Final report of

Toronto's TransformTO Reference Panel on Climate Action

"We are a diverse group of 30 Torontonians from throughout the city who are concerned about the future of Toronto amid the global impacts of climate change. Selected through Civic Lottery, our diversity is a strength — it is a diversity of opinion, of age, of gender, of geography, and of life experience."

Final Report | September 2019

TORONTO

Live green Toronto

Program Development and Facilitation

The TransformTO Reference Panel was commissioned by the City of Toronto. Content related to the TransformTO Strategy and Implementation Plan 2021-2023 were developed and presented by City of Toronto staff.

The Panel was designed and facilitated by MASS LBP. MASS is Canada's leader in the use of long-form deliberative and participatory processes to shape public policy. Since 2007, MASS LBP has pioneered the use of Civic Lotteries in Canada and has led over 30 Citizens' Assemblies and Residents' Reference Panels to engage the public in tackling tough policy challenges.

Chair's Note

I am pleased to present the final report of Toronto's TransformTO Reference Panel on Climate Action to the Environment and Energy Division, on behalf of its 30 volunteer members.

This representative group of Torontonians cumulatively contributed 660 hours of volunteer time over two summer weekends to learn and deliberate about municipal climate policy as an act of public service. The Panel is one of several deliberative citizens' assemblies and panels recently commissioned by cities around the world to examine climate policy.

Panel members were tasked with developing shared recommendations on changes the City should make between 2021 and 2023 to help meet Toronto's long-term greenhouse gas (GHG) emissions targets.

While the Panelists were as diverse as the city itself, they shared a clear commitment to making our city a better place to live.

They embraced the challenge — a wide-ranging topic, limited time — and in a few short days identified significant common ground concerning how they believe Toronto should contribute to the fight against global warming over the next few years.

They recognized that the City of Toronto must walk a fine line — to be bold in its ambition, look beyond the City's traditional policy tools, and make a contribution to global climate efforts, while also ensuring Torontonians understand and support the steps being taken. In particular, Panelists believed it critical for the City to demonstrate how climate action is also a way to build a more efficient, fair, and liveable city that we can all take pride in.

Most encouragingly, Panel members consistently saw their occasionally significant disagreements as opportunities for learning, rather than debates to be won. They engaged each other with curiosity, creativity, and collegiality, all with an eye to collaborative problem-solving.

The Panelists took their task seriously because they understood that it could make a real difference — that the Environment and Energy Division, City Councillors, and fellow Torontonians were likely to study their recommendations carefully and see in them a way forward on what may be the defining issue of our era. I hope this report proves useful to each of these audiences.

My sincere thanks to each member of the Panel who generously gave their time and energy to produce these thoughtful recommendations.

Sincerely,

Alex Way
Chair, Toronto's TransformTO Reference Panel on Climate Action

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Contents

Chair's Note **3**

Summary for Policymakers **7**

About the Panel **9**
Introduction and Context 9
Mandate and Process Summary 9
Membership and Selection 10
The Chair and Panel Team 10
Panel Snapshot 11
Meet the Panelists 12

Panelists' Report **23**
Who We Are 23
Guiding Principles 24
Panelists' Recommendations Regarding the: 25
A. Existing Buildings Section of the Implementation Plan 2021-2023 *25*
B. Transportation Section of the Implementation Plan 2021-2023 *27*
C. Financial Tools and Governance Section of the Implementation Plan 2021-2023 *28*
D. Five Other Sections of the Implementation Plan 2021-2023 *29*

Proceedings of the Panel **32**
Meeting 1: July 27, 2019 32
Meeting 2: August 17, 2019 33
Meeting 3: August 18, 2019 34

APPENDIX **37**
Additional Commentary from Panelists 39
Reference Panel Presenters and Guests 44
Panel Activity Sheet Samples 45
Public Meeting: August 8, 2019 51
Terms of Reference for the TransformTO Reference Panel on Climate Action 56
Civic Lottery Invitation Sample 59

Panelists meet each other on the first day of the Panel at City Hall.

Summary for Policymakers

Two thirds of Torontonians want their City government to do more to address climate change.[1] Yet what precisely Torontonians agree is worth doing on this global issue remains unclear.

The TransformTO Reference Panel on Climate Action was convened to explore this question in depth. The Panel —composed of 30 randomly selected Torontonians who broadly represent the demographics of Toronto— spent three days learning and deliberating about ways that, in the coming years, their City government could help reduce Toronto's greenhouse gas emissions.

In 2017, Toronto City Council voted unanimously to pass TransformTO, the City's plan to cut its GHG emissions by 80% of 1990 levels by 2050. In the two years since, the City has implemented and expanded a number of key initiatives, including the launch of Neighbourhood Climate Action Grants, the issuance of Toronto's first Green Bond, the completion of energy retrofits to 21 Toronto Community Housing buildings, and the installation of solar panels on 100 City-owned properties.

The Reference Panel was convened to shape what City staff will present for additional expert, stakeholder, and public consultation in Fall 2019 — and, ultimately, what actions are recommended to City Council in the TransformTO Implementation Plan 2021-2023.

The Panel did not start from scratch. Instead, they were presented with information about how the City of Toronto is currently addressing greenhouse gas emissions, and asked to examine several consequential new actions that City staff were considering recommending to City Council. Panelists were asked to review and respond to these new ideas, and were given license to develop their own. They were also free to recommend changes to any of the City's climate-related efforts that were already in progress.

It is important to note that the Panel's selection process ensured that its membership had a range of perspectives on the urgency of GHG reduction. Despite sometimes radically differing perspectives, the Panel endorsed, and sometimes recommended strengthening, a number of significant municipal actions that would help drive down Toronto's emissions. Panelists often found common ground because they recognized that these actions, if properly designed and implemented, would be investments that ultimately helped create a fairer and more efficient, liveable, prosperous, connected, resilient, and environmentally conscious city.

In summary:

Panelists endorse and recommend strengthening a pair of proposals that accelerate the retrofitting of existing buildings by 2023. They agree the City should require all residential buildings in Toronto to undergo energy labelling so that buyers and renters have information about the buildings' energy efficiency. They also recommend that new financial incentive programs be not only investigated but also piloted to increase the number of energy retrofits occuring in Toronto.

Panelists recommend that the City do more to speed up surface transit throughout Toronto and discourage unnecessary personal car use. By 2023, they recommend that the City pilot a congestion pricing zone and introduce more priority transit zones like the King Street Transit Priority Corridor. Electric vehicles do not play a major role in the Panel's recommendations.

Panelists are open to new taxes and levies to pay for climate-oriented city-building projects, provided they are transparent and other sources of revenue are explored first. Panelists accept

1) https://www.toronto.ca/wp-content/uploads/2019/03/97b6-City-of-Toronto_City-wide-Climate-Perceptions-Study_Full-Report.pdf

and understand that climate-oriented city-building will require investments, and also that the City has limited means to raise revenue. They offer conditional endorsements of possible new taxes and levies, including a carefully designed parking levy charged to operators of parking lots, which is seen as especially advantageous since it can discourage unnecessary driving. They also conditionally endorse a new property tax levy that will be strictly allocated — or 'earmarked' — for climate action. This earmark can be allocated to fund, for example, new incentives for home energy retrofits.

Panelists call on the City to do more to encourage personal, neighbourhood, and corporate action. Panelists recognize that progress will be more consistent if individuals, neighbourhood groups, and companies are all visibly involved. They encourage the City to get creative and collaborative so climate action is both top-down and bottom-up.

In addition to these specific recommendations, it is notable that:

Panelists emphasize the importance of practicality and visible, incremental progress. The Panel has approached the TransformTO Strategy as an exercise in momentum-building. Their report clearly shows they did not think the City had a mandate to enact sweeping climate-positive changes over the next few years. Yet their report also calls on their City government to actively demonstrate action and results in a number of different climate-related policy areas, as a way to lay a foundation for bolder and more significant actions in the future.

Panelists believe climate actions need to be implemented equitably. Panelists recognize that the policies proposed by the City may have differing impacts on different people. Each policy needs to be designed and implemented in ways that ensure more marginalized Torontonians are not required to shoulder undue costs and are able to share equitably in the benefits.

About the Panel

Introduction and Context

The TransformTO Reference Panel on Climate Action was a three-day public deliberation commissioned by the City of Toronto to inform actions the City will take by 2023 as part of the TransformTO Climate Action Strategy.

In 2007, Toronto City Council adopted a long-term greenhouse gas (GHG) reduction target of 80% of 1990 levels by 2050. Council reaffirmed their commitment to this target in 2017 by approving the TransformTO Climate Action Strategy. This strategy focuses on a set of transformational goals that identify how Toronto will collectively work to reduce greenhouse gas emissions produced by buildings (52% of the city's total emissions in 2016), transportation (38%), and residential waste (10%).

Shortly after adopting the TransformTO Climate Action Strategy, City Council fully funded the implementation of short-term climate actions the City would undertake during 2017-2020. To continue making progress towards the transformational goals identified in the TransformTO Climate Action Strategy, the City will produce and fund an Implementation Plan every four years that lays out the next set of climate actions the City of Toronto will take.

The Environment and Energy Division of the City of Toronto is currently consulting on and preparing the Implementation Plan for 2021-2023, which the TransformTO Reference Panel on Climate Action was convened to inform.

Mandate and Process Summary

Toronto's TransformTO Reference Panel on Climate Action brought together a broadly representative group of 30 randomly selected Toronto residents for three days of learning and deliberation. Their work resulted in shared recommendations about what should be included in the City of Toronto's TransformTO Implementation Plan 2021-2023. The Panelists served as volunteers and were asked to work on behalf of all Toronto residents.

The Panel met for three full-day meetings in July and August, 2019. Panelists were given the opportunity to learn from a range of City staff and external experts. Together, they explored the causes of climate change and the role cities can play in mitigating its impacts; the goals and areas of focus of the TransformTO Strategy; the different ways Toronto produces GHGs, with specific emphasis on existing buildings and transportation; and the financial and regulatory tools Toronto possesses that could contribute to mitigating the impacts of climate change.

Panelists were asked to examine several new actions that staff from the Environment and Energy Division were thinking about recommending to City Council as part of the Implementation Plan to 2023. The actions put before the Panel were focused on three policy areas: **existing buildings** (which accounted for 52% of the city's total emissions in 2017), **transportation** (which accounted for 38% of city emissions), and **financial tools** (since funding is likely needed to implement any substantial new climate action policy). Panelists also had the opportunity to review actions being considered for five **other areas** of the Implementation Plan (energy, waste, sustainable consumption, climate resilience, and 'leading by example').[2]

2) The Panel was asked to focus on existing buildings rather than new buildings since current building stock is not expected to be replaced at a rapid rate, and because Toronto already has the Zero Emissions Buildings Framework in place to address the carbon footprint of new buildings. Waste was also not presented as a major area of focus for the Panel as the City has the separate and comprehensive Long Term Waste Management Strategy that was approved by Council in 2016.

The Panelists worked together to find broad agreement on:

- A set of guiding principles for the Implementation Plan 2021-2023;
- Expectations regarding the approach that the Implementation Plan 2021-2023 should take in each of the four policy areas (existing buildings, transportation, financial tools, and other areas);
- Assessments of new actions presented by City staff for possible inclusion in the Implementation Plan 2021-2023; and
- Any additional recommendations for the Implementation Plan 2021-2023.

Panelists worked in four small groups, each developing recommendations for one section of their report focused on a particular policy area. Throughout their deliberations, Panelists shared updates and checked in with the rest of the Panel to ensure their working group's draft recommendations were reflective of the Panel as a whole. Following the final meeting, Panelists were twice given the opportunity to review and edit the final draft of the report for accuracy, before the report was released to the public and presented to the Environment and Energy Division for inclusion in its report to City Council.

Membership and Selection

The members of Toronto's TransformTO Reference Panel on Climate Action were selected using a Civic Lottery. In June 2019, 12,500 City of Toronto households were randomly mailed a letter inviting a member of the household 16 years of age or older to volunteer. Accessibility supports were offered, including reimbursements for travel, childcare and eldercare, and bursaries for demonstrated financial need. From a pool of 427 candidates, 32 residents were randomly selected in a blind process that also ensured the Panel broadly represented the demographics and attitudes of Toronto as a whole. The Civic Lottery took into account geography, age, gender, housing tenure, and identification as an Indigenous person or visible minority. The selection process also ensured that the attitudinal profile of the Panel mirrored that of the city's population with respect to level of agreement with the statement: "Everyone needs to reduce their emissions that contribute to climate change, including myself." Two selected Panelists withdrew from the process just prior to the first meeting for unanticipated personal reasons, resulting in a total membership of 30 Torontonians. Each of these Panelists generously agreed to spend more than 23 hours working on behalf of all Toronto residents.

The Chair and Panel Team

The Panel was chaired by Alex Way, Managing Director at MASS LBP. This firm won the contract to lead the Panel process following a public tender, and is internationally recognized for its work leading deliberative policy processes. The Chair was responsible for developing the Panel program and process, leading a facilitation team, and serving as spokesperson for the Panel. His role required that he and the facilitation team remain neutral throughout the Panel's deliberations.

Panel Snapshot

Demographic critieria linked to Statistics Canada census data.

Man (16)
Woman (14)

Aged 16-19 (2)
20-29 (5)
30-44 (6)
45-64 (11)
65+ (6)

Visible Minority (16)
First Nations, Métis, or Inuit (3)

Attitudinal criteria linked to Environics Research poll commissioned by the City of Toronto.[3]

Everyone needs to reduce their emissions that contribute to climate change, including myself:

Strongly agree (18)
Somewhat agree (9)
Somewhat disagree (2)
Strongly disagree (1)

Map of Geographic Distribution of the Panel

3) https://www.toronto.ca/wp-content/uploads/2019/03/97b6-City-of-Toronto_City-wide-Climate-Perceptions-Study_Full-Report.pdf

Meet the Panelists

Alyson Cieslik-Weiss
I was born in Toronto and have lived at Church and Wellesley my whole life. During the year, I study biochemistry in Leeds, England, and hope to use my degree to do medical research and study diseases. In the past, I have worked at Centreville, as well as volunteered with many Toronto-based organizations, such as Gibson House Museum and Memento TO, where I was able to share the history of Toronto with its citizens. In my free time I like to cross-stitch and read. I volunteered for this Panel to learn more about the effects of climate change and to hopefully have a positive impact on my city. I hope the Panel will provide a clear representation of what citizens want and provide concrete suggestions to move forward.

Andres Silberstein
I was born in Chile and came to Canada five years ago, and now live at Yonge and Lawrence. I like how multicultural Toronto is and how many cultures and religions can live in harmony here — for a newcomer, it is very easy to blend in. I worked as an architect for several years but languages are my passion and I now work as a Spanish interpreter, mainly on immigration issues. I was a volunteer at the YMCA Newcomers Information Centre and Language Assessment and Referral Services for four years. I have two sons, two daughters, and seven grandchildren. I volunteered for this Panel because I am concerned about global warming and interested in participating actively to mitigate the negative effects of human presence on planet Earth.

Carol Tsang
I was born in Hong Kong and moved to Toronto when I was six years old. Toronto has been my home for most of my life. I work as a graphic designer at an independent school in the city. I enjoy spending time in nature by hiking in our many parks or going camping for a full escape from the hustle and bustle of the big city. I think that people's health is directly related to the health of our environment and having a more green and sustainable place to live will benefit everyone. I volunteered for this Panel because I am passionate about the environment and I want to be involved in shaping Toronto into a green city.

Christopher King
I'm originally from Northern England, but have lived at Queen and Bathurst since 2006. I also lived in Ottawa for ten years, as well as other large and small international cities. I therefore have an appreciation of the issues facing Toronto, and know a bit about how other cities have sought to address similar issues. I'm a professional engineer but now work as an accountant. I volunteered for the Panel because I believe my experience could be a helpful contribution to the discussion and perhaps assist in improving the quality of the plan. The subject of climate change, whatever your view, has a huge impact on everyone's lives today and tomorrow. I appreciate the efforts made and work done by the Council in modernizing our city while trying to improve the quality of life of all residents, and I see participating in the Panel as an opportunity to contribute and support this in a small way.

Danielle Duhaney

I am a Torontonian born and raised, and have been living in North York for practically my entire life. I love Toronto. It's an extremely diverse city with an abundance of fun and interesting experiences to offer. That being said, I do think there are things that can be improved upon, transit being the one closest to my heart. I volunteered because I believe that actions to combat climate change must be taken, and any policies enacted will not only affect me but also my friends and family. I hope we end up with a report that adequately represents all Torontonians with suggestions that will make a significant impact on affecting climate change. It was a great privilege to express how I think we can make the city I love even better.

Elle Franks

I grew up in British Columbia, but moved to Toronto and have lived here most of my life. In BC, conservation and recycling were issues all the way back to the '70s, especially water conservation. Last year I started volunteering with LiveGreen Toronto, and this year enjoy volunteer work at a wildlife centre. Volunteering on this Panel is an education into what climate change is, what the City's efforts are for combating it, and what all of us should be discussing and striving towards. I'm aware of how much our presence and our actions are affecting climate change and I want to feel hopeful that there are things that we can do to improve our collective future.

Emma Pettit

I was born in Toronto but grew up in the Cayman Islands. I returned to Canada in 2002 to attend high school in Oakville, and then moved to Toronto in 2005 where I attended a joint program at the University of Toronto and Sheridan College to study Communication, Culture, and Information Technology. I completed a college advanced diploma in Child and Youth Care from Humber College. I live with my two sons amid the greenery that is Lakeshore Boulevard West in South Etobicoke. I volunteered for the Panel because advocacy is important to me, especially when it comes to building a better future for our younger generations. Climate change is one of the biggest problems that we face, and I'm excited to see how we can come together to help create a safe and eco-friendly city for the children of Toronto.

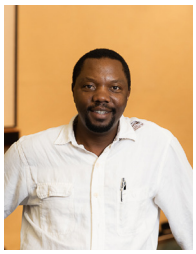
George Paravantes

I am an Interaction Designer and faculty member of the User Experience Design Graduate Certificate Program at Humber College. As an Interaction Design instructor, my areas of expertise are in Mobile Interaction Design, Human Centred Design Research, Motion Graphics, and Multi-Modal Interactions in Augmented Reality. My industry experience encompasses fields in both Interaction Design and Industrial Design. I hold a Master of Fine Arts in Interaction Design from the Umea Institute of Design in Sweden. My final thesis research work explored the mobile context within the connected car experience. This work was done in collaboration with Nokia Helsinki and Volkswagen Germany. My international work experience includes Research In Motion, Nokia Finland, Volkswagen Germany, Drive Design UK, along with varied consulting work with mobile starts-ups in Toronto. My pursuit of innovation was recognized as Co-Inventor of two User Interface Patents for Volkswagen's Connected Electric Vehicle Car Concepts. Recently I was also recognized for a League of Innovation Award in collaboration with my User Experience Design students on an educational marking app. I have been involved in a community outreach program called Techsdale that helps youth in Rexdale get a head start in gaming and STEM skills.

Panelists discuss guiding principles on the first day

Hillary Walker

I have lived in Toronto since 2012, but grew up in the GTA and went to university in Montreal. I now live in the Junction Triangle, and am currently employed as a child and youth worker for the school board and work at MEC Toronto in my spare time. I am also pursuing a Master of Social Work on the weekends. My favourite places in Toronto are Dufferin Mall and Delta Bingo on St. Clair Avenue West. I volunteered for the Panel because I am interested in how cities incorporate citizen interests in their decision-making. In addition to climate change, I am also passionate about cats, especially my two furry roommates, Corky and Snowman.



Janvier Karabaranga

I moved to Toronto in 2000, and have lived in Scarborough for ten years. I studied civil engineering and technology at George Brown College and worked in the public service, but these days I drive trucks. Having lived in Toronto for almost twenty years, I feel like anyone else who was born in Toronto — it's a beautiful, wonderful city. I met my wife here, and my three children (two boys and one girl) were all born here. I like to spend time with friends and family at the beach and in the park, but I prefer winter over summer: I love the snow and cold weather, and skiing and skating. I really love Toronto and that so many people can make this city their home. As Torontonians, we should care more about making sure that our atmosphere is cleaner, and making Toronto a better city for ourselves and our children.

Jeff Smith

I have lived in Toronto all my life and have lived everywhere from Scarborough to North York, and now live in Mount Dennis. I've been recycling since the days of 'Bundle up for Wednesday' newspaper collection in the '70s, and composting as much as possible. While formally trained in Forestry, I ended up in the industrial laundry business and have been for over 35 years. While with this industry, I learned the importance of protecting the environment and of reducing the use of energy with more efficient machinery, boilers, and delivery vehicles. This industry has been a leader in recycling, by reusing our clothing, wipers, floor mats, etc. until such time as they are literally worn out. You might say we've been climate conscious before it was trendy. I volunteered for the Panel on a bit of a lark. As my feelings on climate change are somewhat skeptical, I look forward to ensuring there are two sides to every debate.

Jensen Dalangin

I immigrated from the Philippines and have lived in the Bendale area of Scarborough for about 10 years. I currently work as CIBC bank branch personnel providing excellent customer service. I love to read books and listen to music, which I borrow from the Toronto Public Library. I'm fortunate to have a wonderful family and am the proud dad of a daughter who consistently exceeds even my high expectations. I volunteered for the TransformTO Reference Panel on Climate Action because I would like to motivate the residents of Toronto in developing effective and environmentally friendly habits that will meet the goals for climate change for years to come.

Jonathan Khan

I was born in North York, have been a GTA resident all my life, and have lived in the Briar Hill area for over seven years. I studied culinary at George Brown College, worked at a restaurant, was a cashier, a real estate brokerage employee promoting condominium developments, a receiver and material handler at Roots Canada Distribution Center, and am now studying at the Ontario Real Estate College for a Real Estate Salesperson license. In my free time I enjoy playing basketball, cheering on the Jays and Raps, and cooking. I am also a full-time father of a brilliant 11-year-old boy who loves sports and music. I volunteered for the Panel because I believe global actions need to be taken to preserve the planet, and I jumped at the chance to contribute to something bigger than myself. I hope we can take action and set the tone on a global platform, and influence future generations to accomplish what we can't.

Juliette Heung

My family emigrated from Hong Kong to Victoria, BC. After graduating from the University of Victoria, I moved to Toronto in the 1980s where I have pursued a fulfilling career in Information Technology in both the private and public sectors. I volunteered for the Panel to learn more about climate change, the immediate and long-term actions that are available to the City of Toronto and its residents, and to participate in discussions that will help shape the City's policies. I am not an environmentalist but I stopped ironing my work clothes since the 2003 blackout as my bit part to reduce energy consumption.

Kaseem Adewumi

My name is Kaseem Adewumi, I have a degree in Cost Estimating and a Master's degree in Project Management from Walden University. I have an interest in what is going on in my community and am always glad to contribute to the development of my community through volunteering. I am a detail-oriented person with excellent leadership, interpersonal, and communication skills. I was born in Nigeria and I came to Canada last year, and live in Martin Grove in Etobicoke. The main reason why I volunteered to join the Panel is to have my first experience in volunteering in Canada. When I saw the invitation in my mailbox, I was glad to contribute my opinion in support of governments taking necessary action against climate change.

Lissa Beaucage

A self-confessed cycling (1+re+up) and food enthusiast, I dream of ubiquitously edible public landscaping — hopping on my bike to pedal leisurely through active/mass transport prioritized streets, periodically reaching out to snack on ripe organic fruits and vegetables before disembarking at SAFE bike parking sites across the city. Growing up in Kitchener-Waterloo, I moved to Toronto two years ago and I'm proud to call Wychwood my home. I studied Environmental Science (specializing in Geoscience) at the University of Waterloo and I'm enthralled by the prospect of improving the health and liveability of the city I love, with an eye on ensuring its viability for generations to come. Despite my fervent agreement with climate science findings on the existential threat (and horror) of global warming, I find myself inspired by Rolf's zeal and would be thrilled to wear his likeness on a shirt.

Lucas Laporta

I am a freelance journalist with experience in video production and writing for the web. I've written several stories for Skedline.com, including a deep dive on one of Toronto's biggest policy initiatives, Vision Zero. I live in the Rockcliffe—Smythe neighbourhood and I'm an avid cyclist. When circumstances permit, I ride my bike everywhere because it is often faster than taking public transit over shorter distances or across inconvenient bus routes. I decided to volunteer with the climate change Panel because I wanted to take the opportunity to participate in creating a positive change for my city. In a world where national governments refuse to take action, it's on the municipalities to step up and take responsibility for their emissions.

Maryann Lising

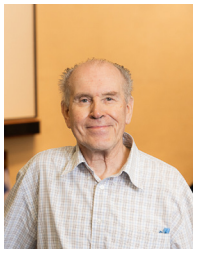
I've lived in Toronto for all 23 years of my life, and currently live in North York. I recently graduated with a Bachelor of Arts from York University. I majored in Health and Society and minored in Medical Anthropology, In addition, I work as a research assistant for one of my professors with a focus on Indigenous Populations. I currently work as a patient communications coordinator at a large cosmetic/plastic surgery clinic. My favourite hobby is travelling. I am provided with many opportunities through work and family to avidly travel. My favourite trip thus far has been to Hawaii, where I learned to surf. I joined the Panel because I thought my knowledge and perspective could be useful, and I wanted to see what I could learn and contribute to the discussion and report.

Nadia Halim

I grew up in the Ottawa Valley, then Ottawa, and moved to Toronto in the mid-'90s to work in publishing. I was lucky enough to get a place in a downtown housing co-op, and I've lived there ever since. I've edited for small presses and magazines, studied and taught philosophy at York, and now I do communications work for a range of arts festivals and non-profits. I'm interested in social connections and community — I have a podcast, The Opposite of Lonely, about how people combat social isolation. I like going for walks in the city with friends. I appreciate this opportunity to learn more about climate change and the city's response, and to be part of the process.

Rae Marlatt

I was born in Toronto in 1950, when there were no subways. I studied accounting and business at Ryerson and then fine art at OCA (now OCAD). At 27, I started to buy and renovate houses in the Beaches, and renovated 17 in all. They were cheap by today's standards! I then studied to become a stock broker, worked for a brokerage firm that is now part of RBC, and later bought two small companies. I still own one of them, a Japanese embroidery company. I've been married for 35 years and we have three grown daughters who live in Toronto, Ottawa, and San Francisco. Three years ago, my wife and I moved from Rouge Hill to Harbourfront, and now we walk or bike everywhere. I am excited to be part of the Panel and hope that I can learn and contribute in a meaningful way.



Rolf Pfeiffer

I was born in Germany, apprenticed as a tool-and-die maker, graduated with honours as a technologist, and was employed in the automotive industry at NSU, now part of Audi, participating in developing Wankel engines. I arrived in my late 20s in Toronto and have lived here ever since. I love Toronto. At the University of Toronto, I studied mechanical engineering for three years and stayed in this field all my life. I became the engineering manager at the Canadian subsidiary of Lurgi, a German firm, and was responsible for design, plant layout, and commissioning of industrial process plants mostly for the winning of zinc. I was also instrumental in a new process for aluminum scrap recycling. It was an honour for me to volunteer for the TransformTO Panel to draw awareness to a likely false climate crisis. Lightning and weather extremes are not caused/controlled by CO_2. Efforts made should protect from weather. You can't change the weather or mitigate outbursts, but you can protect against it! More CO_2 enhances all life. The climate religion seems political and anti capitalism, aiming at the West's demise. We must object to climate lies, recognize truth, and embrace freedom.

Ronald Tyszecki

My name is Ronald Tyszecki. I like to travel and have been to 85 countries (so far) and have seen various cities and transit systems. I've lived in Scarborough long enough to remember when you could build a snow cave in the backyard and drifts were higher than the fence. Now we get a pond, and even had a couple of confused ducks, in the backyard in spring. I was a courier for 30 years and have seen traffic slowly choke the city, with more and more people using a crumbling infrastructure. I volunteered for the Panel in order to see what the options are and to see if I could help in the process.

Ronald Zachariah

I was born in Toronto to an immigrant family, and grew up in Scarborough then Richmond Hill. I studied engineering at the University of Toronto and am now working as a software developer. I currently live downtown, and enjoy the diversity of the city. My interests include audiobooks, cycling, pigeon keeping, and sous vide cooking. I also like biking along the Don Valley Trail. I joined the Panel because I am interested in learning how the city plans to deal with the threat of climate change.

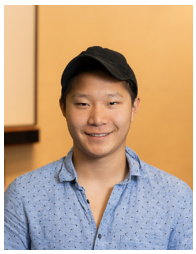
Saeed Azhar

I immigrated from Pakistan in 1967, and after initial struggles obtained my degree in Mechanical Engineering from Ryerson University. I worked for MacDonnell Douglas/Boeing for 30 years, and retired in 2000 as a manager of numerical control programming and planning. Since retirement, I moved to Scarborough. My passion is golf, and therefore, since 2013, I've gone to Florida as a snowbird. As a snowbird I can see the stark difference between Canadian and American society. I strongly believe in taking care of society as a whole, not as an individual. I volunteered for the Panel to make a small contribution to the society which has given me so much.

Siya Agarwal

I am a fourth-year student studying urban planning at the University of Waterloo, but I currently work in Toronto. I live in Chinatown, and love living right beside a park. In Toronto, I love that I can get anywhere I want within the city without having to own a car — I bike almost everywhere. In my free time, I do debate, enjoy dancing, and hang out with friends. I love all urban issues and am particularly passionate about climate change. I previously attended COP23 in Bonn, Germany, as

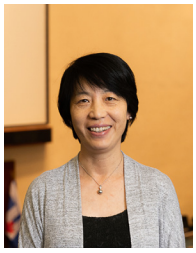
a student delegate and really enjoyed learning about climate change policy and action. I volunteered to join the Panel because I think it is a fantastic opportunity to learn more about an issue I'm interested in and have a chance to actually make an impact on it!



Skylar Kim
I was born in South Korea in 2002. I left Korea when I was six months old to live in Toronto. I've lived in Etobicoke, North York, and more recently in the Annex. I am going into Grade 12 at Upper Canada College, and I enjoy electronic music and athletics. I volunteered for the Panel because of my environmental systems class, and the urgent, worldwide issue of climate change. I thought it would be interesting to be educated on what Toronto specifically is doing to combat it. I hope the planned changes will significantly help the climate change problem.

Timmy Anand
I was born in India, immigrated to Canada in 1978, and have lived most of my life in Toronto. I studied at Ryerson University in the 1980s, and am an intergovernmental advisor at the Ministry of Education. I host delegations from around the world to facilitate conversations about system-wide improvements and best practices in education. I enjoy cooking and love entertaining family and friends. I volunteered for the Panel because I love Toronto and care about our environment. I am hoping to play a role in shaping the future of this city, and I see this as an opportunity to serve the community and country that has provided me and my family with opportunities for a good life.

Wafa Al Aweel
I am a Canadian from the Middle East and I have an electrical engineering degree from my home country. Toronto has been my home for the last two decades; this city is where I had my children and further expanded my career as an electrical designer in a consulting engineering firm. I have always loved nature. However, climate change has become a real threat to the planet, and if we don't begin making changes now, there may not be a future for the next generation. I hope to grow old enough to watch my own children grow up and start their own families, so I'm making it my duty to contribute to solving this crisis. I joined the Panel in the hope of sharing what I learn with others, and together we can make a positive impact on our land.



Weiqing Ren
I have been living in North York since I immigrated to Canada three years ago. I previously worked in the tourism administration department for a local government. My previous working career provided me many opportunities to travel around the world. However, Toronto is one of my favourite cities. As a new resident in Toronto, I would like to contribute to the city. I strongly support actions for protecting the climate and feel honoured to be one of the Panelists for climate action. I like reading and enjoy spending free time in the North York Centre Library.

Note: One Panelist opted to remain anonymous and did not provide a biography.

Toronto's TransformTO Reference Panel on Climate Action, City Hall.

Staff
Staff
Staff
Staff
Staff
Staff
Brad Bradford

A Panel facilitator helps the Panelists sort through a list of possible guiding principles.

Panelists' Report

Who We Are

We are a diverse group of 30 Torontonians from throughout the city who are concerned about the future of Toronto amid the global impacts of climate change. Selected through Civic Lottery, our diversity is a strength — it is a diversity of opinion, of age, of gender, of geography, and of life experience.

We all care deeply about our city. We wish to learn about the challenges we face from climate change and to share our insights about how we, and every Torontonian, can live more sustainably in this city. We are driven by curiosity, opportunity, and the responsibility we have been given to volunteer our time to represent our communities, a privileged position that few residents ever experience.

We began by learning about the nature of the problems we face before distilling those challenges into core ideas we feel comfortable asking the City to move forward with. We considered different points of view —which was essential to the process of trying to reach consensus on how best to meet the City's greenhouse gas reduction targets— allowing us as individuals to consider perspectives we had never encountered before.

Along the way, we have become ambassadors for our fellow Torontonians — acting as a sounding board for City staff's existing ideas on reducing Toronto's emissions, and working together to develop recommendations for the City about how best to reduce the environmental footprint of our buildings, our waste stream, our modes of transportation, and our communities at large.

This report is a confirmation of our collective desire to see Toronto become a better place to live for all.

Guiding Principles

During our meetings, we identified five guiding principles that we believe should apply to the TransformTO Implementation Plan 2021-2023 and that helped us find common ground. We used these values to guide our discussions and balance differences of opinion.

We believe the next few years of Climate Action by the City of Toronto should:

Be practical, achievable, and lay the foundation for future greenhouse gas reductions.

To achieve our short-term climate goals and set a foundation for future reductions, the City needs to put in place the necessary infrastructure, information, and policies, and also undertake short-term steps that are measurable, demonstrably beneficial, and cost-effective. This is important because it will result in political and public support, which is essential for the realization of this long-term strategy.

Strengthen our economy and protect and create local jobs.

The City of Toronto should help facilitate a shift towards greater economic sustainability as an opportunity for a healthier environment. By investing in innovations that lead to sustainability and training workers in greentech skills, the City can help develop a thriving green workforce.

Be fair and socially equitable.

The costs and benefits of climate action in Toronto should not disproportionately affect any one community or group. All communities and groups across the city must be made aware of, and encouraged to stay actively engaged in, proposed climate solutions.

Encourage significant lifestyle changes.

The next few years of climate action by the City of Toronto should encourage significant lifestyle changes by creating awareness of and incentives for more sustainable behaviour. Personal actions can affect climate change mitigation and resilience efforts, and help create stronger communities of responsible residents.

Help make Toronto a climate action leader.

Climate action leadership means incorporating excellence in climate action, including best practices adopted by other cities, as an integral part of our identity and brand as a city. Toronto needs to ensure the vitality of future generations through innovation, appropriate risk-taking, momentum building, and by engaging and encouraging local and international partners to disrupt the status quo.

Panelists' Recommendations

A. Recommendations Regarding the Existing Buildings Section of the Implementation Plan 2021-2023

Expectations for the Existing Buildings section of the Implementation Plan 2021-2023

Broadly, we believe the actions in this section of the Implementation Plan need to:

- Encourage the creation of clear and measurable green standards for existing buildings;
- Target buildings with the highest emissions first, as this will have the largest and most rapid impact;
- Make tangible progress by 2023 (including the introduction of pilot projects) as buildings are the biggest contributor of GHG emissions in Toronto, and we want to lay a foundation for action to 2050; and
- Apply an 'equity lens' to the design of actions to ensure there is no undue burden on marginalized residents.

Assessment of possible new actions on Existing Buildings suggested by City staff

We were asked to offer an assessment of two possible new actions that would target existing buildings.

Action 1: By 2023, require energy ratings and labelling for existing buildings.

*We **conditionally endorse** this action, provided:*

- Appropriate regulations and standardization measures are put in place, such as ensuring that ratings are performed by certified technicians; and
- Energy ratings are transparent to both buyers and renters, who are likely to find them valuable.

We also suggest that:

- By 2023, energy rating and labelling be required for single family homes at the point of sale and after major renovations, and also required periodically for rental buildings. Older multi-unit residential buildings are an important target, along with single family homes. The City should collect this data and make use of it to better understand where to target retrofits; and
- While we have no suggestions on how to handle labelling of commercial or institutional buildings by 2023, older buildings are a potentially important place to start.

Action 2: By 2023, investigate new incentives for energy retrofits.

*We **endorse** this action and **recommend** that:*

- The City take a step beyond investigation and pilot a new incentive to help build momentum for retrofits.

We also suggest that:

- The City focus on high-emissions buildings most in need of retrofits. This will have the biggest impact, and will help ensure owners of these buildings actually conduct retrofits; and
- The City explore incentives besides loans, as other incentives may be more motivating and helpful to residents who are unable or unwilling to take on more debt.

Additional recommendations for the Existing Buildings section of the Implementation Plan 2021-2023

- We endorse the inclusion of required energy audits and recommissioning in the Implementation Plan 2021-2023, as presented to us by City staff, because both actions are relatively cheap, easy to implement, and good for safety, tenant experience, and energy efficiency. The City should also enforce building standards if these audits find that buildings are in violation.

Panelist Wafa Al Aweel asks a question during a plenary session.

*We also **recommend** that by 2023, the City:*

- Continue to increase Toronto's tree cover in order to offset carbon emissions, add shade to buildings, and reduce the severity of floods. This can be achieved by planting on existing city-building properties and private property; and
- Investigate easy ways to let people reduce their building energy use (e.g., requiring condos to let more people dry their clothes outdoors).

B. Recommendations Regarding the Transportation Section of the Implementation Plan 2021-2023

Expectations for the Transportation section of the Implementation Plan 2021-2023

Broadly, we believe the actions in this section of the implementation plan need to:

- Make progress towards having active transportation (i.e., walking and cycling) and public transit become the most convenient options for travelling into and around the city year-round;
- Avoid disproportionate disadvantages to vulnerable or underserved populations; and
- Help ensure that bold and practical transportation actions are followed through on, regardless of changes to the political administration in power. Projects put in motion should be protected from policy reversal due to administrative change, to the extent that this is possible.

Assessment of possible new actions on Transportation suggested by City staff

We were asked to offer an assessment of four possible new actions related to transportation.

Action 1: By 2023, explore the viability of car-free zones.

*We **could not reach consensus** on this action.*

- Some Panel members supported this action and felt that the City should at least explore the viability of the idea as it is consistent with reducing the focus on cars. A pilot could also be run in school zones, or at certain times of day.
- Some Panel members opposed this action as they were uncertain whether it was an effective use of resources, and were concerned about potential low-usage in winter. They were also unsure if this action lay within a climate change mandate, or was more related to community or city-building.

Action 2: By 2023, explore the viability of low-emission vehicle zones.

*We **strongly do not endorse** this action.*

- This action is not an effective use of resources, and continues to maintain a dependence on cars. The impact of low-emission vehicle zones would disproportionately affect people with older cars, making this an equity issue.

Action 3: By 2023, explore the viability of congestion pricing zones.

*We **endorse** this action.*

- We recommend the City consider running pilot(s), because implementing this policy effectively would free up the flow of traffic, reduce idling, and get people out of cars.
- This action can create an opportunity to invest any funds raised into transit projects.

Action 4: By 2023, expand transit priority zones.

*We **strongly endorse** this action.*

- Transit priority zones are an effective action to reduce emissions, meet GHG reduction targets, and get people out of their cars and into more effective transit.
- We also recommend that, as a default, the City incorporate cycle route improvements when developing these zones.

Additional recommendations on the Transportation section of the Implementation Plan 2021-2023

We endorse the inclusion of speeding up timelines and funding for the Cycling Network Plan in the Implementation Plan, as presented to us by City staff. We recommend the City take action to meet existing cycle network targets and, where possible, accelerate these actions. The City should prioritize 'quick wins' and connecting main arteries.

We also recommend that, by 2023, the City establish a standing resident advisory committee to help advance transit plans, which will help ensure City Council is accountable to residents and which will, we hope, reduce the effects of political changes.

C. Recommendations Regarding the Financial Tools and Governance Section of the Implementation Plan 2021-2023

Expectations for the Financial Tools and Governance section of the Implementation Plan 2021-2023

Broadly, we believe the actions in this section of the Implementation Plan need to:

- Create consistent and predictable year-over-year funding for climate-related actions;
- Be creative and include new and innovative means of raising funds, rather than relying exclusively on standard taxes and levies; and
- Provide a high level of ongoing transparency about how any new climate-focused funding is being raised, allocated, and spent.

Assessment of possible new actions on Financial Tools and Governance suggested by City staff

We were asked to offer an assessment of three possible new actions related to financial tools and governance.

Action 1: By 2023, develop a proposal for a property tax earmark for climate action.

*We **conditionally endorse** this action, provided:*

- The City explores other funding options first, such as those listed in the 'additional recommendations' section below; and
- The City explores allowing residents to decide where a portion of their property tax earmark is spent.

Action 2: By 2023, explore the implementation of a parking levy.

*We **strongly endorse** this action, provided:*

- The levy design ensures exemptions for certain parking spots, including: accessibility, electric charging, carpool, park-and-ride, car-share, and expectant mother parking spots. Areas without good transit could also be considered for exemptions. We support this action because it will provide a stable funding source for the City and encourage climate-positive behavioural changes by discouraging car use, while remaining equitable.

Action 3: By 2023, institutionalize a 'Climate Lens' for City decision-making.

*We **endorse** this action.*

- We encourage the City to move quickly in implementing it.

Additional recommendations on the Financial Tools and Governance section of the Implementation Plan 2021-2023

We also recommend that, by 2023, the City:

- Introduce a short-term rental (e.g., Airbnb) tax to create a consistent revenue stream without additional burden on the local tax base, similar to current tax rules for hotels;

- Research and explore any means of qualifying for further federal and provincial climate action funding; and
- Explore the viability of a variety of creative funding ideas, including:
  - Strengthen the City's existing Green Bond program and evaluating with the federal and provincial governments whether the issuance of tax-exempted Green Bonds would be a cost-effective way for the City to lower the cost of borrowing;
  - Set up a Climate Action Fund charity that individuals and corporations can donate to; and
  - Tax single-use plastics and drive-thru restaurants at point-of-sale to generate revenue and discourage certain high-emission consumer behaviours.

D. Recommendations Regarding the Five Other Sections of the Implementation Plan 2021-2023

Expectations for the five other sections of the Implementation Plan 2021-2023:

1. Energy section

Our general view is that energy-related actions should be introduced incrementally. We believe the technology involved will improve in the future, and should not be widely installed until it does. The City should, however, begin installing proven technologies and the infrastructure that supports them in large hubs and institutions where they would have a significant impact.

2. Waste section

Our general view is that waste-related actions should be introduced boldly. We believe waste-related actions are an important way to have a significant impact on public attitudes. We anticipate that doing so will necessitate the expansion of zero waste initiatives (e.g., elimination of single-use plastics), as well as expansion of facilities and infrastructure to deal with remaining waste materials more effectively.

3. Sustainable Consumption section

Our general view is that actions related to advancing sustainable consumption by Torontonians should be introduced boldly as they can potentially have a large impact with a global reach. We expect these actions will push forward behavioural change among local residents and organizations — shifting habits while creating empowerment, understanding, and a sense of individual responsibility.

4. Climate Resilience section

We believe that climate resilience should permeate all City decisions, because the problems related to climate resilience are existing and urgent, affecting all Torontonians. This is also an equity issue, as failure to build a resilient city may become a life-and-death issue for vulnerable people as, for example, Toronto experiences more frequent temperature extremes. Actions to address climate resilience should be overarching, aggressive, anticipatory, clear, and pursued on large and small scales. Large residential buildings are a priority for climate resilience action — we recommend that these actions be enacted most aggressively and quickly. However, the onus and cost of action should not fall on low-income rental tenants.

5. 'Leading by Example' section

Our general view is that actions related to Leading by Example should be pushed forward extremely aggressively, because we believe that doing so will help create a new market of eco-friendly materials and vendors, spark behavioural change, and set the standard for others to follow. For example, the City should look to eliminate single-use plastics and look for new opportunities to use biodegradable materials. An improved recycling program for plastics could also be an alternative to plastic waste ending up in landfills and oceans.

Panelists in discussion with City staff during a breakout session on existing buildings.

Specific recommendations regarding the five other sections of the Implementation Plan

We reviewed a number of possible new actions suggested by City staff related to the five other sections of the Implementation Plan. We provide a specific endorsement of two of these actions, and have developed related recommendations that extend and elaborate on the two endorsed actions.

Action 1: By 2023, establish a Climate Advisory Group (CAG).

*We **strongly endorse** this action, provided:*

- The Group is composed of experts, advisors, and residents (or a representative of residents);
- The Group is non-partisan and remains in place regardless of political change;
- The Group consults and engages with Grassroots Action Teams (GATs) on a neighbourhood or ward basis; and
- The Group plays an information-gathering, communication, and coordination role with GATs.

Action 2: By 2023, enhance the capacity of neighbourhoods to prepare for and recover from shocks through grassroots action and network building.

*We **strongly endorse** this action, provided:*

- This is organized into locally-based, volunteer-led GATs which operate on a neighbourhood or ward basis and are connected in a city-wide network;
- The city-wide Climate Action Group consults and engages with the locally-based; GATs; and
- GATs collect information about issues on the local level and bring those needs to the Climate Advisory Group, which can then inform Council.

*We also **recommend** that:*

- The Climate Action Group and GATs focus on actions pertaining to resilience, individual empowerment, and local responsibility. They should also seek to inform and educate communities about the individual and group actions that everyone can take to encourage more sustainable behaviour; and
- Participation in GATs be available to local residents through both in-person meetings and digital engagement as a means to connect and exchange ideas for further climate action.

*We also **recommend** that by 2023, the City should:*

- Encourage and support the Climate Advisory Group to engage GATs on local issues, inform City Staff and Council about those issues, and also inform GATs of new actions and technology that would be useful and relevant on the local and individual levels;
- Consider the Climate Advisory Group and GATs as part of a cohesive and cooperative infrastructure of environmental action. It should incorporate and piggyback off existing City programs, including engagement animators, neighbourhood climate action grants, community energy planning, and continued TransformTO community engagement. Coordinated fundraising may also be worth exploring — via, for example, crowdfunding platforms and matching grants for neighbourhood climate initiatives.

Proceedings of the Panel

Meeting 1: July 27, 2019

On Saturday, July 27, 30 Panelists of the TransformTO Reference Panel on Climate Action met for the first time. The Panel Chair, Alex Way, welcomed everyone and introduced himself, City staff in attendance, and members of the facilitation team. The Chair then explained how Panelists were selected as a result of a Civic Lottery process in which 12,500 letters were mailed to Torontonians, resulting in 427 volunteers from whom the 30 Panelists were randomly selected to ensure broad representation of Toronto as a whole. The Chair explained that the task of the Panel was to make recommendations on behalf of all Toronto residents rather than focus only on individual or family needs.

Donald Corbiere from the City of Toronto's Indigenous Affairs Office was then invited to acknowledge the land on which the meeting was taking place. His acknowledgement was followed by a presentation from University of Toronto Indigenous studies professor Jon Johnson, who provided a history of Indigenous knowledge and storytelling in Toronto.

Next, the Chair outlined the Panel's mandate: "to recommend changes the City of Toronto should make by 2023 as it works to meet its climate action goals." The Chair provided a brief overview of the City's efforts since 2007 to reduce its greenhouse gas emissions. He detailed the creation of TransformTO and the City's goal of reducing its emissions by 80% of 1990 levels by 2050. The Chair stressed that while the 2050 target was the long-term objective, Panelists should provide guidance on actions the City could take to reduce GHG emissions between 2021 and 2023, after which a new Implementation Plan would be created.

The Chair detailed how the Panel's task was to learn about climate forecasting and the city's sources of GHG emissions, consider how efforts to reduce emissions across the city could impact residents, identify priorities for lowering Toronto's carbon impact, and make recommendations about how the City could approach emissions reductions to 2023.

Panelists were then invited to introduce themselves. They each talked about the reasons why they had volunteered for the Panel. Many were motivated by a sense of responsibility to their community, while some saw it as an opportunity to share their knowledge about how best to make Toronto a more sustainable place to live. Others believed it was an excellent chance to learn more about the challenges their community faces from global warming.

After a short break, the Panel heard from Dr. Danny Harvey, a professor in the Geography Department at the University of Toronto. Dr. Harvey began by providing Panelists with a broad overview of climate change and its causes. He defined greenhouse gases, explained why and how they contribute to global warming, and showed future projections for temperature and precipitation patterns, both globally and for Toronto, if action is not taken.

Next, Environment and Energy Division Director Jim Baxter, Program Manager Linda Swanston, and Senior Environmental Planner Sarah Rodrigues introduced the TransformTO strategy. They explained why the City needs to take action on climate change, what the main sources of Toronto's emissions are, what actions the City is currently taking to reduce its GHG output, and what authority the City possesses to shrink its carbon footprint. They also introduced the Implementation Plan 2021-2023, showing how it fits into the broader policy-making process for TransformTO.

Following lunch, the Chair introduced an activity asking Panelists to consider ideas the City could implement over the next four years to reduce GHG emissions. Members were also encouraged to list any challenges they believed the City might encounter in implementation. This was an initial discussion and not a definitive list.

Panelists were then asked to discuss and select four guiding principles to help inform their even-

tual recommendations. Members were provided with 18 pre-written principles as prompts, though they were also given the option to write their own. The six principles that received the greatest support from the Panel were: Be practical and achievable; Lay the foundation for future greenhouse gas reductions; Strengthen our economy and protect and create local jobs; Be fair and socially equitable; Encourage significant lifestyle choices; and Make Toronto a climate action leader. These principles were set aside for further refinement.

Later in the afternoon, the Panel heard from Rae-Anne Miller, Manager of Public Energy Initiatives for Existing Buildings with the Environment and Energy Division at City of Toronto. Miller further explained how buildings contribute to the city's GHG emissions. She also discussed in detail some of the current policies the City has put in place to reduce the impact of existing buildings, as well as two new ideas City staff asked the Panel to consider: a home energy labelling and rating requirement, and new incentives for building retrofits.

Following the presentation, Panelists reviewed a long list of existing and proposed new action items about existing buildings for inclusion in the Implementation Plan 2021-2023. They discussed which ideas they thought were right, which could be strengthened, and which should be reduced or eliminated. They also discussed new ideas the City could add.

Lastly, Nazzareno Capano, Manager of Transportation Policy and Innovation with the City of Toronto's Transportation Services, presented on ways the City can reduce its carbon footprint from transportation. He emphasized new ideas which included car-free zones, low-emission zones, increased transit priority zones, and congestion pricing. Similar to the previous section, Panelists reviewed a long list of existing policies and new ideas for transportation and discussed which felt appropriate, which could be strengthened, which should be reduced or eliminated, and which new ideas could be added.

The Panel then concluded its discussions for the day and adjourned until August 17, 2019.

Meeting 2: August 17, 2019

To start the Panel's second day, the Chair welcomed everyone back to Toronto City Hall and provided a brief recap of the first day in addition to the public meeting that had been held on August 8. Several Panelists who had attended the event at the Scarborough Civic Centre also relayed their observations about the public meeting.

The Panel then heard from Mark Bekkering, Policy and Research Manager at the Environment and Energy Division. Bekkering began by explaining the financial and regulatory tools available to Toronto City Council and City staff to raise revenue to pay for climate action. Meeting Toronto's 2050 target will require an investment of $60 billion, Bekkering told Panelists. He also outlined several existing efforts underway to finance climate-related and environmental initiatives, including Green Bonds, home energy retrofit loans, and refunds for developers that exceed minimum green standards. He also explained three new tools the City is considering introducing: a 'Climate Lens' that would be applied to all financial decisions, a parking levy, and a property tax earmark.

Linda Swanston returned to briefly explain the 'other areas' of the Implementation Plan, which include new construction, waste, sustainable consumption and lifecycle emissions, climate resilience, 'leading by example' by greening City operations, and engagement and collaboration. While the Panel would not be able to dive deeply into all these areas, Swanston briefly discussed ways the City is currently taking action on these issues so Panelists could comment on them later if desired.

After a break, Panel members reviewed a long list of new and existing financial tools for possible inclusion in the Implementation Plan. They also looked at a list of actions in the six 'other areas' of the plan. For each, they discussed what could be strengthened, reduced, eliminated, or left as is. They also recommended new ideas.

Next, Panelists revisited their draft guiding principles from the first meeting. They split into six small working groups to further refine and define each principle. After 45 minutes, each group shared their working definition and

received feedback. Some overlaps were identified in the definitions, allowing the Panel to narrow their guiding principles down to five, which can be found in the Panel report section of this document.

After lunch, Panel members spent the next hour in focused roundtable discussions with one of six external stakeholders with expertise relevant to the Panel's deliberations. These experts included: Khandker Nurul Habib from the University of Toronto; Andrea Bastien from Indigenous Climate Action; Bala Gnanam from the Building Owners and Managers Association; Alex Greco from Canadian Manufacturers and Exporters; Shoshanna Saxe from the University of Toronto; and David Katz from Sustainable Resources Management Inc. These subject experts shared insights about housing policy and transit investments, and offered business perspectives on freight movement through urban areas and GHGs from manufacturers within city limits. They spoke about ways that building owners approach sustainability and energy efficiency, the impact of housing supply on climate change, and about transportation management and forecasting. Panelists also learned how individuals and communities are incorporating Indigenous knowledge into climate action.

Panelists spent the remainder of the day in working groups discussing the City's four priority areas for emissions reductions. These four broad topics would guide discussions for the rest of the Panel process. The working groups were: Finance and Governance, Existing Buildings, Transportation, and Other Topics.

Panelists were specifically asked to assess several core suggested actions in each area of the Implementation Plan that staff requested more detailed and thorough recommendations on. These core actions were:

Existing Buildings
1. Require energy rating and labelling
2. Investigate incentives for retrofits

Transportation
1. Explore the viability of car-free zones
2. Explore the viability of low-emission vehicle zones
3. Explore the viability of congestion-management (pricing) zones
4. Expand transit priority zones

Financial Tools
1. Introduce a property tax earmark to dedicate funding for climate action
2. Institutionalize climate considerations into all City decision-making through a 'Climate Lens
3. Explore parking levy

The group discussing 'Other Topics' was encouraged to explore the action items listed in each of the six other areas of the Implementation Plan, and pick a select few to focus on. This group chose to focus on community engagement and collaboration.

Each working group was tasked with filling out their section of the draft report, consisting of three parts: 1) General expectations for their section of the Implementation Plan; 2) Specific recommendations on new actions suggested by City staff, which are the core actions listed above; and 3) Assessments of remaining actions suggested by City staff, as well as any additional recommendations the Panel wanted to propose.

Panelists began drafting each section of the report by identifying any immediate areas of consensus or disagreement, discussing any provisions they wanted met before endorsing an idea, and identifying any gaps in what the action item was proposing. At the end of the meeting, Panelists reported to the other tables on their progress to ensure that their discussions were reflective of the broad consensus of the room. The Panel then adjourned until the following day.

Meeting 3: August 18, 2019

The Panel met for its final day at Metro Hall. The Chair asked Panelists to sit with the same working groups they had joined at the previous meeting. The day began with a review of the consolidated guiding principles that had been refined the previous day. The Panel provided final feedback on the principles.

Each working group then turned to the three-part task assigned to them on day two. Groups continued to draft an outline of rec-

ommendations for each category. The working groups then shared their outlines with the other Panelists. After each group read their recommendations and expectations aloud, the Panel asked clarifying questions and provided another round of feedback. This back-and-forth exchange helped ensure that all Panelists were comfortable with the recommendations, that key ideas were preserved in the editing process, and that any contentious proposals were given time for adequate discussion.

Following this round of feedback, Panelists went back to their working groups and continued to refine the rationale for each of their recommendations, adding in explanations and additional detail. They again shared these expanded recommendations with the entire Panel.

Towards the end of the day, Panel members began to finalize the wording of their recommendations in their groups. At this time, the Chair asked three Panelists to briefly leave their groups to draft a preamble for the report that would help future readers understand the Panelists' backgrounds and the motivations for their work.

Panel members continued refining their recommendations until 2:00p.m., at which time the groups completed their final set of recommendations. One member was invited to read aloud the final version of the guiding principles that the Panel had drafted, in addition to the preamble that was written earlier in the day.

Sarah Rodrigues thanked all Panelists on behalf of the City of Toronto for their clear and thoughtful deliberation, and for volunteering their time in service of their communities. With formalities complete, the Chair thanked all Panelists on behalf of the facilitation team, provided a brief overview of next steps, and reminded Panelists that they would have an opportunity to review and edit a draft of the final report in the following weeks. Finally, as each Panelist left, they were presented with a Certificate of Public Service to mark the completion of their work together.

Panelists sort through guiding principles to inform their recommendations.

APPENDIX

- Additional Commentary from Panelists
- Reference Panel Presenters and Guests
- Panel Activity Sheet Samples
- Public Meeting Summary
- Terms of Reference for the TransformTO Reference Panel on Climate Action
- Civic Lottery Invitation Sample

TransformTO Panelist participates in a public meeting on August 8

Additional Commentary from Panelists

All perspectives were welcomed during the proceedings of the Reference Panel. Each member of the Panel was invited to contribute Additional Commentary if they wished to express an idea, issue, or concern that they believed was inadequately addressed by the Panel during the time available for deliberation. Additional Commentaries do not represent a consensus view, nor are they verified for accuracy. Instead, they represent the perspective of one or more named members of the Panel and are provided, verbatim, for the benefit of the reader so that they may consider the additional views of various members of the Panel. Any web addresses provided have not been checked or verified in any way.

Andres Silberstein

My personal submission about important issues and/or ideas that matter to me:

- My highest concern is about having nuclear plants in Pickering, Darlington, and Bowmanville, right within or near our city of over 2.9 million inhabitants. Accidents have occurred in the past in other parts of the world. Ensure that top audits, checks, and inspections are made by independent professionals to their operations, systems, and emergency response plans. These reports should be public and given to City Council as frequently as possible (preferably once a month).
- Study and implement as soon as possible a prohibition for commercial (heavy) trucks to circulate on highways (401, 400, 409, Gardiner, etc.) during rush hours.
- Invite/sign agreements with Universities and Colleges to encourage undergraduate, Master, and PhD candidates to align their theses and projects with the issues that benefit the community and need action—ideas that are considered most urgent for the city and its inhabitants. This would ensure that more brains focus on those important, outstanding issues.
- Control and regulate cars and motorcycles that modify their engines that affect mufflers which blast and roar through our streets, producing annoying noise pollution.
- Increase and enforce speed control to all vehicles. High speed in the city contributes to most accidents causing injuries and death to other drivers, cyclists, and pedestrians.

Carol Tsang

The City needs to take action to make green roofs more prevalent, especially in the downtown core, where concrete dominates the landscape.

Firstly, the City should take the green roof bylaw that exists for new buildings one step further and investigate making it a requirement that all existing commercial, industrial, condos, and rental buildings have green roofs by 2023.

Secondly, single family homes should be encouraged to install green roofs when it's time for their roofs to be replaced. This can be done by more heavily promoting the eco-roof incentive program that already exists, from now until 2023, through ad campaigns highlighting the many benefits of having a green roof. Other incentives should also be investigated.
Some of the biggest benefits of adding green roofs to our city include:

- Reducing the effects of floods by absorbing rainwater and slowly releasing it, preventing stormwater runoff;
- Regulating ambient temperature, reducing our energy use, and cooling the city by a few degrees;
- Offsetting carbon and purifying the air, leading to a reduction of GHGs; and
- Increasing habitat and biodiversity.

Green roofs can make a significant, positive environmental impact to cities while reducing greenhouse gases. With more and more new developments and condos being built in our city, we need to take steps to add green spaces back to our land. This will help mitigate, and make us more resilient to, the effects of climate change.

Juliette Heung

Subsequent to the third and final Panel meeting on August 18, I found this document 'Issuance of Tax-Exempt Municipal Debentures' prepared by the City's Chief Financial Officer and Treasurer dated July 4, 2000. City staff may want to determine whether this old document is still applicable in today's financial situation when evaluating the Panel's recommendation regard-

ing tax-exempt green bonds. This document can be found at https://www.toronto.ca/legdocs/2000/agendas/council/cc/cc000801/pof10rpt/cl017.pdf

Lissa Beaucage

Regarding recommendations from the Panel on the existing buildings section of the Implementation Plan 2021-2023, I suggest standards be re-evaluated through a climate lens in the case of eviction of tenants for the purposes of renovation. 'Renoviction' causes a great deal of undue stress to tenants and can mean the difference between housing and financial security, or being priced out of a neighbourhood or city entirely. In light of Toronto's highly strained rental market, as well as the urgency for climate action, any grounds on which tenants can be legally evicted from their homes should be thoroughly revised and reigned in.

I submit that requirements for renovations should include retrofits that bring the building or unit up to Toronto Green Standards wherever possible, and keep apace with standards for new development as they shift over time. In situations where TGS cannot apply, a unit or building should pass an energy rating assessment in the highest possible result category (as seen in Action 1: By 2023, require energy ratings and labelling for existing buildings).

Although this does little to address the difficulties tenants face once evicted, it would ensure that they remain in situ until landlords are prepared to make substantial improvements to the properties they offer for tenancy. The overall goal is to leave a net positive result to the rental market where climate action and efficiency is concerned, as well as to hold landlords to account, discouraging the undertaking of renovation-based evictions lightly, or under false pretenses.

The Panel also recommended and had the opportunity to discuss improving tree cover to offset carbon emissions, provide well-needed shade, and reduce the severity of floods. Additionally, I would implore City councilors to prioritize the protection, reclamation, and restoration of local wetlands —the vast majority of which have been lost to development— and to champion the expansion of Ontario's Greenbelt to safeguard the viability of the ecosystems which act as a linchpin for the health, wealth, and success of our communities, for generations to come.

Wetlands not only retain water, sequester carbon, and attenuate flooding, but their soils also filter contaminants from surrounding lands and water courses, while their flora take up pollutants, purifying the water that recharges our aquifers, and ensuring it remains safe to drink. These are ecologically sensitive habitats that act as invaluable breeding grounds and havens of biodiversity, as well as calming green spaces to escape the city's heat.

Prioritizing the health of our wetlands stacks benefits not only in nature's favour, but society's as well—purifying water for drinking and recreation, replenishing fish stocks, minimizing flooding, and building much needed climate resilience. It is far less costly to protect and restore these natural systems, than to remedy the consequences of their depletion ad hoc. Our wetlands are a shared resource on which the health and wealth of our communities depend. In order for us to thrive, our wetlands must too.

Nadia Halim

Waste: We felt strongly that reuse should be regarded as a core element of the City's waste management strategy. Specific initiatives could include community 'reduce and reuse' programs (already a TransformTO key initiative), and supporting grassroots programs like Creative Reuse Toronto, Habitat for Humanity ReStore, Secondhand Sundays, Really Really Free Market Toronto, etc. Investigate other possibilities, such as City-run reuse hubs/depots.

Changing commuting habits: One promising strategy for reducing downtown congestion would be to investigate what the City could do to promote and incentivize the creation of co-working spaces in neighbourhoods far from the downtown core, and to encourage employers with downtown offices to allow staff to work from these remote workspaces. Rather than penalizing drivers, this would save them time, money, and hassle by eliminating the daily commute. Employers leery of allowing staff to work from home might be more receptive to the idea of a remote office with professional meet-

ing rooms, communications equipment, etc. Private-sector partners in this initiative could include Staples, Centre for Social Innovation, WeWork, etc.

Rolf Pfeiffer

Abstract: Among the Panelists were a few voices that disagree with the notion that we are facing catastrophic climate change and that CO_2 is to blame. First, recommendations to the City are listed that were left out of the Panel report as these were not agreed-upon. Discussions follow on science and politics. It is argued that realistic science is being suppressed by politics. Among the two world views, socialism is gaining ground over capitalism. Eliminating CO_2 and methane means eliminating fossil fuels that are the provider of our modern day affluent lifestyle, making life more liveable and affordable. Wind and solar cannot replace fossil fuels. If we try, we will be pushed back 200 years. Our industry and way of life will collapse. We will again burn wood, causing actual air pollution and have a less healthy life. Wind and solar produce too little energy and at a higher cost. There will be no more blast furnaces for steel.

Specific comments on the Panel's report, and additional ideas that were excluded from the Panel report.

Regarding the Guiding Principles:
The terms 'sustainable, sustainability,' are derogatory, disparaging terms designed to scare and falsely imply gloom and doom of an impending ruined planet if we do not follow the climate doctrines.

The City should also get involved in strengthening resilience of infrastructure.

Regarding the guiding principle to help make Toronto a climate action leader by engaging and encouraging local and international partners to disrupt the status quo: By 'status quo', reference is likely made to our present use of fossil fuels. This in itself is likely not what we should do. China and India are exempt and China in particular is building massive amounts of coal fired plants. By cutting low-cost fossil fuels we will be deprived of energy that India and China so gleefully enjoy. We all live on the same planet. Fighting the politically made-up climate emergency leads to energy poverty that only the West is forced to follow. It is clearly designed to bring down the West and has nothing to do with a climate catastrophe. It is noteworthy that only the leftists claim a climate calamity. Mitigating GHG emissions will only hurt our economy, and lower plant growth and food production.

Regarding the Buildings section:
A further suggestion to the four bulleted items: It is recommended to maintain heating by natural gas and not replace it with electrical heating, as it would be more costly and the perceived benefit is highly questionable. The benefit/cost ratio must be positive. Without knowing the benefits, no costs should be expended.

Regarding the Transportation section:
Reduction of CO_2 seems fruitless and unnecessary. The switch to electric cars is likewise ludicrous as CO_2 is not harming the planet as proven by real science. CO_2 is a life giver; without it, life cannot exist. Besides, CO_2 generation by EVs is close to that of cars with ICEs (internal combustion engines) counting manufacturing processes and electricity generation. Furthermore, batteries contain poisonous metals that actually do pollute the land and cause harm. The transportation sector, business and private, would suffer greatly if forced to go electric, which includes supply and delivery of goods, food, services, and travel convenience. The food supply to cities would be in question without hydrocarbon fuels.

Regarding the 'Other actions' section:
Regarding the proposal to eliminate single-use plastic materials: To stop plastics ending up in the oceans and landfills, banning them seems an easy way out. However, plastic bags and packaging serve a very useful purpose.

Option 1. Replace plastic bags with biodegradable and leak-proof materials if these already exist. Chemists have a job to do.

Option 2. Practical, true recycling. Plastics can be turned back into oil again or can be incinerated for heat and power generation. Such gains should more than pay for collection and recycling costs.

General comments on the Panel Report:
The aim of the City is for a prosperous, healthy and equitable Toronto. A contradiction to that

goal is the demand for drastic greenhouse gas emissions dictated by the UN / Paris Climate Accord. Most likely the City cannot achieve both simultaneously. Lowering GHG emissions equals energy starvation. Solar and Wind cover arable land, kill birds of prey, and need fossil fuels for back up.

The benefit of CO_2
CO_2 is not carbon, it is carbon dioxide, an invisible odourless gas, 1.5 times heavier than dry air and stays mainly on the ground where it is needed for plant growth. More CO_2 equals increased plant growth, more oxygen generation that is consumed by the animal kingdom that includes humans.

CO_2 is a very beneficial by-product of power generation by fossil fuels. Without CO_2 there would be no life on earth. We are still at the tail end of the little ice age and are coming out of it. Warmer temperatures are quite natural and are to be expected. An increase of natural CO_2 is normal.

Fossil fuels have lifted people out of poverty and hard physical work, allowed steel production and factories to be built that make industrial goods more and more affordable by the masses, and allowed farming to progress ever faster with machinery to do the work requiring far less personnel. All were made possible by fossil fuels and the ICE. Personal transportation for the masses became possible. Sturdy housing with lots of amenities are the norm, providing secure weather protection. We live in a paradise compared to 150 years ago and became the envy of the world. Life is good all around.

Regarding the claim by the IPCC that CO_2 is causing global warming: The only argument the IPCC has is that warming and CO_2 have increased at the same time, so CO_2 must be the reason. They cannot think of anything else, totally eliminating the sun. Interesting too is that their mandate is to find anthropogenic reasons. The IPCC is limited in their scope, the sun is to be excluded and a cause by humans must be found. No wonder they program their climate models on that proposition. Then they make mistakes as pointed out by Lord Christopher Monckton. https://www.youtube.com/watch?v=GW3v4xsrWsU
In view of scientific value, the IPCC reports have no merit. The sun keeps the earth's temperature in a liveable range that is amazingly stable. The proposed temperature rise of 5-6 °F in a century is physically not possible. Where should this massive amount of heat come from? It is a scenario that has never happened in such a short time frame. Based on the sunspot activity or lack thereof, we might be going back to a cooling period as we are still in the little ice age.

Who can tell?

History shows no direct relation between temperature and CO_2. Warming may have come first and CO_2 followed? Over the last decade temperature was steady and has declined in the last three years. Hence the change from Global Warming to Climate Change. More CO_2 is no proof for warmer weather or tornadoes. Links listed below attest to that. The name change alone points to a political agenda.

CO_2 is totally incapable of raising Earth's temperature and having an increase over 100 years of 0.0001 parts. At 1.5 °F rise its contribution would be 0.00015 °F which is ~ 200 times below measurable. Methane is measured in parts per billion (ppb) and has ~50 times lower warming effect and is even further away from a measurable contribution despite feedback claimed. Avoiding meat and killing cows to cut methane would be useless and would be a criminal act against nature. The UN wants to not only take our energy away they also want to starve us.

The drag of solar and wind: Solar and wind are unsightly, take away arable land, kill birds of prey and generate noise pollution. No one wants to live close to wind turbines. The ratio of cost to power generation is low. The claim of being renewable is the same as that of fossil fuels that also renew themselves. Fossil fuels are also free. It is the cost of 'harvesting' that are the expenses which are lower in acquiring fossil fuels.

The politics of all: Capitalism of free enterprise provides the all-important personal freedom; it lifts the masses out of poverty and is the only system that generates wealth. Socialism destroys wealth and puts the people right back into poverty and most often brings death to millions. There is a never-ending fight for socialism as it gives the leaders absolute control and power. It is noteworthy that senior personnel

of the UN stated that climate change was never about the climate but redistribution of wealth.

Human nature is such that people work hard, very hard when their work is rewarded and do little or nothing when no reward can be had. Socialism stops rewards and therewith innovations. The gross domestic product of a nation is very low. Progress is at a snail's pace. It is just the opposite under capitalism.

Nobody wants to live in a socialist society but many do vote for socialist ideas when a land of milk and honey is promised. Many examples exist.

It is a sad day when a nation is gullible to believe lies, which when followed will lead to self-destruction.

All that is needed is the understanding that the climate scare is a farce and is politically motivated. Fossil fuels provide the good life, wealth, prosperity, health and general wellbeing for man and nature.

Suppressed scientists far outnumber the paid IPCC alarmists.

Further web links:
https://www.youtube.com/watch?v=SXxHf-b66ZgM 32 min, Nobel Laureate in Physics, from Norway, Professor Ivar Giaever, the 1973 Nobel Prizewinner for Physics.

https://www.youtube.com/watch?v=eiPIvH49X-E 16 min, Joe Bast, Art Robinson, 1000frolly, Heartland Institute, 31,487 Scientists of which 9000+ have PhD's sign letter,

https://www.prageru.com/video/whats-the-deal-with-the-green-new-deal/ 5 min Alex Epstein PragerU, What's the Deal with the Green New Deal, precise.

https://www.prageru.com/playlist/what-science-reveals-about-climate-change/ 12 consecutive 5 min videos by PragerU, various authors.

True Science must be openly debated. It is time to hear the real scientific knowledge in contrast to the media, academia, IPCC, Al Gore, Elon Musk, etc. Climate drivers are complex.

Quote by Richard Lindzen, an American atmospheric physicist and Alfred P. Sloan Professor of Meteorology at the Massachusetts Institute of Technology: "What historians will definitely wonder about in future centuries is how deeply flawed logic, obscured by shrewd and unrelenting propaganda actually enabled a coalition of powerful special interests to convince nearly everyone in the world that CO_2 from human industry was a dangerous, planet-destroying toxin. It will be remembered as the greatest mass delusion in the history of the world – that CO_2, the life of plants, was considered for a time to be a deadly poison."

Reference Panel Presenters and Guests

The Panel benefited from numerous presentations during meeting days and during a public meeting held on August 8. Each presentation represented a wide range of perspectives and interests. Generally, presentations were brief and followed by question-and-answer sessions. City of Toronto staff were present throughout the Panel process to answer questions of a technical nature.

Topic	Presenter	Title
Land Acknowledgement	Donald Corbiere	Consultant, Indigenous Affairs Office, City of Toronto
Indigenous Knowledge, History, and Storytelling in Toronto	Jon Johnson	Assistant Professor, Indigenous Storytelling, University of Toronto
Climate Change 101	Danny Harvey	Professor, Department of Geography, University of Toronto
Introduction to TransformTO	Jim Baxter	Director, Environment and Energy Division, City of Toronto
Introduction to TransformTO; Implementation Plan: Other Areas (energy, waste, sustainable consumption, climate resilience, and 'leading by example')	Linda Swanston	Program Manager, TransformTO, Environment and Energy Division, City of Toronto
Introduction to TransformTO	Sarah Rodrigues	Senior Environmental Planner, TransformTO, Environment and Energy Division, City of Toronto
Implementation Plan: Existing Buildings	Rae-Anne Miller	Manager, Public Energy Initiatives, Existing Buildings, Environment and Energy Division, City of Toronto
Implementation Plan: Transportation	Nazzareno Capano	Manager, Transportation Policy and Innovation, Transportation Services, City of Toronto
Implementation Plan: Finance and Governance	Mark Bekkering	Manager, Policy and Research, Environment and Energy Division, City of Toronto
Perspectives Roundtables	Khandker Nurul Habib	Associate Professor, Civil Engineering, University of Toronto
Perspectives Roundtables	Andrea Bastien	Operations and Outreach Coordinator, Indigenous Climate Action
Perspectives Roundtables	Bala Gnanam	Director, Sustainability and Building Technologies, Building Owners and Managers Association
Perspectives Roundtables	Alex Greco	Director, Policy and Government Relations, Canadian Manufacturers and Exporters
Perspectives Roundtables	Shoshanna Saxe	Assistant Professor, Civil Engineering, University of Toronto
Perspectives Roundtables	David Katz	President and CEO, Sustainable Resources Management

Panel Activity Sheet Samples

Financial Tools

	Action Drafted for the 2023 Implementation Plan	What is it?	What the impact could be	What the City would do by 2023	Table impressions: Should this be: Strengthened (+)? Reduced or eliminated (-)? Or is it about right?
New Action Items	Introduce a **property tax earmark** to dedicate funding for climate action	A dedicated levy on the property tax bill that raises funds for climate action.	Through a reliable funding source, the City can initiate, accelerate and expand its low carbon initiatives.	Identify scope of projects to be funded by the levy and conduct broad stakeholder engagement to build public and political support.	
	Institutionalize climate considerations into all City decision making through a "**Climate Lens**"	A climate lens policy incorporates climate mitigation and adaptation assessments into financial decision-making processes.	A climate lens will ensure better value for money, de-risk carbon intensive investments and help achieve TransformTO's long-term emission reduction goals	Develop climate lens policy, implementation plan and guidance for city staff (eg. training and decision-support tools).	
New Action Items: Additional ideas	Explore **parking levy**	A parking space levy on non-residential, off-street parking can be implemented as an annual charge levied against all paid parking spaces or all paid and unpaid parking spaces. Paid by owners of parking lots. There are approximately 1.05 million parking spaces in Toronto, both paid and unpaid.	For all paid and unpaid spaces, at a levy of $0.50-$1.50 per space per day, the revenue potential ranges from $191.6 to $574.9 million annually. This revenue can be used to fund climate actions.	Broad stakeholder engagement to build public and political support.	
Existing Programs/Projects	Continue to explore **joint partnerships with private sector partners**	The City of Toronto has partnered with energy provider Enwave Energy Corporation to co-develop low carbon thermal energy networks in Toronto. Low-carbon thermal energy networks use energy from renewable sources, such as heat recovery, geo-exchange and solar thermal, to heat and cool multiple buildings in an area.	Private sector partners and private capital can accelerate and enhance the City's low carbon initiatives.	Look for opportunities to mobilize private capital and expand public-private partnerships to deliver greenhouse gas emission reductions.	
	Continue the **City's Green Debenture Program**	Green Bonds are debts issued by the City to raise funds for climate mitigation and adaptation initiatives.	The proceeds of each green debenture will be applied exclusively to finance or re-finance, in whole or in part, new and/or existing capital projects that mitigate and adapt to the effects of climate change.	Continue to develop a roster of climate mitigation and adaptation projects, conduct ongoing impact reporting, and grow awareness with investor.	
	Continue to support the **Development Charge Refund**	Offers a partial development charge refund to projects that have demonstrated higher levels of sustainable design.	This incentivizes developers to design and build at a level that increases efficiency and reduces emissions to be near zero.	Continue to offer a partial development charge refund for Toronto Green Standard Tier 2, 3, and 4.	

Transportation

	Action Drafted for the 2023 Implementation Plan	What is it?	What the impact might be	What City of Toronto would do by 2023	First Thoughts: Should this be: Strengthened (+)? Reduced or Eliminated(-)? Or is it about Right (✓)?
New Action Items	Explore the viability of **car-free zones**	Certain areas of the city or neighbourhoods are off-limits to cars. Exceptions can be made for non-emitting vehicles, emergency vehicles, etc.	Limit greenhouse gases from cars; Reclaim public space for pedestrians and cyclists; Encourage the use of active transportation (walking, biking)	Conduct research on impacts to drivers, pedestrians, cyclists, businesses, etc. Identify and propose zones (if any) to go car-free.	
	Explore the viability of l**ow-emission vehicle zones**	Certain areas of the city or neighbourhoods are off-limits to cars. Cars below a certain emissions threshold would be exempted.	Limit greenhouse gases from cars; Encourage low-emission vehicle adoption; Encourage the use of active transportation (walking, biking)	Conduct research on impacts to drivers, pedestrians, cyclists, businesses, etc. Identify and propose zones (if any) that would be low-emission zones.	
	Explore the viability of **congestion-management (pricing) zones**	Motorist charged a fee to enter the busiest parts of a city, usually during peak times. Discounts may be offered for those living in the zone, private passenger buses, etc.	Reduce GHG emissions from cars, improve mobility, encourage transit use, increase public health benefits (walking, cycling, cleaner air and reduce accidents).	Conduct research on impacts to drivers, pedestrians, cyclists, businesses, etc. Identify and propose the zones (if any) that would be congestion-management zones.	
	Expand **transit priority zones**	Corridors, streets or areas where transit vehicles are given priority, such as through special lanes or priority signals. Example: Toronto King Street Pilot	Will increase transit ridership by decreasing commute times. Also creates a safer environment for cyclists and pedestrians.	Research and expand the number of transit priority zones across the City.	
Existing Projects, Strategies, and Projects	Develop and implement the **next action plan for the Vision Zero Road Safety Plan** (2017-2021).	The Vision Zero Road Safety Plan is a comprehensive action plan focused on eliminating fatalities and serious injuries on Toronto's Streets. The plan supports pedestrians and cyclists.	This will encourage more active transportation (walking and cycling).	Accelerate and expand the deployment of traffic safety improvements: Run & evaluate pilot programs, implement safety improvements, safety zones, Leading Pedestrian Intervals (LPIs), and cycling safety enhancements throughout the City.	
	Speed up timelines and increase funding for the **Cycling Network Plan**	The Cycling Network Plan is a 10-year plan to connect, grow and renew Toronto's cycling infrastructure.	Will encourage the use of active transportation by making cycling safer and more convenient.	Accelerate and expand the cycling network through additional planning, funding, and construction.	
	Implement the 2020-2023 components of the **Electric Mobility Strategy** (forthcoming in late 2019)	The Electric Mobility Strategy will support current and future electric mobility adoption for the City of Toronto and establish the City as a global leader in electric mobility.	Facilitates the creation of a more EV-friendly city, which will increase adoption of EVs. This moves the City closer to achieving the TransformTO goal that 100% of transportation uses low or zero carbon energy sources by 2050.	Identify and implement actions that the City of Toronto and its partners can take to increase electric vehicle adoption in the City of Toronto.	
	Install on-street and Toronto Parking Authority electric vehicle charging stations	Installation of Level 1 and Level 2 on-street charging stations for users of Electric Vehicles.	Invests in key infrastructure to enable the adoption of EVs by more people, which moves the City closer to achieving the TransformTO goal that 100% of transportation uses low or zero carbon energy sources by 2050.	Working with Toronto Hydro, the City plans to install 13 on-street charging stations in residential areas and 3 stations at two locations in the downtown core – role out expected in September 2019. Working with the Toronto Parking Authority (TPA) to install charging stations across 200 TPA sites.	
	Complete **free-floating car share pilot project and report to Council** with recommendations required to establish a permanent policy.	Members pick-up and drop-off a car-share vehicle parked anywhere within the designated zone (no longer just from a designed car-share space). Currently there are 80 on-street spaces, with additional off-street locations available in TPA Green P lots for car-sharing.	Encourages decrease in vehicle ownership rates, which reduces household transportation costs, vehicle kilometres travelled, and therefore greenhouse gas emissions. Encourages increase in walking, cycling, and transit use.	Complete the current pilot (November 1, 2018 – June 30, 2020) that issues a maximum of 2,000 permits (500 per operator). Report to Council with recommendations required to establish a permanent policy.	
	Develop a City-wide l**ow-carbon freight strategy**	A strategy to address GHGs from urban goods movement - while impacts on congestion, air quality, business continuity and productivity.	Reduce GHGs from freight, reduced contribution to traffic congestion, improved impacts on air quality, business continuity and productivity.	Establish policies to optimize urban freight movement while moving forward on the City's other goals, including low-carbon and economic development goals.	

Existing Buildings (1 of 2)

	Action Drafted for the 2023 Implementation Plan	What is it?	What the impact could be	What the City would do by 2023	Table impressions: Should this be: Strengthened (+)? Reduced or eliminated (-)? Or is it about right?
New Action Items	Require **Energy Rating and Labelling**	A system for rating and labelling residential, commercial, and institutional buildings, capturing emissions, energy, water and other performance characteristics.	Individuals will better understand the energy efficiency of a home at time of sale, rental or major renovations, to help them be conscious of the operating cost. Owners will be able to identify a need for energy performance improvement and take action.	Develop and implement mandatory rating and labelling for single family homes Develop and implement mandatory rating and labelling for commercial and institutional buildings	
	Investigate **Incentives for Retrofits**	Financial incentives such as rebates, financing, strategic partnerships, and tax incentives to property owners to encourage them to undertake energy performance improvements in their buildings.	Accelerate more energy retrofits for buildings.	Investigate **incentives** that support improved business cases for emissions and energy performance improvements in buildings.	
New Action Items: Additional ideas	Design and Implement an **Existing Building Strategy**	A strategy or 'roadmap' to try to move towards to zero emissions and improved energy performance in existing buildings. Net Zero buildings produce as much clean energy as they consume.	Will provide a 'roadmap' to help the City improve energy efficiency in buildings and reach the target of 100% of existing buildings to be retrofitted by 2050.	Design and implement the strategy. Consider a 'Framework for Zero Emissions' that will set targets mandating a reduction of greenhouse gas emissions from existing buildings.	
	Explore **Building Audit Requirements**	A process where all major components of a building are checked or 'audited' for energy efficiency and emissions performance.	Buildings property owners gain a better understanding of their building's emissions performance.	Explore introducing such a requirement for building owners. Analyze whether audits should include measurements of resilience and other best practices like air quality testing, air tightness testing, etc.	
	Explore R**e-commissioning Requirement**	A process where existing building equipment and systems are checked to ensure they are working optimally, and identifying smart ways to improve energy performance, reduce building energy and water costs, as well as GHG emissions.	Buildings property owners are mandated to improve efficiency and lower emissions.	Explore viability of 're-commissioning' requirement for existing buildings in Toronto	
	Explore requiring **Deep Retrofit Capital Plans**	A requirement to incorporate major retrofits into normal capital planning processes for buildings. The plan is designed to achieve the highest levels of emissions performance targets, often 50% of more.	Buildings will have a more clear direction on how to reduce emissions, because energy retrofits will be incorporated into their overall processes for capital planning.	Explore viability of 'deep retrofit capital plan' and appropriate emissions performance targets for existing buildings	
Existing Programs	Enhance the **Better Buildings Partnership (BBP)**	The program where the City provides funding, expertise and support to improve the energy efficiency of Toronto's residential, commercial, industrial and institutional buildings through energy conservation and retrofits.	Financial and logistical support to building owners to reduce barriers to retrofits. Since 1996, the BBP has facilitated more than 2,600 projects, resulting in over 4.6 million megawatt hours in energy savings and eliminating the	Enhance the BBP by developing new retrofit programming in all buildings across the city. This includes providing more personalized support to building owners and more energy retrofit loans.	

Existing Buildings (2 of 2)

			equivalent of 810,000 tonnes of CO_2 emissions.		
	Enhance the **Energy Retrofit Loan**	The City offers low-interest loans to help building owners improve the energy efficiency of their buildings. The City offers financing for up to 100% of project costs, at a rate equal to the City's cost of borrowing, with repayment terms up to 20 years.	Reduced financial barriers to energy efficiency retrofits in Toronto's existing buildings. To date, the City has loaned out approximately $53 Million.	Prioritize giving loans to projects that support TransformTO targets Make special repayment mechanisms available to more types of buildings aside from just single-family and multi-unit residential buildings.	
	Continue the **Eco Roof Incentive Program**	A program that provides grants to help install green roofs and cool roofs on homes and buildings.	Reduces financial barriers to installing green and cool roofs. Since 2009, this program has supported 336 projects with 653,000 square metres of roof space. Each year, these roofs reduce energy consumption by 1,000 megawatt-hours (MWh), avoid 220 tonnes of greenhouse gas emissions, and divert over 11 million litres of storm water.	Continue offering the program.	
	Continue **High-Rise Retrofit Improvement Support Program (Hi-RIS**)	Helps apartment building owners undertake building improvements that reduce energy and water consumption by providing financing with up to 20 year terms at competitive fixed rates to residential apartment buildings in Toronto with 3-storeys or more.	Reduce financial barriers to retrofits to help reduce GHGs. Hi-RIS program generated 3,085 CO2 e tonnes of GHG savings in 2017-2018.	Continue support for building owners. Explore mechanisms to support seniors and low-income people in taking advantage of Local Improvement Charge.	
	Continue **Home Energy Loan Program (HELP)**	Offers Toronto homeowners a low-interest loan of up to $75,000 to cover the cost of home energy improvements. Uses a 'Local Improvement Charge' mechanism for paying back loans.	Reduce GHG emissions while helping homeowners reduce costs. On an annual basis, the average savings for homeowners that take advantage of HELP include gas bill savings of 34%, electricity bill savings of 12%, and cost savings of $560 per home.	Continue support for residential property owners Explore mechanisms to support seniors and low-income people in taking advantage of Local Improvement Charge.	
	Continue **Toronto Navigation Services**	This program supports building owners through each core step of implementing an energy efficiency project, including: • Identification of projects in a building. • Formulating the business case around opportunities identified and access to program incentives and financing. • Validating energy and cost savings of projects	Increases uptake and awareness among building owners of energy efficiency and emission reduction actions that can be taken in buildings.	Continue to develop, implement and promote a "concierge" service to support building owners and operators to reduce GHG emissions, improve and maintain energy performance, and ensure affordable and healthy buildings.	
	Continue **Energy Disclosure**	Public disclosure of the energy and water performance of buildings. This lets the city collect data over time so they can measure improvements.	Identifies buildings with poor energy performance, which provides opportunities for intervention or education	Make building energy performance data and mapping tools available to the public.	

Other Ideas (New Ideas)

	Action Drafted for the 2023 Implementation Plan	What is it?	What the impact could be	Table impressions: Should this be: Strengthened (+)? Reduced or eliminated (-)? Or is it about right? What is reasonable to achieve by 2023?
ENERGY	Implement the **Renewable Energy strategy** to significantly increase adoption of renewable energy	The strategy includes mass adoption of solar technology in houses, heat pumps in residential homes and buildings, development of low-carbon thermal energy sources (like sewer/waste heat recovery) in new and existing buildings.	This action will support greenhouse gas reduction through the adoption of renewable energy. It will also increase economic development and support job creation.	
	Establish either a **voluntary or involuntary program for on-site energy storage** (eg: batteries)	Works by capturing electricity produced by both renewable and non-renewable resources and storing it until it is required. It allows users to consume stored electricity, during times of peak energy demand, giving greater flexibility and control of electrical usage.	This action supports resilience as the owner of the battery will be able to use the stored energy during power outages.	
WASTE	Research opportunities to **reduce private sources of waste** in Toronto	The City offers a service which allows private waste haulers to bring garbage to a transfer station for a fee per tonne of waste. This action aims to identify how the City can influence greater waste diversion from landfill in the private sector for waste materials being generated within the City of Toronto.	This action can address the need for increased waste diversion in multi-unit residential buildings and the Industrial, Commercial & Institutional sector to support City's diversion goals.	
SUSTAINABLE CONSUMPTION	Build on research to date and **develop approach for sustainable consumption and reduction of lifecycle GHG emissions**	Sustainable consumption is the consumption of goods and services that have minimal impact upon the environment, are socially equitable and economically viable while meeting the basic needs of humans, worldwide. Lifecycle emissions take into account the direct and indirect greenhouse gas emissions associated with all activities in the product's life cycle.	Research can help identify ways to reduce resource use, environmental degradation, and GHG emissions along the whole life cycle of products or services Torontonians consume.	
	Develop a program to **reduce lifecycle GHG emissions from buildings and infrastructure.**	Lifecycle emissions take into account the direct and indirect greenhouse gas emissions associated with the life cycle of the building materials.	This action can demonstrate a reduction of GHG emissions that go beyond the Toronto area.	
ENGAGEMENT	Establish a **Climate Advisory Group**	A Climate Advisory Group would engage academic and private sector experts to provide advice to the City, with a focus on integrating equity and inclusion into climate action.	This group can inform and support proposed climate actions, while ensuring that every action is equitable and inclusive.	
LEADING BY EXAMPLE	Establish a plan to **reduce or eliminate single-use plastic products in all City of Toronto Facilities and City events and campaigns**.	Eliminate and reduce the amount of single-use plastics at City facilities and events.	This action can support TransformTO target of zero waste by 2050.	
RESILIENCE	Enable more **retrofits of apartment towers** to improve resilience	Over 500,000 Torontonians live in high-rise apartment towers that are more than 35 years old, and there are key resilience risks in these buildings. Many of these buildings have outdated or inefficient heating systems, windows or back-up power, and most lack air conditioning.	This action improves resilience to risks such as power failures, heatwaves, and extreme cold. Better physical conditions also benefit the physical and mental health of residents. Improving resilience adds greater value for the owner and for the tax base.	
	Enhance the capacity of neighbourhoods to prepare for and recover from shocks through **grassroots action and network building**	Toronto's ability to be resilient will rely on strong and prepared neighbourhoods. Connected communities with active local networks of engaged residents, community leaders, community centres, faith-based organizations, libraries, and local not-for-profits and organizations are better prepared to survive, adapt, and thrive in response to a shock.	This action will improve the way residents in neighbourhood improvement areas are able to prepare for and recover from climate shocks (i.e. extreme heat, ice storms, flooding, power outages).	

Other Ideas (Existing programs)

	Action Drafted for the 2023 Implementation Plan	What is it?	What the impact could be
NEW CONSTR-UCTION	Develop **education and training for low-carbon building workforce**	The City can work with partners to increase skills development and capacity building amongst the low-carbon buildings workforce through education and training.	This action focuses on increasing economic development and creating good quality jobs.
ENERGY	Advance **community energy planning** focusing on neighbourhood-scale efficiency opportunities	Community Energy Planning (CEP) identifies opportunities to integrate local energy solutions at a building or neighbourhood-scale. Opportunities can include supplying the energy of numerous local buildings from a renewable energy source, or an opportunity to gain community input on the best way to support energy efficiency behaviour change.	CEP benefits include reduced GHG emissions, less strain on energy infrastructure, improved resilience to power outages, job creation and investment in the local economy.
	Accelerate development of **Low-Carbon Thermal Energy Networks** (district energy systems)	The City of Toronto has a public-private partnership with Enwave to develop Low-Carbon Thermal Energy Networks (LCTENs) in Toronto. Some LCTENs can use energy from renewable sources, such as heat recovery, geo-exchange and solar thermal, to heat and cool multiple buildings in an area.	LCTENs reduce GHG emissions and improve energy resilience. It delivers economies of scale, allowing large emissions reductions at a lower cost than individual building systems. The City's Deep Lake Water Cooling uses water from Lake Ontario to cool more than 60 buildings including City Hall, Scotiabank Arena, Royal Bank Plaza, and Queen's Park.
WASTE	Continue to support the **Long-term Waste Management Strategy**	The Strategy is a master plan that guides the City's implementation of environmentally sustainable waste management programs and services over the next 30 to 50 years.	The Strategy aims to achieve the goal of zero waste.
SUSTAINABLE CONSUMPTION	Continue to **promote the consumption of healthy, low-carbon food choices**	A recent study conducted by C40 on Toronto's consumption based emissions shows that food consumption makes up about 5.8% of Toronto's consumption based footprint, with red meat accounting for almost 30 percent of the emission. The City's Live Green Toronto program promotes eating local and growing your own food. The City also promotes Canada's new food guide that supports a plant-based diet.	Promoting the consumption of healthy, low-carbon food choices would reduce lifecycle GHG emissions, improve health and support investments in the local economy.
ENGAGEMENT	Continue the **Neighbourhood Climate Action Grants** program	Neighbourhood Climate Action Grants [NCAG] aim to increase awareness and engagement on climate action at the local level by funding resident-led projects, activities and events.	The activities and events funded help reduce emissions, educate the public on climate change and climate action, and advance the priorities and actions of TransformTO.
	Have dedicated '**animators' to work in communities** and facilitate and inspire local climate action	Community climate action animators would be advocates and supporters of local climate action. Their role would be to work with community members in helping to achieve various climate actions targeting GHG emissions, waste diversion, active transportation, etc.	Animators would educate the public about climate change and climate action, and spread the word about TransformTO.
	Expand **Toronto's Smart Commute program**.	Smart Commute works with employers and property owners to promote sustainable commuting options – cycling, walking, public transit, and carpooling – to employees and tenants. This action however, proposes to expand the program to help residents find smart travel options such as walking, cycling, transit and carpooling, and ease traffic congestion.	This program can help the City achieve its goal of 75% of trips under 5 km will be walked or cycled.
	Continue **TransformTO community engagement**	Community feedback helped to inform the City's pathway to a low-carbon future and provide insight on climate action priorities. TransformTO is committed to continuing to consult stakeholders and all members of the public with changes or updates made to the TransformTO strategy or implementation plans.	Community engagement facilitates collaborative decision-making.
RESILIENCE	Explore opportunity to make the City's **"Minimum Backup Power Guidelines for Multi-Unit Residential Buildings (MURBs)"** a requirement	The City's "Minimum Backup Power Guideline for MURBs" is a set of voluntary performance standards for existing and new buildings that help improve resilience during area-wide power outages. This action would explore what authorities we have to make the guidelines a minimum requirement for new MURBs in Toronto. There may be opportunities through the City of Toronto Act, but more analysis is needed.	Improving backup power in MURBs will strengthen the city's overall resilience by allowing people to remain in their buildings during area-wide power outages. This will provide safety and comfort, especially to vulnerable populations, and may potentially reduce added demand on public services, infrastructure, and facilities during nonemergency situations.
LEADING BY EXAMPLE	Continue to implement the **Green Fleet Plan**	The Green Fleet Plan describes what the City will do to reduce GHG and air-pollutant emissions from its vehicles and transportation fuels. The Consolidated Green Fleet Plan includes fleets managed by the City's Fleet Services Division, Toronto Paramedic Services, Toronto Fire Services, Toronto Police Services and the TTC. It focuses on emissions from the operation of almost 10,000 on-road and off-road vehicles and equipment owned and operated by the City of Toronto.	The goal is to choose vehicles, equipment, fuels, and practices that consume less fuel and emit less GHG and air pollution, meet the City's operational requirements, are sustainable and are economically viable.
	Continue to ensure that all **existing City buildings and facilities are retrofitted** to the highest emission reduction possible	The City will conduct deep energy retrofits in its buildings and facilities such as upgrading heating and cooling systems, installing renewable energy, upgrading windows and insulation, etc.	This action supports the TransformTO goal of retrofitting all City-owned buildings, including social housing, to the highest emission reduction technically feasible, on average achieving a 40% energy savings over 2017 building energy performance by 2040.

Public Meeting: August 8, 2019

A public meeting regarding the City of Toronto's TransformTO Climate Action Strategy took place on August 8 at the Scarborough Civic Centre. TransformTO is the City's strategy to reduce Toronto's greenhouse gases by 80% of 1990 levels by 2050. The meeting was one component of a larger process to gather public input on what actions the City should include in the forthcoming TransformTO Implementation Plan 2021-2023.

In addition to 65 members of the general public, the meeting was also attended by 12 Panelists from the TransformTO Reference Panel. The TransformTO Reference Panel is a randomly selected group of Toronto residents also tasked with making recommendations on the content of the Implementation Plan 2021-2023. Panelists attended the meeting to gather public input to help inform their deliberations and ultimate recommendations.

The meeting began with a welcome from Toronto City Councillor James Pasternak, followed by presentations about TransformTO from City staff, and a short question-and-answer session. Participants then joined small-table conversations, where they were asked to discuss one of three broad areas related to how the City can reduce its GHG emissions: Transportation, Existing Buildings, and Other Topics. Participants discussed the City's proposed ideas in each area, recommended new ideas, and discussed how the City could pay for these measures. Following table discussions, highlights from the discussion were shared with the room. Closing remarks were offered by Councillor Jennifer McKelvie.

The discussion has been synthesized and summarized below to reflect ideas that were frequently mentioned by participants, as well as other ideas that were mentioned less frequently.

SECTION 1 – EXISTING BUILDINGS

Frequently Mentioned

- Build more green roofs on municipal properties and encourage private entities to do the same on private buildings. If a green roof is not possible, consider other ways of preventing heat from being absorbed by buildings, like reflective white roofing material.
- Create more permanent community hubs for e-waste and hazardous waste drop off, possibly located in or near existing City-owned buildings.
- Require retrofits of homes, condos, and commercial buildings to boost their energy efficiency. These upgrades should be interest-free, and the fee schedule geared towards income-based or payment plan options.
- Require the planting of a significant number of new trees and the retention of existing trees onsite when issuing permits for new building construction.

Sometimes Mentioned

- Build more pedestrian walkways between high-rise buildings —including elevated walkways to maximize space— to encourage walking for short trips.
- Transition all City buildings to more energy-efficient lighting.
- Install low-flow toilets and efficient showerheads in City-owned buildings.
- Penalize private apartment owners who don't stay up-to-date with energy-efficient appliances.
- Consider turning lights off in unused portions of City buildings at night, or put lights on a dimmer or timer.
- Ensure any warranty on new energy-efficient appliances articulates on the label how long the warranty (and its efficiency rating) is valid for.
    - Investigate the possibility of inaccurate energy efficiency labels on home appliances and the effect this could have on an individual home energy rating.
    - Ensure minimum efficiency standards for any equipment or appliances in City buildings or private apartment buildings.
    - Provide a certificate for owners selling a property to new buyers to prove the efficiency of new appliances.
    - Build more rooftop solar projects on municipal, commercial, and residential buildings.
- Reduce the interest rate on the Home Energy Loan Program. Generally, better incentives are needed to achieve energy

efficiency because loans are not enough.
- Make energy audits an automatic component of a pre-sale home inspection, and hold a contractor accountable for the quality of the energy upgrades they conducted.
- Expand community energy planning to all neighbourhoods across Toronto.
- Remove barriers that keep neighbours in attached houses from sharing in the costs and benefits of installing rooftop solar panels.
- Have the City purchase solar panels or materials for energy retrofits wholesale to take advantage of economies of scale.
- Mandate the use of permeable materials in place of asphalt when replacing existing driveways, since many sewer upgrades lead to driveway repaving.
- Give residents of apartment complexes greater say in what energy efficiency upgrades are made in their buildings.
- Enforce downspout disconnections for private, single-family homes to prevent basement flooding and sewer overflow.
- Introduce stricter regulations and enforcement guidelines for greening existing buildings so owners feel obligated to take them seriously to avoid fines.
- Offer better flood protection for existing buildings.

SECTION 2 – TRANSPORTATION

Frequently Mentioned
- Create more separated bike lanes and dedicated multi-use trails, and ensure they are maintained in winter.
- Invest in cycling infrastructure, including more dedicated bike traffic signals and better bike storage facilities at City properties.
- Expand Toronto's bike share program to new parts of the city.
- Pilot the creation of car-free zones throughout the city.
- Offer incentives to boost transit ridership, including free fares on the TTC for all riders.
- Offer more express TTC buses that stop only at the busiest stops on a route.
- Plan transit to enable more multi-modal trips, focusing on active transportation.
- Encourage the adoption of electric vehicles by adding charging stations and more EV-only parking spots in City-owned lots.

Sometimes Mentioned
- Resurrect Toronto City Council's Cycling and Pedestrian Committee.
- Encourage City staff and other private employees to bike to work with shower and better bike storage facilities.
- Increase visibility on roads, bike paths, sidewalks, and common areas surrounding City-owned apartment complexes to reduce risks faced by those commuting to work at night.
- Ask the province to update the drivers' education program and handbook to enhance awareness of how to drive safely around cyclists.
- Ensure that any future dedicated bus transit lanes include separated bike lanes automatically built into the plan.
- Make park infrastructure more accessible for those with physical disabilities.
- Ensure winter maintenance of sidewalks, bike lanes, and multi-use pathways, especially in parts of the city where transit is poor.
- Explore ways of expanding downtown's PATH system, as it provides an accessible way to get around on foot in the winter.
- Regarding car-free zones:
  - Gradually increase the length of the closure to give drivers and communities a chance to acclimate.
  - Ensure that before any car-free zone is made permanent, transit options to and through the proposed car-free zone are improved.
  - Ensure that people requiring greater access to businesses within car-free zones —WheelTrans users, for example— aren't unduly burdened.
  - Ensure that businesses located in the car-free zone are not negatively impacted by the exclusion of vehicular traffic.
- Expand the streetcar right-of-way initiative currently operating on parts of King Street downtown to stretches of Queen Street.
- Dedicate lanes of large roads leading in and out of the city —Jane Street, Finch Avenue, Kingston Road, Eglinton Avenue— as priority bus lanes during rush hour. These dedicated lanes could also be made available to carpooling vehicles or EVs, similar to HOV lanes on some provincial highways.
- Build more Light Rapid Transit options to connect communities far from high-cap-

acity transit options with existing transit hubs.
- Allow seamless fare integration between transit agencies.
- Reward residents for carpooling, and consider creating carpool-only traffic zones. City can also encourage large businesses to incentivize their employees to ride share or carpool to work.
- Offer incentives to buy hybrid vehicles or EVs.
- Ask the provincial government to reinstate car emissions testing for vehicles older than 10 years.
- Use less road salt in winter and switch to sand.
- Consider eliminating 'drive thru' options at fast food outlets to decrease emissions.
- Encourage corporate discounts for Presto and TTC Metropass.
- Replace all gas-powered City vehicles with EVs.
- Regulate ride-sharing services like Lyft and Uber to green their fleet as the City has done with traditional taxis.

SECTION 3 – FINANCE

Frequently Mentioned

- Reinstate the Vehicle Registration Tax.
- Increase fees for hourly and permitted street parking, and fines for on-street parking violations.
- Address equity considerations of any financial tools used to reduce GHGs. For example, if these tools increase the cost of driving, the City must address the fact that many low-income residents have no choice but to rely on their car to get to and from work, given high rents downtown and poor transit outside the downtown core. Any proposed tax increases/levies must be made equitably to ensure they are not disproportionately impacting the poorest people.
- Increase property taxes and use the money raised to aggressively fund transit and other GHG-reducing projects throughout Toronto.
    - Let homeowners know well in advance about property tax increases, how the money raised will be earmarked, and what it is hoping to achieve. Track the performance of the money raised through that tax increase and be transparent about its effectiveness.
    - Consider tying any income tax increase to how effectively people are able to reduce personal greenhouse gas footprint.

Sometimes Mentioned

- Consider a higher levy for drivers from outside of Toronto who use electric vehicle charging stations in Green P or private parking lots to offset cost.
- Ask the province to revise or expand the City of Toronto Act to provide City Council with more revenue tools to combat climate change.
- Create a levy for businesses that operate standalone parking lots and businesses that offer large parking lots (i.e., shopping malls, grocery stores).
- Charge property owners and renters who order food for delivery based on the higher emissions generated by in-home food delivery and include the small charge on the bill.
- Work with Toronto Hydro and other electric utilities to offer tax breaks for homeowners who install solar panels. Clarify any tax disincentives to installing solar panels and incentivize people to put excess solar power back onto the grid.
- Implement road tolls or a congestion charge for drivers heading into downtown Toronto, but bear in mind that many people who live outside of Toronto but work in the city are not supportive of a congestion charge or toll roads.
    - Look to London, UK, and other jurisdictions that have implemented similar tolls and charges for ways to use these pricing tools in an equitable way.
- Create tax rebates that help low-income communities engage in sustainable actions.
- Look at phasing out levies after GHG-reducing infrastructure has been paid for. In Iceland, the government financed an underwater tunnel and charged users a toll: the toll was removed once the tunnel debt was paid down.
- Implement a non-permeable surface fee to help pay for sewage costs (other municipalities around Toronto have done this). Properties with an abundance of concrete add more surface runoff to sewers than properties covered with more absorbent material like grass. This fee helps reduce flooding.
- Implement a stormwater management fee

to more effectively address the costs of flooding and fund solutions.
- Incentivize residents to install sump pumps to prevent basement flooding.
- Create a dedicated climate emergency fund through equitable tools, including: a tax on large homes, a parking levy, or a one percent property tax increase (with a rebate for low-income homeowners).
- Add an environmental levy to the existing Land Transfer Tax and use that money to fund environmental initiatives.
- Improve enforcement of existing environmental policies to better ensure compliance, and levy fines against homeowners or landlords who fail to comply. These fines can be progressive and reflect the income of the owner.

SECTION 4 – OTHER TOPICS

Frequently Mentioned

- Introduce an equity lens through which the City will view all of its greenhouse gas emission reduction ideas.
    - Recognize that each community in Toronto is different, and that residents face different barriers to reducing their GHG emissions.
    - Reduce financial barriers that prevent residents from participating in activities that lower GHGs.
    - Help empower residents, neighbourhoods, and communities to take action at the grassroots to reduce GHGs.
- Facilitate a shift to a 'circular economy'.
- Create or enhance a tree planting initiative for the City, and encourage private residents to plant more native trees on their property where possible.
- Establish community environment days where residents can curb unwanted but working items for other residents to pick up.
- Create more flexible co-working spaces and help shift workplace culture so that employees feel comfortable working from home or telecommuting where appropriate or possible.
- Support the building of green infrastructure on City property.
- Support the creation of community-based energy projects.
- Encourage privately owned rental apartment buildings to do a better job promoting and ensuring the separation of garbage and recycling in their waste stream.
- Avoid privatized partnerships or contracts for waste management.

Sometimes Mentioned

City operations

- Create a low carbon procurement policy for all City projects.
- Explore other clean tech options —wind, tidal, geothermal heating— to power City buildings.
- Eliminate meat and dairy at City meetings, events, or consultations, particularly at climate action events. The meat and dairy industry is a large contributor to greenhouse gas emissions.

Engagement and education

- Better incorporate Indigenous leadership into the debate over mitigating the impacts of climate change in Toronto.
- Help residents of Toronto make behavioural changes to help reduce overall consumption to reduce upstream GHG impacts.
- Strengthen community awareness of TransformTO and what individual residents can do to reduce greenhouse gas emissions.
- Encourage residents and businesses to buy local.
- Create a digital tool that can help residents better understand how they can help reduce the city's emissions based on factors such as housing, income, or means, knowing that not everyone has the same capacity to consider household decisions through a climate lens.
    - Support efforts like Project Neutral that gamify the calculation of personal GHG emissions as a tool for increasing personal and community engagement in identifying ways of reducing GHG emissions.
- Conduct performance reviews for individual neighbourhoods so residents can better understand their community's GHG output and work towards reducing emissions.
    - Set benchmarks and rewards for local communities that lead in reducing their environmental footprint.
- Equip young people with the tools and training to conduct energy audits to help engage young people early on in promoting

energy efficiency.
- Foster better partnerships with K-8 and high schools to involve children and youth in recycling, energy efficiency, cycling, etc.
  - Ask teachers or the province to strengthen educational opportunities about climate change and the need to reduce greenhouse gas emissions.
- Use public libraries and community centres to disseminate information or hold workshops on City GHG reduction initiatives, and to engage/mobilize local community groups.
- Expand the reach of Green Neighbours Network to every ward.

City Planning
- Change zoning bylaws to help eliminate food deserts.
- Couple green infrastructure with grey infrastructure solutions where possible.
- Rezone certain areas of the city to create more mixed-use neighbourhoods, since purely residential areas often lack retail, commercial, and transit amenities.
  - Encourage development of the 'Missing Middle', a term that encompasses all housing options between detached, single family homes, and mid-rise condo units (i.e., everything from two-unit duplexes to low-rise, live/work multiplexes).
  - Allow for laneway housing and tiny homes.
  - Ensure new housing options do not promote urban sprawl.
  - Increase resident empowerment in how neighbourhoods are built.
  - Keep intensification of housing balanced to maintain affordability and not spur gentrification.

Waste management
- Capture energy-from-waste from sewage, trash, and compost.
- Require existing residential buildings to create compost chutes and all new buildings to include them in their design.
- Make it easier to recycle and compost for individual tenants in apartment buildings through digital tools and public education campaigns.
- Promote the TOWaste app.
- Increase opportunities for community-led composting initiatives in cooperation with local schools, community centres, libraries, and Councillors.
- Provide compost bins and rain barrels at no cost.
- Create incentives for residents who take recycling that can't be picked up by the City directly to central recycling facilities.
- Create a deposit system for recyclable plastic and metal containers.
- Ensure compliance for private companies the City contracts to handle waste management in its commercial buildings to minimize the risk of recyclable material ending up in landfill.

Miscellaneous
- Promote the establishment of green-certified businesses in Toronto.
- Include consumption emissions in GHG emission reduction forecasts.
- Ban plastic cups in restaurants.
- Pass a Municipal Green New Deal resolution.
- Declare a climate emergency at City Council.
- Be transparent about whether the City of Toronto intends to reduce its GHGs by relying on greater volumes of nuclear energy.
- Support the federal government in maintaining a price on carbon emissions.

Terms of Reference for the TransformTO Reference Panel on Climate Action

1. Context

Toronto City Council unanimously passed the TransformTO Climate Action Strategy in 2017, a plan to cut greenhouse gas emissions by 80% of 1990 levels by 2050. The City of Toronto Environment and Energy Division (EED) is convening a Residents' Reference Panel so that residents who represent the diversity of Toronto have a hand in shaping the City's TransformTO Implementation Plan 2021-2023, which will guide how the city meets these GHG reduction targets. The Panel will serve as one piece of a broader engagement strategy which includes public meetings, stakeholder meetings, and other activities as determined by EED.

2. Objective of Environment and Energy Division (EED)

The EED wants to engage a representative group of Torontonians to ensure that advice on the four-year implementation plan is broadly reflective of the priorities of all Torontonians.

3. Mandate

Members of the Panel will meet three times in July and August 2019 to:

- Learn first-hand from independent experts, community, industry representatives, and City of Toronto staff;
- Explore the ways Toronto produces greenhouse gases and learn about changes we could make to our buildings, transportation, and waste management systems;
- Make recommendations on changes the City should make in the next four years in order to help meet their greenhouse gas emissions goals.

4. Membership

The Panel will be comprised of 32 randomly selected members who together form a broad, representative cross-section of Toronto residents.

4.1 Recruitment

Panelists will be randomly selected by Civic Lottery. 12,500 letters will be sent to randomly selected households inviting residents to register as a volunteer. A blind draw selects Panelists from the pool of registered volunteers in a way that satisfies the composition requirements described in 4.3.

4.2 Eligibility Requirements

In order to be eligible to serve on the Panel, an applicant must:

- Reside within Toronto, at a residential address (unit in building) that was selected to receive one of the recruitment letters, or who received a letter via alternative mechanisms aimed at reaching Toronto residents without fixed addresses;
- Be at least 16 years of age as of the final day of the recruitment period;
- Be the only applicant from their residential address (unit in building);
- Not be an employee of the City of Toronto, an elected municipal, provincial, or federal official, or a declared candidate seeking such offices, a member of the Senate of Canada, or a member of another City of Toronto advisory body;
- Be committed to attending all three meetings of the Panel;
- Be committed to acting in accordance with the Panelist responsibilities as set out in Section 6.2 (Panelist Responsibilities).

4.3 Composition

At the time of selection, the Panel will be composed so that together members form a broadly representative cross-section of Toronto residents. Panelists are selected to reflect the city's gender balance, age balance, and the proportion of those who self identify as a visible minority. Selection also saves at least two seats for individuals who identify as Indigenous.

At the time of selection, Panel members will be selected to roughly reflect the population distribution of Toronto, and include proportionate number of renters and owners, including at least two members who reside in subsidized housing. Proportions will be established based on the most recent available census profile. It will also reflect the distribution of opinions on climate change in Toronto, as measured by a recent public opinion poll commissioned by TransformTO.

4.4 Term and Schedule

Panelists will meet three times in summer 2019:

- July 27 from 9:00 a.m. to 7:00 p.m.
- August 17 from 9:00 a.m. to 4:00 p.m.
- August 18 from 9:00 a.m. to 2:00 p.m.

4.5 Termination of Membership

Panelists effectively terminate their membership on the Panel if they provide written notice of their intent to step down from the Panel due to illness or an unexpected event, if they become an employee of the City of Toronto, or if they declare their intent to run for office as a municipal, provincial, or federal representative during the Panel. The EED can also terminate membership on the Panel, at their discretion, if the member does not attend the first meeting, if they move to a residence outside the City of Toronto before the Panel begins, or if the member contravenes the responsibilities of Panelists set out in Section 6.2 (Panelist Responsibilities) in a manner that imperils the effectiveness and legitimacy of the Panel. The member would be notified of the intent to review their membership, the rationale for this review, and be offered an opportunity to prepare a response. EED staff will make the final decision concerning the termination of the Panelist's membership.

4.6 Replacement of Panelists

If a Panelist's membership is terminated before the first meeting, a replacement member will be randomly selected from amongst the pool of applicants. If a Panelist's membership is terminated after the first meeting, a replacement member may be randomly selected at the discretion of the EED.

5. Agenda development

The Panel program will be developed by the EED that introduces Panelists to TransformTO, and teaches Panelists about the issues under discussion in a fair and balanced manner. EED will invite speakers from the City, academia, community, and industry to participate in delivering sections of the learning program.

6. Roles and Responsibilities

Both Panelists and the EED have distinct roles and responsibilities:

6.1 The Role and Responsibilities of Panelists

Panelists are not appointed or excluded due to their professional expertise. Instead, they are appointed in recognition of the value of all voices and the capacity of all residents to consider the needs of others and contribute their own experience and perspective to a shared exploration of climate solutions. The role of Panelists is to work together to offer input to the EED about the contents of the 2021-2023 Climate Action Implementation Plan.

The role of Panelists is limited to offering recommendations to the City. This advice must be broadly consistent with the City's role, mission, and legal obligations.

Panelists are responsible for:

- Treating all persons respectfully and acting in a manner that advances the mandate of the Panel;
- Considering the needs of all Torontonians in their deliberations;
- Acting collaboratively with other Panelists and working towards consensus;
- Declaring any conflicts of interest. If Panelists are uncertain about the existence of a conflict of interest, Panelists are responsible for seeking clarification from the Panel coordinator;
- Having their names and short biography made public;
- Attending all Panel meetings as set out in Section 4.4

Panelists are restricted from:

- Replicating, paraphrasing or commenting on the views and contributions of other named individual members in public or private venues outside of the Panel's deliberations. This is to encourage candour and free exploration of topics during Panel deliberations;
- Speaking on behalf of the Panel, or appearing to speak on behalf of the Panel, without explicit permission from the Panel Chair. This is to ensure that public pronouncements made on behalf of the Panel are accurate and complete. Panelists should make coordinators aware of any media requests;
- Making false statements about their role or professional expertise. It is understood that membership on the Panel does not, in any way, imply expertise;
- Trading in influence. It is understood that Panelists must resist and report any poten-

tial lobbying from impacted parties and refrain from using their influence on the Panel in order to receive personal or business benefit.

Panelists are permitted to:
- Speak publicly about their own experience serving on the Panel;
- Share their personal opinions and views, when indicated as such, about any documents made public by the City; and
- Seek to engage their communities and networks to obtain useful perspectives concerning the work of the Panel.

6.3 The Role and Responsibilities of the Environment and Energy Division

The EED is asking Torontonians with different backgrounds and experience to volunteer substantial time and effort as members of the Panel. As such, the role of the EED is to provide a substantive program for the Panel, support the integrity of the Panel's work, give careful consideration to their recommendations, and communicate the findings of the Panel widely.

The EED is responsible for:
- Overseeing a fair and broadly representative member selection process;
- Offering a learning program that provides the Panel with expertise and access to current research, in such a way that learning opportunities are balanced, adequate, and reflective of a diversity of reasonable perspectives, including a balance of public and private stakeholders and communities;
- Appointing a host to preside over meetings of the Panel and provide necessary moderation and facilitation to support respectful dialogue and productive deliberation amongst Panelists and ensure unbiased and accurate reporting;
- Producing and publishing a public report of the Panel's recommendations;
- Incorporating the recommendations made by the Panel, wherever appropriate, and at the direction of Council, into the Implementation Plan;
- Providing Panelists with an update on how and why their input impacted the final Plan;
- Providing logistical necessities for Panel activities, including venues and food, reimbursement of reasonable childcare, eldercare, and transportation costs, and provision of additional assistance to those Panelists with differing physical or learning abilities.

7. Procedures

7.1 Working Language

The working language of the Panel is English—translation services are not able to be provided.

7.2 Chair

Meetings will be chaired and moderated by a designate of EED, and notes taken by the facilitation team.

7.3 Participants

Meeting participants are limited to Panelists, City staff and their designates, and guests invited to provide learning opportunities to the Panel. The EED may approve observers on a case-by-case basis.

7.4 Meeting Conduct

Common sense and reasonableness will be the primary guides in determining how meetings are conducted. Meetings will be conducted in an organized but informal manner that avoids formal 'rules of order'.

7.5 Consensus and Divergent Viewpoints

There is no requirement that Panelists reach full consensus. The Panel is not a decision-making body. However, Panelists will seek consensus to the greatest extent possible, while ensuring that divergent conclusions are given voice and noted in the Panel's final report. Consensus means that, in the opinion of the Chair, a clear majority of members support or 'can live with' the position. Panelists have the right to question the accuracy of the finding of consensus in meetings or in the final report.

7.6 Public Reporting

A final Report of the Panel will be drafted by Panelists, with assistance from staff. The draft report will be circulated to Panelists in two rounds for feedback, and Panelists will have a minimum of one week to review each draft and make comments. A final version will be prepared by EED staff, and will be deemed approved and ready for public release if no more than 10% of meeting participants raise concerns within 5 days of the final version being circulated.

Civic Lottery Invtitation Sample

TORONTO

CANADA POST POSTES CANADA
Postage paid / Port payé
Lettermail / Poste-lettres

Only 12,500 households in Toronto have been randomly selected to receive this invitation
We need you to volunteer for Toronto's TransformTO Reference Panel on Climate Action

Dear Resident
12-555 King Street North
Yourcity, ON J5G Z8G
Important information enclosed

Response required by July 11

Return Address

CANADA POST POSTES CANADA
Postage paid if mailed in Canada / Port payé si posté au Canada
Business Reply Mail / Correspondance-réponse d'affaires
0007290152 01

Response required by: Thursday, July 11

Registering online ensures your response is received by the deadline

toronto.ca/transformto-panel

1000071167-M5A3C8-BR01

CITY OF TORONTO
REFERENCE PANEL
3A GILEAD PLACE
TORONTO ON M5A 9Z9

What's it like to serve on a Reference Panel?

"We're looking at building the city and accommodating a lot of people's different needs and wants. After the first meeting I realized that yes, I need to be here."
—*Sharon*

"I volunteered on this Panel to contribute to the society that took care of me. I know I can give something back."
—*Albert*

"I volunteered for this Panel because I wanted to get an insider's view of the planning process, and to help influence and shape the future of my city."
—*Steven*

Do you know where Toronto's greenhouse gas emissions come from?

45 percent are from homes and buildings

35 percent are from transportation

20 percent are from waste

To learn more about the TransformTO Climate Action Strategy, visit toronto.ca/transformto

Source: *Toronto's 2016 Greenhouse Gas Emissions Inventory*

Civic Lottery Invitation Sample

Candidate Response Card

❑ **YES, I would like to volunteer as a member of Toronto's TransformTO Reference Panel**

❑ *No, I do not wish to volunteer on the Panel, but I would like to receive further information*

First name: _____ Last name: _____

Gender: Man | Woman | Or: _____ Age: 16 – 19 | 20 – 29 | 30 – 44 | 45 – 64 | 65+

Primary Phone: ___ – ___ – ____ Secondary Phone: ___ – ___ – ____

Email: _____

Deadline
July 11

Please turn over

Candidate Response Card

Please answer these questions accurately so that we can ensure that the Panel represents the perspectives of all Torontonians, and broadly matches the city's demographic profile:

1) ❑ I own my home ❑ I rent my home ❑ I rent my home and my rent is subsidized

2) I identify as a: ❑ Indigenous, First Nations, Métis, or Inuit person **and/or** ❑ Visible Minority

3) Everyone needs to reduce their emissions that contribute to climate change, including myself.
❑ *Strongly agree* ❑ *Somewhat agree* ❑ *Somewhat disagree* ❑ *Strongly disagree*

4) I will make myself available to attend all three meetings of the Panel: ❑ Yes ❑ No
Meeting dates: July 27, 2019 August 17, 2019 August 18, 2019

NOTICE OF COLLECTION: The personal information requested here is collected under the legal authority of the City of Toronto Act, S.O. 2006, Chapter 11, Schedule A, s.136 (b) & (c) and the Planning Act, R.S.O. 1990, Chapter P.13.

Your personal information will be used for the purpose of forming Toronto's TransformTO Reference Panel and will not be shared with any other parties or for any other purpose than the creation of this Panel. Questions about this collection can be directed to the Project Lead, TransformTO in the Environment and Energy Division, 416-392-0921, sarah.gingrich@toronto.ca.

Deadline
July 11
Respond Today

Please turn over

TORONTO

We need your help to decide how Toronto will reduce its greenhouse gas emissions over the next four years.

May 27, 2019

Dear Torontonian,

Toronto Island flooded in 2017. Ice melt from an exceptionally warm winter, coupled with heavy spring rain, raised Lake Ontario by a metre to its highest point in a century. Homes and businesses were destroyed and the Island was closed to visitors for most of the summer. Just four years before, flooding inundated the Don Valley Parkway, transit stations, and thousands of basements, costing Torontonians more than $850 million in repairs. This spring, rising waters are threatening the Island again.

These floods, along with intensifying hurricanes, wildfires, and droughts around the world, are symptoms of climate change caused by rising greenhouse gas emissions. **As residents of Canada's largest city, Torontonians have a role to play in fighting climate change.** It's essential that we do our part.

This is why, in 2017, Toronto City Council voted unanimously to pass TransformTO, the City's plan to cut greenhouse gas emissions by 80 percent of 1990 levels by 2050. To hit this target, we need to make transformative changes to how we travel, build, use energy, and manage waste.

This letter is a special invitation to volunteer to be one of 32 residents who will advise the City on how to meet this goal. As someone who cares about the future of the city, this is your opportunity to make a difference that could last for generations.

As a member of Toronto's TransformTO Reference Panel on Climate Action, you will meet for three days in July and August, learn about the City's climate plan, and advise the City on the actions we can take over the next four years to help ensure that Toronto meets its 2050 greenhouse gas reduction target. You will hear from climate experts, urban planners, and economists, as well as representatives from major industries and sectors like energy, transportation, and health. You will also have the chance to learn how other cities are responding to the climate crisis.

Your household is one of 12,500 randomly selected to receive this invitation. **We are asking you, or another member of your household, to volunteer to participate in this special exercise in local democracy.**

If you are interested in joining the Panel, but have questions, please call us at 1-833-568-9070.

If you are randomly selected to serve, you will meet and work with 31 other Torontonians from across the city. Together, you will:

- Learn about the current climate forecasts and sources of greenhouse gas emissions in Toronto;
- Examine the changes we could make to our homes and workplaces, as well as to city infrastructure like roadways and transit systems;
- Consider how different emission reduction actions could affect residents like you;
- Identify top priorities that could help make Toronto a low-carbon city; and
- Make recommendations on the changes we as a city should make in the next four years as we work to meet our climate action goals.

You don't need to be an expert to participate. You may be supportive or skeptical of the City's TransformTO climate strategy. **What matters most is your perspective and experience as a Toronto resident.**

Please turn over

Response required by July 11

Membership on the Panel is open to any Torontonian 16 years of age or older who currently lives in the household to which this letter is addressed. From among the pool of volunteers, 32 members will be randomly selected to ensure broad representation from across the city.

You do not need to be a Canadian citizen and there is no cost to participate. We are happy to cover childcare or eldercare costs and to work with you to address any reasonable barriers that might prevent you from participating. Meals and refreshments will be provided. Accessibility supports, such as hearing and visual assistance, will be provided as required.

If you are 16 years of age or older, please call 1-833-568-9070 to volunteer — no experience is necessary.

Members of Toronto's TransformTO Reference Panel on Climate Action will meet on the following three days in July and August 2019. **Panelists must be able to attend on all three dates:**

1. **Saturday, July 27** **9:00 a.m. to 7:00 p.m.**
2. **Saturday, August 17** **9:00 a.m. to 4:00 p.m.**
3. **Sunday, August 18** **9:00 a.m. to 2:00 p.m.**

Breakfast and lunch will be provided on all days, and dinner will be provided on July 27.

To volunteer for Toronto's TransformTO Reference Panel on Climate Action, please call 1-833-568-9070, mail in the enclosed card, or register online at toronto.ca/transformto-panel by Thursday, July 11, 2019.

Climate change is requiring cities around the world to take action to reduce greenhouse gas emissions. If we do our part, we can help avert further environmental damage and create a more prosperous and sustainable city.

This is your chance to be part of the solution by defining the priorities that will shape Toronto's response to climate change.

We hope you will join us.

Sincerely,

Mark Bekkering
Acting Director
Environment and Energy Division
City of Toronto

To learn more about the TransformTO Climate Action Strategy, visit toronto.ca/transformto

A MESSAGE FROM THE MAYOR OF TORONTO, JOHN TORY:
"We are all passionate about our city and its future. Toronto's TransformTO Reference Panel on Climate Action is an important process that will allow residents to shape the City's response to climate change. Whether you are new to our city or have lived here your entire life, I encourage you to volunteer. Toronto needs your best ideas and advice."

How to register as a volunteer for Toronto's TransformTO Reference Panel on Climate Action:

There are three quick and easy ways you can register:

1. Call 1-833-568-9070 to register by phone (or ask questions about the selection process);
2. Complete the enclosed Candidate Response Card and mail it back using the enclosed envelope; or
3. Register securely online at toronto.ca/transformto-panel.

Please ensure you register in one of the above ways by Thursday, July 11, 2019. If you are selected for the Panel, you will receive a phone call on the evening of Friday, July 12, 2019.

Before registering, please check that you are available on July 27, August 17, and August 18. Please hold these dates in your calendar until July 15 when all members of the Panel will have been notified.

If you are unable to participate, please encourage members of your household 16 years of age or older to volunteer.

Frequently Asked Questions

TransformTO Reference Panel on Climate Action

What is a Residents' Reference Panel?
A Residents' Reference Panel is a group of randomly selected people tasked with examining an issue in-depth and making consensus recommendations to governments on behalf of their fellow residents. There have been over 35 Reference Panels held across Canada over the last 10 years. Reference Panels are a tool well-suited to complex issues because the process focuses on learning, deliberation, and consensus-building among people with different perspectives and backgrounds.

Why is the City of Toronto inviting me to volunteer for this Reference Panel?
The City of Toronto is forming a Reference Panel so that residents who represent the diversity of Toronto have a hand in shaping the City's TransformTO 2020-2023 Climate Action Implementation Plan. This Plan will help guide how the city meets its greenhouse gas reduction targets for the next four years. The Panel will be made up of 32 residents who will learn about ways that Toronto can take action on climate change. Panelists will then make recommendations about what actions the City should take to meet its greenhouse gas emissions reduction goals.

What is the TransformTO Climate Action Strategy?
Toronto's TransformTO Climate Action Strategy was unanimously passed by City Council in 2017. It sets out long-term, low-carbon goals and strategies to reduce local greenhouse gas emissions, improve our health, grow our economy, and improve social equity. Toronto's goal is to reduce our greenhouse gas emissions by 80% by 2050, based on 1990 levels. To hit this target, we need to make transformative changes to how we travel, build, use energy, and manage waste. Learn more at toronto.ca/transformto.

When and where will the Panel meetings take place?
The Panel meetings will take place over three days in the summer:

1. July 27, 2019: 9:00 a.m. - 7:00 p.m. (breakfast, lunch, and dinner provided)
2. August 17, 2019: 9:00 a.m. - 4:00 p.m. (breakfast and lunch provided)
3. August 18, 2019: 9:00 a.m. - 2:00 p.m. (breakfast and lunch provided)

All meetings will be held at a central location in Toronto that is accessible by public transit.

What would I do as a Panelist?
Members of the Panel will meet during two weekend sessions in July and August 2019. As a member of the Panel, you will:

- Learn first-hand from independent experts, community and industry representatives, and City of Toronto staff;
- Meet other Torontonians from across our city and contribute your perspective in small group discussions;
- Explore the different ways Toronto produces greenhouse gases and learn about changes we could make to our buildings, to the ways we get around, and to the ways we create and handle waste; and
- Make recommendations on the changes the City should make in the next four years as we work to meet our climate action goals.

Why did I receive this invitation?
Your household is one of 12,500 randomly selected homes throughout Toronto that received this invitation.

Who is eligible to apply?
Panelists must reside in the City of Toronto and be 16 years of age and over. Whether or not you think the City should take action on climate change, your participation is welcome. We will make sure the Panel is as diverse as Toronto itself, with people of different ages, genders, and backgrounds from all across the city. The Panel will include at least two Indigenous members. Employees of the City of Toronto, members of other offical City of Toronto Advisory Bodies, as well as currently elected municipal, provincial, and federal representatives are ineligible to participate. If you are unsure if your employment disqualifies you, please give us a call at 1-833-568-9070.

Why does the response card ask for my views on climate action and other information?
It is important to ensure that the Panel is balanced to match the demographic profile of Toronto. It is also important to ensure a range of perspectives are heard on how to address climate change. The information you provide when volunteering will be used only for the purposes of selecting the members of Panel, and will be destroyed following the completion of the Panel's work. We will never share this information with any third party.

I'm not an expert — can I still be involved?
Absolutely. We do not expect you to be an expert. You will learn everything you need to know to make an

Please turn over

Response required by July 11

informed contribution in the three sessions of the Panel. Staff will always be on hand to answer your questions. Your perspective and experience as a resident, as well as your willingness to consider new information and different perspectives, are what matter.

Can another member of my household volunteer for the Reference Panel?
This invitation is transferable to anyone 16 years of age or older who would like to participate as a Panel member and who lives at the address on this letter. The City of Toronto encourages anyone who wants to take part in this exercise to volunteer, regardless of age, gender, immigration status, origin, or ability.

I am unsure whether I can attend all three sessions. Can I still apply?
Unfortunately, no — you must be available for all three meetings to qualify for participation. We can provide transportation assistance to help you reach the venue, as well as reimbursements for childcare and eldercare (see "Accessibility" for more information). We are also happy to discuss bursaries for participants with demonstrated financial need on a case-by-case basis. Please consider and confirm your ability to participate before applying.

How do I become a member of the Reference Panel?
First you must respond to this invitation by the deadline of July 11, 2019, by either:
- Calling 1-833-568-9070;
- Registering securely online at toronto.ca/transformto-panel; or
- Mailing the enclosed candidate response card in the postage-paid envelope.

On July 11 a draw will be conducted to randomly select the members of the Reference Panel from among the respondents to this letter. You will receive a call on July 12 to inform you if you are selected.

Will I get paid to serve on the Reference Panel?
No — we are asking you to donate your time and volunteer as a member of the Panel. There will be no cost to participate, and we are happy to discuss bursaries for participants with demonstrated financial need. Meals will be provided throughout the day. We will cover basic travel costs, including mileage and parking expenses. Childcare or eldercare support will also be provided on an as-needed basis. Assistance will be offered to people with hearing, visual, physical, or other disabilities. The meeting space is fully accessible. If there are other barriers that you feel may prevent you from volunteering for the Panel, please call us at 1-833-568-9070 and we will try to work them out.

What languages will be used during the Reference Panel?
The Reference Panel's presentations and activities will be conducted in English. If language is a barrier to your participation, please call us.

If I do not get chosen for the Reference Panel, can I still be involved?
Yes. You can contribute to the process by:
- Signing up at toronto.ca/transformto-panel to follow the Panel's work, even if you can't volunteer.
- Staying connected about upcoming events and developments by subscribing to our newsletter at toronto.ca/transformto.

Accessibility

We are committed to working with you to help address any barriers to your participation. Here are some of the supports we make available to Panelists:
- Mileage, parking, and transit reimbursements, as well as assistance arranging special transportation if needed;
- Reimbursements for childcare and eldercare;
- Meals and coffee during the meeting, and accommodation for any dietary restrictions;
- Accessible meeting spaces;
- Accommodation for visual, hearing, or physical disabilities;
- Central meeting locations close to transit and parking; and
- Bursaries for demonstrated financial need.

How to register as a volunteer for Toronto's TransformTO Reference Panel on Climate Action:

There are three quick and easy ways you can register:
1. Call 1-833-568-9070 to register by phone (or ask questions about the selection process);
2. Complete the enclosed Candidate Response Card and mail it back using the enclosed envelope; or
3. Register securely online at toronto.ca/transformto-panel.

Please ensure you register in one of the above ways by Thursday, July 11, 2019. If you are selected for the Panel, you will receive a phone call on the evening of Friday, July 12, 2019.

Before registering, please check that you are available on July 27, August 17, and August 18. Please hold these dates in your calendar until July 15 when all members of the Panel will have been notified.

If you are unable to participate, please encourage members of your household 16 years of age or older to volunteer.

The report of Toronto's TransformTO Reference Panel on Climate Action