



Spotlight on Cities Financing Resilience

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Why Canada's Largest Cities Are Adopting the TCFD Recommendations

In July 2018, a deadly heat wave killed 93 people in Quebec prompting more than 300 Quebec municipalities, including Montreal, to join a global movement of communities declaring climate emergencies.¹ Vancouver, Toronto and a growing number Canadian cities have done the same. Declaring a climate emergency puts the spotlight on the threat posed by climate change and brings urgency to the need to shift to a carbon-neutral society.

More and more, cities recognize that critical to making this shift is understanding the risks and opportunities of climate change and putting a climate lens on where capital is flowing.

A little context: In 2017, the G20 [Task Force on Climate-Related Financial Disclosures \(TCFD\)](#) developed a voluntary framework for companies to disclose the governance around and financial impact of climate-related risks and opportunities, as well as specific recommendations for climate-related financial disclosures. Since then, more than 800 companies representing \$34 trillion in assets have committed to supporting the recommendations. In 2019, [Canada's Expert Panel on Sustainable Finance](#) issued a report on how Canada can transition to a low-carbon economy. Among its core recommendations: adopt the TCFD framework.

¹ nationalpost.com/news/politics/ottawa-joins-growing-number-of-canadian-cities-to-declare-a-climate-emergency-but-what-does-that-mean
montreal.ctvnews.ca/heat-wave-that-killed-93-in-quebec-is-second-biggest-weather-story-of-2018-1.4226174

CPA Canada, with funding from Natural Resources Canada and input from a working group of cities, including Montreal, Vancouver and Toronto, and other municipal stakeholders, has released [*Enhancing Climate-related Disclosure by Cities: A Guide to Adopting the Recommendations of the Task Force on Climate-related Financial Disclosures \(TCFD\)*](#) to help cities join the private sector in this growing move that links finance directly to sustainability.

Why does reporting under TCFD make the difference for cities adapting to climate change? “TCFD assesses the materiality of climate risk in line with other risks, so that climate risks (and opportunities) are incorporated in organizational budgeting and capital planning activities. TCFD also enhances an organization’s financial statements and reports for external stakeholders through reporting of material climate-related financial disclosures. City staff can leverage the terms and language outlined by the TCFD to create a shared understanding of climate information among different departments,” says Dina Georgious, Principal in CPA Canada’s Research, Guidance and Support group.

Montreal, Vancouver and Toronto are all engaged in the process of adopting the TCFD recommendations to help them achieve their shared goals of reducing carbon emissions by at least half by 2030 and to be carbon neutral by 2050. CPA Canada spoke with representatives from each city to learn about their respective journeys. The following is an edited version of these wide-ranging discussions.

Q. What impact has climate change had on your city and what adaptation actions have you taken in response?

Montreal

Montreal has identified six climate hazards:

1. higher average temperatures
2. heavy rainfall
3. heat waves
4. destructive storms (e.g., wind, hail, snow, freezing rain)
5. droughts
6. floods

In order to adapt and protect its most vulnerable residents, Montreal has extended hours for swimming pools, libraries and community centres. Fire and police officers check door to door on people. The city has allocated a budget of \$75 million for the next three years for an urban forest management plan. In the last three years, the city has tackled two floods. In 2019, when the last severe flood occurred, it built dikes, used sandbags and other mitigation measures at a cost of \$90 million. Looking ahead to the long-term, the city has obtained financing from Infrastructure Canada to install permanent valves and pumping stations and to construct water retention ponds to prevent sewers from backing up.

Vancouver

Vancouver sees climate impacting three key areas.

1. *Hotter, drier summers*
These have led to record-breaking wildfire seasons in the interior of the province in three of the last five years, with smoke drifting out to Vancouver creating health and safety risks to vulnerable communities.
2. *Sea-level rise*
This along with storm surges has resulted in flooding along the city's coasts.
3. *Warmer, wetter winters*
These result in surface water flooding.

False Creek Energy Centre, the city's low-carbon district energy system, was built to provide heat and hot water for the athletes' village during the 2010 Olympics and now services nearly six million sq. ft. of residential and commercial space. In October 2018, a heavy rainfall event combined with high tide caused flooding and an outage of the heat recovery system; it has been running on backup ever since. The fact the \$5 billion in total damage was paid for by insurance has implications for the cost of the insurance the city will have to buy in the future.

In the short-term, Vancouver is implementing clean-air shelters with enhanced filtration in community centres. These are to be activated during air advisories. Annual sandbagging programs are in place to manage flooding. Over the long-term, the city is looking to change its building code to require greater air tightness in new buildings and to require buildings constructed on flood-prone zones to have the main floors one metre higher than the current code requires. The city will be launching a sea-level-rise design challenge that will bring some of the brightest minds in the field to develop holistic solutions while explaining to the public this clear and present danger.

Toronto

Toronto has quantified the financial cost of climate impacts in three key categories:

1. repair costs for the city government as well as for residents and businesses that have already experienced damages and disruption due to creeping and acute changes in weather patterns
2. costs to increase resilience to more frequent extreme weather
3. costs for transition toward net zero carbon emissions by 2050 (e.g., Toronto spent \$28 million to mitigate the impacts of high-lake effects in 2017 and a windstorm in 2018)

City staff are in the process of developing integrated implementation plans for its Resilience Strategy and TransformTO, the city's set of long-term, low-carbon goals and strategies to reduce local greenhouse gas (GHG) emissions, improve health and social equity and grow the economy. It is also investing in several climate resilience and mitigation projects, including:

- mapping flood risk and developing a long-term heat relief strategy
- improving and repairing the city's tree canopy, trails, pathways, boardwalks, and shoreline infrastructure, as well as erosion control
- purchasing of a fleet of electric buses as it works toward a zero-emissions public transit fleet by 2040
- installing renewable gas processing infrastructure to collect renewable natural gas from anaerobic digestion facilities and existing landfills, among other initiatives

Q: What is the current state of climate reporting in your city and why is it important to report under the TCFD?

Montreal

Montreal will add an unaudited note to its financial statements to disclose climate-related information just as the cities of Vancouver and Toronto have done. The Department of Ecological Transition and Resilience reports on an annual basis to [CDP](#) (formerly the Carbon Disclosure Project) on GHG emissions and the city's mitigation and adaptation actions. The Department also produces adaptation progress reports for council.

This year Montreal will issue new climate plans for 2020, 2030 and 2050, which will include additional strategies with which the city will have to align itself in order to achieve 55% GHG reduction by 2030 and carbon neutrality by 2050. "In the long run, we think the TCFD recommendations will promote consistency, comparability, transparency, reliability, clarity and efficiency of climate-related financial disclosures," says Baia Ouldsliaman, financial analyst, Capital Investment Division, City of Montreal.

Vancouver

Vancouver issues annual progress reports on its Green City Action Plan. This is the main way council is kept apprised of what is going on in terms of mitigation and increasing adaptation. Vancouver's annual report to CDP allows for benchmarking against the 800 cities that also use the CDP framework. Vancouver is also part of the C40 cities network, an international network of the 40 megacities plus 50 small observer cities taking leadership in knowledge sharing on climate change. "Until TCFD, all that reporting sat separate from the financial realm," says Lloyd Lee, monitoring and reporting planner, Sustainability Group at the City of Vancouver. "We're having conversations [with finance] we weren't before. TCFD provides the business case for climate adaptation and now we have the risk management department getting [sustainability] into mainstream budgeting and capital allocation. TCFD opens the door for climate."

Toronto

Toronto publicly reports to CDP and staff report to city council on progress implementing TransformTO. In 2019, Toronto launched its Resilience Strategy which has many sections addressing resilience to extreme weather. Major programs such as the Wet Weather Flow Master Plan and the Basement Flood Protection Program provide their own staff reports to city council that are also available to the public. When there is a major extreme weather event such as an ice storm or flood, separate reports are generated on how the issues were handled and the costs.

“City staff believe that incorporating TCFD reporting into Toronto’s annual financial report will not only enhance financial information being reported but will enhance information to municipal stakeholders about short-term budget decisions and actual results, and longer-term capital planning decisions,” says Sandra Califaretti, director, Accounting Services, City of Toronto. “The format and language is designed to be understandable and readily usable to financial decision-makers. TCFD-style reporting signals that Toronto’s administration supports decision making in a manner that is consistent, evidence based, rigorous and in alignment with regular financial reporting.”

Q. Where is your city on its TCFD implementation journey?

Montreal

Montreal has conducted a self-assessment of its current practices based on the three phases of CPA Canada’s Maturity Assessment Framework:

1. getting started
2. progressing
3. high integration

These are applied to the TCFD’s four recommendation areas of:

1. governance
2. strategy
3. risk management
4. metrics and targets

“We feel we are in the second phase, at the halfway point of meeting the TCFD recommendations,” says Raoul Cyr, director, Accounting and Financial Information at the City of Montreal.

“In the area of governance, we have established the Office of Ecological Transition and Resilience and a steering committee focused on the environment. The process is becoming more formal, with monthly meetings to discuss climate risk and strategies for mitigation and adaptation.” In the area of metrics and targets, municipal governments have detailed measures and targets for achieving common GHG emission goals. “There are still areas that need special attention, such as risk management and strategy, which are our next focus,” says Cyr.

Vancouver

“Last year, Vancouver was the first city in Canada to issue a TCFD-style disclosure in the unaudited section of our financial statements. We are working on this year’s now,” says Lee. “The CPA Canada guide for cities was helpful in providing a maturity assessment framework to see how far along cities have come. We are qualitatively somewhere between getting started and progressing. If there were a stage called more questions than answers, that’s probably where we are. Much of our disclosures have been qualitative in nature. The TCFD is driving disclosure in quantitative terms, and that is an area we need to focus on.”

Toronto

Toronto provided summary information under TCFD-prescribed headings as an attachment to its 2018 Annual Financial Report; city staff are developing a more comprehensive disclosure for the 2019 Annual Financial Report. Toronto, Vancouver and Montreal recently held a workshop to discuss alignment of disclosures among themselves. The workshop also raised issues that need to be addressed in order to support enhanced disclosures, continued collaboration, and development of a strategy to increase the number of Canadian municipalities that disclose. It will likely take some years to fully comply with TCFD guidelines; as a result, the city will be developing a plan that guides the implementation and aligns Toronto with other Canadian cities.

Q. What are the most significant benefits / insights your city has realized so far on this journey?

Montreal

“Reporting under TCFD means we finally get to know our colleagues in the environmental department, because we never thought to talk to them about the future,” says Ouldsliman. “Our best learnings are coming from our group sessions with other cities such as Toronto and Vancouver. We are looking at how we can come up with methodologies so we can align with other cities to come up with standard disclosures.”

Vancouver

“Sustainability, historically, if it even exists in a city, has been another city service. At budget time, we knock on finance’s door and look for money. TCFD moves that conversation upstream. Suddenly people are talking about putting a climate lens on our financial decisions,” says Lee. “If you follow TCFD, you are starting to ask questions around who within our governance structure is looking at climate risk and how are they looking at it? How is it being managed as part of the overall risk management program? What strategies and actions are in place and how are you managing progress? And it’s all being done with that quantitative financial lens versus a qualitative city planning political lens. TCFD removes the political when we’re talking about climate.”

Toronto

For Toronto, the most significant benefit to date is the discipline and structure provided by the TCFD guidelines. This has meant accounting staff have been working much more directly with climate change and sustainability staff to identify what succinct information should be made available in a format and language more readily usable by decision makers. “The sober reality of climate change impacts that may occur into the future is causing more serious consideration of the cost of ‘business as usual’ versus earlier action on climate change,” says David MacLeod, senior environmental specialist, Environment and Energy Division, City of Toronto. “Bringing climate-related information into financial terms as much as possible helps decision makers understand risks and better prioritize and helps readers of our financial information understand why certain decisions were made.”

Q. What barriers / challenges have you faced on implementing TCFD and how have you overcome them?

Montreal

“Climate is a new expertise area for finance and accounting,” says Ouldsliman. “As accountants, we did not have climate-related courses. How do you report on the impact of an uncertainty that reaches far into the future in your current financial reporting? Thanks to CPA Canada, we get to work with other cities to share knowledge and expertise, to standardize and make climate financial disclosure auditable if possible.”

Vancouver

“We get to talk to new audiences in finance, but there are steep learning curves on both sides,” says Lee. “In sustainability, we are used to voluntary reporting frameworks, but finance wants regulated and standardized frameworks. The lack of guidance because it is so new has been a challenge. CPA Canada guidance is helping move us together. We know we have to change the way we do business and our economies will have to change. How do we factor in those changes? We’ve talked a lot about materiality and that runs up against the idea of equity, which is a strong direction that sustainability efforts are moving into. Is a risk material if it only impacts a small part of the population? Do traditional definitions of materiality apply when you are looking at climate? In terms of scope of concern, where do you draw the line on impacts to services, city infrastructure and the public good? It’s a work in progress.”

Toronto

City government is responsible for what might be considered 44 separate operations to deliver infrastructure and social support programs to residents, businesses and visitors. This complexity is even greater when the issue of city- and non-city-controlled infrastructure systems’ interdependencies are considered. Layered onto this is the uncertainty associated with how much the climate will continue to change. Resources for conducting climate-risk assessment work have been limited mostly to qualitative impacts. More resources are needed to develop actual cost estimates for predicted damages and engineering solutions

Q. What one piece of advice would you offer an organization or city about to begin its implementation journey?

Montreal

“Identify a leader and multidisciplinary team that includes environment, asset management, finance and others for implementation,” says Cyr. “Perform an auto-assessment evaluation based on the TCFD framework. This will provide organizational insights on the city’s position on the roadmap. It’s also important to establish a work schedule and accounting reconciliations process to disclose information in the financial statements.”

Vancouver

“Just start reporting. That’s what we did,” says Lee. “It’s not perfect but it was useful as a way to bring all the things we’re doing together and publishing it in a non-traditional channel that reached a lot of different audiences.”

Toronto

“Perform a gap analysis to ensure you understand where you are and where you need to be. Identify partners you can collaborate and share information with,” says Califaretti. “Support from your top-level executives is very important – your CFO, controller, are vital to the discussion and provide invaluable guidance. This is a close collaboration between Accounting, Finance, Financial Planning and Sustainability staff so ensure that you identify who needs to be involved early and that everyone involved understands the end goal. Paying attention to the TCFD guidelines provides a level of confidence that the right questions are being asked and answered.”

Resources


[Enhancing Climate-related Disclosure by Cities: A Guide to Adopting the Recommendations of the Task Force on Climate-related Financial Disclosures \(TCFD\)](#)

[Disclosing the Impact of Climate Change: A Process for Assessing Materiality](#)

[Climate-related Risks and Events: Questions to Ask Under Existing Public Sector GAAP and SORPs](#)

[Climate Change Disclosure and Decision Making: Resources](#)

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Canada 

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