



STAFF REPORT ACTION REQUIRED

Transformation Toronto 2050 – Terms of Reference

Date:	March 30, 2015
To:	Parks and Environment Committee
From:	Chief Corporate Officer
Wards:	All
Reference Number:	P:\2015\Internal Services\E&E\Pe15002e&e (AFS #20255)

SUMMARY

Climate change is well understood to be the greatest environmental challenge of the 21st century. The changes occurring in the global climate pose serious threats to our natural environment, our health, our jobs and economy. The challenge is great, but if we continue on the path towards a low carbon future there will be many new opportunities to create a more prosperous, liveable, connected and equitable Toronto.

In July 2007, Toronto City Council unanimously decided to address the challenge of climate change when it adopted the target of reducing greenhouse gas emissions by 80% against 1990 levels by the year 2050. Toronto has made great strides towards that goal and it is estimated that emissions were 25% below 1990 levels in 2012, well exceeding the short-term target of a 6% reduction by 2012. This achievement is recognized in part in the 2015 Sustainable Cities Index report, where Toronto is recognized as the most Sustainable City in North America taking into account economic, social and environmental criteria.

In order to maintain and improve Toronto's standing globally, new strategies and actions are required by all orders of government, residents and businesses to continue to curb emissions. If we act as part of a global effort to reduce carbon emissions, Toronto can help reduce the impacts of a changing climate on our city.

“Transformation Toronto 2050: The Path to a Low Carbon Future” is a proposed process for co-creating with residents, businesses, community organizations, research institutions and other orders of government the path to be taken to achieve the goal of a 80% reduction in emissions. This proposal, if adopted, will result in the development of a short-term strategy (2017-2020) for achieving the interim target of a 30 percent reduction in emissions by 2020 and a long-term (2020-2050) approach identifying how we can

reduce emissions by 80%, while generating a more prosperous economy and liveable and healthier Toronto.

The actions and strategies that will emerge from “*Transformation Toronto 2050: The Path to a Low Carbon Future*” will build upon and replace the existing climate change mitigation strategies found in the Climate Change Action Plan (adopted in July 2007) and The Power to Live Green: Toronto’s Sustainable Energy Strategy (adopted in November 2009). Existing research and work, plus best practices from other cities will inform the project. Addressing climate change is a whole community effort and this process will use innovative approaches for co-creating with the Toronto community and other partners the steps and pathways needed to continue on the path towards a low carbon, prosperous, equitable, connected and healthier Toronto.

RECOMMENDATIONS

The Chief Corporate Officer recommends that:

1. City Council direct the Chief Corporate Officer to undertake the *Transformation Toronto 2050: The Path to a Low Carbon Future* initiative according to the Terms of Reference as outlined in this report.
2. City Council authorize the Chief Corporate Officer to enter into funding agreements to receive up to a maximum of \$250,000 per annum and/or other related agreements (*e.g.* non-disclosure agreements) with community and not-for-profit foundations, government agencies, utility companies, and other partners, in forms satisfactory to the City Solicitor, to support research, program design and implementation activities in connection with this initiative, as required.
3. City Council request the Chief Corporate Officer to report to the Parks and Environment Committee with updates on the development of the *Transformation Toronto 2050: The Path to a Low Carbon Future* initiative at key milestones and that the resultant strategic actions be submitted to City Council for approval.

Financial Impact

Initial research and design will be sourced from current program activities in the Environment & Energy Division and the Toronto Atmospheric Fund.

Non-staff costs for the two-year project are estimated to be in the range of \$400,000 to \$600,000. Actions are underway to source estimated budget funds through in-kind contributions from partner organizations, as well as, through funding applications to private and community foundations and associations such as the Canadian Federation of Municipalities and the Urban Sustainability Directors Network (USDN).

Should inadequate funds be raised from external sources, either the project will not proceed or the scope of the project will be modified according to amount of funds available.

Budget adjustment to the 2015 or future year Operating Budget for Environment & Energy is necessary should external funding become available to support the *Transformation Toronto 2050* initiative.

The Deputy City Manager & Chief Financial Officer has reviewed this report and agrees with the financial impact information.

Equity Statement

Any actions or strategies proposed through the *Transformation Toronto 2050* initiative will be reviewed to ensure they have positive influence on the health, liveability and prosperity of all residents.

DECISION HISTORY

At its meeting of October 8, 2013 City Council adopted item EX34.5 endorsing the 26 strategic actions proposed by the City Manager to guide the Toronto Public Service for 2013-2018. Strategic Action #6 identifies the need to develop an environmental sustainability framework to advance the City of Toronto's environmental and energy objectives and the need for integrated business plans and implementation strategies. *Transformation Toronto 2050* addresses, in part, this strategic action by working to identify a framework for addressing the issue of climate change.

City Council Decision document can be viewed at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.EX34.5>

At its meeting of July 8, 2014 City Council in its consideration of item PE28.4 amended the recommendations of the Chief Corporate Officer and directed that a program be developed for accelerating the actions required to address the emission reduction and sustainable energy targets adopted by City Council in the Climate Change, Clean Air and Sustainable Energy Action Plan and the Power to Live Green: Toronto's Sustainable Energy Strategy. Development of that program should involve preparation of necessary studies and analyses and extensive engagement with City Councillors, subject matter experts, all City operations, academia, community leaders, other orders of government and the community. The *Transformation Toronto 2050* initiative addresses this directive of City Council.

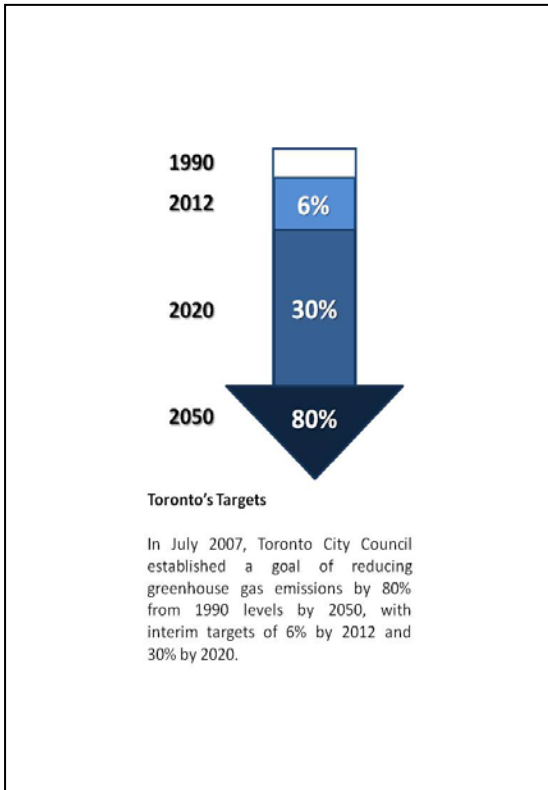
City Council Decision document can be viewed at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2014.PE28.4>

ISSUE BACKGROUND

As requested by City Council in July 2014, the Chief Corporate Officer is initiating a program to identify and propose the strategic actions to achieve Toronto's climate change goals. These strategic actions, if adopted by City Council, will guide the City of Toronto in its decision making for the next 35 years. This report outlines the proposed guiding principles, scope of work, deliverables and community engagement, as well as costs and timelines in which the work is to be completed.

The City's existing climate change strategies have served their useful life in supporting the reduction of Toronto's greenhouse gas emissions by 25% compared to 1990. In fact, due to impressive carbon reductions achieved through energy conservation efforts, waste management strategies, and via changes in the Province's electricity generation mix, Toronto has exceeded the 2012 reduction target of 6% (the "Kyoto Target") and is now more than half-way to the 2020 reduction target of 30%.



Reducing Carbon Emission Makes Financial Sense

The Better Buildings Partnership (BBP) is a City program established in 1996 that helps Toronto building owners, managers and developers achieve their energy efficiency goals while saving money. In 2013, the BBP completed 165 retrofit projects covering a gross floor area of 4 million m² saving participants \$3 million per year. An estimated 1086 person years of employment is associated with these BBP projects.

More recently in 2014, Toronto launched the HELP (Home Energy Loan Program) which provides low cost loans to support homeowners in making their properties more energy efficient. Early results have found that participants are achieving savings of \$9000 per home on average over an estimated payback period of 10 years per home.

Transformation Toronto 2050 will build upon and replace the existing climate strategies: The Climate Change Action Plan (adopted in July 2007) and The Power to Live Green: Toronto's Sustainable Energy Strategy (adopted in November 2009). Transformation Toronto 2050 is focused on establishing the directions that will serve to achieve significant carbon reductions over a 35-year timeframe and will be linked with other long-term planning activities within the City.

Related to this staff report, Parks and Environment Committee is also being provided with the Terms of Reference for the *Parks and Environment Committee, Subcommittee on Climate Change Mitigation and Adaptation* which defines the role of the Subcommittee in relation to this initiative.

TERMS OF REFERENCE, TRANSFORMATION TORONTO 2050

Statement of Work

Transformation Toronto 2050 is a two-year process that will result in the preparation of a short term (2017-2020) action plan to achieve the interim target of a 30% reduction in emissions and the identification of the path Toronto can follow for the next 35 years to become a low carbon city by 2050. These strategic documents will be co-created with the Toronto community and based on carbon reduction scenarios derived from the best available data and methods that aim to maximize co-benefits in local economic activity, resident health and liveability.

The term "transformation" is meant to stimulate thinking about significant changes that will affect the current structure of our economies and employment, further our work on balancing social equity, change our modes of travel, and alter our relationship to our homes as well as the ways that we may interact with each other in a future low carbon city.

Toronto is a Leader

City Operations have reduced our emissions 49% from 1990 levels as of 2012, far exceeding the community-wide Climate Change Action Plan target of 6% reduction. Toronto's overall community emissions have been reduced by 25% by the year 2012.

Transformation Toronto 2050 will engage people in a process of re-imagining our city: a city that reduces its carbon footprint while enhancing its local economy, reducing inequalities and shifting patterns of consumption.

Guiding Principles

The following principles will guide the development of *Transformation Toronto 2050*:

1. Build on existing success.

Toronto has had significant success in reducing carbon emissions. Existing and emerging work will inform the foundation for proposed future action. Existing policies and programs which have contributed to greenhouse gas emissions reductions include the Toronto Green Standard, the Green Roof Bylaw, the Better Buildings Partnership, the Toronto Atmospheric Fund, the Tower Renewal program, and the Home Energy Loan Program in addition to the emissions reduced from improvements in the delivery of key City services, such as increased waste diversion rates, land use planning, transportation and transit services which promote low and no carbon modes of transportation, and water conservation and storm water initiatives.

2. Build on the existing knowledge base.

A growing number of countries, states/provinces and cities are developing low carbon strategies. Toronto will align its methods with global best practices. The City will take full advantage of Toronto's involvement in the C40 Secretariat, the Urban Sustainability Directors Network and other forums established to support cities in establishing the path to a low carbon future.

3. Ensure open data.

All data collected to develop the scenarios, where possible, will be made available through the City of Toronto's open data initiative. Partners including academics and community organizations will also be invited to share their data with the City so that the best available data is matched with some of the best analytical tools. Using open data forums, community members will be able to run their own analytics to offer alternative visions into the decision-making mix.

4. Co-creation.

We will initiate, develop, and strengthen partnerships in the Toronto community specifically with academics, the business community, and non-government organizations so as to engage the broad community, incorporate their knowledge and interests, and build their long term commitment to the outcomes of *Transformation Toronto 2050*.

5. Clear communications.

All analyses and results will be presented in meaningful ways to the community with an emphasis on clear and concise visual representations of modelling outcomes.

6. Equitable public benefit.

Proposals will be evaluated for their environmental, financial and economic, social and health implications. Options will be evaluated to identify those that provide the greatest public benefit.

7. Alignment with current and future strategies.

The outcomes of the *Transformation Toronto 2050* initiative will learn from, complement and be coordinated, where appropriate with other City strategic initiatives, such as the Long Term Waste Management Plan, the Official Plan, the Workforce Development Strategy, Toronto Strong Neighbourhood Strategy, and the City of Toronto Act Review.

8. Collaborate with other orders of government.

The Province of Ontario is currently in the process of establishing a strategy for how Ontario can achieve their provincially mandated long-term goal of reducing greenhouse gas emissions by 80% by the year 2050. Toronto is a direct source of almost 12% of Ontario's emissions and is indirectly responsible for significantly more of the province's emissions if the City includes consumption-based or lifecycle emissions. Actions will be taken to align Toronto's efforts with those occurring with the Province.

Outcomes

The *Transformation Toronto 2050* initiative will:

1. Select the best tools and approaches for this initiative through a review of background information on greenhouse gas modelling and forecasting as well as data visualization techniques that can be used to translate complex data into useful decision support and public engagement tools.
2. Document and apply to this initiative the best practices developed by other countries, states/provinces and cities for generating different scenarios of how to achieve significant reductions of carbon emissions.
3. Identify, document and evaluate scenarios of change that can guide Toronto towards a low carbon future in balance with financial, economic and social/health priorities.
4. Prepare an action plan for the 2017 to 2020 period to support achievement of the 30% reduction of greenhouse gases by 2020.
5. Identify and document the path Toronto can follow to a low carbon city by 2050 that is integrated with other long term, transformative strategies and that identifies the multiple benefits of following this path.

Community Engagement and Partnership

A critical element of the *Transformation Toronto 2050* initiative will be the approach taken to engage and partner with the Toronto community. The engagement approach will be one that encourages residents, businesses, community leaders, academia, and others participation in the development and evaluation of scenarios and the strategies for taking action.

Various forums will be established to allow for effective engagement and partnership. These include but are not limited to:

1. City Staff Leader's Forum – under the leadership of the Environment & Energy Division staff from other City Divisions and Agencies will be engaged in guiding the design, research, analyzes, planning, implementation and communications that will support this project.
2. Community Leader's Forum – a group of city leaders representing various sectors and responsible for helping build community ownership.
3. Expert Advisors and Working Groups – group(s) of experts including academics that will be responsible for assisting in the development of scenarios, the evaluation of implications of those scenarios, and guiding development of proposed targets and strategies.
4. Residents – participants in various engagement forums designed to garner their views on potential priority actions, while at the same time informing and educating residents about the challenges and opportunities.
5. Parks & Environment Committee, Subcommittee on Climate Change Mitigation and Adaptation – host themed roundtable discussions with experts and the community and provide advice and input at key milestones of the *Transformation Toronto 2050* initiative.

As the project proceeds, input and engagement also will be sought from existing City advisory bodies, such as the Disabilities Advisory Committee, the Youth Cabinet and others.

Project Management

Transformation Toronto 2050 will be co-managed and led by staff from the Environment and Energy Division and the Toronto Atmospheric Fund with advice from the City's Executive Environment Team, which is chaired by the Chief Corporate Officer.

The Executive Environment Team consists of representatives of City Agencies, Divisions and Corporations that play a significant role through their policies, programs and operations in enhancing and protecting Toronto's natural environment.

Time Line

Project Phases	Activities
January to April 2015	<ul style="list-style-type: none">• Development of project concept and proposal• Review of project proposal by the Parks & Environment Committee
May to December 2015	<ul style="list-style-type: none">• Literature reviews of best practices, greenhouse gas modelling and forecasting techniques and visualization techniques• Funding proposals• Collect data internally and externally for use in scenario modelling• Develop and run scenarios
January to June 2016	<ul style="list-style-type: none">• Community wide engagement & discussion about possible scenarios of change• Detailed financial, economic, social, health and environmental analysis of short-listed options and strategies
July to September 2016	<ul style="list-style-type: none">• Development of first draft of the short term action plan (2017-2020) and path that can followed to a low carbon city
October to November 2016	<ul style="list-style-type: none">• Community wide discussion about proposals• Consideration by the Parks and Environment Committee

CONTACT

Jim Baxter, Director, Environment & Energy Division
Telephone: 416-338-1295, E-mail: jbaxter2@toronto.ca

Mark Bekkering, Manager, Implementation & Support, Environment & Energy Division
Telephone: 416-392-8556, E-mail: mbekker@toronto.ca

Mary Pickering, Vice-President, Programs and Partnerships, Toronto Atmospheric Fund
Telephone: 416-392-1217, E-mail: mpickering@taf.ca

SIGNATURE

Josie Scioli
Chief Corporate Officer