

Municipal Scan of Climate and Carbon Budget Approaches

	Calgary	Durham	Edmonton	Halifax	Montreal	Ottawa	Toronto	Vancouver
Approach*	Carbon Budget	Carbon Budget	Carbon Budget	TBD	Climate Budget	Carbon Budget	Climate Budget	Climate Budget
Methodology	<p>Phasing-in emissions quantification of large capital projects and moving to operations and external contractors.</p> <p>Full implementation is expected to offer control function like financial budget.</p>	<p>Focused on corporate capital projects for GHG quantification</p> <p>The finance department uses the info submitted through the budget process to generate GHG forecasts for corporate operations</p>	<p>Climate lens applied to corporate emissions operating and capital budgets</p> <p>Each department must estimate their total carbon emissions in their section of the budget book.</p>	<p>Hired consultant to assist with feasibility research, unknown what implementation will look like</p>	<p>Participating in C40 cities pilot with City of Oslo. Budget will be owned and managed by finance staff</p> <p>Starting with internal staff engagement, using actions for reductions from their 2020 climate plan</p>	<p>Currently developing carbon accounting tool to calculate emissions from projects considered as part of the municipal budgeting or capital planning processes.</p> <p>Phase 1 of tool will focus on projects with direct links to emissions such as building energy and transportation and (including transit)</p> <p>Phase 2 will require climate lens for programming and policies or infrastructure development</p>	<p>Direction provided to design implementation options for a Toronto carbon budget that would be an accountability/governance mechanism.</p> <p>Governance framework is needed to mandate a climate lens or climate budget for the city's financial budget process.</p>	<p>Uses bottom-up, reduction-effectiveness approach – similar to Oslo approach.</p> <p>Use targets and indicators for projects from climate plan and apply financial and emissions estimates to each action.</p> <p>Forecasting funding needed for projects to reduce emissions to achieve climate planning targets.</p>
Stage of Development	Implementation	Operational	Implementation	Feasibility	Feasibility	Implementation	Implementation	Implementation
Phasing & Timelines	1 year developing carbon budget target calculation and carbon accounting	4-6 months calculating carbon budget target and modelling emissions	<p>1 year developing a carbon accounting framework,</p> <p>1 year implementation</p>	<p>Council report on best practices and pros and cons expected in September 2022.</p> <p>Implementation timeline is</p>	<p>Internal engagement expected to take place by end of 2022</p> <p>Report on climate budget</p>	1-2 years to develop the carbon accounting framework and carbon budget framework	<p>Research and design of implementation options - 1.5 years</p> <p>Implementation launch - 1 year</p>	<p>GHG inventory process well established in City; financial element of carbon budget ("Climate Emergency Financial</p>

	framework development Implementation and launch done in a phased approach over multiple years and budget cycles	6-8 months to embed this across corporation and include in budget cycle for 2022	Fully integrated in budget by 2023-2026 cycle	unknown, council direction for implementation not confirmed yet.	for next budget cycle in Q1 2023			Framework") developed with Climate Emergency Action Plan ~ 18 months
FTEs Required	1 dedicated FTE 0.2 supervisor FTE 0.8 supporting FTEs in financial budgeting department	0.5 FTE in sustainability 0.5 FTE in finance	1 dedicated FTE for implementation 1 finance FTE for ongoing support and operations	0.1 FTE for feasibility analysis with consultant support Sustainable Financial Analyst FTE expected to work on development if council direction is provided	1 FTE in finance dedicated to climate budget research/C40 Cities pilot participation	0.25 of an FTE with consultant support for carbon accounting tool	2 dedicated FTEs (0.5 FTEs used for design and research work)	1.5 FTEs for design and implementation of climate section for budgeting documents
Capital Cost	\$25,000 for consultant assistance to develop an implementation plan and jurisdictional scan, \$35,000 for accounting framework tool and training manual	\$50,000 for consultant to calculate carbon budget targets and integrate climate goals with existing budgeting process	TBD	\$20,000 for consultant feasibility research	TBD	\$36,000 for consulting services to develop a carbon accounting tool. Cost of carbon accounting tool development is being shared by 3 cities. Total cost of project is \$107,000	TBD - Internal staff time used to date; no consultants hired	~\$200,000 external consultant used to update modelling for emissions reductions in alignment with 1.5 degree warming target

* Municipalities were deemed to be using a carbon or climate budget approach based on their methodology, the municipality may use another term or name