



Climate change is one of the major challenges facing municipalities today. With increased frequency, we are starting to see the impacts of climate patterns changing locally and internationally. The urgency of the challenge is also highlighted by recent studies that suggest that the challenges we face may be greater than we realize.

According to *Canada's Changing Climate* report put together by the Environment and Climate Change Canada the region of SW Ontario has warmed by ~1.0°C since 1948. The projections they present show that we will receive more intense temperatures and extreme weather, with 50-year events almost halving in frequency under relatively conservative scenarios.

Municipalities will face the brunt of these impacts and we must make climate change the key consideration in every decision the city is making.

Leadership

Declaring a climate emergency is a recognition that the City of Kitchener realizes the magnitude of the challenge we face. It aligns us with cities across the country like Hamilton, London, Vancouver, and Ottawa, who have already declared a climate emergency. It helps call attention to the support needed from other levels of government and the private sector to tackle this. And it signals to the residents of Kitchener that this is a topic that will have a direct impact on them.

Financial Cost of Climate Change

Almost all parts of the operations of a city will be impacted by climate change. More frequent freezing and thawing will make road maintenance a more frequent occurrence. Extreme rainfall will pose flood risk and require more robust drainage infrastructure. Extreme heat will challenge the operations of some equipment. The Insurance Bureau of Canada noted that the losses per year on property and casualty insurance grew from \$405 million between 1983 and 2008 to \$1.8 billion between 2009 and 2017.

According to Jason Thistlewaite, a professor in the Faculty of Environment at the University of Waterloo, "For every dollar you spend on disaster mitigation, you save anywhere between six to 10 in comparison to the cost of repairing the damage."

Apart from the cost on infrastructure, the more extreme weather will pose a direct risk to the health and safety of our population.

Accountability

Elevating the issue to an emergency ensures that the level of resources and importance it requires are devoted to it. Introducing a carbon budget will provide the accountability needed to tackle such a problem. It will help the city better plan its reductions in a way that aligns with other priorities while maintaining the holistic picture needed to make real reductions in our emissions. The carbon budget will ensure that we are keeping up with our commitments in an efficient and accountable manner.



A Carbon Budget

A municipal carbon budget is intended to serve a very similar role to a financial budget. It ensures that the city and its departments stay within the allocations they receive, in this case, for carbon emissions. It provides clear accountability and transparency as to how we are measuring up to our commitment.

Oslo's Climate Budget (Carbon Budget)

Oslo's Climate Budget is one of the key governance tools for reaching the targets adopted in Oslo's Climate and Energy Strategy. It budgets the city's CO₂ emissions in a similar manner to the city's finances. It was first adopted by the City Council in June 2016 and was introduced as an integral component of the overall city budget.

The Department of Finance and the City Council for Environment and Transport are responsible for the Climate Budget. The City Council has overall responsibility for monitoring and implementing the climate measures and associated initiatives.

The Oslo budget contains 36 measures that have been developed to tackle GHG emissions from waste, buildings, and transport sectors.

A 'Climate Barometer' indicating the progress of the Budget measures is published every quarter. The measures in the Climate Budget are reported together with the budget report in the Oslo Municipality.

A Canadian Version

In Canada, the City of Vancouver tasked its staff in January to establish what their remaining corporate and community emissions are if they are to be commensurate with a 1.5°C world. This is a very ambitious approach to mitigation and could go hand in hand with the Oslo model that we are proposing if the City of Kitchener wanted to ratchet up its ambition to what the science says is needed.

Action

We want the City of Kitchener to declare a climate emergency and task its staff with preparing the implementation of a carbon budget based off of the Oslo Climate Budget to provide accountability for the 80% by 2050 target the City has already committed to.