TAF'S COMMENTS FOR THE 2020 FEDERAL PRE-BUDGET CONSULTATIONS

In 2019, the House of Commons Standing Committee on Finance invited Canadians to contribute to Budget 2020 on the theme of "Climate Emergency: The Required Transition to a Low Carbon Economy." The Atmospheric Fund (TAF) supports this theme and in this budget submission we will recommend key areas for vital targeted spending, and areas that require federal leadership to help accelerate the transition towards net-zero carbon emissions by 2050, or sooner.

TAF is a non-profit corporation that was created in 1991 with a mandate is to advance urban solutions to climate change and air pollution for the Greater Toronto and Hamilton Area (GTHA). For 29 years, TAF has been innovating, incubating and investing in low-carbon solutions. We played a key role in helping Toronto reduce its carbon emissions by 33 per cent since 1990. Please note that the views expressed in this submission do not necessarily represent those of the City of Toronto or other GTHA stakeholders.

In Budget 2019, the Government of Canada allocated funding to the Low Carbon Cities Canada (LC3) initiative, which aims to adapt TAF's model for use in seven of Canada's major municipalities in an effort to combat climate change. The federal government understands the importance of funding local initiatives as part of a national coalition to assist in transitioning towards a low-carbon economy. This forward thinking will bear fruit as the LC3 organizations come online with TAF's support. To fully realize the potential of the LC3 network, financial support must also be linked with federal leadership on three key policy issues: (1) Net-Zero Emission Homes and Buildings; (2) Zero Emission Vehicles and Electric Vehicle Charging Stations; and (3) Clean, Renewable Power. These are issues that local organizations and cities are already tackling across Canada, but they need a federal partner to amplify local efforts and embolden climate action in cities across Canada.

Key Areas for Federal Leadership

Low-Carbon Homes and Buildings

The federal government's 2019 campaign promises to make homes and businesses more energy efficient will play an essential role in helping cities reach net-zero emissions by 2050. The projected funding from the 2019 campaign platform allocates funding that will increase over four years. This stable increase in funding is vital and will help to augment investments made by organizations such as TAF through our TowerWise program.²

Recommendations:

- 1. **Commit to Net-Zero Home Initiatives.** The proposed \$5,000 grant for newly built homes that are certified net-zero emissions will play an essential role in ensuring that future homes offer both lower energy bills and improved indoor air quality.
 - This campaign promise must be versatile enough to include innovative energy efficiency options that would accommodate local realities across Canada, ultimately helping Canadians become energy independent, as detailed in the Generation Energy Council

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¹ Toronto Emissions Decline but 2030 Target Looms Large

² Read more here: https://taf.ca/programs/towerwise/

- report.³ The program must be carefully designed and effectively marketed to ensure it generates incremental demand for net-zero homes.
- To compliment Net-Zero Home Grants, we also recommend mandating Energy Star certification for all new home appliances by 2022. This will help advance energy conservation across Canada.
- 2. Support Home Energy Retrofits. Free energy audits and access to \$40,000 interest free loans will help Canadians invest in home energy retrofits and reduce their energy bills. Consider supplementing the loan with a cash incentive for homeowners who invest in deeper retrofits. Ensure the program is designed to complement other programs such as FCM's Community Eco-Efficiency Acceleration Fund and related municipal programs.
- 3. Invest \$100 million in education and training to ensure the workforce is well equipped to meet the promised energy audits, retrofits, and construction of net-zero homes.
- 4. Commit to the promise of supporting to make homes and businesses more energy efficient, and to increase funding over 4 years culminating in spending \$432 million in fiscal year 2023-2024.
 - The four \$100-million long-term funds to help attract private capital for commercial building retrofits through the use of a competition has the potential to be highly effective. However, in order to serve as a market, shift indicator as desired we recommend that this program's design begin as soon as possible as such a program will take time to implement effectively.

Zero-Emissions Vehicle Rebates and Charging Stations

We know that two of the largest barriers for consumer around the purchasing of zero-emission vehicles (ZEVs) are 1) the upfront costs and 2) lack of sufficient and continuous charging infrastructure across jurisdictions and for long distance driving, which results in range anxiety.⁴ There has been considerable progress on this issue in the form of budget allocations in Budget 2019, as well as in the 2019 platform. Ongoing federal leadership is critical to overcoming these barriers and accelerating the electrification of Canada's transportation sector.

With respect to charging infrastructure, it is not just the number of charging stations that is important. Other factors, such as the location, accessibility, reliability and affordability are key to ensuring broad consumer adoption of EVs.

Recommendations:

1. Commit funding to the promise of 5,000 EV charging stations across Canada. A well-designed funding program is critical to ensure municipalities, utilities, and other stakeholders have the time, flexibility, and predictability needed to deploy charging stations in a manner that meets local needs while contributing to comprehensive regional and national charging networks. A national funding program is also an opportunity to incorporate national standards

³ Generation Energy Council, 2018. Canada's Energy Transition: Getting to Our Energy Future, Together. https://www.nrcan.gc.ca/20380

⁴ <u>Pollution Probe and The Delphi Group, 2018. Final Project Report: City of Toronto Electric Mobility Strategy Assessment Phase</u> Pg. 23

for how public charging should operate in a way that is financially sustainable while also ensuring consumers have access to convenient, reliable, and accessible charging services. For example, consider mandating that consumers have the option to pay onsite with established and convenient payment methods (e.g. credit card or debit card), just as consumers currently purchase gasoline.

- 2. Implement the 10% rebate up to \$2,000 for used ZEVs. While EVs will become more affordable as the industry transitions towards low-carbon vehicles and ZEVs, affordability continues to be a barrier to EV adoption.⁵ This rebate will assist Canadians in making the transition to non-fossil fuel-based vehicles and ensure equitable access to ZEVs across different socioeconomic groups.
- 3. Commit to the planned four-year spending of \$700 million to assist in the electrification of transportation between 2020-2024
 - It is important that this spending assists in the electrification of transportation systems across Canada and includes initiatives such as the electrification of buses and the necessary infrastructure to charge those buses.

CLEAN, AFFORDABLE POWER

TAF is investing in fuel switching for homes and buildings to accelerate the transition away from natural gas. While natural gas may be useful as a bridge from other fossil fuel energies, Canada will not meet our 2050 emissions targets if we simply become more efficient at using fossil fuel-based heating systems. The promise to invest \$5 billion in a new Clean Power Fund has the potential to signal to the market that Canada can achieve independence from fossil fuels – but to achieve this, the Fund must have the following service agreement requirements in the Canada Infrastructure Bank:

Recommendations:

- Fund and support utilities in upgrading transmission capacity that would enable greater cross-provincial energy transfers. This would help break down barriers between provinces such as Quebec and Ontario to move renewable electricity between provinces.
- 2. Invest in energy storage capacity to assist in the phase out of fossil fuels. Electricity storage is key to addressing on-peak demand for electricity and maximizing the potential of renewable energy technologies.
- 3. Invest in large scale renewable energy infrastructure including renewable electricity generation, renewable thermal energy and renewable natural gas (RNG). RNG has the potential to unlock energy generation in rural areas that can utilize existing gas distribution infrastructure while displacing fossil-gas with cleaner and domestic energy sources. Renewable thermal energy investment priorities should include decarbonization of legacy fossil fuel-based district heating systems.

⁵ Pollution Probe and The Delphi Group, 2018. Final Project Report: City of Toronto Electric Mobility Strategy Assessment Phase. https://www.toronto.ca/wp-content/uploads/2019/05/9685-EMS-Assessment-Phase-Final-Project-Report.pdf

Market Transformation for a Low-Carbon Building Sector

In 2017 the Energy and Mines Ministers' Conference created aspirational energy performance goals for the building sector in Canada. The resulting NRCAN report titled "Paving the Road to 2030 and Beyond: Market Transformation road map for energy efficient equipment in the building sector - Supporting the transition to a low-carbon economy" provides a detailed vision of how to address the three key areas in our building sector that need improvement which are:

- 1. Windows
- 2. Space heating
- 3. Water heating

Addressing these three areas is vital to achieving net zero by 2050; without market transformation in these three areas we simply will not meet our carbon reduction targets. The Roadmap lays out a compelling vision for how targeted investment in Research, Development, Demonstration and Deployment (RDD&D) can work in synergy with equipment standards to transform the market for building energy equipment in Canada. The Roadmap's priorities for RDD&D have been vetted and endorsed by stakeholders across Canada – all that is missing is the funding needed to move forward.

Recommendation

We recommend that the Government of Canada creates a \$20-30-million fund to support Research, Development, Demonstration, and Deployment activities across Canada based on the Roadmap priorities. This funding should be earmarked for addressing the market barriers to achieving the Roadmap's aspirational goals for space heating, water heating, and windows in the Canadian market.

For implementation we recommend that these funds be allocated to NRCAN's Office of Energy Efficiency as it is well suited to disburse funds across Canada based on roadmap priorities, with ongoing guidance from the Roadmap Implementation Steering Committee. It is vital that these funds be allocated in Budget 2020 as implementation will take time and the funding process will need to be developed. TAF has considerable experience in grant management and is willing to assist in anyway that we can as we did with the creation of the Low Carbon Cities Canada initiative in Budget 2019 with the Canadian Federation of Municipalities.

KEY TO IMPLEMENTATION

For all the above-mentioned recommendations, we strongly recommend that the federal government also allocate funds for any spending required for *program implementation*. A long-standing problem with any government funding allocations is that often no funds are allocated for implementation, which results in funds not being rolled out in a timely and effective manner. The resulting delays in implementation of joint programs slows down the roll out with local partners and leads to programming being delayed. This is particularly devastating in a minority parliament situation when the traditional longer timelines are not applicable.

⁶ Paving the Road to 2030 and Beyond: Market transformation road map for energy efficient equipment in the building sector - Supporting the transition to a low-carbon economy