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2021 OPERATING BUDGET BRIEFING NOTE

Status of Commitments Made in Climate Emergency Declaration & Climate-Related Investments

Issue/Background:

On January 22, 2021, the Budget Committee requested that the Director, Environment and Energy prepare Briefing Note on:

1. The timeline, budget and Full Time Equivalents associated with 2021 reports, including the TransformTO net-zero report

And a Briefing Note:

1. Detailing the current status of climate emergency declaration commitments that were supposed to be delivered in 2020 and 2021 including
 - a. which of these commitments will be delivered in 2021;
 - b. what the proposed level of staffing, in Full Time Equivalents, for each commitment; and
 - c. for those commitments that won't be delivered in 2021, what additional staffing would be needed to deliver each of them in 2021.
2. Listing climate-related initiatives to be undertaken by each division or agency in 2021, funding amount allocated to each initiative, and if possible, the expected emission reduction impact of each initiative.

This briefing note responds to the requests listed above.

2021 Report Updates

- The 2021 Budget request reflects the Environment and Energy Division's (EED) estimated funding and resources required to respond to the requests associated with Council's declaration of a climate emergency including reporting back to Council with accelerated plans to achieve net zero.
- EED will provide an update to Infrastructure and Environment Committee (IEC) on the strategy to achieve net zero in Q4 2021 that will include the requests of the Climate Emergency Declaration as detailed in the table below.

- Four full-time equivalents (FTE) is the level of EED staffing in the 2021 budget dedicated to responding to 2020 and 2021 strategy report back requests of the Climate Emergency Declaration including:
 - Analysing and reporting back on the needed actions to reach net zero GHG emissions by 2050 or sooner;
 - Exploring the feasibility of a Carbon Budget for Toronto; and
 - Developing and reporting back on progress to implement a proposed climate-lens to support cross-corporate climate-informed decision making.

Status of Climate Emergency Commitments

- The Climate Emergency commitments that were requested to be delivered in 2020 and 2021 are related to reporting back on strategy and implementation actions for Council's consideration. The Q4 2021 report back will identify the needed cross-corporate resources to execute the plan.
- Nearly all climate emergency strategy and reporting commitments have been initiated and have either been completed or will be delivered in 2021 through the Q4 2021 report. The further work and resources required to accelerate action and achieve net-zero will be outlined in the report and incorporated into in the 2022 budget. These actions and investments will be cross-corporate and include Agencies and Corporations.
- The City's COVID-19 response impacted EED's ability to deploy all approved resources in 2020 and this will continue in 2021. The staff recommended in the 2021 budget related to responding to the research, analysis and reporting requests of the Climate Emergency Declaration includes the continued funding for 4 FTEs approved through the 2020 budget process.
- Despite the challenges presented by COVID-19, EED continues to advance most of the Climate Emergency Commitments. The 2021 priority will be the delivery of the Net-Zero Plan in Q4.
- Acceleration of existing TransformTO initiatives in 2021, as directed in the Climate Emergency Declaration (commitment number 3) is challenged given the continued support, response and impacts arising from the pandemic.
 - Complement required to advance TransformTO acceleration as directed in the Climate Emergency Declaration was approved as part of the 2020 budget process for implementation in mid/late 2020.
 - Actual implementation has been challenged as the City continues to respond to the pandemic. Given continued COVID impacts, full implementation is now expected by early 2022.
 - Approved complement continues to exist in the EED 2021 Operating Budget, assuming continued COVID recovery and reductions in associated City response, an

acceleration of implementation could be possible by mid-2021 at the earliest, predicated on the ability to recruit and onboard the staff needed to commence actions.

Climate Emergency Commitments

Committee / Council Direction	Comments	Expected Delivery
City Council on October 2 and 3, 2019, adopted the following:		
1. City Council declare a climate emergency for the purpose of naming, framing, and deepening our commitment to protecting our economy, our ecosystems and our community from climate change.	Complete	N/A
2. City Council endorse a net zero greenhouse gas emissions target that is in line with keeping global average temperature rise below 1.5 degrees Celsius, immediately strengthening Toronto's goal of becoming net zero before 2050, and City Council request the Director, Environment and Energy to report back by the fourth quarter of 2020 on the feasibility of actions that could achieve net zero by 2040.	EED is finalizing technical scenario modelling to determine the feasibility of achieving net zero by 2050 and by 2040. The technical results will be used to inform actions required to achieve net zero and will be presented in Q4 2021.	Q4 2021
3. City Council commit to: a. looking for opportunities to invest in and accelerate high priority emission reduction areas in TransformTO, such as building retrofits and transportation, as part of the 2020 Budget; b. exploring all viable and equitable financing mechanisms to adequately finance and encourage climate actions and adaptation in the 2021 Budget cycle; c. accelerating the implementation of TransformTO climate actions at every opportunity; and d. engaging job-seekers, workers, unions, academic institutions, relevant sectors,	Work is underway cross-corporately to advance Council's stated priorities related to Climate Emergency Response.	Ongoing

Committee / Council Direction	Comments	Expected Delivery
<p>and social service agencies in the creation of a low-carbon jobs strategy that supports a decent work agenda, career pathways for equity-seeking groups, and the expansion of green industry sectors across Toronto.</p>		
<p>4. City Council direct the Chief Financial Officer and Treasurer to report to City Council on possible amendments to the Statement of Investments and Procedures to become a green investment city by reflecting current responsible investment best practices, excluding fossil fuels from the portfolio, and actively investing in clean energy and climate solutions.</p>	<p>On June 29, 2020, the Environmental, Social, and Governance (ESG) section of the City's Investment Policy was strengthened by having investment managers consider the United Nations' 17 sustainable development goals (SDGs), and that these investment managers have a process that integrates ESG in the analysis and on-going review of the assets under management. Also, as directed by City Council, the City has developed a process to monitor and report on whether or not external investment firms hired by the City are compliant with the terms of the Investment Policy governing Environmental, Social, and Governance Factors and that the information and data regarding climate change risk from these reviews will be reported to City Council semi-annually.</p> <p>The City of Toronto has chosen to take the lead and be the first government in Canada to issue an ESG annual report to reflect its commitment and performance in each of three areas: Environment, Social, and Governance (ESG). The report (2021 EX20.3) was adopted by Executive Committee on January 27, 2021.</p>	<p>Complete / ongoing</p>
<p>5. City Council direct the Director, Environment and Energy to:</p>		
<p>5. a. report back in the second quarter of 2020 on:</p> <p>i. the feasibility of developing a formal adaptive resource management system to assist in achieving net-zero:</p>	<p>Research on adaptive resource management has been ongoing throughout 2020. Upcoming TransformTO plans will incorporate the principles of adaptive management that allow for flexibility and adaptive responses to new technologies, information and directions as they emerge.</p>	<p>Q4 2021</p>

Committee / Council Direction	Comments	Expected Delivery
	<p>The technical modelling currently underway is also incorporating elements of adaptive management as many different scenarios are being explored and modelled including possible scenarios related to the decarbonisation of the provincial electrical grid.</p>	
<p>5. a. ii. options for establishing an advisory committee that includes scientists, businesses, community experts, labour groups, Non-Governmental Organization experts and the Toronto and Region Conservation Authority to provide regular peer review on plans to achieve net-zero; and</p>	<p>Research on establishing an advisory committee has been ongoing throughout 2020 and will continue in 2021. The work has been informed in part by a series of Roundtables on the Environment, Climate and Sustainability hosted in 2020 to inform the COVID-19: Impacts and Opportunities Report. Options and recommendations for the establishment of an advisory committee will be presented in the Q4 report.</p>	<p>Q4 2021</p>
<p>5. a. iii. the interrelationship between city strategies and targets, as well as a critical path analysis to achieve net-zero; and</p>	<p>Work to ensure alignment with other strategies and targets is ongoing. EED has been working collaboratively with the Service Groups, Senior Management Team (SMT) and the Chief Financial Officer (CFO), along with other City divisions and agencies to ensure maximum alignment and coordination of strategies and targets. The voluntary input into the Climate Lens is one output of these efforts.</p> <p>The technical scenario modelling currently underway will present a critical path analysis to achieve net zero.</p>	<p>Q4 2021</p>
<p>5. b. report annually in the second quarter on the implementation status of climate actions and progress made towards meeting interim and 2030 emission reduction targets.</p>	<p>A TransformTO 2019 Implementation Update was released publically in 2020 and can be accessed on the web at www.Toronto.ca/transformto.</p> <p>In December 2020, the EED released the City's 2018 greenhouse gas (GHG) inventory on community-wide GHG emissions – which measures the emissions from energy use in buildings, vehicles, waste and industry – indicating that GHG emissions in Toronto were 37 per cent lower in 2018 than in 1990.</p>	<p>Ongoing/ complete</p>

Committee / Council Direction	Comments	Expected Delivery
	The EED will continue to report regularly on the status of climate actions and on progress being made towards all long term goals and targets.	
6. City Council direct the Director, Environment and Energy to include in the 2021-2023 TransformTO implementation plan:	<i>In light of COVID the existing TransformTO implementation plan was extended through the end of 2021, and the next TransformTO Implementation plan will be integrated into the overall Net-Zero Strategy in Q4 2021.</i>	
6. a. actions to achieve a net zero greenhouse gas emissions in line with keeping global average temperature rise below 1.5 degrees Celsius;	<p>EED is finalizing technical scenario modelling to understand the feasibility of achieving net zero by 2050 and by 2040. Actions being considered are also ensuring Toronto's plans to achieve net zero are in line with keeping global average temperatures below 1.5 degrees. The technical results will help to identify actions required to achieve net zero and will be presented in Q4 2021.</p> <p>The Environment and Energy Division continues to partner with C40 Cities to ensure that TransformTO aligns with the Paris Agreement and the International Panel on Climate Change (IPCC) science-based targets to limit planetary warming to 1.5 degrees Celsius.</p> <p>Any advice from C40, including recommended new or accelerated actions that Toronto should take to ensure 1.5 degree compliance, will inform the ongoing implementation of TransformTO.</p>	Q4 2021
6. b. strategies that would accelerate timelines for existing TransformTO actions;	The technical scenario modelling currently underway includes an assessment of the feasibility of achieving net zero by 2040. This includes strategies that would accelerate existing timelines and levels of ambition.	Q4 2021
6. c. the feasibility of establishing interim 2023 and 2027 targets and actions that put Toronto on track to meet its 2030	Interim targets and actions to accelerate implementation will be presented as part of the Q4 2021 report.	Q4 2021

Committee / Council Direction	Comments	Expected Delivery
target, including quick-wins in the transportation and building sectors;		
6. d. a strategy for securing dedicated and sustained climate funding to adequately finance climate actions necessary to meet 2030 emission reduction targets;	City staff will continue to put forward, through the annual budget process, any requests for necessary funding required to implement TransformTO. Staff will also continue to identify opportunities for funding from other orders of government, the private sector, and other key partners.	Ongoing
6. e. a climate lens that evaluates and considers the climate impacts of all major City of Toronto decisions, including financial decisions;	<p>A Climate Lens Framework and Climate Lens for Budget were developed (and implemented in the case of the Climate Lens for Budget) in summer 2020. Work is underway to develop a Climate Lens Policy that will direct Divisions within scope to conduct GHG and resilience assessments, so decisions can be made with the necessary climate information available.</p> <p>It is anticipated that this initiative will involve a policy, specific procedures and tools, and training for staff.</p> <p>City-wide implementation of a Climate Lens will require additional work and will be delivered beyond 2021.</p>	Ongoing

Committee / Council Direction	Comments	Expected Delivery
<p>6. f. a plan to measure, monitor and reduce consumption-based (lifecycle) emissions;</p>	<p>The measurement and monitoring of consumption based (lifecycle) emissions is an emerging field. EED is working closely with international networks, such as C40, and academia to understand international best practices and methods for measuring and monitoring consumption-based emissions in a Toronto context.</p> <p>EED is also working closely with other divisions to evaluate the feasibility to measure consumption based (lifecycle) emissions and opportunities to address them.</p> <p>EED will report on preliminary activities as part of the Q4 2021 report. The plan to measure, monitor and reduce consumption-based emissions will be delivered beyond 2021.</p>	<p>Q4 2021/On going</p>
<p>6. g. engaging residents and stakeholders in decision-making and provide greater public accountability;</p>	<p>EED continues to prioritize resident and stakeholder engagement in the ongoing implementation of TransformTO. Throughout 2020, Live Green Toronto has continued to engage residents in climate action through events, grants, and community action programs.</p> <p>In the summer and fall of 2019, members of the public were encouraged to provide input on Toronto’s climate actions and priorities through four City-hosted public meetings, an online survey, community-hosted conversation events, and the TransformTO Reference Panel on Climate Action.</p> <p>EED continues to engage with stakeholders throughout the development of the technical scenario modelling. Additional opportunities for resident and stakeholder engagement in the development of TransformTO plans are forthcoming in 2021.</p> <p>Additional opportunities to expand resident and stakeholder engagement will be presented in the Q4 report.</p>	<p>Ongoing</p>

Committee / Council Direction	Comments	Expected Delivery
<p>6. h. a commitment to meaningfully consult and cooperate with Indigenous communities on the development and implementation of TransformTO in accordance with the City’s commitment to the United Nations Declaration on the Rights of Indigenous Peoples;</p>	<p>The City is exploring collaborative approaches to involve Indigenous Traditional Knowledges (ITK) and Indigenous communities in designing and delivering climate action in Toronto. The City partnered with Indigenous Climate Action (ICA) to design, host, and report on the outcomes of a workshop with Indigenous communities on urban climate action.</p> <p>Additional opportunities to engage with Indigenous communities will be presented in the Q4 2021 report.</p>	<p>Ongoing</p>
<p>6. i. a plan to apply the City’s Equity Lens to TransformTO decision-making in order to ensure that strategies include and benefit equity-seeking groups;</p>	<p>EED continues to follow the TransformTO guiding principles when designing and delivering climate actions to ensure that the transition to a low-carbon Toronto occurs in a way that maximizes public benefit and minimizes harms.</p> <p>EED has engaged with staff in SDFa to incorporate equity considerations into the modelling of proposed climate actions. Further equity analysis will continue to take place during the development of TransformTO plans.</p>	<p>Ongoing</p>
<p>6. j. a plan to collaborate with youth, including youth from equity-seeking groups, to increase youth participation in the development and implementation of TransformTO strategies;</p>	<p>A plan to further collaborate with youth, including youth from equity-seeking groups, is ongoing in 2020 and will continue throughout 2021. Youth engagement will be coordinated with ongoing initiatives under Live Green Toronto.</p>	<p>Ongoing</p>
<p>6. k. the feasibility of creating a Toronto Carbon Budget to aid in the implementation of TransformTO;</p>	<p>Work to determine the feasibility of establishing a carbon budget for Toronto is underway and will be reported back in the Q4 2021 report.</p>	<p>Q4 2021</p>
<p>6. l. integration of resilience into TransformTO, consistent with Resilience Strategy Action 4.2; and</p>	<p>Implementation of TransformTO is increasingly being led by other Divisions, and as such climate resilience is embedded in implementation activities.</p> <p>A guiding principle of TransformTO is to maximize co-benefits including climate resilience. Actions that maximize resilience,</p>	<p>Ongoing</p>

Committee / Council Direction	Comments	Expected Delivery
	while also reducing GHGs, will be presented in the Q4 2021 report.	
<p>6. m. recognition of the City of Toronto’s role in uptake of innovation and a plan to:</p> <p>i. improve collaboration with the academic and business community in the development and implementation of TransformTO strategies; and</p> <p>ii. establish leadership on resilience consistent with Resilience Strategy Action 4.5.</p>	<p>EED continues to leverage partnerships and actions by the academic and business community. EED will continue to enable residents, businesses and building owners to change behaviors and take action towards meeting the overall target of net zero emissions before 2050 through leadership, creating partnerships, providing advice, and the promotion of sustainable solutions.</p>	<p>Q4 2021/ ongoing</p>

Investments in GHG Reductions and Climate Resilience:

- For the first time in Toronto's history, a Climate Lens was utilized in the 2021 budget process to establish a climate spending baseline for City Divisions, Agencies and Corporations. For the first year roll-out the Climate Lens for Budget was voluntary, to enable a period of learning and evaluation. Staff were asked to flag projects that increased the City's climate resilience and/or reduced GHG emissions, to begin a cross-corporate culture change that will be further enhanced in the 2022 budget cycle.
- The data reported through the Climate Lens identifies all projects having a component dedicated to reducing GHGs or increasing resilience, and the total cost of these projects. EED is working with FPD to capture in future budget cycles the investments directly related to the climate related component of each project.
- New/enhanced (new program/services, expansion of existing programs/services, new user fees) and incremental budget requests were captured for operating programs and work is underway to review the ability to capture the climate component of base budgets for operating programs in future years.
- All capital projects in the 10-year Capital Plan, with the exception of 'Legacy projects' (long-term projects that do not need to submit new business cases due to no changes in budget) were captured under the Climate Lens. The Environment and Energy Division is working with the Financial Planning Division to incorporate legacy projects under the Climate Lens for the Budget in the future.
- Four operating and 439 capital projects were flagged through the Climate Lens. These projects have been flagged in the business case development process as having a component that either reduces GHG emissions, increases the City's climate resilience, or both reduces GHGs and increases climate resilience.

- The 2021 Capital Budget for the 439 capital projects identified under the Climate Lens as having a climate component is \$611.3 million, and the 2021-2030 Capital Plan for these projects is \$4.8 billion.
- TTC projects are not included in the numbers reflected and it will be a priority to include them through the 2022 Budget Process. Many TTC projects would apply within their 10-year Capital Plan that totals \$11.907 billion, which includes \$1.576 billion alone for vehicles such as buses, streetcars and subway cars, including the acquisition of electric buses.
- EED is currently developing a City-wide Climate Lens Policy that will support and ultimately require Divisions within scope to conduct GHG and climate resilience assessments on their projects and programs. The Climate Lens tools will also be available to Agencies and Corporations.
- The 2021 budget training process included climate related training and information, as well as a dedicated email handle to answer any climate and budget related inquiries. The implementation of the Climate Lens for Budget revealed the need for additional training for staff regarding climate action, including general information regarding GHGs and climate resilience.

Operating Programs that Support the Toronto Resilience Strategy or TransformTO

- The four operating programs that were flagged by the Climate Lens are detailed in Table 1, below.

Table 1 Operating Programs that Support the Toronto Resilience Strategy or TransformTO (Increase Climate Resilience or Reduce GHGs)				
Tax or Rate Supported	Service Area	Strategy Alignment	No. of Programs	2021 Budget Change* (millions)
Tax-supported	Community and Social Services • Parks, Forestry & Recreation	Resilience Strategy	1	\$0.538
Tax-supported	Infrastructure and Development Services • Transportation Services	TransformTO	2	\$0.396
Rate-supported	City Agency • Toronto Parking Authority	TransformTO	1	\$3.190
Total			4	\$4.124

*As noted above, the Climate Lens only captured operating budget changes to new/enhanced or incremental base business cases and was not applied to unchanged base budget operating programs.

Capital Projects that Contribute Only to GHG Reductions

- The 439 capital projects that were flagged by the Climate Lens are detailed in Tables 2, 3 and 4, below.

Table 2 Capital Projects that Contribute Only to GHG Reductions				
Tax or Rate Supported	Service Area	No. of Projects	2021 Budget (millions)	2021-2030 Budget (millions)
Tax-supported	Community and Social Services <ul style="list-style-type: none"> • Economic Development & Culture • Parks, Forestry & Recreation 	45	\$36.928	\$255.882
	Corporate Services <ul style="list-style-type: none"> • Corporate Real Estate Management 	2	\$8.636	\$23.636
Rate-supported	Infrastructure and Development Services <ul style="list-style-type: none"> • Solid Waste Management Services 	7	\$2.491	\$50.950
Total		54	\$48.055	\$330.468

Capital Projects that Contribute Only to Climate Resilience

Table 3 Capital Projects that Contribute Only to Climate Resilience				
Tax or Rate Supported	Service Area	No. of Projects	2021 Budget (millions)	2021-2030 Budget (millions)
Tax-supported	Community and Social Services <ul style="list-style-type: none"> • Children's Services • Economic Development & Culture • Parks, Forestry & Recreation 	48	\$18.747	\$164.411
	Infrastructure and Development Services <ul style="list-style-type: none"> • Transportation Services • Waterfront Revitalization Initiative 	69	\$259.512	\$1,675.073

Table 3 Capital Projects that Contribute Only to Climate Resilience				
Tax or Rate Supported	Service Area	No. of Projects	2021 Budget (millions)	2021-2030 Budget (millions)
	Corporate Services <ul style="list-style-type: none"> • Corporate Real Estate Management • Environment and Energy 	24	\$47.575	\$423.525
Rate-supported	Infrastructure and Development Services <ul style="list-style-type: none"> • Solid Waste Management Services 	4	\$4.093	\$151.030
	City Agency <ul style="list-style-type: none"> • Toronto Parking Authority 	1	-	\$1.000
Total		146	\$329.927	\$2,415.039

Capital Projects that Contribute to Both GHG Reductions and Climate Resilience

Table 4 Capital Projects that Contribute to Both GHG Reductions and Climate Resilience				
Tax or Rate Supported	Service Area	No. of Projects	2021 Budget (millions)	2021-2030 Budget (millions)
Tax Supported	Community and Social Services <ul style="list-style-type: none"> • Parks, Forestry & Recreation • Toronto Paramedic Services 	213	\$132.574	\$1,586.754
	Corporate Services <ul style="list-style-type: none"> • Corporate Real Estate Management • Environment and Energy 	17	\$89.313	\$336.800
	City Agency <ul style="list-style-type: none"> • Toronto Public Library • Toronto Zoo 	8	\$5.060	\$76.534
Rate Supported	Infrastructure and Development Services <ul style="list-style-type: none"> • Solid Waste Management Services 	1	\$6.346	\$29.328
Total		239	\$233.293	\$2,029.416

Other Key Points:

- Throughout 2020 during the COVID-19 pandemic, EED continued to implement the priority activities associated with advancing TransformTO to respond to the Climate Emergency. One third of Environment and Energy Division (EED) staff were redeployed and/or recalled, they supported the Toronto Office of Recovery and Rebuild and provided front-line service to shelter and long-term care clients, among other COVID-19 related emergency services. Timelines and deliverables have been adjusted as a result of EED's contribution to the COVID-19 pandemic response.

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