
Environmental Action Committee

Date

2019/07/09

Time

9:30 AM

Location

Civic Centre, Committee Room A - Second Floor,
300 Civic Centre Drive, Mississauga, Ontario, L5B 3C1

Members

Matt Mahoney	Councillor - Ward 8 (Chair)
George Carlson	Councillor - Ward 11 (Vice-Chair)
Stephen Dasko	Councillor - Ward 1
Brad Bass	Citizen Member
Chelsea Dalton	Citizen Member
Lea Ann Mallett	Citizen Member
Pujita Verma	Citizen Member
Leena Baber	Peel Environmental Youth Alliance
Simran Persaud	University of Toronto Mississauga
Britt McKee	Ecosource
Melanie Kramer	Credit Valley Conservation
Dianne Zimmerman	Partners in Project Green
Vacant	Peel Aboriginal Network

Non-Voting Members

Alice Casselman	Association of Canadian Educational Resources
Teresa Ierullo	Greening Sacred Spaces
Brad Butt	Mississauga Board of Trade
Shelia Storey	Sawmill Sid Inc.

Contact

Dayna Obaseki, Legislative Coordinator, Legislative Services
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Find it Online

<http://www.mississauga.ca/portal/cityhall/environmentalactioncommittee>

AGENDA INDEX

1. **CALL TO ORDER**

2. **APPROVAL OF AGENDA**

3. **DECLARATION OF CONFLICT OF INTEREST**

4. **MINUTES OF PREVIOUS MEETING**

4.1. Environmental Action Committee Minutes – June 11, 2019

5. **DEPUTATIONS**

5.1. Sarah Piett, Acting Supervisor, Woodlands & Natural Areas to present on Pollinator Initiatives.

5.2. Leya Barry, Climate Change Coordinator and Teresa Chan, Climate Change Specialist to present on The Climate Change Action Plan.

6. **PUBLIC QUESTION PERIOD - 15 Minute Limit (5 Minutes per Speaker)**

Pursuant to Section 42 of the Council Procedure By-law 0139-2013, as amended:

Environmental Action Committee may grant permission to a member of the public to ask a question of Environmental Action Committee, with the following provisions:

1. The question must pertain to a specific item on the current agenda and the speaker will state which item the question is related to.
2. A person asking a question shall limit any background explanation to two (2) statements, followed by the question.
3. The total speaking time shall be five (5) minutes maximum, per speaker.

7. **MATTERS TO BE CONSIDERED**

7.1. Environmental Action Committee Work Plan

8. **INFORMATION ITEMS**

8.1. Committees of Council Procedure

9. **OTHER BUSINESS**

10. **ENQUIRIES**

11. **DATE OF NEXT MEETING**

To be determined.

12. **ADJOURNMENT**

City of Mississauga

Minutes



Environmental Action Committee

Date

2019/06/11

Time

9:30 AM

Location

Civic Centre, Committee Room A - Second Floor,
300 Civic Centre Drive, Mississauga, Ontario, L5B 3C1

Members Present

Matt Mahoney	Councillor - Ward 8 (Chair)
Stephen Dasko	Councillor - Ward 1 (Vice-Chair)
George Carlson	Councillor - Ward 11
Chelsea Dalton	Citizen Member
Lea Ann Mallett	Citizen Member
Leena Baber	Peel Environmental Youth Alliance
Britt McKee	Ecosource
Melanie Kramer	Credit Valley Conservation Authority
Dianne Zimmerman	Partners in Project Green

Non-Voting Members

Alice Casselman	Association of Canadian Educational Resources
Teresa Ierullo	Greening Sacred Spaces
Brad Butt	Mississauga Board of Trade

Members Absent

Simran Persaud	University of Toronto Mississauga
Brad Bass	Citizen Member
Pujita Verma	Citizen Member
Shelia Storey	Sawmill Sid Inc.
Vacant	Peel Aboriginal Network

Staff Present

Robert Trewartha, Chief of Staff, Mayors Office
 Andrea J. McLeod, Manager, Environment
 Lisa Urbani, Environment Research Assistant, Environment
 Sumeet Jhingan, Project Manager, Energy Management
 Leya Barry, Climate Change Coordinator, Climate Change
 Daniela Paraschiv, Manager, Energy Management
 Dayna Obaseki, Legislative Coordinator, Legislative Services

Find it online

<http://www.mississauga.ca/portal/cityhall/environmentalactioncommittee>

1. **CALL TO ORDER** – 9:38 AM2. **APPROVAL OF AGENDA**

Approved (L. Mallet)

3. **DECLARATION OF CONFLICT OF INTEREST** – Nil.4. **MINUTES OF PREVIOUS MEETING**4.1 **Environmental Action Committee Minutes** – May 14, 2019

Approved (C. Dalton)

5. **DEPUTATIONS**

Note: The meeting order was amended due to scheduling. The minutes below reflect the order in which items were considered.

5.1. **Climate Emergency**

This item was referred to the Environmental Action Committee for further consideration at the May 29, 2019 General Committee meeting (GC-0306-2019).

The Eco Team Students from Camilla Road Senior Public School provided an overview on the crisis surrounding climate change and requested that the City of Mississauga declare a Climate Emergency.

Members of the Committee spoke to the matter and raised the following questions:

- Inquired about what declaring a climate emergency entails;
- Inquired about Council's position on the matter; and
- Inquired about what actions the students have taken to help this movement and help improve the environment;
 - Suggested planting more trees and taking an assessment of the condition of the trees in the area.

The Student of Camilla Road, Ms. McLeod and Councillor Mahoney responded to questions from the Members of the Committee;

- Declaring a Climate Emergency creates a bigger public awareness, puts pressure on larger organizations to be more environmental conscious and initiate a change in regulations. Declarations are usually backed up with action plans to effect change.
- Council is supportive of this initiative, however wanted to ensure the correct process was taken by having the matter brought forward to EAC to gain feedback.
- The students are involved in a number of environmental aspects, such as bird homes, a green roof and a bee garden at Camilla Rd Sr. P.S. They also noted that they want to bring their ideas to other schools to create further change and action.

RECOMMENDATION

That the Environmental Action Committee supports Camilla Road Sr. Public School Eco Team's position that the City of Mississauga will declare a Climate Emergency and create an action plan to help achieve net zero emissions and increased renewable energy by 2050.

Approved (L. Mallet)

Recommendation EAC-0016-2019

RECOMMENDATION

1. That the deputation from the Camilla Road Senior Public School Eco Team Students in regards to declaring a Climate Emergency be received.
2. That the hand-out from the Camilla Road Senior Public School Eco Team regarding the 12 Climate Change Improvement Ideas be referred back to staff for further review.

Received (S. Dasko)

Recommendation EAC-0017-2019

5.4. The Climate Change Project

Leya Barry, Climate Change Coordinator provided an overview on The Climate Change Project: Findings from Siemens' City Performance Tool for Mississauga. Ms. Barry noted that the City Performance Tool (CyPT) uses specific data to calculate the impact of GHG (greenhouse gas) emissions, air quality and economic trends. This data creates a footprint to help identify key issues to create action based responses. Ms. Barry provided a comparison between today's and 2050 predications outlining the City's growth population, the buildings and transportation footprints, energy consumptions and GHG emissions. Ms. Barry noted a number of high performing tools, such as electric heat pumps and electric cars to help further reduce GHG emissions, improve air quality, create more jobs and ensure cost efficiency.

Members of the Committee spoke to the matter and raised the following questions:

- Inquired about what initiatives are taking place to reduce energy consumption, such as painting flat roofs white, hurricane straps, attic installation, etc.;
- Expressed the lack of climate data being collected and the concern with the data source being American based;
- Inquired about the location of the heating mix data and whether the data is residential or industrial based; and
- Inquired about the variation between freight and car emissions.

Ms. Barry responded to questions from the Members of the Committee;

- The City uses passive cooling and shading to reduce energy consumption.

- Future building codes will be including technical aspects to reduce energy consumption and emissions.
- More climate data monitoring needs to be incorporated and be based on Canadian weather trends.
- The heating mix includes all types of buildings in Mississauga.
- Building emissions are higher than transport emissions, while car emissions surpass freight emissions.

RECOMMENDATION

That the deputation and associated presentation by Leya Barry, Climate Change Coordinator to present on The Climate Change Project: Findings from Siemens' City Performance Tool for Mississauga be received.

Received (D. Zimmerman)
Recommendation EAC-0018-2019

5.2. 5 Year Energy Conservation Plan

Sumeet Jhingan, Project Manager, Energy Management provided an overview on the 5 Year Energy Conservation Plan (2019 -2023). The 5 Year Energy Management Plan encompasses the concepts from the Climate Change Project and the City's Strategic Plan that include 80% GHG reduction by 2050, utility consumption, budget sustainability and net-zero carbon. Mr. Jhingan provided an overview on the previous 5 Year Energy Conservation Plan by noting previous targets and achieved savings. Mr. Jhingan noted that the City is using a Continual Improvement Framework that consists of Plan, Do, Check and Act that involves set targets, funding requests, project execution, real-time tracking and utilizing data to make improvements. The main focus of the projects under the "improve green" category for the 2019-2023 Energy Management Plan is natural gas and electricity reductions.

Members of the Committee spoke to the matter and raised the following questions:

- Whether the reduction data in the previous 5 Year Conservation Plan is an overall drop in absolute energy;
- How the City is finding affordable technology and if there has been a plateau in energy saving ideas; and
- Inquired about increasing onsite renewables.

Mr. Jhingan and Daniela Paraschiv, Manager, Energy Management responded to questions from the Members of the Committee;

- The data presented is absolute energy.
- The City is always looking for new technologies and projects as well as continuing to measure data in order to find better solutions. A number of resources have been exhausted and therefore the focus has become building onto existing aspects. Unfortunately retrofits can be challenging as they are huge undertaking and have a large associated cost. The City conducts pilot projects to measure the effects and reduce the potential risk.

- The Corporate Green Building Standards will include a tiered level of expectations with aggressive gradual onsite renewable renovations and will be retrofitting older buildings to meet the standards. As well as solar panels will be installed at one of the City's transit facility.

RECOMMENDATION

That the deputation and associated presentation by Sumeet Jhingan, Project Manager, Energy Management to present on the 5 Year Energy Conservation Plan (2019 -2023) be received.

Received (S. Dasko)

Recommendation EAC-0019-2019

5.5. Study Tour to Sweden, 2019

Councillor Stephen Dasko, Ward 1 provided an overview on the Study Tour to Sweden, 2019 by presenting a number of photographs on environmental initiatives in Sweden. Councillor Dasko provided a brief explanation of each displayed picture; which consisted of an autonomous vehicle, an electric scooter, the city's development masterplan, the vacuum waste management system, hybrid modes of transportation, green roofs and their storm water treatment.

Dianne Zimmerman, Partners in Project Green Group Rep Citizen spoke to the matter and raised questions regarding sustainable measures. Councillor Dasko responded by noting Lakeview's Sustainability Strategy involving renewable district energy and the remediation efforts in the West Village Area.

RECOMMENDATION

That the deputation and associated presentation Councillor Stephen Dasko, Ward 1 to present on the Study Tour to Sweden, 2019 be received.

Received (M. Kramer)

Recommendation EAC-0020-2019

5.3. Pollinator Initiatives

RECOMMENDATION

That the deputation by Sarah Piett, Acting Supervisor, Woodlands & Natural Areas to present on Pollinator Initiatives be deferred to a future EAC meeting.

Received (C. Dalton)

Recommendation EAC-0021-2019

6. PUBLIC QUESTION PERIOD - 15 Minute Limit (5 Minutes per Speaker)

No members of the public requested to speak.

7. MATTERS CONSIDERED

7.1. Environmental Action Committee Terms of Reference

Dayna Obaseki, Legislative Coordinator noted that the only change to the EAC Terms of Reference was to reflect the non-voting membership for the additional group representatives.

RECOMMENDATION

That the revised 2019-2022 Environmental Action Committee Terms of Reference be approved.

Approved (Councillor Dasko)
Recommendation EAC-0022-2019

7.2 Environmental Action Committee Work Plan

Andrea J. McLeod, Manager, Environment provided an overview on the 2019-2022 Draft EAC Work Plan. Ms. McLeod highlighted the specific topics, achievable actions and timeline. The work plan focuses on Climate Change, Volunteering, Supporting City Action on Environment and Reporting on Committee Progress.

Members of the Committee spoke to the matter and raised the following questions:

- Biodiversity;
- Committee of Council's Procedure;
 - Suggested a short feedback time period post meeting
- The terminology, such as recommend vs. approve; and
- Agenda items;

Councillor Mahoney and Ms. McLeod responded to questions from the Members of the Committee;

- EAC's Work Plan is currently focused lower level aspects in order to achieve action; biodiversity is an overarching topic that would need to be narrowed to a focused based area.
- The process allows for staff and the public to present their subject matters and receive feedback from the committee to prior to GC and Council.
- Noted certain items are updates that need to be received, vs. items that request approval and endorsement – which involve members voting.
- The agenda is set by staff and public deputation requests. The Environmental staff selects the agendas items based on the information being presented, while clerk's coordinate and creates the agenda package.

RECOMMENDATION

That the proposed 2019-2022 Environmental Action Committee Work Plan be approved.

Received/Approved (D. Zimmerman)
Recommendation EAC-0023-2019

7.3. EAC Actions Summary

Dayna Obaseki, Legislative Coordinator noted that based on the proposed action plan that the EAC Actions Summary can be reflected and incorporated into the EAC Work Plan. Ms. Obaseki suggested reporting the list of environmental actions from the committee and the members annually. The EAC Actions Summary will no longer be a standing item on every agenda.

RECOMMENDATION

1. That the EAC Actions Summary will no longer be a standing item on every Environmental Action Committee Agenda.
2. That the EAC Actions Summary will be reflected into the EAC Work Plan.
3. That the EAC Actions Summary will be an annual report list.

Received/Approved (L. Baber)
Recommendation EAC-0024-2019

8. INFORMATION ITEMS – Nil.9. OTHER BUSINESS

- 9.1 Dayna Obaseki, Legislative Coordinator provided a reminder to the Members of the Committee to RSVP to the Committee Member Governance Workshop on June 25, 2019 at 6:30pm in Council Chambers.

10. ENQUIRES

Councillor Mahoney, Chair noted that this is a newly added section to the agenda to provide an opportunity for Members to make enquiries.

11. DATE OF NEXT MEETING(S) - Tuesday, July 9, 2019 - 9:30am, Committee Room A12. ADJOURNMENT – 11:32 AM (L. Mallet)

Mississauga Pollinator Initiatives

June 11, 2019

Sarah Piett

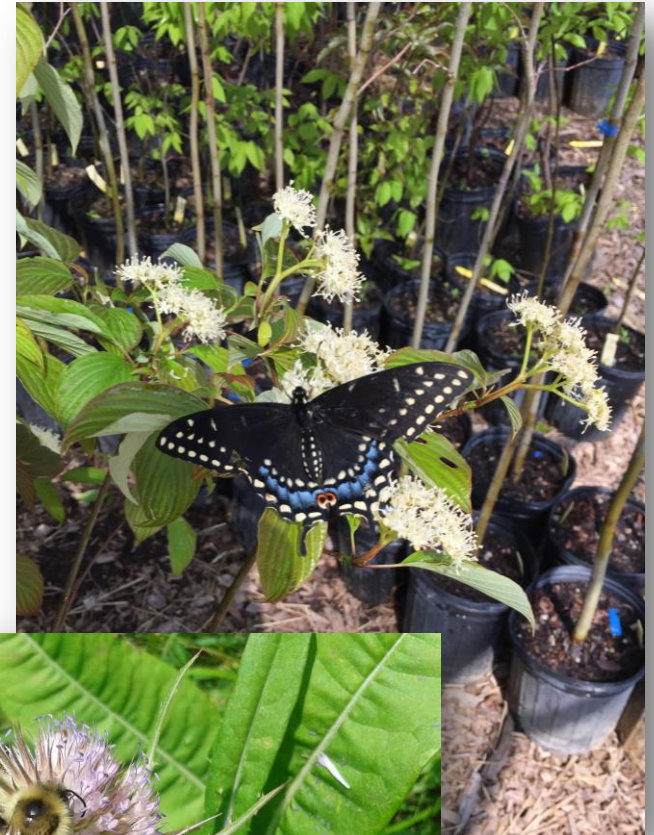
Parks, Forestry & Environment



What are pollinators?

Pollinators

- Bees, butterflies, wasps, moths, flies, beetles and birds
- Transfer pollen between flowers of same species



Native Wild Bees

- Greater than 350 species in the GTA
- Several species are in decline
- Important pollinators in the ecosystem



Sweat Bee



Carpenter Bee



Leafcutter Bee

Honeybees

- Non-native species from Europe/Asia
- Brought to Canada for agriculture



Current Initiatives

Honeybee Hive at City Hall



Pollinator Hotels at Garden Parks



Pollinator Gardens



One Million Trees Mississauga



Bee City Canada

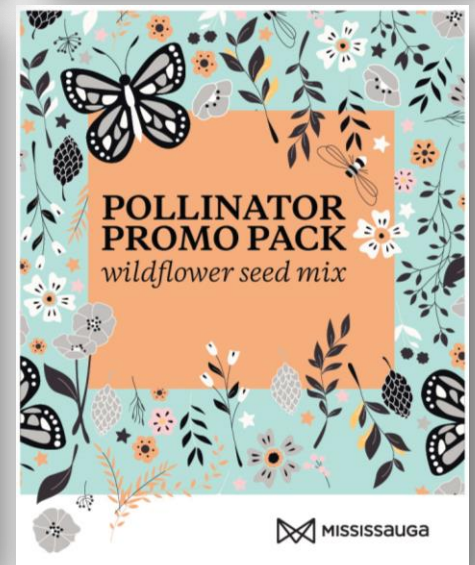
- Commitment to improving pollinator health and habitat
- 23 Bee Cities across Canada



What can we do?

Native Plants

- Planting native wildflowers and flowering trees/shrubs is the best way to help pollinators



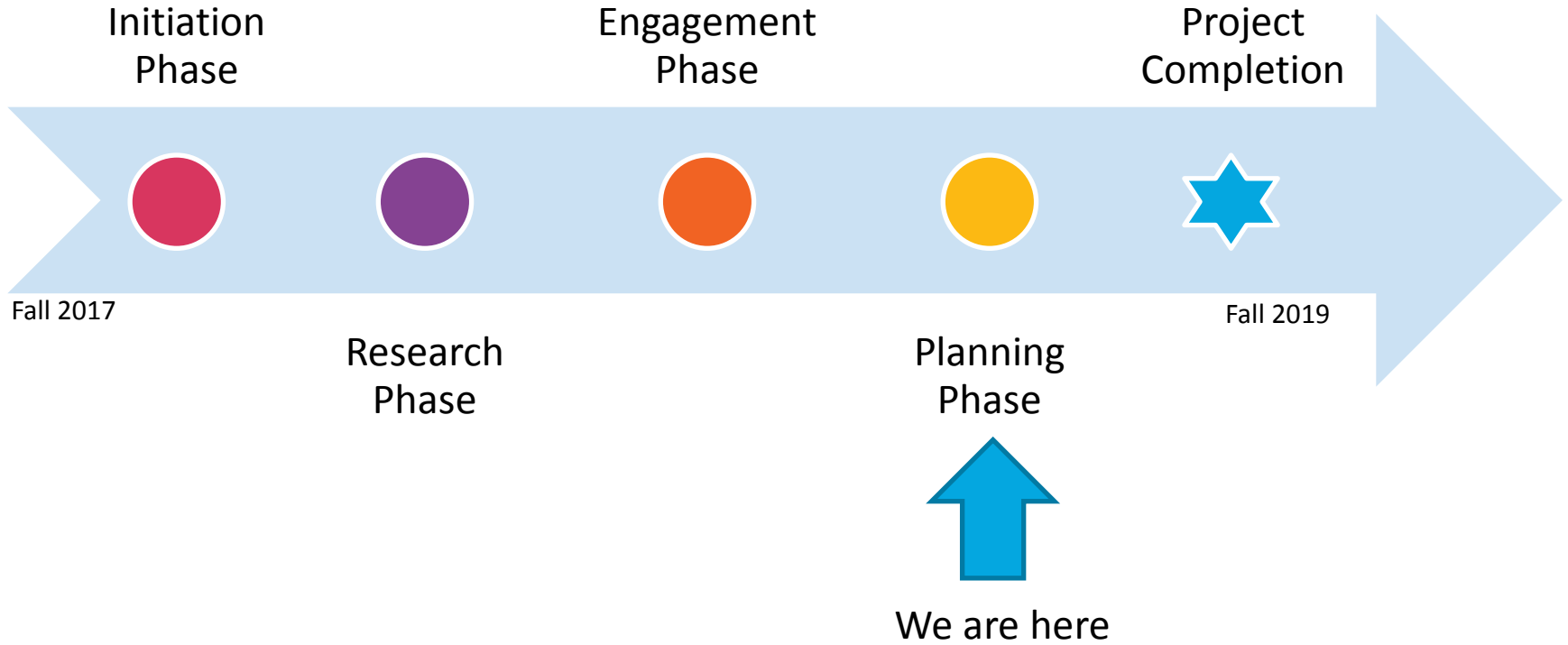
Bee Hotels

- Some native wild bees will nest in bee hotels
- Bee hotels need to be maintained
- Proper bee hotel selection is important





the
**CLIMATE
CHANGE**
project





GOALS

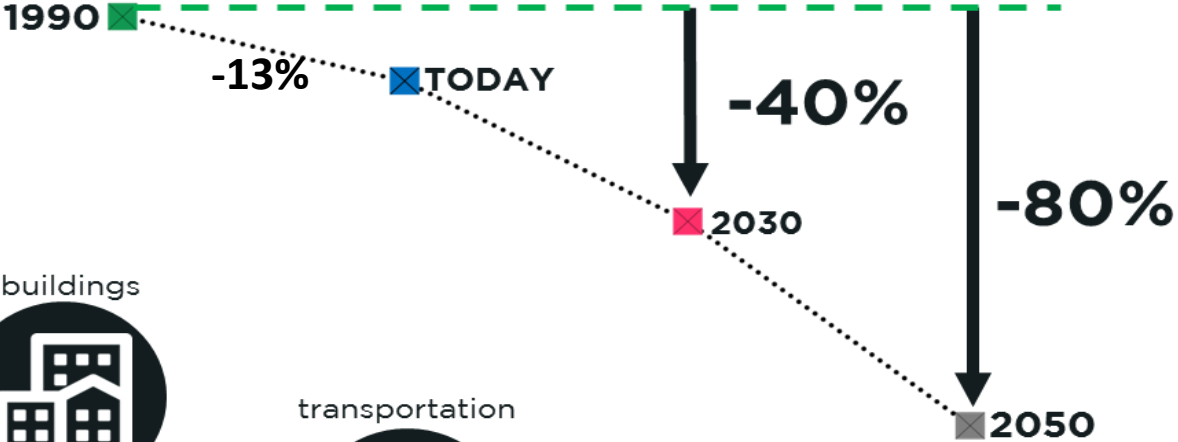
Goal 1: MITIGATION

Reduce GHG emissions by 80% by 2050 and 40% by 2030 (below 1990 levels) and position the city competitively in the emerging low carbon economy

Goal 2: ADAPTATION

Increase city resilience and the capacity to deal with and respond to future climate events **by taking action on our highest risks**

TOTAL CARBON-RELATED EMISSIONS IN MISSISSAUGA



buildings



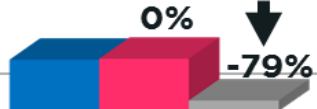
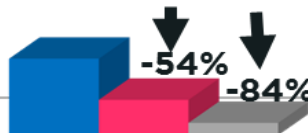
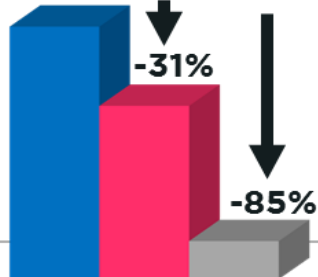
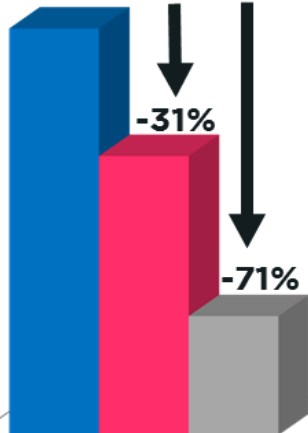
transportation



industry

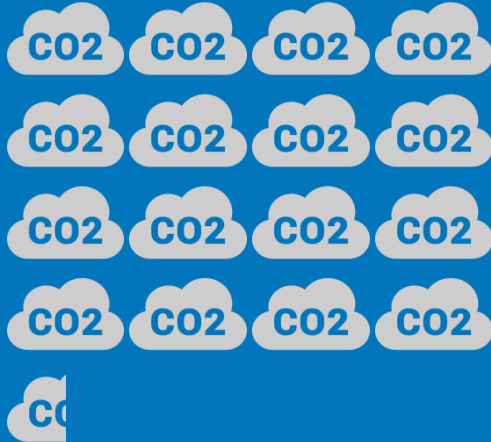


air travel



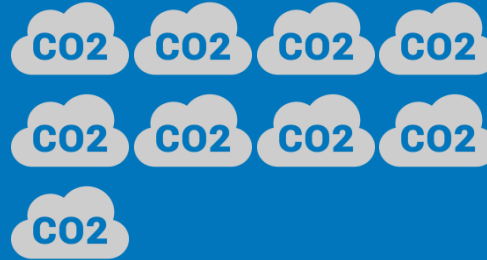
■ TODAY ■ 2030 ■ 2050

EMISSIONS PER CAPITA



In 1990

16.4 tGHG/Per capita



Today

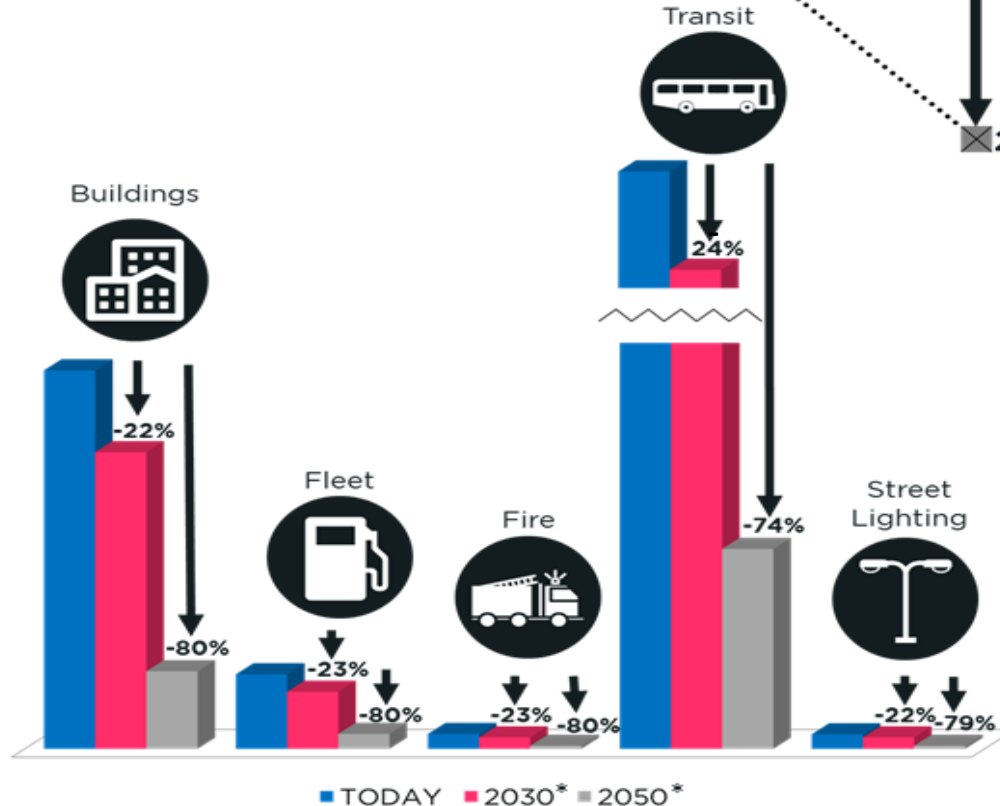
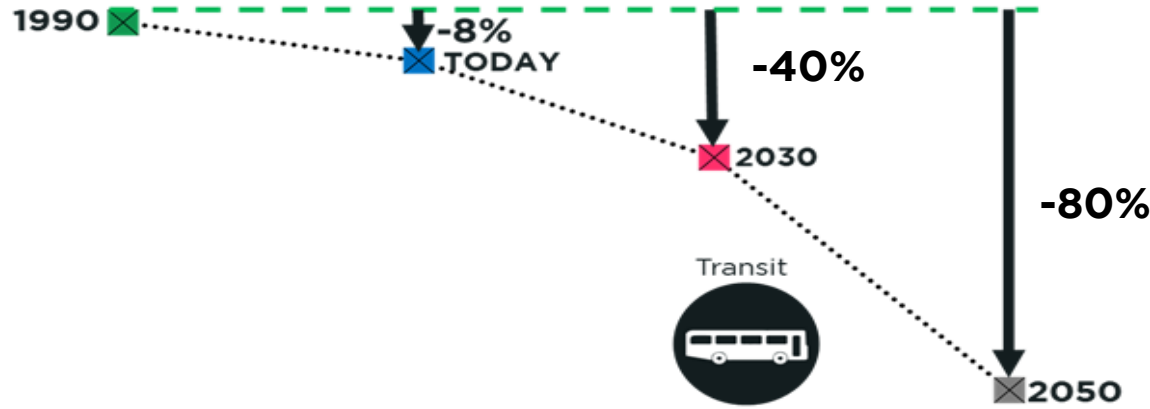
9 tGHG/ Per capita



By 2050

1.6 tGHG/Per capita

TOTAL CORPORATE CARBON-RELATED EMISSIONS IN MISSISSAUGA



*Projected Estimated Emissions

The Climate Change Action Plan will help the City achieve ~32% reduction in corporate GHG's by 2030

GETTING TO THE 2030 TARGETS

5 ACTION PATHWAYS



GUIDING QUESTIONS

- Are there specific inputs and/or resources (e.g. subject matter experts, funding) that are needed to implement the action(s)?
- Are there any partnership opportunities (e.g. specific community groups)?
- Are the action pathways comprehensive?
- Are there any specific barriers or opportunities for the actions?
- What's missing?

BUILDINGS AND CLEAN ENERGY

Action #1: Advance Community Energy Planning and Low Carbon Energy Systems

Community Energy Planning and district energy systems will be explored for new developments and existing neighbourhoods (where appropriate). Greenhouse gas emissions and residential and non-residential energy maps will be developed and tracked over time.

Action #2: Update Mississauga's Official Plan to Strengthen Existing Climate Change Imperative

The City's commitment to a low-carbon future will be strengthened in the City's Official Plan and will create the supporting land-use planning framework to advance climate action in Mississauga.

Action #3: Improve the Energy Efficiency and Climate Resilience of New Buildings

The City will work to advance the sustainability and resilience of new private developments to encourage the use of renewable and district energy, reduce stormwater runoff, protect and enhance ecological functions, and reduce urban heat island.



BUILDINGS AND CLEAN ENERGY - CONTINUED

Action #4: Increase the Use and Supply of Renewable Energy at City-Owned Facilities

All new municipal buildings will be designed to accommodate future connections to solar energy sources and have on-site renewable energy devices to offset 5% of building annual energy consumption starting in 2025. Solutions that move towards low carbon energy sources such as solar, wind, or district energy will be investigated and installed where possible.

Action #5: Advance Energy Efficiency and Climate Resilience of Municipally-Owned Buildings

The City will lead by example by implementing low carbon and resilient technologies and processes in municipally-owned buildings to reduce energy consumption in corporate buildings by 25% below 2008 levels by 2030. Emerging technologies that work towards affordable and highly efficient solutions will also be encouraged, particularly those which reduce natural gas consumption

Action #6: Support Building Retrofit Programs in the Community

The City will pursue opportunities to educate land owners and promote the retrofit of existing buildings (including residential and non-residential) with low carbon and resilient technologies to support improved energy efficiency (e.g., through heat pumps, wall insulation) while extending the life of existing structures.



RESILIENT AND GREEN INFRASTRUCTURE

Action #7: Create a Municipal Green Infrastructure Management Program

Create a City-wide green infrastructure program which will include the development of an inventory, management plan, and performance tracking mechanisms, and will establish and drive service levels in a coordinated and holistic way.

Action #8: Integrate Climate Change Considerations into the Municipal Park Standards

The ongoing development of parks and facilities will include measures to address climate change risk and resiliency. These may include: increasing permeability of surfaces; increasing vegetation around stormwater management areas and adjacent areas that have low permeability; hardy species lists; and targets for tree canopy/soft landscape areas and naturalization.

Action #9: Continue to identify and mitigate climate-related risks and enhance community-level resilience and preparedness

Climate-related risks to the community, including extreme heat, wind, ice storms, and food security, will be identified and mitigated. Climate change considerations will be included in asset management planning and management.



RESILIENT AND GREEN INFRASTRUCTURE

Action #10: Increase overall tree canopy cover and improve air quality to reduce greenhouse gas emissions and improve resilience

Climate change considerations will be integrated into existing habitat and tree monitoring and maintenance to ensure thriving natural areas and a robust tree canopy to help the City maintain the urban forest, improve air quality, and proactively prepare for future impacts from pests and disease, changing watering requirements for trees, and other climate change impacts (e.g., extreme heat, wind).

Action #11: Continue to enhance flood resilience and stormwater management in the context of changing climate conditions

Immediate and long-term actions will be developed to enhance flood resilience and the City's approach to stormwater management to address climate change issues and flood risks.



ACCELERATING DISCOVERY & INNOVATION

Action #12: Support Growth and Development of the Green Economy and the Local Cleantech Sector

Networks to support the shift towards a green economy will be created. Within the cleantech sector, there is a need to facilitate a stronger sense of interconnectivity among incubators, accelerators, cohabitation spaces, post-secondary institutions, the City's economic development staff, and local businesses at different stages of development.

Action #13: Incorporate Climate Change into Municipal Decision-Making

Climate change will be incorporated into municipal decision making, including procurement and business planning, wherever possible.

Action #14: Monitor Innovation in Low Carbon and Resilient Technologies

Stay up-to-date with available technologies and work with industry and businesses to identify long-term equipment needs and low carbon technologies for the City and its service areas.



LOW EMISSIONS MOBILITY

Action #15: Reduce Emissions from the City's Corporate and Transit Fleet

The City will lead by example by investing in low carbon and fuel efficient technologies and infrastructure, including electric vehicle charging infrastructure, for the City's corporate and transit fleets and equipment.

Action #16: Empower Alternative Modes of Transportation in the Community

Efforts that enable and encourage travelers to choose transit, low carbon, and people-powered transportation alternatives will be advanced.



ENGAGEMENT AND PARTNERSHIPS

Action #17: Raise Awareness about Climate Change

Information and education will be provided to residents, staff, elected officials, and community groups through outreach activities and campaigns.

Action #18: Inspire Climate Action at the City and in the Community

Programs and actions that can be taken to reduce greenhouse gas emissions and improve resilience will be developed and highlighted.

Action #19: Support Behaviour Changes at the City and in the Community

Monitoring and evaluation programs and metrics to identify how Mississauga can enhance climate action over time will be developed along with a platform for sharing successes and motivating continued action and achievement.



GUIDING QUESTIONS

- Are there specific inputs and/or resources (e.g. subject matter experts, funding) that are needed to implement the action(s)?
- Are there any partnership opportunities (e.g. specific community groups)?
- Are the action pathways comprehensive?
- Are there any specific barriers or opportunities for the actions?
- What's missing?

COMMUNITY STAKEHOLDER PANEL - WORKSHOP

- Where: Living Arts Center
- When: Thursday, July 24th
 - AM or PM Sessions
 - Register here: <https://docs.google.com/forms/d/e/1FAIpQLSdIS01Cj1-A7tIZLD-5VNivA81rjYc7BxsMkJ85uikA1tKu8Q/viewform>
- What: Reviewing the draft Climate Change Action Plan

NEXT STEPS

- Public Consultation
 - July 25 – Community Climate Change Stakeholder Panel Meeting
 - Social Media Campaign
 - Engagement HQ (yoursay.mississauga.ca)
- August-October - 1:1's with Mayor and Councillors
- November - GC



THANK YOU!

Leya Barry

Climate Change Specialist

Leya.Barry@mississauga.ca

2019-2022 Environmental Action Committee Work Plan

WORK PLAN ITEM	ACTION FOR EAC MEMBERS	TIMING	PROGRESS <i>Action Taken or Date Completed</i>
Climate Change	Support approval and implementation of the Climate Change Action Plan	Ongoing	
Volunteering	Participate in volunteering opportunities as members of the Community Green Leaders volunteer program	Ongoing	
Support City Action on Environment	Be prepared to comment on City-led items brought forward to EAC meetings (E.g., strategic plans, by-laws)	At EAC meetings	
Report on Committee Progress	Report to General Committee annually on progress on EAC's work plan and activities (Includes the EAC Actions Summary as an appendix)	Once per year	
Additional/Other			