

January 28, 2019

Nathaniel Aguda
Project Manager
Ministry of the Environment, Conservation and Parks
Environmental Policy Division
40 St Clair Avenue W.
Floor 10
Toronto, M4V 1M2
Canada

Re: TAF's Comments on Ontario's Environment Plan

Dear Mr. Aguda,

The Atmospheric Fund (TAF) is a public agency established in 1991 by the City of Toronto and endowed by the City and the Province of Ontario. TAF works closely with stakeholders across the Greater Toronto and Hamilton Area (GTHA) to test and advance innovative programs to reduce greenhouse gas (GHG) emissions and air pollution. However, the views expressed in this submission do not necessarily represent those of the City of Toronto, the Province of Ontario or other GTHA stakeholders.

TAF would like to thank the Ministry of the Environment, Conservation and Parks for the opportunity to provide input on the development of this important plan. Climate change is among the greatest threats facing Ontario and the world today. Strong provincial action on climate change presents promising opportunities to create local jobs and drive Ontario's future economic prosperity while protecting our environment.

COMMENTS ON PROPOSED FOCUS AREAS

ACHIEVING THE PARIS AGREEMENT TARGET

Ontario's proposed climate target falls short of what the scientific evidence suggests is needed to limit global warming to 1.5°C, in alignment with the latest report by the [Intergovernmental Panel on Climate Change](#) (IPCC). At the very time when more ambition and leadership are called for, the proposed target would dramatically scale back Ontario's commitment to climate change. The new target is substantially weaker than the previous target, and the proposed Environment Plan (the Plan) also lacks a long-term (2050) target. Choices we make between now and 2030 will have a major impact on Ontario's



2050 emissions, such as decisions about new buildings and infrastructure. A long-term target is key to ensuring that these decisions are evaluated against that goal. Otherwise, Ontario risks getting locked into a pathway that is inconsistent with a stable climate. ***Ontario should commit to ambitious science-based targets for 2030 and 2050 to provide clear signals for industry and accelerate investment in climate action.***

Reducing Emissions from the Transportation Sector

Transportation is the largest and fastest growing source of emissions in Ontario. At the same time, congestion is costing Ontario billions of dollars in lost productivity¹ while taking an increasing toll on the health and well-being of Ontarians. The transportation sector provides an unparalleled opportunity to achieve emissions reductions while improving productivity, quality of life, and affordability for families. ***A balanced solution must address three key priorities: transportation demand management, modal shift, and electrification.***

The fastest, cleanest, and most affordable kilometre is the one that isn't travelled. Reducing demand for transportation increases productivity and reduces pollution without requiring major public investments. By and large, Ontarians want to live closer to where they work and play,² but struggle to find affordable, family-friendly housing in complete communities. ***The province can and must stimulate the supply of location efficient, transit-connected communities that are affordable for families to buy and municipalities to service.*** This will reduce the total kilometres travelled while simultaneously making modal shift more viable for more Ontarians. Just as importantly, expanding the supply of transit-connected, family friendly housing will improve housing affordability. This will require streamlining the development process for these kinds of communities, and strengthening requirements for appropriate zoning around current and future major transit nodes.

Ontario also needs to make continued progress in shifting transportation from personal vehicles towards public transit and other low carbon options. ***Ontario should continue and accelerate support for regional transit projects and GO transit expansion and electrification*** across the GTHA and other major urban centres. Building the transit Ontario needs will benefit all Ontarians by providing more and better transportation choices, reducing congestion for drivers, and reducing air pollution and carbon emissions.

Finally, Ontario must reduce reliance on high-pollution vehicles by supporting the electrification of transportation. The Plan relies on substantial increases in adoption of electric vehicles (EV), but does not propose any investments in charging infrastructure or

¹ Metrolinx. *Cost of Road Congestion in the Greater Toronto and Hamilton Area*, 2008. Available at http://www.metrolinx.com/en/regionalplanning/costsofcongestion/ISP_08-015_Cost_of_Congestion_report_1128081.pdf

² Pembina Institute, *2014 Home Location Preference Survey: Understanding where GTA residents prefer to live and commute*, September 2014

vehicle purchase incentives to support this transition. In contrast, B.C.'s recent climate plan includes clear EV-related goals and timelines, substantial funding commitments, and a zero-emissions vehicle mandate that will require all new vehicles to be zero emissions by 2040.³ While EVs represent a small proportion of vehicles currently on Ontario's roads, sales are growing exponentially and jurisdictions around the world are competing for investment in this emerging sector. Ontario's auto sector forms a large and important part of our economy; we must have a strong policy framework to support EVs as the future of the sector. ***Ontario requires a more detailed and specific plan for accelerating adoption of EVs, including: support for EV charging infrastructure and vehicle purchases; encouraging the manufacture of more EVs in Ontario; and development of a zero emissions vehicle mandate.***

MAKE POLLUTERS ACCOUNTABLE

Codes and standards are increasingly recognized as among the most effective and affordable strategies for reducing emissions⁴ as they don't require any significant outlay of public dollars, instead relying on the capacity of the private sector to continuously improve performance. Industry accounts for 30% of Ontario's carbon emissions and therefore targeted regulations for major industrial emitters could be an effective tool, so long as competitiveness impacts are taken into account to avoid carbon leakage. While TAF is pleased to see that the Plan includes the implementation of emission performance standards for large emitters, there is a lack of detail regarding the implementation of the new emissions standard system. Consequently, it is unclear how the proposed system will interact with the federal output-based performance standards which came into effect on January 1st 2019. ***Ontario needs to move quickly to clarify the intentions of the proposed industrial emissions performance standards and ensure that the province's strategy is synergistic with federal regulations.***

ACTIVATE THE PRIVATE SECTOR AND THE ONTARIO CARBON TRUST

Mobilizing private capital, innovation, and expertise is critical to achieving deep carbon reductions in Ontario. The Province can and should play a key role in this, including through the proposed emissions-reduction fund – the Ontario Carbon Trust. However, careful design is required to ensure the Ontario Carbon Trust is impactful and successful in leveraging private capital. ***Without careful design, there is a risk that the Ontario Carbon Trust could actually crowd out private capital and waste public resources on projects that would have occurred with or without public support.***

³ Available at: https://www2.gov.bc.ca/assets/gov/environment/climate-change/action/cleanbc/cleanbc_2018-bc-climate-strategy.pdf

⁴ For example, see IPCC, 2014: Summary for Policymakers. Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change.

Ontario should learn from and improve upon Australia's experience with the proposed reverse auction mechanism. Australia's carbon emissions have shown no improvement since 2017 and it is broadly considered unlikely that the country will meet its 2030 target.⁵ The key challenge is that reverse auction systems put an overwhelming focus on the cost (to government) per tonne of emissions reduced. Wise investment of public funds in climate action requires a nuanced and strategic approach that considers multiple criteria. While cost effectiveness is a key criterion, a singular focus on cost-per-tonne can lead to investments that make little sense. One reason is that the lowest cost-per-tonne actions often have a strong business case without public funding. There is little value in investing in projects that are highly likely to occur without public funding (AKA *free riders*). This single-minded focus on cost per tonne creates a selection bias in favour of projects that are not truly additional - and can therefore bid at a very low subsidy per tonne. Therefore, ***additionality must be a key criterion for allocating public funds.***

Public funding should also be directed towards areas where there is an opportunity to catalyze larger emissions reduction potential in the future. In some cases, this means supporting initiatives that are not cost effective today where there is a realistic expectation that costs can be reduced in the future. ***Public funding can play a catalytic role by demonstrating, de-risking, and creating the economies of scale needed to reduce costs.*** The budget available for the Ontario Carbon Trust will never be sufficient to directly achieve the level of emissions reductions required; therefore, scale-up potential should be a key criterion.

Finally, ***investment decisions should also consider the co-benefits of various climate actions.*** Many emissions reduction projects create multiple benefits, including improved public health, local job creation, and improved mobility for residents. These co-benefits often have a more direct and immediate impact on the lives of Ontarians than the emissions reductions.⁶ TAF supports the government's commitment to "put people first" in the new Plan, and submits that this necessitates an explicit assessment of co-benefits when making funding decisions.

USE ENERGY AND RESOURCES WISELY

Conserving Energy in Homes and Buildings

Energy efficiency improves productivity, creates good jobs, and leaves more money in the pockets of households and businesses. Energy efficiency is generally the most cost-effective way to reduce emissions, while creating multiple benefits. A renewed drive to

⁵ UNEP, 2018. The Emissions Gap Report 2018. United Nations Environment Programme, Nairobi. Available at: <https://www.unenvironment.org/resources/emissions-gap-report-2018>

⁶ For example, see the International Energy Agency's seminal report *Capturing the Multiple Benefits of Energy Efficiency*, available at <https://webstore.iea.org/capturing-the-multiple-benefits-of-energy-efficiency>



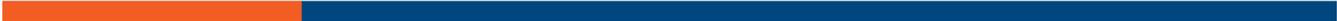
improve energy efficiency in Ontario's residential, commercial and industrial sectors could create over 30,000 net new jobs while boosting GDP by over \$8 billion.⁷ This will require the continuation and expansion of electric and natural gas utility conservation programs, along with strategic use of the proposed emissions reduction fund. The unprecedented data becoming available through Ontario's Energy and Water Reporting and Benchmarking regulation can allow energy efficiency programs to get smarter and more effective by targeting investment at the worst performing buildings. Co-benefits can be maximized by prioritizing investments in social housing and schools, where energy efficiency retrofits can reduce operating costs while improving health and comfort for vulnerable residents and schoolchildren.

Optimizing Ontario's Clean Hydro System

We encourage the government to consider innovative means of supporting the transition towards a low-carbon economy and increasing access to clean and affordable electricity for families and businesses. While subsidizing energy costs or restructuring energy sector debt can create short-term rate relief for households and businesses, they do not represent sustainable, long-term solutions to energy affordability. The cheapest megawatt hour is the one that is *not* used. Conservation and demand management should be the top priority in reducing Ontarians' energy costs. Affordability can be further enhanced by targeting conservation programs at low-income households and businesses struggling with energy bills. Those most impacted by hydro rates are the minority of homes and businesses with electric-resistance heating. A program to retrofit such homes and buildings (e.g. with heat pumps) would be far more cost-effective than subsidizing hydro rates or expanding natural gas distribution, and would support emissions reductions.

Ontario must also address the structural issues that are increasingly putting pressure on electricity rates. Ontario is in the enviable position of having a surplus of low-carbon electricity. However, instead of capitalizing on this asset, we've allowed it to turn into a liability. ***Ontario should incentivize the use of surplus low-carbon electricity to offset fossil fuels and reduce system costs,*** turning this liability into an advantage. There are many examples of technologies and approaches that could be used, including but not limited to: energy storage; power-to-gas technology; and hybrid homes and buildings that dynamically switch from electric heat pumps to natural gas heating. Ontario can also use its surplus low-carbon power to support the low-cost charging of EVs overnight. These approaches can reduce the amount of fossil fuels imported into Ontario while simultaneously reducing hydro costs for Ontario consumers by reducing the need to dispatch-down variable generation sources or sell surplus electricity at a loss to neighbouring jurisdictions. In the long-run, decarbonization requires increased

⁷ Clean Energy Canada and Dunsky Energy Consulting, The Economic Impact of Improved Energy Efficiency in Canada, 2018. Based on the PCF+ Scenario for Ontario, limited to natural gas and electricity sectors (Appendix C).



electrification of heating and transportation. Ontario's success will depend on finding a pathway to optimizing use of our clean hydro assets.

Codes and Standards

Codes and standards have a critical role to play in reducing emissions across all sectors. In addition to cost effectively reducing emissions, codes and standards also function as consumer protection instruments, ensuring households and businesses are not saddled with unnecessarily high energy/fuel costs. The most critical priorities are Ontario's Building Code and Ontario's equipment and appliance standards. costs. The most critical priorities are Ontario's Building Code and Ontario's equipment and appliance standards. costs. The most critical priorities are Ontario's Building Code and Ontario's equipment and appliance standards.

Buildings already account for about a quarter of Ontario's GHG emissions.⁸ With Ontario's population projected to grow by over 30% over the next 25 years,⁹ ongoing incremental improvements in energy efficiency are likely to be offset by growth. ***Ontario needs transformative changes in the way we build and renovate buildings***, and we need them now, before the current building boom locks in carbon emissions that will be prohibitively expensive and difficult to address down the line. The Ontario building sector is a key economic driver of jobs at all skill levels and an engine for innovation in clean technology. High performance buildings also result in reduced energy costs for households and businesses; the benefits of such savings are multiplied when they are recycled into other economic sectors. Working with a broad range of stakeholders, TAF has already provided [detailed recommendations for the OBC](#). We encourage the government to consider those recommendations as part of the government's plan to modernize the OBC.

Incorporating climate change impacts and related resilience requirements into the OBC should be an immediate priority. Likewise, climate change impacts need to be fully incorporated into processes for planning, prioritizing, and designing infrastructure projects. As it stands, we are developing new buildings and infrastructure for a climate that no longer exists. ***Particular priority should be placed on those areas where there is synergy between climate change adaptation and mitigation objectives.*** For example, requiring high performance building envelopes in new construction will reduce energy costs and emissions while enhancing resilience by allowing buildings to remain habitable during power outages caused by increasingly frequent extreme weather events.

Ontario's equipment and appliance standards can continue to drive significant, predictable improvement in energy efficiency at a minimal cost to consumers and businesses. Energy performance standards play a key role in accelerating adoption of

⁸ When including emissions from electricity used in buildings as well as natural gas and other fuels combusted on site.

⁹ Ontario Ministry of Finance, *Ontario Population Projections Update*, Spring 2017.



efficient technologies, ensuring that yesterday's innovations become tomorrow's standard features across a broad range of products. ***Ontario needs to continue moving forward with regular, proactive updates to its energy and water efficiency standards, protecting consumers while providing a predictable policy environment for manufacturers and importers.*** Where possible, Ontario can harmonize standards with leading jurisdictions (e.g. federal standards, other provinces, or US states); where leadership is lacking, Ontario should move forward with suitable made-in-Ontario standards.

INTEGRATED GOVERNMENT LEADERSHIP

Ontario's climate change plan should take an all-of-government approach and implementation should include collaboration with all levels of government. Due to the cross-cutting nature of the climate change challenge, responsibility and authority span across multiple ministries within the Province, and across all levels of government. The climate plan must be closely integrated with Ontario's long-term energy plan, infrastructure plan, and housing strategy. Likewise, many of the key priorities will require collaboration with municipal and federal governments. Ontario can and must find common ground with other levels of government to solve the climate crisis.

NEXT STEPS

The Plan includes a detailed breakdown of expected emissions reductions by sector, which is critical. However, for many of the key sectors, there is little detail on how the government plans to achieve the reductions. ***TAF recommends the development of more detailed action plans with fixed timelines for key sectors in the Plan.***

TAF is pleased to see that the Plan includes establishing an advisory panel, a four-year review cycle, and a commitment to reporting on progress. ***However, TAF recommends a commitment to progress reporting on a set annual schedule,*** in order to ensure accountability and facilitate continuous improvement.

Thank you for your consideration in reviewing the TAF's comments. We look forward to continuing to work with the Province to support the development of Ontario's climate strategy. Please don't hesitate to contact us directly should you have any questions.

Sincerely yours,

Bryan Purcell
Director of Policy & Programs
The Atmospheric Fund