

Canada's Last Shot at a Safe Climate

2021 Federal Election Climate Policy Priorities

The Atmospheric Fund (TAF) is a regional climate agency that serves the Greater Toronto-Hamilton Area, supporting a net-zero goal by 2050. Our annual carbon emissions inventory consistently reveals that the two major sources of emissions in our region are **Buildings (42.8%)** and **Transportation (34.3%)**.¹ This work informs our policy recommendations below.

The IPCC's recent report on climate change² emphasizes the need for major emissions reductions by the end of this decade, however, many of Canada's targets lag behind the international goals established to keep global warming below 1.5 C. Canada is the only G7 country whose emissions have increased since the Paris Agreement. And global climate change has a unique impact on Canada's average temperatures, warming at twice the global rate, leading to more extreme weather events, and afflicting Canadians across the country.

This brief outlines priorities for the federal parties of Canada to bring **credible climate change plans** before voters in the 2021 election. We present six key policy recommendations to tackle building and transportation emissions and accelerate a shift to a low-carbon economy. These actions are necessary to address the climate crisis, create new jobs, improve public health and well-being, and ensure an equitable and just transition to a low-carbon, prosperous economy.

Canada's next Prime Minister will determine if we are in the global race for a clean economy. TAF is pleased to meet with any interested party to discuss strategies to reduce carbon emissions in the GTHA and Canada.

Recommendation 1: Accelerate building retrofits

To reach Canada's 2030 climate target, we need to retrofit over *half* of Canada's existing homes and buildings to a 56% carbon reduction standard, or one third of our homes and buildings to an 84% reduction standard.³ That means deep retrofits of *at least* 370,000 homes and buildings every year.⁴ At the current pace, it would take 142 years to retrofit every building in Canada. To accelerate a mass retrofit mission, create upwards of 200,000 long-term, green jobs,⁵ and \$48 billion annually in economic activity, we recommend the federal government:

¹ https://taf.ca/wp-content/uploads/2021/02/TAF_RealityCheck-Emissions-Inventory-2018.pdf

² https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf

³ <https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/climate-plan-overview/healthy-environment-healthy-economy/annex-modelling-analysis.html> (Derived from modelling and analysis annex, table 3, showing the plan based on achieving a 28% reduction in building sector emissions between 2020-2030, from 90 to 65 megatonnes).

⁴ <https://www.energycanada.org/wp-content/uploads/2021/06/Retrofit-Mission-FINAL-2021-06-16.pdf>

⁵ <https://www.pembina.org/reports/canadas-renovation-wave.pdf>

- **Commit to at least \$10 billion annually to make retrofits achievable, affordable, and accessible to Canadian home and building owners, including:**
 - ≥\$2 billion per year to fund no-cost deep retrofits for low-income households and top-up for the renovation of social housing through the National Housing Strategy.⁶
 - ≥\$300 million annually to develop an inclusive and diverse retrofit workforce, with funding for skills development and training and recruitment and outreach strategies.
 - With the balance of capital costs, provide smart loans and grants for retrofits that target more than 40% carbon reduction.
- **Allocate at least \$100 million for market development initiatives.** This is critical to generating and sustaining market demand to spur the industry investment and innovation needed for a vibrant and inclusive retrofit economy.⁷
- **Set ambitious annual deep energy retrofit targets and aim for a mass retrofit of Canada's building sector by 2035⁸.**
- **Dedicate funding programs exclusively to deep retrofits and collaborate more closely with municipalities** and other stakeholders to ensure access to funding is streamlined, efficient, and synergistic with local retrofit initiatives.⁹

Without a dramatic scale-up of deep energy retrofits, we will not achieve our climate objectives. If we do invest in scale-up, we will prepare our buildings for the impacts of climate change and create billions of dollars in economic opportunities.

Recommendation 2: Establish new building codes for the 21st century

Canada's 2020 building codes are years behind schedule and draft versions do not include any requirements to limit carbon emissions, nor any provisions for future needs such as renewable energy, energy storage, or EV charging. We recommend the federal government:

- **Modernize building codes to ensure resilient, net-zero homes and buildings.** Strong federal building codes mean homes and buildings that are healthier, safer, and energy efficient.¹⁰
- **Identify which Minister is responsible for Canada's building codes.** The current process for developing national building codes is opaque and it is unclear which Minister is responsible. The process should be transparent, accessible, and focused on carbon reduction.
- **Update equipment standards.** As identified by the IPCC, equipment standards are the most important, cost-effective, and impactful changes the Government of Canada can make to reduce carbon emissions from the building sector.¹¹ Equipment standards for space and water heating, as well as windows, could reduce emissions by 26 megatonnes by 2030 without using any new or unproven technology. Equipment standards also save consumers money on their utility bills and increase energy

⁶ <https://www.pembina.org/reports/canadas-renovation-wave-summary.pdf>

⁷ <https://www.energycanada.org/wp-content/uploads/2021/06/Canadas-Retrofit-Mission-At-A-Glance.pdf>

⁸ *ibid*

⁹ <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2021.IE23.1>

¹⁰ <https://codes4climate.energycanada.org/>

¹¹ https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_summary-for-policymakers.pdf

productivity. The International Energy Agency has called on all nations to use standards to phase-out fossil fuel-based heating equipment before 2030, and Canada should answer that call.

Recommendation 3: Phase out natural gas and implement just transition for workers

Global leaders are reaching a decisive moment, recognizing the effects of fossil fuels on climate change. It is critical to align with the recommendation of the International Energy Agency¹² and the Biden administration's commitment¹³ to phase out natural gas electricity generation by 2035. If we don't act to significantly reduce our natural gas consumption, we will not meet our national climate targets.

Canada's road to net-zero requires improving efficiency and electrifying most of our heating and transportation needs. But this road only leads to a net-zero future if we eliminate the use of fossil fuels for electricity generation. Meanwhile, Ontario is actively planning to quintuple carbon emissions from electricity generation by 2030 and has largely exempted the electricity sector from carbon pricing to enable this. We recommend the federal government:

- **Develop a requirement to phase out natural gas electricity generation by-or-before 2035.**
- **Explore and incentivize uptake of alternative energy sources.**
- **Fund training for jobs in the clean energy sector and a just transition for workers.**

Recommendation 4: Mandate zero emission vehicles and standardize fuel efficiency

Modest uptake in electric vehicles in Canada has not compensated for the increase in vehicles on the road; overall transportation emissions are increasing.¹⁴ Measures that target the tailpipe are vital for achieving our national 2030 and 2050 climate objectives. Strong policy signals are also crucial for Canada to stay globally competitive in key industries such as battery development and manufacturing and low-carbon fuel production like biofuels.¹⁵ We recommend that the federal government:

- **Develop greenhouse gas emissions regulations for vehicles aligned with the leading jurisdictions in North America.**
- **Implement a Zero Emission Vehicle Mandate.** A ZEV mandate should require, through regulation, that a minimum percentage of cars sold are ZEVs, and this percentage should increase over time to 100%.

¹² https://iea.blob.core.windows.net/assets/beceb956-0dcf-4d73-89fe-1310e3046d68/NetZeroby2050-ARoadmapfortheGlobalEnergySector_CORR.pdf

¹³ <https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating-good-paying-union-jobs-and-securing-u-s-leadership-on-clean-energy-technologies/>

¹⁴ <https://www.canada.ca/en/environment-climate-change/services/climate-change/greenhouse-gas-emissions/sources-sinks-executive-summary-2021.html>

¹⁵ <https://electricautonomy.ca/2019/10/10/canadas-electric-vehicle-industry-to-experience-massive-annual-growth-boom-in-new-jobs/>

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- We recommend targeting 100% new ZEV sales for light duty vehicles by 2030 and setting binding interim targets for any final ZEV sales target.
 - We recommend targeting 100% new ZEV sales for medium and heavy-duty vehicles by 2040.
 - **Invest in EV charging infrastructure and ZEV vehicle rebates** designed to ensure equitable access for all Canadians
 - **Implement a more robust** Clean Fuel Standard to ensure outcomes are in line with intended carbon reduction commitments.¹⁶

Recommendation 5: Secure carbon pricing in Canada

Rising carbon emissions show we need stronger economic incentives. Carbon price works to reduce emissions, putting costs on polluters and generating revenue for Canada. The impacts of climate change could cost Canada billions of dollars and lead to thousands of deaths, affecting the most vulnerable Canadians.¹⁷ We advise the next government to keep the carbon price, increase it, and ensure it is fair. We recommend:

- **Increase the federal carbon price to \$295 per tonne of carbon by 2035 and commit to carbon pricing as outlined in the Greenhouse Gas Pollution Pricing Act.** At \$295 per tonne, we start to achieve critical market signals that support wide-spread fuel-switching, a critical measure to get to net-zero.
- **Ensure carbon price is equitable, fair, and does not disproportionately impact vulnerable Canadians.** We need to maintain and enhance policy instruments that ensure a rising price on carbon pollution does not unduly burden Canadians who are already facing economic hardship, or who are economically reliant on fossil fuel industries. Programs should ensure a just transition for workers and others impacted by a transition away from fossil fuel use.
- **Ensure predictability for industry.** Canadian business-owners need the carbon price to be predictable to assist in long-term decision-making and to avoid stranded assets.

Recommendation 6: Grant authorities to the Commissioner of Environment and Sustainable Development

To date, it has been next to impossible for stakeholders including industry, local governments, environmental advocates, and private citizens to hold government agencies and departments accountable for decisions that increase carbon emissions in Canada. We recommend the federal government:

- **Empower the Commissioner of Environment and Sustainable Development to scrutinize government policies and investments with carbon reduction focus.** This office would:
 - Function similarly to other officers of Parliament and would have the authority to review programs by arm's length entities such as the Canada Infrastructure Bank.

¹⁶ <https://taf.ca/why-canadians-need-the-clean-fuel-standard/>

¹⁷ <https://globalnews.ca/news/8070896/canada-wildfires-climate-change/>

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- Function similarly to Ontario's former Environmental Commissioner, performing audits and reporting to ensure transparency in meeting emissions targets.
 - Evaluate programs or investments which could contradict Canada's emission reduction efforts and detract from progress towards our climate targets. The outcomes of these reviews should be made publicly available.

About The Atmospheric Fund

The Atmospheric Fund (TAF) is a regional climate agency that invests in low-carbon solutions for the Greater Toronto and Hamilton Area (GTHA) and helps scale them up for broad implementation. Please note that the views expressed in this submission do not necessarily represent those of the City of Toronto or other GTHA stakeholders. We are experienced leaders and collaborate with stakeholders in the private, public and non-profit sectors who have ideas and opportunities for reducing carbon emissions. Supported by endowment funds, we advance the most promising concepts by investing, providing grants, influencing policies and running programs. We're particularly interested in ideas that offer benefits in addition to carbon reduction such as improving people's health, creating local jobs, boosting urban resiliency, and contributing to a fair society.

Get in touch



Bryan Purcell
VP, Policy and Programs
bpurcell@taf.ca
416-393-6358



Margot Whittington
Climate Policy Analyst
mwhittington@taf.ca
416-392-1220