

October 11, 2018

Cap and Trade - Help Desk Cap and Trade Branch 77 Wellesley Street West 10th Floor, Ferguson Block Toronto ON M7A 2T5 Canada

Submitted online to the Environmental Registry of Ontario

Re: Pembina Institute comments on Bill 4, Cap and Trade Cancellation Act, 2018

To whom it may concern:

The Pembina Institute is appreciative of the opportunity to share our views on Ontario's Ministry of the Environment, Conservation and Parks' Bill 4 – An Act respecting the preparation of a climate change plan, providing for the wind down of the cap-and-trade program and repealing the Climate Change Mitigation and Low-carbon Economy Act, 2016 (hereafter Bill 4).

The development of a new climate plan offers a significant opportunity to put forward a concrete set of ambitious measures to protect Ontarians' health and prosperity by reducing harmful greenhouse gas (GHG) emissions while promoting innovation, job creation, and economic growth. Although the Pembina Institute does not support the government's decision to cancel the cap-and-trade program, particularly before having put forward an alternative to tackle one of the most pressing issues for Ontarians, we are encouraged by the Minister's commitment to establish a new GHG reduction target and a climate change plan as well as to report on the implementation of this plan. We look forward to working with the Government of Ontario on these objectives.

The Ontario Environmental Bill of Rights enshrines the rights of Ontarians to be consulted on decisions of significant environmental importance – the kinds of decisions that would impact our communities, our air, our water, our land and our economic well-being. Bill 4, which dismantles Ontario's cap-and-trade program and cancels the climate change action plan, is one such decision. While the government did not initially fulfill the requirements of the Environmental Bill of Rights with respect to the proposed legislation, we are pleased that the

government is now inviting Ontarians to express their opinions about protecting the environment.

Summary

Setting a new carbon pollution reduction target

To do its part in avoiding the worst of climate change for Ontarians, the government must set long term and interim targets for carbon pollution reduction consistent with the global target of limiting the global average temperature rise to 2°C and pursuing efforts to limit the temperature rise to 1.5°C (compared to temperatures pre-industrial revolution). The targets should also be consistent with - or more ambitious than - Canada's target of reaching carbon neutrality by 2050. For example, 35% below 2005 levels by 2025 would be an appropriate interim target, as discussed later in this submission.

Developing a new climate change plan

- The government should consider using its announced emissions reduction fund¹ and future public infrastructure funds in a coordinated way to make targeted investments to reduce pollution while supporting a healthy economy. These targeted pollution reduction investments should include:
 - o Clean transportation technologies and infrastructure;
 - Research and development related to new and emerging clean technologies and industrial production processes; and
 - Incentives for energy saving home and building upgrades and the adoption of other low-carbon technologies.
- The climate plan should seek long term decarbonization of the energy system by advancing energy efficiency and renewable energy as well as capitalizing on Ontario's clean grid by advancing electrification of transportation and buildings, Ontario's first and third largest sources of carbon pollution at 33% and 22% of total emissions, respectively.
- To take decisive action on transport the government should make continued investments in low-emissions public transit, high-speed electric rail, and infrastructure for zero-emission vehicles. Since public infrastructure is highly durable, clean

¹ CBN News, *New Climate Change Plan Coming this Fall, PC Government says* (September 24, 2018) https://www.cbc.ca/news/canada/toronto/ontario-environment-minister-climate-change-plan-1.4836509

- infrastructure investments made now will have positive implications for GHG emissions for many years.
- A successful transition to a clean economy requires a vision for activating civil society, businesses and academics and close coordination between policy, technology and capital. Importantly, clear and consistent policies are fundamental to build investor confidence.
- The climate plan should not disproportionately negatively affect lower income and vulnerable households.
- In the development stage of the climate plan, the policy options and measures should be explored with stakeholders.

Pricing carbon pollution

- In addition to providing a tool to reduce emissions throughout the province, the capand-trade program provides a source of revenue to finance pollution reduction and build the competitive businesses in the low-carbon economy of tomorrow. By officially ending the cap-and-trade program, the government is forfeiting billions in future revenues that could serve to achieve these goals.
- We encourage the government to reconsider its decision to challenge the federal government's right to apply the carbon pricing backstop. Instead, a negotiated solution with the federal government would allow the Ontario government to conserve its share of the Low Carbon Economy Fund and to reallocate the 30 million of tax payers dollars earmarked for this battle to more productive uses.
- Pricing carbon pollution is widely recognized as the most cost-effective tool to reduce harmful emissions and a key tenet of a comprehensive policy package to tackle climate change. We welcome the Canadian government's leadership in moving forward to ensure that a price on pollution is applied across the country by January 2019. Should Ontario not take the option of designing its own carbon pricing system, we support the federal government's application of the backstop.

Setting a new carbon pollution reduction target

Under Bill 4, the Government is required to establish targets for reducing the amount of greenhouse gas emissions in Ontario. The Minister of Environment, Conservation and Parks is required to prepare a climate change plan and to prepare progress reports in respect of the plan.

- Canadians are not sheltered from the impacts of climate change and can expect escalating costs from climate change-related weather events. According to the Insurance Bureau of Canada, 4 of the 5 highest yearly catastrophic disaster payout years from 1983 to 2016 occurred after 2010 the highest being over \$5 billion in 2016. Ontario's heat wave in March 2012 caused losses to local fruit production estimated by Environment Canada to be to the order of \$100 million a hit to one of Ontario's important rural industries and the grocery bills of Ontarians. We have yet to tally the cost of the nearly 900 forest fires that have blazed in Ontario this year alone.
- As the Government of Ontario forms its replacement plan to tackle the most important challenge to Ontarian's health and economic prosperity, they should consider that the province – the second biggest GHG emitter behind Alberta – needs to take responsibility in meeting the nation's international climate mitigation commitment.²
- The Paris Agreement is a historic achievement. It was adopted by 195 countries that are working towards the common goal of "holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change." Beyond 2 °C, we risk dramatically higher seas, changes in weather patterns, and food and water crises. Under Paris, Canada's commitment to the international community is to reduce GHG emissions by 30% below 2005 levels by 2030.
- To have a reasonable chance of meeting the 2 °C objective, industrialized countries have to reduce their emissions by 70 to 80% below 2000 levels by 2050.⁴ A recent report, however, released by the International Panel on Climate Change (IPCC) warns that temperature increases should be limited to 1.5 °C to protect the most vulnerabe regions

² Environmental Commissioner of Ontario, *Climate Change in Ontario: what's next? 2018 Greenhouse Gas Progress Report*, https://docs.assets.eco.on.ca/reports/climate-change/2018/Climate-Action-in-Ontario.pdf, p.80.

³ United Nations Framework Convention on Climate Change, *The Paris Agreement*, https://unfccc.int/files/meetings/paris_nov_2015/application/pdf/paris_agreement_english_.pdf

⁴ Union of Concerned Scientists, *Avoiding Dangerous Climate Change*, https://www.ucsusa.org/sites/default/files/legacy/assets/documents/global_warming/emissions-target-fact-sheet.pdf

- and populations. To meet this objective, nations have to reduce their emissions by 45% from 2010 levels by 2030 and reach net zero by 2050
- Canada's 2016 Mid-Century Long-Term Low Greenhouse Gas Development Strategy sets out to reduce emissions by 80% in 2050 from 2005 levels.⁵ More recently, Canada joined the Carbon Neutrality Coalition whose members agree to change their long-term target to become carbon neutral.⁶
- Tackling climate change requires setting long-term targets to create planning and investment certainty. It's also important to set interim targets that align with this trajectory along with a governance mechanism to reflect the government's commitment and ambition.
- To do its part in avoiding the worst of climate change for Ontarians, the government must have long term and shorter term targets for carbon pollution reduction that are either consistent with or more ambitious than the 2 °C goal and with Canada's long term target of reaching carbon neutrality by 2050. For example, 35% below 2005 levels by 2025 would be appropriate and within reach (see Figure 1).

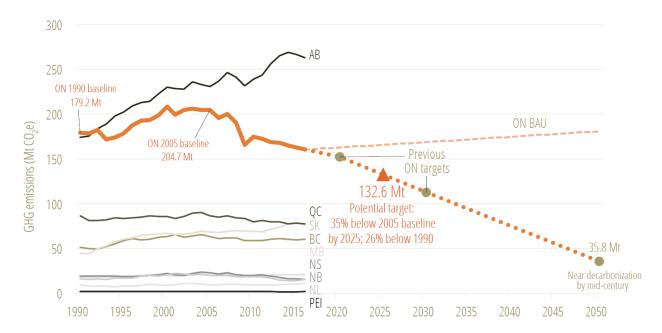


Figure 1. Ontario emissions trajectory showing pathway that aligns with averting the worst effects of climate change and acceptable interim targets (historical data from National Inventory Report, 2018)

⁵ Government of Canada, *Canada's Mid-Century Long-Term Low-Greenhouse Gas Development Strategy*, https://unfccc.int/files/focus/long-term_strategies/application/pdf/canadas_mid-century_long-term_strategy.pdf ⁶ Climate Home News, *19 countries team up to go carbon neutral*, September 28, 2018. http://www.climatechangenews.com/2018/09/28/19-countries-team-go-carbon-neutral/

- To complement an economy-wide target, the government could also adopt sectoral targets. The International Energy Agency has described sectoral target setting as a potential "vehicle to enhance the effectiveness, and broaden the scope of GHG mitigation efforts." This approach explicitly recognizes and highlights how each sector must contribute to the overall mitigation goal according to their technological and economic potential. For example, the European Union 2050 roadmap sets the following targets (base year is 1990):8

1. Electricity sector: almost 100%

2. Transport: more than 60%

3. Buildings: around 90%

4. Industry: more than 80%

2. Developing a new climate change plan

- A credible and efficient climate change plan details the measures to achieve the long term and short term targets. The plan should set a vision and long term framework for collaboration between citizens, businesses, and the academic sector to contribute to the transition to a competitive, low-carbon economy.
- Ontario depends on importing fossil fuels for 80% of our energy needs, draining \$11 billion out of the province every year, and making us vulnerable to international price fluctuations. The upcoming climate plan and our sectoral recommendations below offers a significant opportunity to reduce this outflow of money by investing in clean energy and technologies that generate profits and jobs right here at home in addition to reducing emissions and the energy bill.
- Significantly, we encourage the Ontario government to consult on and implement an effective replacement climate plan as quickly as possible. Delaying action in the near-

⁷ International Energy Agency, *Sectoral Approaches to Greenhouse Gas Mitigation, Exploring Issues for Heavy Industry*, November 2007. https://www.iea.org/publications/freepublications/publication/sectoral approach info web.pdf, p.6

⁸ European Commission, *2050 Low Carbon Economy*, visited on October 9, 2018. https://ec.europa.eu/clima/policies/strategies/2050_en

⁹ Environmental Commissioner of Ontario, *Climate Change in Ontario: what's next? 2018 Greenhouse Gas Progress Report*, https://docs.assets.eco.on.ca/reports/climate-change/2018/Climate-Action-in-Ontario.pdf, p. 80.

term increases total economic mitigation costs "because stronger efforts are required in the period after the delay to counterbalance the higher emissions in the near term." ¹⁰

- There are three broad policy options to reduce carbon emissions:
 - 1. Regulating specific actions that result in emissions reductions (e.g. the phase out of coal-fired generating plants, requiring minimum sales of electric vehicles).
 - 2. Financial support and investment in innovation or deployment of emissions reductions technology and infrastructure (e.g. investing in public transit and active transportation infrastructure, support to companies to green their truck fleets).
 - 3. Putting a price on carbon that results in market-based emissions reductions due to a price signal.
- A plan that does not contain pricing carbon pollution will necessarily have to rely more heavily on regulations and financial support – less economically efficient measures – to achieve its target.
- The three options mentioned above can be employed to unlock any number of mitigation measures in each sector of the economy. The IPCC summarizes sectoral mitigation measures as follows:¹¹

Table 2. Possible Mitigation Measures by Sector, IPCC 4TH Assessment Report

Sector	Mitigation measures		
Energy supply	Energy efficiency improvement in all sectors (buildings,		
and use	transportation, industry, and energy supply)		
	Fuel switching and other options in the transportation and		
	buildings sectors		
	Replacing imported fossil fuel with domestic alternative energy		
	sources		
	Replacing domestic fossil fuel with imported alternative energy		
	sources		
Forestry	Afforestation		
	Avoided deforestation		
	Forest Management		
Bioenergy	Bioenergy production		

¹⁰ International Panel on Climate Change, *Global Warming of 1.5 °C - an IPCC special report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty http://report.ipcc.ch/sr15/pdf/sr15_chapter2.pdf, Chapter 2, p.80.*

¹¹ International Panel on Climate Change, Fourth Assessment Report: Climate Change 2007. https://www.ipcc.ch/publications_and_data/ar4/wg3/en/ch12s12-3.html 12.3 Implications of mitigation choices for sustainable development goals.

Agriculture	Cropland management (management of nutrients, tillage, residues, and agro-forestry) Cropland management (water, rice, and setaside)
	Grazing land management
	Livestock management
Waste management	Engineered sanitary landfilling with landfill gas recovery
	Biological processes for waste and wastewater (composting,
	anaerobic digestion, aerobic and anaerobic wastewater processes)
	Incineration and other thermal processes
	Recycling, reuse, and waste minimization

 Ontario's climate change plan must consider the evolution of its emissions profile (see table below) and take decisive action to tackle the biggest sources of pollution: transportation, industry and buildings.

Table 2. Ontario's GHG emission by sector, Ontario Ministry of Environment and Climate Change

Sector	Emissions in 1990 ¹²	Emissions in 2012 ¹³	Emissions in 2015 ¹⁴
	(total 177 MT)	(total 167 MT)	(total 166 MT)
Transportation	26%	34%	33%
Industry	36%	30%	29%
Buildings	15%	17%	22%
Waste	3%	4%	5%
Agriculture	6%	6%	8%
Electricity	14%	9%	3%

2.1 Transportation

 Ontario's climate plan can harness the present opportunity to ensure healthier air and effective climate action by supporting Ontarians and Ontario businesses in shifting to a cleaner transportation system for people and goods.

¹² Ontario Ministry of Environment and Climate Change, *Ontario's Climate Change Update*, https://dr6j45jk9xcmk.cloudfront.net/documents/3618/climate-change-report-2014.pdf, p.7

¹³ Ibid, 12

¹⁴ Government of Ontario, *Ontario Minister's Climate Action Plan Progress Report 2017* https://www.ontario.ca/page/ministers-climate-change-action-plan-progress-report-2017#section3

- In contrast to other sectors, transportation emissions have been growing rapidly (see Figure 2). This growth was primarily due to increased trucking, though passenger vehicles still make up the majority of the sector's overall emissions.¹⁵

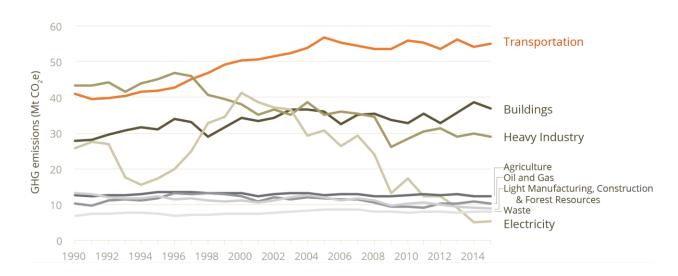


Figure 2. Evolution of sectoral GHG emissions in Ontario, 1990-2015 (National Inventory Report, 2017)

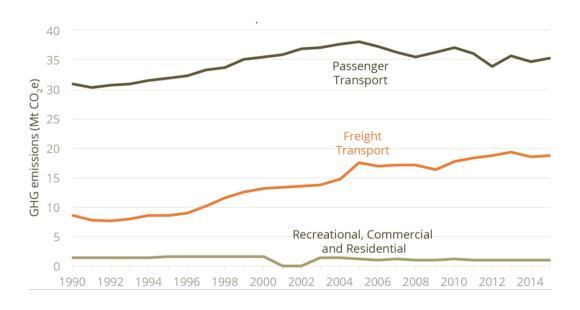


Figure 3. Ontario Transportation Sector Emissions, 1990 to 2015 (National Inventory Report, 2017)

¹⁵ Environmental Commissioner of Ontario, *Climate Change in Ontario: what's next? 2018 Greenhouse Gas Progress Report*, https://docs.assets.eco.on.ca/reports/climate-change/2018/Climate-Action-in-Ontario.pdf, p. 42.

- Moving goods is a backbone of our local and regional economies; 38% of Ontario's economy comes from freight-intensive industries, and trade between Ontario and the United States was worth \$284 billion in 2011.¹⁶
- Indeed, the volume of road freight activity (measured in tonne-kilometres) in Ontario has increased dramatically (by 242%) over the period from 1990 to 2014.¹⁷ Although passenger transport still accounts for the majority of emissions within the sector, overall freight emissions (across all modes) are projected to eclipse passenger emissions in Canada by 2030.¹⁸ Trucks are a leading source of nitrogen oxides (NOx) and particulate matter (PM)¹⁹ which cause and aggravate respiratory illness and cardiovascular disease.²⁰
- Thus, there is a significant opportunity for the Ontario government to take action on people and goods movement to reduce carbon pollution. Complementary actions should be taken across the spectrum of possible actions including reducing demand, shifting modes and improving efficiency.
- To encourage mode shifting for passenger travel while combatting congestion, investments must continue to be made in widely accessible public transit (surface and underground), pedestrian and bike infrastructure.
- Investments in infrastructure must be paired with land-use policies that encourage compact development and reduce sprawl. Accelerating development around transit stations, for example, can have the joint benefit of increasing housing supply while providing transit access to more Ontarians.
- Ontario will need to reduce petroleum fuel consumption in transportation. Possibilities
 include investments in infrastructure supporting electrification and hydrogen derived
 from electrolysis. Ontario is home to innovative businesses in hydrogen and electric
 technologies, logistics, and other clean tech sectors who can be key partners in this
 effort.

¹⁶ Ontario Ministry of Transportation, Freight-Supportive Guidelines, (2016), Chapter 1. http://www.mto.gov.on.ca/english/publications/freight-supportive-guidelines.shtml. Information from Transport Canada.

¹⁷ 1 Natural Resources Canada, Comprehensive Energy Use Database, "Table 11: Freight Road Transportation Secondary Energy Use and GHG Emissions by Energy Source" http://oee.nrcan.gc.ca/corporate/statistics/neud/dpa/showTable.cfm?type=CP§or=tran&juris=on&rn=1 1&page=4

¹⁸ Bora Plumptre, Eli Angen and Dianne Zimmerman, The State of Freight: Understanding greenhouse gas emissions from goods movement in Canada (Pembina Foundation, 2017). http://www.pembina.org/pub/state-of-freight

¹⁹ City of Toronto, Path to Healthier Air: Toronto air pollution burden of illness update (2014). https://www1.toronto.ca/City Of Toronto/Toronto Public Health/Healthy Public Policy/Report Library/PDF Reports Repository/2014 Air Pollution Burden of Illness Tech RPT final.pdf

²⁰ Environment Canada, *Air pollutants – Criteria Air Contaminants*, 2017. https://www.ec.gc.ca/air/default.asp?lang=En&n=7C43740B-1

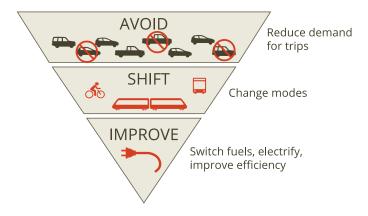


Figure 4. Options for reducing transportation emissions

- Key recommended actions to encourage more efficient passenger transportation options include:
 - Maintaining the plan to increase the municipal share of gas tax funds to help fund local public transit improvements, maintain investment commitments for rapid transit projects across Ontario, and keep the promise to electrify and increase service via GO Regional Express Rail.
 - Including mandatory funding for active transportation connections to major mobility hubs/transit stations in all transit investments, and re-establish provincial cycling funding through Ontario's new emissions-reduction fund.
 - Supporting deployment of electric vehicle charging stations and hydrogen refueling stations in workplaces and public locations through Ontario's new emissions-reduction fund, and accelerate building code changes to ensure charging potential in new homes.
 - Through Ontario's new emissions-reduction fund and using government procurement, supporting pilot projects to deploy zero-emissions transit buses on Ontario roads.
 - Striking an independent committee to examine decongestion charging options and its impacts, and make recommendations to government.
- Zero-cost options are available to the govenrment to accelerate the shift to a cleaner passenger vehicle fleet in Ontario.
 - The government may want to study Québec's zero-emissions vehicle (ZEV)
 mandate with a view toward harmonizing requirements for the two provinces.
 - o The government may also want to assess France's Bonus-Malus feebate program for vehicles. The program consists of a financial reward for purchasers of environmentally friendly new cars and a financial penalty for those buying cars emitting high levels of CO₂.
- To reduce pollution from the on-road goods movement, the government may wish to consider:

- Working with the trucking industry to set progressively stringent in-use standards for heavy-duty tractors and trailers.
- Working with industry partners to establish battery electric and hydrogen refuelling infrastructure for freight vehicles.
- Creating provincial programs that provide education, subsidies or incentives for businesses and municipalities to implement sustainable freight pilot projects (e.g. off-peak delivery programs, cargo bike and e-bike pilots).
- Working with relevant municipalities to establish a sustainable goods movement strategy and network for the Greater Golden Horseshoe and support municipal freight planning.

2.2 Industry

- The government could consider including sectoral emissions performance standards in their climate plan. These performance standards could include credible enforcement mechanisms, such as a plan for firms to face fines for not meeting the industry allowable emissions standards, which would decline over time (i.e., the allowable emissions would decrease).
- The government should consider the inclusion of a suite of transformative technology market regulations that require an initially small market share for key transformative technologies that would grow over time.
- Investments in clean technology research and development could potentially form the
 nucleus of a clean energy cluster in Ontario's economy. Ontario has the foundation for
 developing an international comparative advantage in clean technology, with a highly
 skilled labour force, leading universities, considerable manufacturing expertise, and a
 strong applied research hub in Kitchener-Waterloo.
- Ontario's clean tech sector has been the fastest growing of all Canadian provinces and territories.²¹ In 2017, the clean tech sector in Ontario included 5,000 companies with 130,000 employees, generating about \$19.8 billion in annual revenue.²² The global market for low-carbon goods and services is already worth over USD \$5.8 trillion, and is projected to keep growing.²³
- In broader terms, these developments could also lead to opportunities in international
 markets for Canadian businesses; as other jurisdictions introduce or increase carbon
 prices, global demand for emissions-reducing technologies will continue to increase.
 These benefits will begin to accrue once the new technologies become better known and
 will grow over time.

²¹ Ibid, 20, p. 86.

²² Ibid, 20, p. 64.

²³ Ibid, 20, p. 86.

- Direct investment in low-carbon technology can also make it easier to implement more stringent carbon pricing by lowering the costs of technologies that reduce GHG emissions. By reducing the costs associated with carbon pricing over the longer term, the development of cleaner technologies can also reduce the overall costs of any carbon pricing policy.
- These technology investments can lead to more GHG emissions reductions at lower cost, and therefore improve firms' emissions performance. Lowering firms' carbon costs helps to reduce pressures on business competitiveness.
- Industry and the environment would both benefit from government investment into
 research and development in various areas of clean technology, including the use of
 carbon capture and sequestration to store process GHG emissions that are otherwise
 difficult to eliminate. Industrial process GHG emissions reductions will also require
 research and development investments in innovative clean technologies (e.g.
 developing carbon-neutral cement).

2.3 Buildings

- Incentives for energy-saving building retrofits and the adoption of other low-carbon technologies can provide countless Ontarians with significant monthly energy savings while supporting thousands of good-paying jobs in Ontario and across Canada, such as high performance building contractors, solar energy installers and roles with clean technology manufacturers.
- Financial incentives for home and building upgrades, such as solar panel installation, smart thermostats, heat pumps, insulation, air sealing and energy efficient windows, incentivize GHG emission reduction strategies for both Part 3 and Part 9 buildings.
- Further, supporting the energy use and emissions reductions defined for new buildings in recent Ontario Building Code updates will help drive market solutions for high efficiency buildings. Also per the OBC, the government should support EV-ready buildings and electrification of heating systems towards net zero emissions and eliminating GHGs.
- Achieving the balance between improving the building envelope and electrification will necessitate not just the cost of energy, but full accounting of improvements in the health and comfort of our living and working spaces and the benefits of reducing the GHGs associated with their operation.

2.4 Electricity

- To meet the long term carbon neutral target, the world's energy systems must be almost completely decarbonized by 2050.

- Great strides were made in Ontario to decarbonize the electricity sector, where fossil fuels now only represent 4% of the supply mix.²⁴ Ontario's coal phase-out is a great example of successful climate policy; coal dropped from 25% of the supply mix in 2003, to 0 in 2014, all while grid reliability and domestic supply improved. The measure enabled Ontario to meet its target of achieving 2014 emissions reduction target of 6% below 1990 levels.²⁵ Building on this success, Ontario should avoid any new investment in fossil energy infrastructure and the resulting lock-in effects.
- In addition to seeking increases in energy efficiency and renewables, Ontario's climate action plan should capitalize on its clean grid. The clean grid creates an economic and decarbonization opportunity through electrification of transportation and buildings, Ontario's biggest sources of carbon pollution.

2.5 Climate finance

- As a key policy principle, the climate plan should not disproportionately affect lower income and vulnerable households. Care should be taken to protect these households from any loss in purchasing power due to climate policy while preserving the policy's incentives for cost-effective emissions reductions.
- Implementing the climate plan will require earmarking financial resources from the public sector and mobilizing resources from the private sector.
 - The revenues from the cap-and-trade auctions represent a significant opportunity to advance climate action in Ontario. We echo the Environment Comissioner's position, who estimates that \$1 billion in auction revenues are still in the Government coffers,²⁶ that the money must be spent on reducing carbon emissions.
 - The Low Carbon Economy Leadership Fund provides \$1.4 billion to jurisdictions that have adopted the Pan-Canadian Framework to help them reduce GHG emissions. Ontario's allocation of \$420 million represents a second important opportunity for advancing climate goals, one that the province should seek to preserve by committing to seriously addressing climate change in collaboration with the federal government.
 - To make financial flows consistent with a pathway toward low-emission, the Government should strive to take objectives laid out in its climate plan into account in all public investment decisions.

²⁴ Ontario Energy Board, *Ontario's System-Wide Electricity Supply Mix: 2017 Data*, October 5, 2018, https://www.oeb.ca/sites/default/files/2017-supply-mix-data.pdf

²⁵ Government of Ontario, *The End of Coal*, visited on October 9, 2018. https://www.ontario.ca/page/end-coal

²⁶ Mike Crawley, Ford government sitting on \$1B in cap-and-trade money (October 2, 2018) https://www.cbc.ca/news/canada/toronto/doug-ford-cap-and-trade-fund-revenue-1.4841483, CBN News

A successful transition requires close coordination between policy, technology and capital, at the core of which is partnership between the public and private sector. ²⁷ While governments play an important role in setting a vision and creating enabling conditions for this transition to materialize, the scale of the investment challenge is beyond the capacity of the public sector alone. Decarbonization is not synonymous with deindustrialization, but rather with transforming industry. We encourage the government to put in place enabling conditions for investors to unlock these opportunities and deliver cleaner, smarter, more efficient energy systems. Clear and consistent policies are fundamental to the succesful deployment of capital over a long period of time so that the private sector has the confidence to invest.

2.6 Mitigation and adaptation measures

- Although our submission focuses on mitigation, Ontario's climate change plan should also contain adaptation planning and actions to deal with the impacts, risks and opportunities posed by a changing climate.
- Ontario is warming faster than the global average.²⁸ The province's 10 warmest years on record have all occurred since 1998.²⁹
- Mitigation and adaptation measures should be developed in conjunction; they are complementary strategies for responding to climate change.
 - o In March 2018 the Commissioner of the Environment and Sustainable Development released the Collaborative Climate Change Report. The report highlights that in 2016, Ontario had only implemented 30% of the action plan items from the 2011 adaptation strategy and action plan for 2011 to 2014, which was developed in response to a 2009 report of the Expert Panel.³⁰ The authors also report that the Ministry of the Environment did not have the authority to require other ministries to complete the actions in that plan. We encourage the Ontario government to continue to address these findings as well as to determine whether the adaptation plan should be updated to reflect current information and align with the upcoming mitigation plan.
- Each jurisidiction's individual characteristics in terms of economy, resource base, and political structure provides different opportunities for tackling climate change while

²⁷ Goldman Sachs, *Transition to a Low-Carbon Economy*, https://www.goldmansachs.com/insights/archive/archive-pdfs/trans-low-carbon-econ.pdf

²⁸ Environmental Commissioner of Ontario, *Climate Change in Ontario: what's next? 2018 Greenhouse Gas Progress Report*, https://docs.assets.eco.on.ca/reports/climate-change/2018/Climate-Action-in-Ontario.pdf, p.18.

²⁹ Ibid, 28, p. 24.

³⁰ Office of the Auditor General of Canada, *Perspectives on Climate Change Action in Canada, a Collaborative Report from Auditors General*, March 2018. http://www.oag-bvg.gc.ca/internet/English/parl_otp_201803_e_42883.html#ex6, exhibit 6

building a competitive low-carbon economy. A comprehensive and effective climate change plan will combine the three options listed above to target reductions across the economy while taking advantage of specific sectoral opportunities for innovation and market transformation. The combination of policy option and measures should be explored with businesses and civil society and bring climate targets on par with economic and social goals to develop concrete pathways to decarbonization. The government should evaluate the economic, social and environmental impact of proposed measures.

2.7 Reporting on progress

- Regular monitoring and reporting on progress is essential to assessing the effectiveness
 of the climate plan and for the government to demonstrate its willingness to be held
 accountable for their commitments.
- Progress reports should be based on a robust set of indicators that allow to track the implementation of policies under the plan, including costs, technology diffusion, energy use, and emissions reduction.
- In addition to tracking progress annually, periodic reviews are an essential element of a robust climate policy. Reviews should reflect learning and allow for improvement as well as to ratchet up the ambition of the plan. They should aim to regularly check the effectiveness of the measures and modify them wherever necessary.
- Progress reports and reviews should be carried out transparently and through a process of dialogue with all stakeholders.

3. Pricing carbon pollution

3.1 Federal carbon pricing backstop

- We welcome the Canadian government's leadership in moving forward to ensure that a price on pollution is applied across the country by January 2019. Should Ontario not take the option of designing its own carbon pricing system, we support the federal government's application of the backstop.
- We encourage the Government of Ontario to reconsider its recent decision to join Saskatchewan in challenging the federal government's right to apply the backstop in provinces that do not comply with the carbon pricing benchmark requirements. A negotiated solution would allow the Ontario government to conserve its share of the Low Carbon Economy Fund and to reallocate the 30 million of tax payers dollars earmarked for this battle to more productive uses, including addressing the pressing challenge of climate change.

- There is little doubt that the federal government has the authority to apply the carbon pricing backstop. The legal opinion commissioned by the province of Manitoba in 2017 concludes "the federal government does have the authority to legislate its backstop proposal with a strong likelihood that the Supreme Court of Canada would uphold the proposed carbon tax/levy."³¹
- Pricing carbon pollution is widely recognized as the most cost-effective tool to reduce harmful emissions and a key tenet of a comprehensive plan to tackle climate change.
- The latest report from the IPCC is a call to action for governments to take ambitious action to scale up the energy transition to avoid reaching the 1.5 °C threshold. To achieve this goal, according to the authors, "carbon pricing, direct regulation and public investment to enable innovation are critical."³²
- A price on carbon is increasingly the norm around the world: over 70 jurisdictions are applying a price on carbon. According to the High-Level Commission on Carbon Prices a well-designed carbon price is an indispensable part of a strategy for reducing emissions in an efficient way.³³ The World Business Council for Sustainable Development³⁴ lists five reasons to price carbon pollution, namely:
 - 1. Pricing carbon pollution is the lowest cost pathway
 - Carbon pricing not only involves lower costs than other policy approaches, but the GDP cost is low in absolute terms.³⁵
 - 2. Pricing carbon pollution offers technology neutrality
 - Industry can chose its own path forward in response to the carbon price.
 - 3. Pricing carbon pollution offers flexibility
 - Carbon pricing provides the option for facilities to avoid the need for immediate capital investment while still complying with the requirement. It also offers the government flexibility to address competitiveness risks and carbon leakage.

³¹ Government of Manitoba, *Province Releases Expert Legal Opinion on Carbon Pricing* (October 11, 2017), https://news.gov.mb.ca/news/index.html?item=42320

³² International Panel on Climate Change, *Global Warming of 1.5 °C - an IPCC special report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty http://report.ipcc.ch/sr15/pdf/sr15_chapter2.pdf, Chapter 2, p.75.*

³³ High- Level Commission on Carbon Prices, Report of the High-Level Commission on Carbon Prices (May 29, 2017), https://static1.squarespace.com/static/54ff9c5ce4b0a53decccfb4c/t/59b7f2409f8dce5316811916/1505227332748/CarbonPricing FullReport.pdf, p.1

³⁴ World Business Council for Sustainable Development, Why carbon pricing matters (November 2017), p.16, http://docs.wbcsd.org/2017/11/WBCSD_carbon_pricing.pdf

³⁵ Chris Ragan, Dale Beugin, *Opinion: the real cost and benefits, of carbon pricing* (May 2, 2018) https://ecofiscal.ca/2018/05/02/opinion-real-costs-benefits-carbon-pricing/

- 4. Pricing carbon pollution offers stability and predictability
 - Carbon prices give a consistent signal to promote the investments we need today to create a competitive low-carbon economy of tomorrow.
- 5. Pricing carbon pollution ensures transparency and fairness
 - Carbon pricing reflects the "polluter pays" principle and contributes to distributing costs and benefits equitably, avoiding disproportionate burdens on vulnerable groups through revenue recycling.
 - Addressing equity concerns doesn't preclude addressing other revenue recycling priorities; only 10-12% of carbon pricing revenues are needed to address equity concerns for the bottom 40% of households.³⁶

3.2 Proposal to cancel the cap-and-trade program

Bill 4 provides for the retirement and cancellation of cap-and-trade instruments.

- In 2016, Ontario established a cap-and-trade system in the province with the passage of the Climate Change Mitigation and Low-Carbon Economy Act.
- In addition to providing a flexible and efficient tool to promote innovation and reduce emissions throughout the province, the cap-and-trade provides a source of revenue through auctions to finance mitigation projects that help build the green businesses and economy of tomorrow in Ontario.
- Under the cap-and-trade, heavy emitters receive free allowances up to a cap that
 declines each year to support achieving the province's 2020 and 2030 emissions
 reductions target. If emissions over the compliance period³⁷ exceed this cap, emitters
 must purchase allowances at auction or offsets to cover emissions over this limit.
- The first auction was held in March 2017. In January 2018 Ontario linked its system with California and Quebec through the Western Climate Initiative (WCI) carbon market.
 Two joint auctions were successfully held, selling out all available allowances in February³⁸ and in May³⁹ 2018 demonstrating a high level of future confidence in the system.

³⁶ Jason Dion, *We can design fair carbon pricing (and we are)* (April 18, 2018) https://ecofiscal.ca/2018/04/18/candesign-fair-carbon-pricing-already-are/

³⁷ A compliance period is when the compliance obligation is calculated. At the end of each compliance period, each facility must turn in: allowances; early reduction credits; or offset credits.

³⁸ International Emissions Trading Association, *Ontario Joins California and Quebec for Largest Carbon Auction Yet, All Current Allowances Sell* (February 28, 2018)

 $https://www.ieta.org/resources/_NA\%20 News\%20 Developments/February\%202018/REGIONAL/WCI/EDF\%20 Blog\%20WCI\%20 Auction\%20 Results-28 Feb.pdf$

³⁹ Carbon Pulse, *WCI auction sells out again, with results bucking analyst predictions* (May 23, 2018) https://carbon-pulse.com/52736/

- The individual and joint auctions generated over \$2.8 billion for Ontario. Carbon pricing revenue funded initiatives like the \$377-million Green Ontario Fund (now cancelled) which provided rebates for home technologies such as efficient windows, heat pumps, and smart thermostats. This revenue also funded a host of programs to promote electric vehicles and school buses, and support for greening municipalities. The cancellation of the cap-and-trade and with it, the programs it funded affects businesses and start-ups and their customers.
- By enacting Bill 4, the Ontario government would relinquish billions in future revenues earned from the cap-and-trade auctions. Ontario faces losses of about \$5-billion, according to the International Emissions Trading Association.⁴⁰
- The province sustained a dramatic reversal in policy in early June when Premier Ford announced an immediate end to the program, disregarding the one-year notice or wait under the WCI agreement.
- The cancellation of the cap and trade program, although not finalized, has already damaged a good partnership with Quebec and California that delivered results and reduced emissions.
- The International Emissions Trading Association (IETA) has qualified this decision as "extremely dangerous and detrimental to Ontario businesses, consumers and trade partners."⁴¹

The Act provides for the payment by the Crown of compensation in respect of cap and trade instruments, the amount of which is to be determined in accordance with the regulations. The obligation to pay compensation is subject to various limitations set out in the Act.

- While the broader California and Quebec markets recovered quickly after a move by California to freeze trading, extensive uncertainty remains for entities that purchased and held allowances in Ontario, where a new regulation prevents the purchase or sale of compliance instruments,⁴² with signficant potential downstream implications for consumers.
- In the first compliance period (2017-2020), heavy emitters received free allowances to cover 100% of emissions. The rate of free allowances was to decrease over time. Free allowances were not given to fuel suppliers/distributors, electricity importers and most electricity generators.

⁴⁰ Eric Reguly, *Scrapping Ontario's cap-and-trade carbon market creates far more losers than winners* (July 13, 2018) https://www.theglobeandmail.com/business/commentary/article-scrapping-ontarios-cap-and-trade-carbon-market-creates-far-more/, Globe and Mail

⁴¹ International Emissions Trading Association, *IETA statement in response to Ontario's announcement of WCI withdrawal* (June 15, 2018) https://www.ieta.org/page-18192/6315334

⁴² O.Reg 386/18: Prohibition Against the Purchase, Sale and Other Dealings with Emission Allowances and Credits

- Out of more than \$2.8 billion in allowances sold by the province, the Ontario government has said it would provide only \$5 million⁴³ in compensation to those market participants.
- Regulated entities implement their own strategy for managing regulatory compliance. They plan investments, for example in more efficient technologies or processes, over the compliance period to reduce on site emissions and therefore compliance costs, when necessary, combining allowances and offsets to meet their cap. Under a conservative scenario, it may be argued that \$2.2 of \$2.8 billion sold in allowances would have been used as compliance instruments for 2017 and half of 2018. Fair compensation for participants would therefore be \$663 million. The Act provides no justification for cancelling the 2021 vintage, which represent \$65 million, nor for using a scaling factor of 0.008363 for the 2018 (\$437 million) and 2020 (\$160 million) vintages to get to the \$5 million figure.
- This will generate significant losses for market participants. The Canadian Manufacturers & Exporters have urged the Ontario government to "provide required support to Ontario businesses that have purchased trading allowances ... so that investments are kept whole and recovered appropriately"⁴⁴
- The uncompensated \$659 million risk being passed onto consumers.

The Act also provides for preventing any cause of action from arising against the Crown and specified related persons as a result of various specified matters, including the enactment of the Act and the repeal of the Climate Change Mitigation and Low-carbon Economy Act, 2016.

- The government's decision to break contracts that companies made in good faith by purchasing allowances combined with legislated immunity sets a dangerous precedent for a jurisdiction looking to build investor confidence.
- In addition to allowances, the Ontario government has also cancelled 758 renewable-energy contracts. Potential investors have voiced concerns, from German and multinational companies to businesses across Canada including John Manley, then-president of the Business Council of Canada, who flagged the recent decisions as a risk to Ontario's "reputation for fair dealing and respect for the rule of law" and in

⁴³ Paolo Loriggio, *Ontario's PC government introduces legislation to scrap cap-and-trade* (July 25, 2018) https://globalnews.ca/news/4352665/ontario-cap-and-trade-pc/, Global News.

⁴⁴ Shawn McCarthy, *Ontario introduces legislation to kill cap-and-trade program* (July 25, 2018) https://www.theglobeandmail.com/canada/article-ontario-introduces-legislation-to-kill-cap-and-trade-program/. Globe and Mail.

contradiction with the recent Speech from the Throne where the government said it intends to "send a message to the world that Ontario is open for business." ⁴⁵

Conclusion

Thank you for the opportunity to share our views on Bill 4 — specifically on the cancellation of the cap-and-trade program and the development of a new climate change plan, along with appropriate mitigation targets for the province of Ontario. We look forward to continuing to collaborate with the Government of Ontario as it develops its approach.

Contact

Robin Edger Director, Ontario Climate Policy robine@pembina.org c: 613-447-9437

Lindsay Wiginton Managing Director, Transportation and Urban Solutions lindsayw@pembina.org c: 514-743-9244

Isabelle Turcotte
Interim Director, Federal Program
isabellet@pembina.org
c: 613-277-3242

Pembina Institute 305-75 Albert Street, Ottawa, ON, K1P 5E7 www.pembina.org

⁴⁵ The Business Council of Canada, *Letter to the Honorable Doug Ford* (July 23, 2018) https://thebusinesscouncil.ca/wp-content/uploads/2018/07/Letter-to-the-Honourable-Doug-Ford-Premier-Government-of-Ontario-July-23-2018.pdf