**DEEPER DIVE: THE IMPACT OF THE CLIMATE EMERGENCY: ECONOMY**

## The Impact of the Climate Emergency for all tiers of government

Climate change poses significant challenges for public finances across Ontario and Canada, directly impacting municipalities and the broader economy. Here's an integrated list of the top five climate impacts on public finances and municipalities:

### 1. Higher Disaster Response and Recovery Costs

While extreme weather events place significant pressure on all government budgets - often leading to higher taxes and borrowing.

### 2. Increased Healthcare Expenditures

Rising temperatures, poor air quality, and diseases like Lyme disease are making public health risks worse. This means local healthcare services and emergency response teams will face more pressure and will need more funding to meet these growing health challenges and protect their communities. That funding will come from provincial and federal tax dollars.

### 3. Infrastructure and Energy System Strain

Aging infrastructure is struggling to keep up with the impacts of climate change. Heavy rainfall and flooding are major issues in southern Ontario, leading to rapidly rising costs for stormwater systems and road repairs - meaning extra pressure on your taxes.

### 4. Strain on Natural Resource Economies

The climate emergency is affecting industries like agriculture, forestry and fishing, with extreme weather making it harder to produce and work. This means food scarcity and higher prices.

### 5. Rising Insurance and Risk Management Costs

As climate risks grow, insurance costs for municipalities and public infrastructure are rising. In some areas, flooding or wildfire risks are making properties hard to insure. Municipalities also face higher costs for climate adaptation, like building flood control systems. This all means money. YOUR money.

## Economic Implications

1. **Municipalities play a vital role** in addressing climate impacts, managing 70% of the costs for climate-related damages. For example, Newmarket homeowners recently contributed an additional $83 annually to the region, while Aurora residents contributed $102, plus $95 per household for essential municipal needs like infrastructure and stormwater systems.

These investments are a step toward however, **with** stronger action **we can reduce the** *long-term financial burden* *on households and* minimize future costs on our economy.

2. In **Ontario,** if current climate efforts remain unchanged, repair costs for infrastructure damaged by severe weather could rise to $4.1 billion annually. However, with moderate efforts, this could be reduced to $3 billion, and with **strong, forward-thinking planning, it could drop by half to $2.1 billion.** Pay $1 now or way more later.

   Ontario, as the province with the second-highest emissions in Canada, has made the following financial decisions related to climate efforts since 2018:

   - **$2.5 billion** was spent on flood protection from 2018 to 2021 - a critical investment, but with worsening climate impacts, at least that amount will be needed every year going forward.
   - **$7 million** was spent fighting the federal carbon price in court, and another 4 million on anti-carbon tax ads - funds that could have been used to address growing health issues, support vulnerable communities or invest in clean electricity.
   - **$2 billion** worth of carbon reduction programs were cut, reducing opportunities for clean energy solutions and local job creation.
   - $350 million spent on Enbridge subsidies to keep gas pipelines going to new subdivisions and another $250 million a year in other subsidies. There has been no subsidy for wind or solar but electricity has had subsidy programs to offset the higher cost of gas power generation.
   - It canceled climate programs and the cap-and-trade carbon tax, which left a multi-billion budget hole.

   **These choices affect everyone** - families living in flood-prone areas, workers seeking stable green jobs, and communities facing higher costs from extreme weather. Investing wisely in climate solutions can ease these burdens, create opportunities, and build a more secure future for all Ontarians.

3. The **federal government** has made **significant investments** in climate action since 2015, committing over **$100 billion** to support a cleaner, more sustainable future. This includes:

- **$60 billion** allocated from 2015 to 2019 to promote climate action and clean growth, fostering innovation and creating jobs in green industries.
- **$53.6 billion** committed to Canada's green recovery since October 2020, helping communities transition to a low-carbon economy and adapt to climate impacts.

- **$7.5 billion** invested internationally to aid vulnerable nations in adapting to climate change and transitioning from coal, strengthening global partnerships.

- Yet, Canada has paid out almost ***$20 billion a year*** since 2015 in *loans and subsidies to oil and gas* (not including CCUS funding); only about $1 billion a year to all types of clean energy.

  The scale of the challenge demands ***sustained and strategic action,*** particularly in the oil and gas sector, where subsidies have often been directed toward projects like carbon capture - primarily used to facilitate harder-to-access oil and gas extraction, ultimately increasing emissions to be captured. Without a clear focus and coordinated investment in proven solutions that exist now like wind and solar, the benefits may fail to reach Canadians who need them most or quickly enough.

At all levels we need access to **clear and transparent information** about climate risks that empower better decisions for individuals, communities, and businesses. For example, in Ontario**,** no legal requirement exists for developers or homeowners to disclose floodplain risks to buyers.

A single flood or wildfire can cause damages of $500 million, underscoring the importance of proactive planning. The financial toll of extreme weather is evident in Toronto's records:

- **2005 rainstorm**: $44 million
- **2013 rainstorm**: $65 million
- **2013 ice storm**: $101 million
- **2017 high lake levels & 2018 windstorm**: $28 million

Meanwhile, the 2023 wildfires 2023 wildfires in Ontario) led to harmful air pollution, adding **$1.28 billion in health costs.**

## What You Can Do

We can protect both our economy and quality of life while creating a safer, more sustainable future by focusing on existing smart solutions like cleaner, greener energy and infrastructure, and effective disaster planning.

Ask your election candidate what they will do to cost you less in this growing climate emergency and what they will do to help prevent emissions from going up to keep your family and community safer, food on the table, and clean water to drink. How exactly will their government plan carefully to use resources wisely, keep costs fair, and support families and communities.

**Additional Background and Sources**

**Federal:**

**Infographic of climate costs: https://climatechoices.ca/reports/tip-of-the-iceberg/visuals/**

**https://climateinstitute.ca/reports/tip-of-the-iceberg/ :**

- *The average cost per disaster has jumped 1250% since the 1970s. A typical storm or flood that cost roughly $8 million in the early 1970's now costs over $110 million.*
- *Over the last decade, the average cost of weather-related disasters and catastrophic losses each year has risen to the equivalent 5-6% of annual GDP growth*
- *From 2010-2019, the cost of weather-related insured catastrophic losses was twice as high as from 1983 to 2009 combined.*
- *10 per cent of households—1.8 million—are currently at very high risk of flooding.*

**Federal international funding to date:**

Canada's climate finance commitments support a variety of areas, including:

- Clean energy transition
- Climate-smart agriculture
- Biodiversity
- Climate governance
- Environmental policy and economic instruments
- Environmental training and research
- Sustainable forestry
- Disaster risk management

Consultations on Canada's post-2025–2026 international climate and nature finance commitment

- Canada's international financial pledges doubled for 2021-26 from 2015-2020 ($5.3 billion vs $2.6) focused on vulnerable countries and transition from coal An Overview of Canadian International Climate Finance, 2015/16 to 2023/24: Key Trends and Future Directions
- Just announced Canada will have key role in Global Clean Energy Alliance, initiated by UK in Sept 2024;
- Canada has contributed over $8.7 billion in international climate finance to developing countries since 2015:
    - **2010–2013**: Canada provided $1.2 billion
    - **2015–2021**: Canada provided $2.65 billion

- **2021–2026**: Canada doubled its commitment to $5.3 billion

**Recommendations:**

**https://climatechoices.ca/wp-content/uploads/2020/12/Tip-of-the-Iceberg-_-CoCC-_-Institute-_-Recomendations.pdf**

- *government programs and investments should transparently evaluate their effects on current and future climate risks, and the costs and benefits of incorporating adaptation and resilience - scaling up government investment in adaptations*
- Canada needs rapid, large-scale adaptation that crosses administrative, geographic, and sectoral boundaries. While adaptation must be locally tailored, coordination can minimize overlaps and gaps. A collaborative all tiers of government approach can set priorities, define roles, identify key policies, and optimize finance for adaptation efforts at all levels. It could avoid such ineffective responses as witnessed in the Fort McMurray flood 2020 Fort McMurray spring flood caused $522 million in damage, insurance bureau says | CBC News and in Valencia 2024 where it took at least 7 days to coordinate an appropriate emergency response because governmental tiers hadn't planned ahead. What to Know About the Floods That Killed Over 200 in Spain | TIME
- Transparency on climate risks is crucial for redirecting investments from risk to resilience. This includes not only corporate disclosures but also greater visibility into risks faced by governments, communities, and individuals. Integrating this information into areas like credit ratings and home inspections will help all stakeholders prepare and drive investments in resilient solutions. The federal government has taken the first steps: Government advances Made-in-Canada sustainable investment guidelines and mandatory climate disclosures to accelerate progress to net-zero emissions by 2050
- Canada doesn't factor into top ten countries for alternative energy; the emissions cap is a start; more funding needs to go to wind and solar.

**Provincial:**

**http://www.fao-on.org/en/Blog/Publications/cipi-summary :**
*'Climate hazards are accelerating asset deterioration, resulting in the need for higher capital investments for more frequent rehabilitations and earlier renewals, as well as higher spending for more operations and maintenance (O&M) activities. The FAO projects that in the absence of adaptation, these changing climate hazards will add $4.1 billion per year on average to the cost of maintaining the $708 billion portfolio of existing public infrastructure in a medium emissions scenario. This represents a 16 per cent increase in infrastructure costs relative to a stable climate base case.'*
*' In the absence of adaptation, the FAO estimates that Ontario's public infrastructure costs will rise by approximately eight per cent (or about $2.0 billion per year) on average over the rest of the century for each degree Celsius increase in the global mean surface temperature beyond the 0.5°C in the base case….*

However, the FAO estimates that on a constant dollar basis, average annual climate-related costs are highest under the no adaptation strategy ($4.1 billion per year, or 16 per cent above a stable climate base case) and lowest under the proactive adaptation strategy ($3.0 billion per year, or 11 per cent above a stable climate case case) in a medium emissions scenario. ‘

What has Ontario spent on climate change solutions since 2018?

- From 2018 to 2021, Ontario spent $2.5 billion on flood protection infrastructure, which was double the amount spent by any other province. The Daily — Climate change statistics
- Environmental Defence also reported that *Ontario has lost revenue, paid compensation to cap-and-trade participants, and incurred costs from green energy contract cancellations. The report concluded that Ontario is no longer a leader in climate change action and is not on track to meet its 2030 greenhouse gas emissions reduction target.* A REVIEW OF THE PAST FOUR YEARS OF ONTARIO'S CLIMATE CHANGE (IN)ACTION
- Climate change is threatening water quality and supply in Ontario. Climate Change // Conservation Ontario - no $ amount noted
- Economic decline is inevitable by 2100 but mitigation and adaptation can reduce the impact - 6.2 to 6.5 Costs and Benefits of Climate Change Impacts and Adaptation
- EB-2019-0255 Potential Projects to Expand Access to Natural Gas Distribution
- Ontario’s Electricity Options: A Cost Comparison
- Why Doug Ford's government spends more than $6B/year subsidizing hydro rates | CBC News
- Who should pay when development causes floods? | The Narwhal

*‘federal government’s ballooning bill for Disaster Financial Assistance Arrangements, the money it sends to provinces and territories to cope with the aftermath of natural disasters. Since the program was created in 1970, it’s paid out over $12 billion’*

*https://www.theglobeandmail.com/canada/article-natural-disaster-relief-payments/*

*Ralph Pentland sees higher liabilities ahead. He is intimately familiar with the DFAA. He worked for the federal government for 30 years and managed the program from 1979 to 1991. Owing to climate change and “a lot of unwise development going on,” he said, “you probably have flood damages doubling every five years.”*

*August flooding in GTA and parts of southern Ontario caused over $100 million in insured damage*

Recommendations:

Climate Change Solutions - Toronto and Region Conservation Authority (TRCA)

Mitigation:

- energy efficiency retrofits and behaviours (**reducing consumption**)
- exploring renewable energy sources (**providing clean energy alternatives**)
- increasing the urban forest (**serving as a carbon sink**)
- providing shade for homes (**to reduce energy use**)
- water conservation and stormwater re-use (**resulting in less water being treated**)
- local food production (**decreasing food miles**)

Adaptation:

- planting trees, planting edible vegetation on balconies and constructing shade structures (to address rising temperatures and urban heat island effects)
- flooding protection measures and better lot level management of stormwater (to address high volumes of stormwater runoff and flooding due to more frequent extreme rain events)
- rainwater harvesting (to alleviate water shortages due to droughts)
- fostering community connections, facilitating increased local food production, and generating work opportunities within the neighbourhood (to increase community resilience for emergency preparedness)

clearing the air: solutions:

**ZEV Sales Mandates**: Automakers must increase electric vehicle sales by specific dates (e.g., in BC and Quebec), ensuring wide availability and advertising of ZEVs.
**ZEV Purchase Incentives**: Temporary incentives to make ZEVs affordable until they reach price parity with gas vehicles. Benefits of $10,000 annually per ZEV, with higher true benefits when considering healthcare savings.
**EV Charging Infrastructure**: Expand charging stations to reduce "range anxiety" and support EV adoption.
**Stronger Fuel Efficiency Regulations**: Governments set stricter annual greenhouse gas emission standards for automakers, encouraging more ZEV production. Canada must separate its standards from the U.S., which is weakening theirs.
**Electric Transit Buses**: Commit transit providers to exclusively purchase electric buses and retire diesel buses. Some cities, like Toronto and Montreal, have started this transition.
**Funding for Electric Transit Buses**: Federal and provincial funding to support the high cost of electric buses, including support for Canadian manufacturers.
**Truck Scrappage Programs**: Financial incentives for fleet owners to replace older, polluting trucks with newer, more efficient (or electric) models.
**Low Emission Zones**: Restrict the most polluting vehicles from entering high-pollution areas. Over 250 EU cities have adopted this measure.

**Fuel Efficiency Regulations for Trucks**: Maintain and strengthen greenhouse gas standards for new heavy trucks, separating from U.S. standards to prevent weakening.
**Green Commercial Vehicle Incentives**: Rebate program for companies adopting electric or alternative-fuel trucks and retrofitting existing vehicles.

Municipal:

So far: The State of Climate Action Implementation in Ontario Municipalities

Stormwater increases until 2030:
https://www.newmarkettoday.ca/local-news/newmarkets-stormwater-charges-will-rise-118-by-2030-if-new-plan-approved-2805322

**Recommendations**

- Reducing emissions: Municipalities can reduce emissions from their own operations, facilities, and fleets, as well as from transportation, buildings, and waste:
    - Renewable energy: Municipalities can install renewable energy sources like solar, wind, and geothermal energy. The Municipal Role in Climate Policy – IMFG
    - District energy systems: Municipalities can install low-carbon district energy systems that use renewable energy to heat and cool buildings. The State of Climate Action Implementation in Ontario Municipalities
    - Transportation: Municipalities can improve walking and cycling infrastructure, expand public electric vehicle (EV) infrastructure, and right-size roads. Climate Change Opportunities for Municipalities to Better Design their Communities - PSD Citywide
    - Waste: Municipalities can improve waste management, including reducing GHG emissions from waste collection trucks. Municipal Environmental Stewardship | AMO and Municipalities for Climate Innovation Program | FCM.
- Land use and zoning: Municipalities can make choices about land use and zoning, including expanding tree canopy and green spaces.
- Climate action plans: Municipalities can develop and implement climate action plans.
- Net zero targets: Municipalities can set ambitious net zero targets.
- Green building standards: Municipalities can create local green building standards and encourage building renewal.
- Stormwater management: Municipalities can improve stormwater management.
- Green roofs: Municipalities can encourage green roofs.
- Extended producer responsibility (EPR): Municipalities can support EPR, which places financial responsibility for the end-of-life management of products on the producer.