However, to gain a more complete understanding of the subject matter of the audit, we also examined certain matters that preceded the start date of this period.

Date of the report

We obtained sufficient and appropriate audit evidence on which to base our conclusion on 11 March 2022, in Ottawa, Canada.

Audit team

This audit was completed by a multidisciplinary team from across the Office of the Auditor General of Canada (OAG) led by Kimberley Leach, Principal. The principal has overall responsibility for audit quality, including conducting the audit in accordance with professional standards, applicable legal and regulatory requirements, and the OAG's policies and system of quality management.

List of Recommendations

The following table lists the recommendations and responses found in this report. The paragraph number preceding the recommendation indicates the location of the recommendation in the report.

Recommendation	Response
5.58 Environment and Climate Change Canada should work with provinces and territories to determine an approach to minimizing domestic competitiveness risks while improving effectiveness. This work should • assess setting minimum performance standards • assess aligning average costs • engage an expert to independently assess risks to effectiveness and domestic competitiveness from federal, provincial, and territorial pricing systems	Agreed. As committed to in the new benchmark criteria published on August 5, 2021, the federal government will engage provinces, territories and Indigenous organizations in an interim review of the benchmark by 2026, to confirm that benchmark criteria are sufficient to continue ensuring that pricing stringency is aligned across all carbon pricing systems in Canada. The benchmark specifically commits to considering impacts on inter-jurisdictional and international competitiveness from carbon pricing, and whether additional criteria are needed to address differences among jurisdictions (i.e., differences in average cost) and to commissioning an expert assessment. More specifically, the department will: • Begin federal-provincial-territorial work on the interim review by early 2023, with the goal of completing the review by late 2024 or early 2025 to allow time for any subsequent changes to benchmark criteria. This would include the expert assessment. • Create a dedicated federal-provincial-territorial working group to assess aligning average costs and industrial performance standards as part of the review. • Include an assessment of risks to effectiveness and domestic competitiveness and carbon leakage from federal, provincial and territorial pricing systems in the mandate of the independent expert assessment.
5.59 To improve the effectiveness of carbon pricing and the stringency of provincial or territorial large-emitter programs, Environment and Climate Change Canada should assess, on the basis of federal modelling, whether each provincial or territorial system is sufficiently stringent in that it would be expected to lead to reductions that correspond, at a minimum, to the projected emission reductions that would result from the application of the federal	Agreed. Benchmark assessments of carbon pricing to be conducted later this year will include an estimate of resulting emissions reductions compared with the federal backstop system if applied in that jurisdiction. However, the modelled reductions from provincial systems found to align with the benchmark do not need to “correspond” to or be precisely equal to what would be achieved from the application of the federal system, for example due to differences in sources covered and

Recommendation	Response
backstop system, and report publicly on the results of their analysis.	performance standards for industry. Nonetheless, the new benchmark provisions on covered emissions sources and industrial pricing systems will bring all systems into closer alignment, and therefore should produce broadly similar levels of emissions reductions. Once all systems for 2023–30 are finalized, the department will model expected emissions reductions and report publicly on the results of this analysis. Note that public reporting will likely occur in late 2023 or 2024 as some aspects of some systems may be finalized later in 2023 and applied retroactively.
5.79 To address the disproportionate burden that carbon pricing may have on certain groups and Indigenous peoples, Environment and Climate Change Canada should work with provinces and territories to • assess the burden of carbon pricing certain systems on groups, including Indigenous peoples • report publicly on measures implemented in jurisdictions to mitigate the burden of carbon pricing on these groups	Agreed. As outlined in the Pan-Canadian Approach to Pricing Carbon Pollution, Canada supports the principle that carbon pricing policies should include revenue recycling to avoid a disproportionate burden on vulnerable groups and Indigenous peoples. A similar principle was developed by the federal-provincial-territorial Working Group on Carbon Pricing Mechanisms: that carbon pricing policies, including their revenue recycling components, should strike a balance between the polluter-pays principle and avoiding a disproportionate burden on vulnerable groups. As part of work on the interim review of carbon pricing, by late 2022 or early winter 2023, the department will engage with provinces and territories to • develop an approach to assess the impacts of carbon pricing on groups at risk of disproportional impacts, including Indigenous peoples; • undertake research on the impacts of carbon pricing on these groups; and • develop an approach to report publicly on measures to mitigate these impacts.
5.101 To increase the transparency of carbon pricing systems across Canada, Environment and Climate Change Canada should collect key information on provincial and territorial carbon pricing systems, make it publicly available in a central location, and regularly report on their results. This information should include • emission coverage from each jurisdiction, compared with the federal backstop system	Agreed. To support stringency and effectiveness, the updated benchmark for 2023-2030 includes new reporting requirements that require provinces and territories to publish regular, transparent reports and/or information on the key features, outcomes, and impacts of their carbon pricing systems, as well as on compliance information and carbon market data where publication could enhance accountability, and carbon market function and oversight. The department

Recommendation	Response
• compliance data and emission-trading market data • average cost imposed on large emitters • expected emission reductions	expects that reporting on other aspects of provincial and territorial carbon pricing systems will evolve over time. While each province and territory is responsible for publishing this information on their respective systems, the department agrees with the merit of making all of this information publicly available in a single place. To enable this, the department will engage with provinces and territories to discuss an approach for collecting and publishing all data on carbon pricing systems in a single location.