

November 16, 2018

David Donovan
Director of Policy
Office of the Honourable Rod Phillips
Ministry of the Environment, Conservation and Parks
77 Wellesley St W.
11th Floor
Toronto, M7A 2T5
Canada

Re: TAF's Comments on Ontario's new Climate Plan

Dear Mr. Donovan,

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 guidance and feedback on the development of this important plan. The issue of climate change presents various challenges for the province and will undoubtedly impact the lives of Ontarians. At the same time, strong provincial action on climate change presents promising opportunities to create local jobs and drive Ontario's future economic prosperity.

Ambitious, science-based targets are critical to maintaining Ontario's credibility as a climate leader and should be entrenched in legislation. This will provide the private sector with clear signals of the required pace and scope of decarbonization and thereby enable them to make long-term investments accordingly. Ontario's plan should be designed to meet or exceed the new targets, with an identified process for periodic review and refinement. Annual progress reporting and regular refinement cycles can provide the government flexibility to respond to changing needs while maintaining efficient and effective resource allocation. With strong targets and a strategic plan to achieve them, ***Ontario can achieve deep carbon reductions while enhancing affordability, optimizing our Hydro system, and creating good jobs.***

Ontario's climate plan must include a focus on all major sources of carbon emissions, including transportation, industry, buildings, and waste. The plan

must also balance a focus on achieving short-term, cost-effective carbon reductions with a focus on unlocking deeper reductions opportunities down the road. While the plan should prioritize emissions reductions strategies based on cost-effectiveness and the potential to generate multiple benefits (e.g. job creation, energy cost savings, etc.), it cannot ignore any major emissions sources. In the medium-term, Ontario needs to achieve deep carbon reductions across *all* emissions sources. Where this is less cost-effective today, an emphasis should be placed on supporting research, demonstration and capacity building to enable cost-effective reductions at scale in the future.

Ontario's climate 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 is split 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.***

Comments on proposed focus areas

Creating an understanding of the effects that climate change is having...and strengthen our resiliency.

Ontario is already experiencing significant - and costly - climate impacts, which will only increase in severity in the future. Improving our understanding of these climate impacts is important to enable successful adaptation and resilience efforts. However, it must also be recognized that a significant amount of information is already available, including detailed projections on expected changes in temperature and precipitation. While further research will enhance and improve our current understanding, enough is known to enable immediate action to adapt and build Ontario's resilience. Getting on with the business of adapting to climate change impacts and enhancing resilience is therefore a higher priority than improving our understanding of those impacts. For example, ***incorporating climate change impacts and related resilience requirements into the Ontario Building Code (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.

Ensuring polluters are held accountable and creating dedicated measures that will efficiently reduce GHG emissions.

Codes and standards are increasingly recognized as among the most effective and affordable strategies for reducing emissions.¹ Codes and standards 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. However, codes and standards also have an important role to play in reducing emissions in other sectors, which collectively account for the majority of Ontario's emissions. In many of these other sectors, codes and standards also function as consumer protection instruments, ensuring households and businesses are not saddled with unnecessarily high energy/fuel costs. Key priorities are outlined below.

Modernizing the OBC

Buildings already account for about a quarter of Ontario's GHG emissions.² With Ontario's population projected to grow by over 30% over the next 25 years³, 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 also 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](#).⁴ ***We encourage the government to consider those recommendations, and to incorporate the OBC as a key policy tool within Ontario's new climate plan.***

Enhancing Ontario's Equipment and Appliance Standards

¹ 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.

² When including emissions from electricity used in buildings as well as natural gas and other fuels combusted on site.

³ Ontario Ministry of Finance, *Ontario Population Projections Update*, Spring 2017.

⁴ Available at <http://taf.ca/publications/joint-submission-strengthening-ontario-building-code/>

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 adaption of 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.

Improving Ontario's business climate by unlocking the power of the private sector to finance and drive innovative climate solutions.

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 Fund). However, careful design is required to ensure the Fund is impactful and successful in leveraging private capital. Without careful design, there is a risk that the Fund could actually crowd-out private capital and waste public resources on projects that would have occurred with or without support from the Fund. Key considerations are outlined below.

Financing vs. granting - using the right tool for the right job

We encourage the Province to deploy a combination of financing (revolving/recoverable) and leveraged incentives to accelerate and mobilize private investment in climate solutions. Emissions reduction projects with a viable business case should be supported through financing tools that allow the Province to recover its funds over time and reinvest them in future projects. There are a wide variety of carbon reduction opportunities (e.g., energy retrofits) that are economically viable but are not pursued due to competing capital priorities or a mismatch between the available return on investment and the yield expectations of investors and businesses in relation to perceived project risks. Public financing tools can help the private sector take advantage of these opportunities, either by direct public investment leveraging the government's low cost of capital, or through credit enhancement mechanisms that de-risk private capital investments. TAF's guidance note on [Energy Efficiency Financing Tools for the Canadian Context](#) provides a detailed review of a broad range of financing mechanisms that could be used for this purpose.⁵

⁵ Available at: <http://taf.ca/publications/taf-guide-energy-efficiency-financing-tools/>

Grants or other non-recoverable funding should be reserved for emission reduction opportunities that are not economically viable without a subsidy. Such funding should be focused in areas where there is an opportunity to unlock future cost-effective reductions, for example by demonstrating the performance of new technologies or approaches.

Thinking beyond cost per tonne - using the right criteria

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 towards 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*). Therefore, ***additionality should 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 Fund 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 climate plan, and submits that this necessitates an explicit assessment of co-benefits when making funding decisions.

Finding a balanced solution that puts people first and makes life more affordable for families

Climate action should put people first and address affordability issues. Climate action that ignores societal wellbeing is unsustainable and therefore counter-productive. A key element of this is accounting for the value of climate action co-

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>

benefits as noted above, both with regard to the proposed Fund but also more broadly in developing climate policies and programs. Key opportunities to drive public benefits and address affordability through climate action are noted below.

Optimizing Ontario's clean hydro system

While subsidizing energy costs, or restructuring energy sector debt, can create short-term rate relief for households and businesses, it does not provide a sustainable long-term approach to improving energy affordability. One key point is that 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 electric vehicles (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 electrification of heating and transportation. ***Ontario's success will depend on finding a pathway to optimizing use of our clean hydro assets.***

Getting Ontario Moving

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

productivity⁷ 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,⁸ but struggle to find affordable, family friendly housing in complete communities. ***The province can and must stimulate the supply of location efficient, transit-connected mid-rise 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 mid-rise 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.

Ontario should reduce reliance on high-pollution vehicles by supporting the electrification of transportation. 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; if we are going to maintain our leadership position in this industry, then we must have a strong policy framework to support EVs as the future of the sector.*** The government can advance this promising new business opportunity through a variety of initiatives, including: supporting the development of EV charging infrastructure; encouraging the manufacture of more EVs in Ontario; ensuring a predictable supply

⁷ 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

⁸ Pembina Institute, *2014 Home Location Preference Survey: Understanding where GTA residents prefer to live and commute*, September 2014

of EVs in the market; and educating consumers about the advantages of EVs – including the thousands of dollars they can save annually in avoided fuel and maintenance costs.

Creating good jobs – put people and capital to work improving efficiency of homes, buildings and industry.

Energy efficiency improves productivity, creates good jobs, and leaves more money in the pockets of households and businesses. Energy efficiency is the generally the most cost effective way to reduce emissions, while creating multiple benefits. ***A renewed drive to 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***⁹. This will requires 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.

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 a new 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

⁹Clean 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).