



Orientation Manual

**Environment
Advisory
Committee**



BRAMPTON
Flower City

Date: June 19, 2023

To: Environment Advisory Committee Members

From: Charlotte Gravlev, Deputy City Clerk

Re: **General Information – Committee Appointment**

Congratulations on your appointment as a member of the Environment Advisory Committee for the term ending November 14, 2026, or until a successor is appointed.

The purpose of this memo is to provide you with additional details regarding your appointment.

Committee Meetings

Attendance

- Attendance at meetings is important so that Environment Advisory Committee business is completed.
- If you are unable to attend, need to leave early or expect to arrive late, you are requested to notify the Legislative Coordinator, as soon as you know your schedule. This assists staff to determine if quorum will be achieved and maintained and provides the opportunity to contact the other committee members, if necessary, to confirm their attendance.
- If it is realized prior to the meeting that the committee will not have quorum, the Chair will be advised and the meeting may be cancelled.
- If quorum is not achieved within ½ hour after the scheduled start time, the meeting will be deemed as “failed for quorum” and the names of members who are in attendance will be recorded and the meeting will not proceed.
- As outlined in the Procedure By-law, if citizen members are absent for **three consecutive meetings, without cause, or approval from Council**, the member will be deemed to have resigned and the vacancy will be filled in accordance with the Citizen Appointment Procedures.

Meeting Procedures

- The appointment of the Co-Chairs is scheduled for the first meeting of the “new” committee.
- The “Procedure By-law at a Glance” handout assists the members regarding Council-approved procedures for all meetings.
- The Legislative Coordinator is present at the meetings to record the proceedings and to assist the Chair to ensure that procedures are followed properly.

All Environment Advisory Committee member appointments are for the term ending November 14, 2026 or until successors are appointed. If necessary, this Committee may continue with normal business after the next municipal election in 2026, until the new Council at that time appoints a new committee.

[Meeting agendas and minutes](#) are available on the City’s website for your reference, at your convenience. Some meeting materials may be available in alternate formats. If you require such materials, please advise staff.

This Orientation e-Manual includes reference material as you begin your duties. For information regarding Brampton’s environmental plans, programs and initiatives please visit our [Grow Green website](#). Also, please be assured that City staff is available to assist you.

I wish you an enjoyable and fulfilling experience on the Environment Advisory Committee. If you have any questions, please contact myself or Sonya Pacheco, Legislative Coordinator, at sonya.pacheco@brampton.ca or (905) 874-2178.

Charlotte Gravlev
Deputy City Clerk
Tel: (905) 874-2115
charlotte.gravlev@brampton.ca

cc: Peter Fay, City Clerk
Sonya Pacheco, Legislative Coordinator

Environment Advisory Committee

2023 Schedule of Meetings

Meetings are scheduled to commence at **6:00 p.m.** and will be held in-person in the Council Chambers - 4th Floor, City Hall, with an option to participate virtually (*unless otherwise noted on the agenda*)

Meeting Dates
June 27, 2023 (5:30 p.m.)
August 1, 2023
October 3, 2023
December 5, 2023

If you are unable to attend a meeting, please contact Sonya Pacheco, Legislative Coordinator, at sonya.pacheco@brampton.ca at your earliest convenience.

Environment Advisory Committee Membership List (2022-2026)

Citizen Members:

Sukran Balaban
Brajgeet Bhathal
Pushproop Brar
Charles Coimbra
Subhash Chander Duggal
Neil Fairhead
Hardik Mankad
Shailly Prajapati
Sherry-Ann Ram
Sandra Roppa
Raman Vasudev

Council Liaison Member:

Regional Councillor Gurpartap Singh Toor – Wards 9 and 10

Staff:

<i>Planning, Building & Growth Management – Environment & Development Engineering</i>	
Pam Cooper Acting Manager, Environmental Planning	pam.cooper@brampton.ca 905-874-2265
Kristina Dokoska Policy Planner - Environment	kristina.dokoska@brampton.ca
Karley Cianchino Environmental Project Specialist	karley.cianchino@brampton.ca
<i>Legislative Services – City Clerk's Office</i>	
Sonya Pacheco Legislative Coordinator	sonya.pacheco@brampton.ca 905-874-2178

Environment Advisory Committee

- Composition:** At least twelve and up to fifteen (12-15) members, one (1) of which will be a Member of City Council and twelve to fourteen (12-14) citizens that are representatives of Brampton's community
- Term of Office:** Concurrent with the term of Council, ending November 14, 2026, or until successors are appointed
- Established by:** Council Resolution C374-2022
- Meetings:** Every other month, or at the call of the Chair
- Reports to:** Committee of Council
- Supported by:** City Clerk's Office (meeting management) and Environment and Engineering Services Division (subject matter expertise)

Purpose of Committee

The Committee will assist, educate, and engage the community to advance the goals and actions of the City's *Grow Green* Environmental Master Plan (EMP). The Committee will advise City Council on environmental planning policy and sustainability matters to promote the protection, enhancement, and management of the City's natural and built environment.

Committee Responsibilities

The Committee will act as the City's liaison/forum on environmental issues. The Committee will collaborate with other internal and external advisory committees and environmental partners and agencies to achieve the City's environmental mandate and goals.

The Committee will be primarily responsible for the following, in consultation with City staff:

- i. Identifying opportunities for community engagement;
- ii. Reviewing and distributing communication materials to educate residents, businesses, institutions, and community groups on environment sustainability;
- iii. Coordinating and hosting community events; and
- iv. Preparing annual reports to Council.

The secondary responsibility of the Committee is assisting and advising Council on:

- i. Matters related to environmental policy and programs;
- ii. Management practices of the City's facilities, infrastructure, and lands; and

- iii. Research conducted into environmental and sustainability practices to improve the information available to the City and City Council.

Committee Scope of Work

The primary scope of work for the Committee is to undertake the following, in consultation with City staff:

- i. Identify, coordinate, and implement community outreach and engagement activities that raise environmental awareness;
- ii. Coordinate and host environmental sustainability events; and
- iii. Build and maintain meaningful and effective relationships with community organizations;
- iv. Attend and represent the City of Brampton at meetings and events to promote environmental awareness and educate the community.

The secondary scope of work for the Committee is to undertake the following, in consultation with City staff:

- i. Provide input into policy and programs at the request of Council and City staff;
- ii. Conduct research to help inform environmental programs, outreach campaigns, by-laws, etc. that support the Grow Green Environmental Master Plan;
- iii. Participate in strategic planning policy studies that relate to environmental sustainability; and
- iv. Present to Council regarding environmental matters.

Note: It is not intended that the Committee participate in the technical review of or comment on individual development proposals or infrastructure projects. These functions are undertaken by technical staff of the relevant approval and commenting authorities including City of Brampton, Region of Peel, Conservation Authorities, and Provincial Ministries.

Member Responsibilities

Committee members will be responsible for:

- i. Being adaptable to meet the changing needs of the portfolio;
- ii. Preparing for meetings by reading agendas, minutes, reports and other documentation required to actively participate and contribute in them;
- iii. Making inquiries when clarification or more information is needed;
- iv. Maintaining an understanding of environmental issues and trends in Brampton;
- v. Identifying opportunities to maximize public outreach and engagement;
- vi. Keeping an open line of contact with the Committee throughout the year and contribute thoughts, ideas, and feedback as they arise;
- vii. Working collaboratively with all Committee members to ensure successful outcomes at all events;
- viii. Sitting on at least one (1) Subcommittee;

- ix. Being involved in Committee activities for approximately ten (10) hours per month, which may include evenings and weekends;
- x. Attending at least three (3) events within the City per year, which may occur during evenings and weekends; and
- xi. Upholding the City's Code of Conduct.

Member Qualifications

Members shall possess:

- i. An understanding of environmental sustainability issues in Brampton;
- ii. A demonstrated commitment to improve environmental sustainability in Brampton;
- iii. An active participation in the coordination and/or delivery of outreach initiatives;
- iv. Relationships with community organizations;
- v. Proven organizational skills;
- vi. Broad volunteer experience; and
- vii. Ability to be involved in activities and events during evenings or weekends.

Meetings

As a committee of Council, meetings will be held in accordance with the City's Procedural By-Law.

The Committee shall meet a minimum six (6) times per year, pending the development of Subcommittees.

The Committee shall be led by Co-Chairs selected annually, with the intention to provide members with organizational experience and leadership skills.

Standing Subcommittees

The Committee will establish the following standing Subcommittees:

- i. Engagement Subcommittee; and
- ii. Events Subcommittee.

The Committee shall prepare Terms of Reference for the standing Subcommittees. A standing Subcommittee must include at least two (2) Committee members and may include volunteers who are not on the Committee.

Members of the standing Subcommittee will elect a Subcommittee Chair or Co-Chairs in accordance with the City's Procedural By-Law.

The standing Subcommittees will hold meetings in accordance with the City's Procedural By-Law, and record minutes that will be submitted to the Committee.

Ad Hoc Subcommittees

The Committee may establish ad hoc Subcommittees for specific purposes and tasks related to strategic environmental planning or sustainability initiatives.

An ad hoc Subcommittee must include at least two (2) Committee members and may include volunteers who are not on the Committee.

The ad hoc Subcommittees will hold meetings in accordance with the City's Procedural By-Law, and record minutes that will be submitted to the Committee.

The Ad Hoc Subcommittee will be dissolved upon completion of its identified task.

Support Services to the Committee

The Director of Environment and Development Engineering or designate shall serve as staff liaison to the Committee. The liaison shall provide administrative and technical support to the Committee.

City Council will provide a budget to cover the operational expenses of the Committee, which will be administered by the Environment and Development Engineering Division.

The City Clerk's Office will provide meeting management support.

Work Plans and Reports

At the beginning of each Term of Council, the Committee members will prepare a Term of Council Implementation Plan for Council approval.

The Committee members shall prepare an annual Work Plan within the context of the Term of Council Implementation Plan. The annual Work Plan will include an estimate of the resources necessary to undertake initiatives and actions that will help achieve it. Environment and Development Engineering Services will review the Work Plan to determine opportunities to coordinate with other environmental initiatives in the City, and to avoid duplication of municipal and volunteer resources. The annual Work Plan will be approved by Council.

The Committee will prepare an annual summary of activities completed in the previous year and submit to City staff for review.

Procedure By-law - At a Glance For Council Committees and Citizen Advisory Committees	
Additions to an Agenda	Additions to the agenda for a Committee meeting are permitted by a two-thirds majority vote.
Amendments	If an amendment is not contrary, it is voted on before the main motion. The last amendment made is voted on first.
Attendance	If any member of a Committee fails to attend three consecutive regular meetings of that Committee without authorization by Council resolution, that citizen's membership on the Committee is terminated and Council will appoint a new person to fill the vacancy.
Call the Question	The vote will be taken after any member who has not already spoken and wishes to, has spoken. If a member speaks to the motion, he/she may not then immediately call the question.
Chair Not Present	If the Committee Chair does not attend within 15 minutes of the meeting start time, the Co-Chair, Vice-Chair, or other member, will assume the Chair for the meeting, until the arrival of the Chair.
Conflict of Interest	A member is required to declare a conflict of interest prior to any consideration of the matter and to disclose the general nature of the conflict. The conflict must relate to a direct or indirect pecuniary interest, eg. positive or negative financial interest, affecting the member or the member's spouse, child or parent. The member shall not participate in the discussion, vote on any motion regarding the matter, or attempt in any way to influence the voting before, during or after the meeting. Please refer to the <i>Municipal Conflict of Interest Act</i> .
Defer (to a Future Meeting)	To postpone consideration of a matter to a future meeting, the vote on a deferral is taken immediately, that is, there is no discussion or debate on the motion to defer.
Delegations	A delegation is limited to speaking for a maximum of five minutes, unless an extension is agreed upon. If the subject of the delegation is not a matter on the agenda, it will be received without comment and referred to staff for a report, unless there is a majority vote to simply receive the delegation. Delegation requests are directed by the City Clerk's Office to the appropriate Committee.
Interrupt a Speaker	A member is prohibited from interrupting a speaker except on a point of order or point of privilege.
Last Speaker to a Motion	The mover has the right to be the last speaker unless the question is called and then those rules apply (see above).
Minutes	The minutes of each Committee meeting will be presented at the next regular meeting of the appropriate Standing Committee or Council for approval of the recommendations and receipt of the minutes. The Standing Committee or Council may debate and amend any matter contained within the Committee minutes.

Order of Speakers	The order of speakers is as announced by the Chair. Only a speaker may make a motion.
Point of Order	A point of order may be raised at any time, eg. for a breach of the rules.
Point of Privilege	A point of privilege may be raised at any time, eg. for a challenge to the Council's or member's integrity, statements naming a member, rights / privileges of Council, eg. incorrect minutes, conduct of staff/visitors, comfort of members, eg. noise, heat.
Public Question Period	A member of the public in attendance may ask a question regarding any decision made at a meeting. A maximum of 15 minutes is allowed for all public questions.
* Quorum *	A majority of Committee members is required to be present and seated in order to constitute a quorum, unless a Committee terms of reference specify different quorum provisions. If a quorum is not achieved within 30 minutes of the meeting start time, the Legislative Co-ordinator will record the name of the members present and the meeting will not be called to order. If quorum is lost during a meeting, the meeting is recessed and will reconvene when quorum is regained. If quorum is not regained within 30 minutes, the Legislative Co-ordinator will record in the minutes the names of those present and the meeting will end without formal adjournment. The items that were not considered will be placed on the agenda of the next meeting.
Recorded Vote	Any Committee member may request a recorded vote at a Committee meeting.
Recount Vote	A recount may be requested only immediately after the declaration of the vote by the Chair.
Refer (to a Committee or Person Named in the Motion)	A motion to refer will send or direct a matter to another Committee, staff or official named in the motion, for further work or consideration. This motion is debatable, but only the merits of the referral, not the subject. In order to continue to discuss the subject, the motion to refer must be defeated.
Reopen the Question	To discuss a matter already voted on at a meeting, a two-thirds majority is required to reopen the question. To discuss a matter from a previous meeting, a two-thirds majority is required by Council Resolution. If a motion to reopen is lost, it cannot be raised again during the current term of Council.
Speaking – Number of Times a Member may Speak	A Committee member may speak initially for five minutes. He/she may not speak again until everyone else who wants to, has spoken. A member may then speak a second time for five minutes. There is no restriction on the number of times a member may speak.

The above are selected extracts from [Procedure By-law 160-2004](#), as amended. For further information, please refer to the Procedure By-law and/or contact the City Clerk's Office.

Municipal Conflict of Interest Act

R.S.O. 1990, CHAPTER M.50

Consolidation Period: From November 23, 2022 to the [e-Laws currency date](#).

Last amendment: 2022, c. 18, Sched. 3.

Legislative History: 1994, c. 23, s. 2; 1996, c. 32, s. 76; 1997, c. 25, Sched. E, s. 7; 1997, c. 31, s. 156; 1999, c. 6, s. 41; 2002, c. 17, Sched. F, Table; 2005, c. 5, s. 45; 2006, c. 19, Sched. C, s. 1 (1); 2006, c. 32, Sched. C, s. 33; 2006, c. 32, Sched. D, s. 10; 2007, c. 7, Sched. 27; 2007, c. 8, s. 219; 2009, c. 33, Sched. 21, s. 7; 2016, c. 23, s. 58; 2017, c. 10, Sched. 3; 2018, c. 3, Sched. 5, s. 37 (see: 2019, c. 1, Sched. 3, s. 5); 2019, c. 1, Sched. 4, s. 35; 2021, c. 4, Sched. 11, s. 23; 2022, c. 18, Sched. 3.

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Definitions

1 In this Act,

“child” means a child born within or outside marriage and includes an adopted child and a person whom a parent has demonstrated a settled intention to treat as a child of his or her family; (“enfant”)

“controlling interest” means the interest that a person has in a corporation when the person beneficially owns, directly or indirectly, or exercises control or direction over, equity shares of the corporation carrying more than 10 per cent of the voting rights attached to all equity shares of the corporation for the time being outstanding; (“intérêts majoritaires”)

“council” means the council of a municipality; (“conseil”)

“elector” means,

- (a) in respect of a municipality, or a local board thereof, other than a school board, a person entitled to vote at a municipal election in the municipality, and

(b) in respect of a school board, a person entitled to vote at the election of members of the school board; (“électeur”)

“interest in common with electors generally” means a pecuniary interest in common with the electors within the area of jurisdiction and, where the matter under consideration affects only part of the area of jurisdiction, means a pecuniary interest in common with the electors within that part; (“intérêt commun à tous les électeurs”)

“judge” means a judge of the Superior Court of Justice; (“juge”)

“local board” means a school board, board of directors of a children’s aid society, committee of adjustment, conservation authority, court of revision, land division committee, municipal service board, public library board, board of management of an improvement area, board of health, police services board, planning board, district social services administration board, trustees of a police village, board of trustees of a police village, board or committee of management of a long-term care home, or any other board, commission, committee, body or local authority established or exercising any power or authority under any general or special Act in respect of any of the affairs or purposes, including school purposes, of one or more municipalities or parts thereof, but does not include a committee of management of a community recreation centre appointed by a school board or a local roads board; (“conseil local”)

Note: On a day to be named by proclamation of the Lieutenant Governor, the definition of “local board” in section 1 of the Act is amended by striking out “police services board” and substituting “police service board”. (See: 2019, c. 1, Sched. 4, s. 35)

“meeting” includes any regular, special, committee or other meeting of a council or local board, as the case may be; (“réunion”)

“member” means a member of a council or of a local board; (“membre”)

“municipality” includes a board, commission or other local authority exercising any power in respect of municipal affairs or purposes, including school purposes, in territory without municipal organization, but does not include a committee of management of a community recreation centre appointed by a school board, a local roads board or a local services board; (“municipalité”)

“parent” means a person who has demonstrated a settled intention to treat a child as a member of his or her family; (“parent”)

“school board” means a board as defined in subsection 1 (1) of the *Education Act*, and, where the context requires, includes an old board within the meaning of subsection 1 (1) of the *Education Act*; (“conseil scolaire”)

“senior officer” means the chair or any vice-chair of the board of directors, the president, any vice-president, the secretary, the treasurer or the general manager of a corporation or any other person who performs functions for the corporation similar to those normally performed by a person occupying any such office; (“dirigeant”)

“spouse” means a person to whom the person is married or with whom the person is living in a conjugal relationship outside marriage. (“conjoint”) R.S.O. 1990, c. M.50, s. 1; 1997, c. 25, Sched. E, s. 7; 1997, c. 31, s. 156 (1); 1999, c. 6, s. 41 (1); 2002, c. 17, Sched. F, Table; 2005, c. 5, s. 45 (1, 2); 2006, c. 19, Sched. C, s. 1 (1); 2006, c. 32, Sched. D, s. 10; 2007, c. 8, s. 219; 2016, c. 23, s. 58; 2021, c. 4, Sched. 11, s. 23 (1-3).

Section Amendments with date in force (d/m/y)

1997, c. 31, s. 156 (1) - 01/01/1998; 1999, c. 6, s. 41 (1) - 01/03/2000

2002, c. 17, Sched. F, Table - 01/01/2003

2005, c. 5, s. 45 (1, 2) - 13/06/2005

2006, c. 19, Sched. C, s. 1 (1) - 22/06/2006; 2006, c. 32, Sched. D, s. 10 - 01/01/2007

2007, c. 8, s. 219 - 01/07/2010

2016, c. 23, s. 58 - 01/01/2017

2018, c. 3, Sched. 5, s. 37 - no effect - see 2019, c. 1, Sched. 3, s. 5 - 26/03/2019

2019, c. 1, Sched. 4, s. 35 - not in force

2021, c. 4, Sched. 11, s. 23 (1-3) - 19/04/2021

Principles

1.1 The Province of Ontario endorses the following principles in relation to the duties of members of councils and of local boards under this Act:

1. The importance of integrity, independence and accountability in local government decision-making.

2. The importance of certainty in reconciling the public duties and pecuniary interests of members.
3. Members are expected to perform their duties of office with integrity and impartiality in a manner that will bear the closest scrutiny.
4. There is a benefit to municipalities and local boards when members have a broad range of knowledge and continue to be active in their own communities, whether in business, in the practice of a profession, in community associations, and otherwise. 2017, c. 10, Sched. 3, s. 1.

Section Amendments with date in force (d/m/y)

2017, c. 10, Sched. 3, s. 1 - 01/03/2019

Indirect pecuniary interest

2 For the purposes of this Act, a member has an indirect pecuniary interest in any matter in which the council or local board, as the case may be, is concerned, if,

- (a) the member or his or her nominee,
 - (i) is a shareholder in, or a director or senior officer of, a corporation that does not offer its securities to the public,
 - (ii) has a controlling interest in or is a director or senior officer of, a corporation that offers its securities to the public, or
 - (iii) is a member of a body,

that has a pecuniary interest in the matter; or

- (b) the member is a partner of a person or is in the employment of a person or body that has a pecuniary interest in the matter. R.S.O. 1990, c. M.50, s. 2.

Interest of certain persons deemed that of member

3 For the purposes of this Act, the pecuniary interest, direct or indirect, of a parent or the spouse or any child of the member shall, if known to the member, be deemed to be also the pecuniary interest of the member. R.S.O. 1990, c. M.50, s. 3; 1999, c. 6, s. 41 (2); 2005, c. 5, s. 45 (3); 2021, c. 4, Sched. 11, s. 23 (4).

Section Amendments with date in force (d/m/y)

1999, c. 6, s. 41 (2) - 01/03/2000

2005, c. 5, s. 45 (3) - 13/06/2005

2021, c. 4, Sched. 11, s. 23 (4) - 19/04/2021

EXCEPTIONS

Where ss. 5, 5.2 and 5.3 do not apply

4 Sections 5, 5.2 and 5.3 do not apply to a pecuniary interest in any matter that a member may have,

- (a) as a user of any public utility service supplied to the member by the municipality or local board in like manner and subject to the like conditions as are applicable in the case of persons who are not members;
- (b) by reason of the member being entitled to receive on terms common to other persons any service or commodity or any subsidy, loan or other such benefit offered by the municipality or local board;
- (c) by reason of the member purchasing or owning a debenture of the municipality or local board;
- (d) by reason of the member having made a deposit with the municipality or local board, the whole or part of which is or may be returnable to the member in like manner as such a deposit is or may be returnable to all other electors;
- (e) by reason of having an interest in any property affected by a work under the *Drainage Act* or by a work under a regulation made under Part XII of the *Municipal Act, 2001* or Part IX of the *City of Toronto Act, 2006*, as the case may be, relating to local improvements;
- (f) by reason of having an interest in farm lands that are exempted from taxation for certain expenditures under the *Assessment Act*;
- (g) by reason of the member being eligible for election or appointment to fill a vacancy, office or position in the council or local board when the council or local board is empowered or required by any general or special Act to fill such vacancy, office or position;

- (h) by reason only of the member being a director or senior officer of a corporation incorporated for the purpose of carrying on business for and on behalf of the municipality or local board or by reason only of the member being a member of a board, commission, or other body as an appointee of a council or local board;
- (i) in respect of an allowance for attendance at meetings, or any other allowance, honorarium, remuneration, salary or benefit to which the member may be entitled by reason of being a member or as a member of a volunteer fire brigade, as the case may be;
- (j) by reason of the member having a pecuniary interest which is an interest in common with electors generally; or
- (k) by reason only of an interest of the member which is so remote or insignificant in its nature that it cannot reasonably be regarded as likely to influence the member. R.S.O. 1990, c. M.50, s. 4; 2002, c. 17, Sched. F, Table; 2006, c. 32, Sched. C, s. 33 (1); 2017, c. 10, Sched. 3, s. 2; 2022, c. 18, Sched. 3, s. 1.

Section Amendments with date in force (d/m/y)

2002, c. 17, Sched. F, Table - 01/01/2003

2006, c. 32, Sched. C, s. 33 (1) - 01/01/2007

2017, c. 10, Sched. 3, s. 2 - 01/03/2019

2022, c. 18, Sched. 3, s. 1 - 23/11/2022

DUTY OF MEMBER

When present at meeting at which matter considered

5 (1) Where a member, either on his or her own behalf or while acting for, by, with or through another, has any pecuniary interest, direct or indirect, in any matter and is present at a meeting of the council or local board at which the matter is the subject of consideration, the member,

- (a) shall, prior to any consideration of the matter at the meeting, disclose the interest and the general nature thereof;
- (b) shall not take part in the discussion of, or vote on any question in respect of the matter; and
- (c) shall not attempt in any way whether before, during or after the meeting to influence the voting on any such question. R.S.O. 1990, c. M.50, s. 5 (1).

Where member to leave closed meeting

(2) Where the meeting referred to in subsection (1) is not open to the public, in addition to complying with the requirements of that subsection, the member shall forthwith leave the meeting or the part of the meeting during which the matter is under consideration. R.S.O. 1990, c. M.50, s. 5 (2).

Exception, consideration of penalty

(2.1) The following rules apply if the matter under consideration at a meeting or a part of a meeting is to consider whether to suspend the remuneration paid to the member under subsection 223.4 (5) or (6) of the *Municipal Act, 2001* or under subsection 160 (5) or (6) of the *City of Toronto Act, 2006*:

1. Despite clauses (1) (b) and (c), the member may take part in the discussion of the matter, including making submissions to council or the local board, as the case may be, and may attempt to influence the voting on any question in respect of the matter, whether before, during or after the meeting. However, the member is not permitted to vote on any question in respect of the matter.
2. Despite subsection (2), in the case of a meeting that is not open to the public, the member may attend the meeting or part of the meeting during which the matter is under consideration. 2017, c. 10, Sched. 3, s. 3.

When absent from meeting at which matter considered

(3) Where the interest of a member has not been disclosed as required by subsection (1) by reason of the member's absence from the meeting referred to therein, the member shall disclose the interest and otherwise comply with subsection (1) at the first meeting of the council or local board, as the case may be, attended by the member after the meeting referred to in subsection (1). R.S.O. 1990, c. M.50, s. 5 (3).

Section Amendments with date in force (d/m/y)

2017, c. 10, Sched. 3, s. 3 - 01/03/2019

Written statement re disclosure

5.1 At a meeting at which a member discloses an interest under section 5, or as soon as possible afterwards, the member shall file a written statement of the interest and its general nature with the clerk of the municipality or the secretary of the committee or local board, as the case may be. 2017, c. 10, Sched. 3, s. 4.

Section Amendments with date in force (d/m/y)

2017, c. 10, Sched. 3, s. 4 - 01/03/2019

Influence

5.2 (1) Where a member, either on his or her own behalf or while acting for, by, with or through another, has any pecuniary interest, direct or indirect, in any matter that is being considered by an officer or employee of the municipality or local board, or by a person or body to which the municipality or local board has delegated a power or duty, the member shall not use his or her office in any way to attempt to influence any decision or recommendation that results from consideration of the matter. 2017, c. 10, Sched. 3, s. 4.

Exception

(2) However, if a municipality delegates a power to suspend the remuneration paid to a member under subsection 223.4 (5) of the *Municipal Act, 2001* or subsection 160 (5) of the *City of Toronto Act, 2006* to a person or body, and the person or body is considering exercising that power with respect to a member, subsection (1) of this section does not prevent the member from attempting to influence any decision or recommendation of the person or body that results from consideration of the matter. 2017, c. 10, Sched. 3, s. 4.

Section Amendments with date in force (d/m/y)

2017, c. 10, Sched. 3, s. 4 - 01/03/2019

Head of council

5.3 (1) Where a head of council of a municipality either on their own behalf or while acting for, by, with or through another, has any pecuniary interest, direct or indirect, in any matter of the municipality and has a power or duty listed in subsection (2) with respect to the matter, the head of council,

- (a) shall, upon becoming aware of the interest in the matter, disclose the interest by filing a written statement of the interest and its general nature with the clerk of the municipality;
- (b) shall not use the power or exercise the duty with respect to the matter; and
- (c) shall not use their office in any way to attempt to influence any decision or recommendation of the municipality that results from consideration of the matter. 2022, c. 18, Sched. 3, s. 2.

Same

(2) For the purposes of subsection (1), the powers and duties are the powers and duties of a head of council in Part VI.1 of the *Municipal Act, 2001* and Part VI.1 of the *City of Toronto Act, 2006* but do not include the power to delegate in section 284.13 of the *Municipal Act, 2001* and section 226.11 of the *City of Toronto Act, 2006*. 2022, c. 18, Sched. 3, s. 2.

Section Amendments with date in force (d/m/y)

2022, c. 18, Sched. 3, s. 2 - 23/11/2022

RECORD OF DISCLOSURE

Disclosure to be recorded in minutes

6 (1) Every declaration of interest and the general nature thereof made under section 5 shall, where the meeting is open to the public, be recorded in the minutes of the meeting by the clerk of the municipality or secretary of the committee or local board, as the case may be. R.S.O. 1990, c. M.50, s. 6 (1).

Idem

(2) Every declaration of interest made under section 5, but not the general nature of that interest, shall, where the meeting is not open to the public, be recorded in the minutes of the next meeting that is open to the public. R.S.O. 1990, c. M.50, s. 6 (2).

REGISTRY

Requirement to establish registry

- 6.1** (1) Every municipality and local board shall establish and maintain a registry in which shall be kept,
- (a) a copy of each statement filed under section 5.1 or 5.3; and
 - (b) a copy of each declaration recorded under section 6. 2017, c. 10, Sched. 3, s. 5; 2022, c. 18, Sched. 3, s. 3.

Access to registry

- (2) The registry shall be available for public inspection in the manner and during the time that the municipality or local board, as the case may be, may determine. 2017, c. 10, Sched. 3, s. 5.

Section Amendments with date in force (d/m/y)

2017, c. 10, Sched. 3, s. 5 - 01/03/2019

2022, c. 18, Sched. 3, s. 3 - 23/11/2022

REMEDY FOR LACK OF QUORUM

Quorum deemed constituted

- 7 (1) Where the number of members who, by reason of the provisions of this Act, are disabled from participating in a meeting is such that at that meeting the remaining members are not of sufficient number to constitute a quorum, then, despite any other general or special Act, the remaining number of members shall be deemed to constitute a quorum, provided such number is not less than two. R.S.O. 1990, c. M.50, s. 7 (1).

Application to judge

- (2) Where in the circumstances mentioned in subsection (1), the remaining number of members who are not disabled from participating in the meeting is less than two, the council or local board may apply to a judge without notice for an order authorizing the council or local board, as the case may be, to give consideration to, discuss and vote on the matter out of which the interest arises. R.S.O. 1990, c. M.50, s. 7 (2).

Power of judge to declare s. 5, 5.1 or 5.2 not to apply

- (3) The judge may, on an application brought under subsection (2), by order, declare that section 5, 5.1 or 5.2 does not apply to the council or local board, as the case may be, in respect of the matter in relation to which the application is brought, and the council or local board thereupon may give consideration to, discuss and vote on the matter in the same manner as though none of the members had any interest therein, subject only to such conditions and directions as the judge may consider appropriate and so order. R.S.O. 1990, c. M.50, s. 7 (3); 2017, c. 10, Sched. 3, s. 6.

Section Amendments with date in force (d/m/y)

2017, c. 10, Sched. 3, s. 6 - 01/03/2019

ACTION WHERE CONTRAVENTION ALLEGED

Application

- 8** (1) An elector, an Integrity Commissioner of a municipality or a person demonstrably acting in the public interest may apply to a judge for a determination of the question of whether,
- (a) a member has contravened section 5, 5.1, 5.2 or 5.3; or
 - (b) a former member contravened section 5, 5.1, 5.2 or 5.3 while he or she was a member. 2017, c. 10, Sched. 3, s. 7; 2022, c. 18, Sched. 3, s. 4.

Six-week period

- (2) An application may only be made within six weeks after the applicant became aware of the alleged contravention. 2017, c. 10, Sched. 3, s. 7.

Exception

- (3) Despite subsection (2), an application may be made more than six weeks after the applicant became aware of the alleged contravention if all of the following conditions are satisfied:

1. The applicant applied to an Integrity Commissioner for an inquiry under section 223.4.1 of the Municipal Act, 2001 or under section 160.1 of the City of Toronto Act, 2006 in accordance with those sections.

2. The Integrity Commissioner conducted an inquiry under section 223.4.1 of the *Municipal Act, 2001* or under section 160.1 of the *City of Toronto Act, 2006* and the Commissioner,
 - i. has advised the applicant under subsection 223.4.1 (16) of the *Municipal Act, 2001* or under subsection 160.1 (16) of the *City of Toronto Act, 2006* that the Commissioner will not be making an application to a judge,
 - ii. has not completed the inquiry within the time limit set out in subsection 223.4.1 (14) of the *Municipal Act, 2001* or subsection 160.1 (14) of the *City of Toronto Act, 2006*, or
 - iii. has terminated the inquiry under subsection 223.4.1 (12) of the *Municipal Act, 2001* or subsection 160.1 (12) of the *City of Toronto Act, 2006*.
3. The application under this section includes a copy of the applicant's statutory declaration made under subsection 223.4.1 (6) of the *Municipal Act, 2001* or under subsection 160.1 (6) of the *City of Toronto Act, 2006*.
4. The application under this section is made within six weeks after the earlier of the following,
 - i. the day the Commissioner advised the applicant under subsection 223.4.1 (16) of the *Municipal Act, 2001* or under subsection 160.1 (16) of the *City of Toronto Act, 2006* that the Commissioner will not be making an application to a judge,
 - ii. the last day on which the Commissioner is required under subsection 223.4.1 (14) of the *Municipal Act, 2001* or subsection 160.1 (14) of the *City of Toronto Act, 2006* to complete the inquiry referred to in paragraph 2 of this subsection, and
 - iii. the day the inquiry was terminated under subsection 223.4.1 (12) of the *Municipal Act, 2001* or subsection 160.1 (12) of the *City of Toronto Act, 2006*. 2017, c. 10, Sched. 3, s. 7.

Same, application by Integrity Commissioner

(4) Despite subsection (2), an application may be made more than six weeks after the applicant became aware of the alleged contravention if the applicant is an Integrity Commissioner and if the application relates to an inquiry conducted by the Commissioner under section 223.4.1 of the *Municipal Act, 2001* or under section 160.1 of the *City of Toronto Act, 2006*. 2017, c. 10, Sched. 3, s. 7.

No application by Integrity Commissioner during regular election

(5) No application shall be made by an Integrity Commissioner of a municipality during the period of time starting on nomination day for a regular election, as set out in section 31 of the *Municipal Elections Act, 1996*, and ending on voting day in a regular election, as set out in section 5 of that Act. 2017, c. 10, Sched. 3, s. 7.

Limitation

(6) Despite subsections (2), (3) and (4), no application shall be made after the sixth anniversary of the alleged contravention. 2017, c. 10, Sched. 3, s. 7.

Contents of notice of application

(7) The notice of application shall state the grounds for finding that the member or former member contravened section 5, 5.1, 5.2 or 5.3. 2017, c. 10, Sched. 3, s. 7; 2022, c. 18, Sched. 3, s. 4.

Section Amendments with date in force (d/m/y)

2017, c. 10, Sched. 3, s. 7 - 01/03/2019

2022, c. 18, Sched. 3, s. 4 - 23/11/2022

Power of judge

9 (1) If the judge determines that the member or former member contravened section 5, 5.1, 5.2 or 5.3, the judge may do any or all of the following:

1. Reprimand the member or former member.
2. Suspend the remuneration paid to the member for a period of up to 90 days.
3. Declare the member's seat vacant.
4. Disqualify the member or former member from being a member during a period of not more than seven years after the date of the order.

5. If the contravention has resulted in personal financial gain, require the member or former member to make restitution to the party suffering the loss, or, if the party's identity is not readily ascertainable, to the municipality or local board, as the case may be. 2017, c. 10, Sched. 3, s. 7; 2022, c. 18, Sched. 3, s. 4.

Same

(2) In exercising his or her discretion under subsection (1) the judge may consider, among other matters, whether the member or former member,

- (a) took reasonable measures to prevent the contravention;
- (b) disclosed the pecuniary interest and all relevant facts known to him or her to an Integrity Commissioner in a request for advice from the Commissioner under the *Municipal Act, 2001* or the *City of Toronto Act, 2006* and acted in accordance with the advice, if any, provided to the member by the Commissioner; or
- (c) committed the contravention through inadvertence or by reason of an error in judgment made in good faith. 2017, c. 10, Sched. 3, s. 7.

Section Amendments with date in force (d/m/y)

2017, c. 10, Sched. 3, s. 7 - 01/03/2019

2022, c. 18, Sched. 3, s. 4 - 23/11/2022

10 REPEALED: 2017, c. 10, Sched. 3, s. 7.

Section Amendments with date in force (d/m/y)

1997, c. 31, s. 156 (2) - 01/01/1998

2017, c. 10, Sched. 3, s. 7 - 01/03/2019

Appeal to Divisional Court

11 (1) An appeal lies from any order made under section 9 to the Divisional Court in accordance with the rules of court. R.S.O. 1990, c. M.50, s. 11 (1); 2017, c. 10, Sched. 3, s. 8.

Judgment or new trial

(2) The Divisional Court may give any judgment that ought to have been pronounced, in which case its decision is final, or the Divisional Court may grant a new trial for the purpose of taking evidence or additional evidence and may remit the case to the trial judge or another judge and, subject to any directions of the Divisional Court, the case shall be proceeded with as if there had been no appeal. R.S.O. 1990, c. M.50, s. 11 (2).

Appeal from order or new trial

(3) Where the case is remitted to a judge under subsection (2), an appeal lies from the order of the judge to the Divisional Court in accordance with the provisions of this section. R.S.O. 1990, c. M.50, s. 11 (3).

Section Amendments with date in force (d/m/y)

2017, c. 10, Sched. 3, s. 8 - 01/03/2019

Proceedings not invalidated but voidable

12 (1) A member's failure to comply with section 5, 5.1, 5.2 or 5.3 does not invalidate any proceedings in respect of a matter referred to in those sections, but those proceedings are voidable in the circumstances described in subsection (2). 2017, c. 10, Sched. 3, s. 9; 2022, c. 18, Sched. 3, s. 4.

Declaring proceedings void

(2) Subject to subsection (3), if a member has failed to comply with section 5, 5.1, 5.2 or 5.3 in respect of a matter referred to in those sections, the municipality or local board, as the case may be, may declare the proceedings to be void before the second anniversary of the date of the passing of the by-law or resolution authorizing the matter. 2017, c. 10, Sched. 3, s. 9; 2022, c. 18, Sched. 3, s. 4.

Exception

(3) Subsection (2) does not apply if declaring the proceedings to be void would adversely affect the rights that any person who acted in good faith and without actual notice of the failure to comply with section 5, 5.1, 5.2 or 5.3 acquired under or by virtue of the proceedings. 2017, c. 10, Sched. 3, s. 9; 2022, c. 18, Sched. 3, s. 4.

Section Amendments with date in force (d/m/y)

2017, c. 10, Sched. 3, s. 9 - 01/03/2019

2022, c. 18, Sched. 3, s. 4 - 23/11/2022

Other proceedings prohibited

13 (1) A proceeding that relates to a member's or former member's alleged conflict of interest and seeks a remedy described in subsection 9 (1) shall be brought only under this Act. 2017, c. 10, Sched. 3, s. 9.

Same

(2) Subsection (1) does not affect the power of a municipality or a local board to reprimand a member or suspend a member's remuneration under subsection 223.4 (5) or (6) of the *Municipal Act, 2001* or under subsection 160 (5) or (6) of the *City of Toronto Act, 2006*. 2017, c. 10, Sched. 3, s. 9.

Section Amendments with date in force (d/m/y)

2017, c. 10, Sched. 3, s. 9 - 01/03/2019

GENERAL

Insurance

14 (1) Despite section 279 of the *Municipal Act, 2001* or section 218 of the *City of Toronto Act, 2006*, as the case may be, the council of every municipality may at any time pass by-laws,

- (a) for contracting for insurance;
- (b) despite the *Insurance Act*, to enable the municipality to act as an insurer; and
- (c) for exchanging with other municipalities in Ontario reciprocal contracts of indemnity or inter-insurance in accordance with Part XIII of the *Insurance Act*,

to protect a member of the council or of any local board thereof who has been found not to have contravened section 5, 5.1, 5.2 or 5.3 against any costs or expenses incurred by the member as a result of a proceeding brought under this Act, and for paying on behalf of or reimbursing the member for any such costs or expenses. R.S.O. 1990, c. M.50, s. 14 (1); 2002, c. 17, Sched. F, Table; 2006, c. 32, Sched. C, s. 33 (2); 2017, c. 10, Sched. 3, s. 10 (1); 2022, c. 18, Sched. 3, s. 4.

Insurance Act does not apply

(2) The *Insurance Act* does not apply to a municipality acting as an insurer for the purposes of subsection (1). R.S.O. 1990, c. M.50, s. 14 (2).

Surplus funds

(3) Despite section 387 of the *Insurance Act*, any surplus funds and the reserve fund of a municipal reciprocal exchange may be invested only in accordance with subsection 279 (2) of the *Municipal Act, 2001* or subsection 218 (3) of the *City of Toronto Act, 2006*, as the case may be. 2017, c. 10, Sched. 3, s. 10 (2).

Reserve funds

(4) The money raised for a reserve fund of a municipal reciprocal exchange may be expended or pledged for, or applied to, a purpose other than that for which the fund was established if two-thirds of the municipalities that are members of the exchange together with two-thirds of the municipalities that previously were members of the exchange and that may be subject to claims arising while they were members of the exchange agree in writing and if section 386 of the *Insurance Act* is complied with. R.S.O. 1990, c. M.50, s. 14 (4); 2009, c. 33, Sched. 21, s. 7.

Local boards

(5) A local board has the same powers to provide insurance for or to make payments to or on behalf of its members as are conferred upon the council of a municipality under this section in respect of its members. R.S.O. 1990, c. M.50, s. 14 (5).

Former members

(6) A by-law passed under this section may provide that it applies to a person who was a member at the time the circumstances giving rise to the proceeding occurred but who, prior to the judgment in the proceeding, has ceased to be a member. R.S.O. 1990, c. M.50, s. 14 (6).

Section Amendments with date in force (d/m/y)

1996, c. 32, s. 76 (1) - 06/03/1997

2002, c. 17, Sched. F, Table - 01/01/2003

2006, c. 32, Sched. C, s. 33 (2, 3) - 01/01/2007

2007, c. 7, Sched. 27, s. 1 - 05/05/2008

2009, c. 33, Sched. 21, s. 7 - 15/12/2009

2017, c. 10, Sched. 3, s. 10 (1) - 01/03/2019; 2017, c. 10, Sched. 3, s. 10 (2) - 01/03/2018

2022, c. 18, Sched. 3, s. 4 - 23/11/2022

Conflict with other Acts

15 In the event of conflict between any provision of this Act and any provision of any general or special Act, the provision of this Act prevails. R.S.O. 1990, c. M.50, s. 15.

Français

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Date: 2021-02-22

Subject: **Update of the Brampton Grow Green Environmental Master Plan**

Contact: Stavroula Kassaris, Environmental Planner, Environment,
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Report Number: Public Works & Engineering-2021-249

Recommendations:

1. That the report titled: **Update of the Brampton Grow Green Environmental Master Plan** to the Committee of Council meeting of March 10, 2021, be received; and
2. That Council endorse the updated Brampton Grow Green Environmental Master Plan.

Overview:

- In 2014, City Council approved the Brampton Grow Green Environmental Master Plan (EMP), the City's first blueprint for improving environmental sustainability at both the City and community level.
- The Brampton Grow Green Environmental Master Plan, like other master plans, is a living document that should be updated every five years to ensure it remains current, relevant, and reflective of the City's evolving environmental priorities and ambitions.
- The updated EMP addresses changes in policies, plans, and programs, and provides a new Action Plan and revised set of performance metrics to accelerate our momentum toward a more healthy, resilient, and sustainable Brampton.
- The purpose of this report is to seek Council endorsement of the updated Brampton Grow Green Environmental Master Plan.

Background:

In 2014, City Council approved the Brampton Grow Green Environmental Master Plan (EMP), the City's first blueprint for improving environmental sustainability at both the City (internal) and community (external) level. Organized under the core components of People, Air, Water, Land, Energy, and Waste, Brampton Grow Green outlines a vision, guiding principles, goals, and actions for a more sustainable future, as well as performance metrics and targets to drive and evaluate our progress. It has helped Brampton become an environmental sustainability leader in the Greater Toronto and Hamilton Area (GTHA).

The Brampton Grow Green Environmental Master Plan, like other master plans, is a living document that should be regularly updated to ensure it remains current, relevant, and reflective of the City's evolving environmental priorities and ambitions. The original Environmental Master Plan recommends that this exercise be undertaken every five years.

EMP Refresh Process

Updating the Brampton Grow Green Environmental Master Plan was an iterative process that was led by the City's Grow Green Team and involved:

- understanding the progress toward achieving the EMP goals, actions, and targets;
- reviewing the City's strategic documents approved since the launch of the EMP;
- leveraging information gathered as part of other city-wide plans that recently underwent public engagement;
- performing a jurisdictional scan to identify current international, federal, provincial, and local plans, policies, and priorities for environmental sustainability;
- benchmarking against environmental plans of other municipalities;
- undertaking interviews and meetings with City staff and other stakeholders;
- conducting an online survey for public input on potential actions and action prioritization; and
- consulting with Brampton's Environment Advisory Committee.

How Have We Done So Far?

Five Key Corporate Directions

The initial Brampton Grow Green Environmental Master Plan outlined five key corporate directions to position the City for the successful implementation of the EMP, including modifying how we conduct business, communicate between departments, monitor and

report performance, make decisions, and manage operations. The City has made advancements in all five directions, which are summarized in Appendix 1.

Grow Green Action Plan

Brampton has come a long way since City Council approved the Brampton Grow Green Environmental Master Plan in 2014. Brampton Grow Green has been the catalyst for a variety of the City's plans, policies, projects, and practices that are improving Brampton's environmental performance, quality of life, and economic development.

Our progress includes the delivery of over half of an ambitious ten year Action Plan comprised of both City and community focused actions. Key completed actions include the:

- development of the Corporate Energy and Emissions Management Plan, and the Community Energy and Emissions Reduction Plan (CEERP);
- creation of the Brampton Cycling Advisory Committee, and the Active Transportation Master Plan (ATMP);
- installation of Low Impact Development projects, like the County Court Bio-filter Swale;
- growth of the Sustainable Neighbourhood Action Program (SNAP) into two additional neighbourhoods;
- expansion of the Naturalization Program, and launch of the Don't Mow, Let it Grow initiative;
- installation of renewable energy systems and Electric Vehicle charging stations across City facilities; and
- growth of the Brampton Transit network, and greening the transit bus fleet.

A complete list of the initial Grow Green Action Plan and the status of each action is available on the City's website at www.brampton.ca/EMP, while Appendix 2 provides a snapshot of our notable achievements since the launch of the EMP.

Grow Green Performance Metrics

The Brampton Grow Green Environmental Master Plan identified a series of City and community performance metrics, as well as aspiring targets to motivate action and drive change. As outlined below, the majority of the metrics are on target or progressing toward their targets, while several are not meeting their target. The remaining metrics either had no or limited data available, or had no targets established in the first iteration of the EMP.

On Target:	Transit Trips; Natural Heritage System (NHS) Restoration
Progressing Toward Target:	Corporate Building Energy Use; NHS in Public Ownership; Environmental Programs; Public Waste Diversion; Density
Off Target:	Vehicle KM Traveled; Participants in Programs; Water Use
No Target Established in the Initial EMP:	GHG Emissions; Watercourse Channel Naturalization; Trees Planted
Limited/No Data Available:	Renewable Energy; Corporate Waste Diversion; Community Energy Intensity

Success in achieving land-related targets, particularly connected to natural heritage restoration, illustrates the expanding restoration partnerships between the City and its local Conservation Authorities (Toronto & Region Conservation Authority and Credit Valley Conservation).

Transit has performed exceptionally well, with Brampton Transit being one of the fastest growing transit systems in Canada. Yet while public transportation use is increasing, so is the average distance Brampton drivers are travelling each day, highlighting the need to create more complete communities, foster local economic development, and invest in multi-modal transportation options.

Building energy use intensity of City facilities has improved, largely driven by the guidance of the City's Energy Management team and their Corporate Energy and Emissions Management Plan.

Community and City staff participation in environmental initiatives and events have seen declines, mainly attributed to the wind down of the Brampton Clean City team and the Smart Commute Brampton-Caledon initiative.

While the Community waste diversion rate across Peel region has improved over the last several years, progress regarding waste cannot be evaluated for City buildings and outdoor facilities because this information is not currently being tracked.

Additional detail regarding our progress against each performance metric is available in Appendix 3.

What Has Evolved?

Several notable changes have occurred in the years since the initial Brampton Grow Green Environmental Master Plan was approved in 2014. Prior to the EMP, the City's environmental efforts were typically ad-hoc and lacked coordination across the corporation and its partners. Council's endorsement of the EMP provided direction and emboldened City staff to apply an environmental lens to their work and decision making. The EMP's directive to increase environmental awareness amongst City staff and the general public coupled with the mandate to monitor and report environmental progress resulted in acquiring more knowledge and fostering higher expectations for meaningful environmental action. Consequently, environmental sustainability has become more integrated into a broader suite of City strategic documents and master plans, most notably the Brampton 2040 Vision and the Term of Council Priorities. It also ushered in efforts to establish community organizations to help achieve our goals, such as the Grow Green Network and the Centre for Community Energy Transformation.

Aligning with Regional, Provincial, Nation, and International Sustainability Priorities

As part of the background research to update the Brampton Grow Green Environmental Master Plan, a range of sustainability plans of partner agencies and upper level governments were reviewed. The top themes that emerged are listed below, and guided the development of the new EMP Action Plan:

- transitioning to a low-carbon future (climate change mitigation);
- increasing climate change adaptation and resilience;
- expanding multimodal transportation;
- creating complete communities;
- fostering natural heritage stewardship;
- improving water quality;
- advancing public health;
- cultivating green jobs;
- supporting a circular economy;
- building partnerships; and
- empowering the community.

Many of these themes are also reflected in the City's Term of Council Priorities.

Current Situation:

The Brampton Grow Green Environmental Master Plan update is complete and ready for implementation. It is not a full reinvention or redesign of the plan. The Brampton Grow Green vision, guiding principles, and core components remain pertinent and continue to act as the foundation of the EMP.

Instead, the update of the Brampton Grow Green Environment Master Plan focuses on providing a revised and streamlined Action Plan and updated performance metrics. The

updated EMP also illustrates an evolution in our sustainability approach by aiming to better acknowledge, constructively influence, and strategically leverage the interrelationships between the three E's of sustainability - environment, economy, and equity.

The new ten year Action Plan is comprised of approximately 60 high-impact actions that chart the course for a greener Brampton. It carries forward and adapts key actions from the original EMP that have yet to be achieved, and adds new actions that are reflective of best practice and tailored to the qualities, needs, and opportunities of Brampton. Some of the major actions the City aims to move forward with includes, but is not limited to:

- launching Complete Streets Guidelines;
- creating Water Efficiency Strategies for City buildings and facilities;
- expanding the Community Gardens program;
- pursuing Bee City designation; and
- establishing a Home Energy Retrofit Program.

The majority of the EMP metrics remain unchanged as part of this refresh. However, several metrics, baselines, and targets have been refined based on the review of metric suitability, availability and accuracy of data, methodological improvements, and direction garnered from other technical studies and plans. One new metric has been added regarding the sustainability performance of new development.

Next Steps:

Following Council's endorsement of the updated Brampton Grow Green Environmental Master Plan, next steps include:

- undertaking a communication strategy to build awareness of the updated EMP amongst City staff, external partners, and the general public;
- exploring external funding opportunities that could be pursued to support the implementation of actions; and
- regular meetings with the Grow Green Team to monitor progress.

Corporate Implications:

Financial Implications:

There are no direct financial implications resulting from the approval of the recommendations of this report. Through the 2021 City Budget process, Council appropriately allocated funding to implement the Brampton Grow Green Environmental Master Plan actions. Any additional resources and funding required to implement actions

will be identified and brought forward to Council for approval as part of the annual budget process.

Other Implications:

There are no other implications resulting from the approval of the recommendations of this report.

Term of Council Priorities:

The updated Brampton Environmental Master Plan contributes to all of the Term of Council priorities, particularly “Brampton is a Green City”, “Brampton is a City of Opportunities”, “Brampton is Healthy and Safe”.

Conclusion:

The updated Brampton Grow Green EMP aims to accelerate progress in creating a more healthy, resilient, and environmentally sustainable city. While Brampton has made great strides since the launch of the Plan in 2014, gradual progress must be replaced with transformative action if we are to address today’s environmental challenges and avert climate disaster. The Grow Green vision will require support from leadership, inter-department cooperation, sustained and dedicated resources, ongoing education, sector-wide collaboration, and persistence.

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Attachments:

Appendix 1 – Fulfilling the Five Corporate Directions Identified in the Initial Brampton Grow Green Environmental Master Plan

Appendix 2 – Grow Green Achievements Snapshot: 2014-2020

Appendix 3 – Brampton Grow Green Environmental Master Plan Refresh (2020)

Fulfilling the Five Corporate Directions Identified in the Initial Brampton Grow Green Environmental Master Plan

The Brampton Grow Green Environmental Master Plan (2014) outlined five key corporate directions to position the City for the successful implementation, including modifying how we conduct business, communicate between departments, monitor and report performance, make decisions, and manage operations. Provided below are these key directions and an overview of the City's progress in achieving them.

1) Define and assign municipal sustainability resources

Brampton Grow Green must be embedded in the organizational configuration and composition of City departments and their associated divisions. A City department is typically responsible for specific tasks, goals and responsibilities relevant to its departmental mandate and function. The way the EMP is positioned within the City structure will influence collaboration between departments, promote corporate awareness of environmental initiatives and performance, and enhance public messaging about the priority of environmental sustainability within the City.

The following municipal resources and actions were identified to create changes that will help the EMP succeed in the long term.

- a) The Senior Management Team (SMT) will lead and support the Departments responsible for each action and facilitate interdepartmental collaboration, communication, education, and reporting on the City's environmental performance.
 - *Each City Department is responsible for leading the implementation of their respective actions identified in the Brampton Grow Green Environmental Master Plan.*
 - *The Environmental Planning staff of the Public Works and Engineering department coordinates the communication, monitoring, and reporting on the City's environmental performance.*
 - *Interdepartmental collaboration is facilitated by the Grow Green Team (refer to item 1.c).*
- b) Senior Management Team (SMT) will promote, coordinate and monitor Corporate and Community Actions to achieve improvements to the City's environmental performance.
 - *While overall support for Brampton Grow Green is being provided by senior management, the promotion, coordination, and monitoring of the City's environmental performance is headed by the Environmental Planning staff in collaboration with a network of internal and external partners.*
- c) SMT, with support of an integrated divisional Grow Green Team, will operationalize the EMP actions including partnership collaboration.

- *In 2017, the senior management endorsed the establishment of a corporate Grow Green Team, a group of cross-departmental staff led by Environmental Planning, to help facilitate the implementation of the Brampton Grow Green Action Plan, track progress, and promote a culture of conservation.*
- *The benefits of having one team have been multifaceted, including shared information, improved communication, and increased collaboration between departments. In addition, the Grow Green Team has been instrumental in providing an in-depth understanding of the successes, opportunities, and challenges of implementing Brampton Grow Green.*

2) Educate and promote awareness within and beyond the Corporation

Communication of environmental imperatives, goals, policies, and actions within the Corporation as well as to the community, including residents, private corporations, non-profit organizations, stakeholders and other levels of government, will be an important element of the EMP's success. Internal and external education must focus on engaging stakeholders and building support to undertake environmental actions. The public and City staff must understand what it is they are expected to do, what supports are in place to assist them, and what benefits are expected from their actions.

The following are actions for the City to expand awareness and educate the community at large and its partners about the EMP.

- a) Expand the role of the Brampton Environmental Planning Advisory Committee to act as EMP community resource for education and outreach.
 - *As the representation of and conduit to the community, Brampton's Environment Advisory Committee (BEAC) plays an important role in the development and delivery of public outreach and education.*
 - *Over the last several years, BEAC has supported and participated in a variety of community events.*
 - *More recently, the Terms of Reference for BEAC were updated to focus the committee's efforts toward assisting, educating, and engaging the community to advance the goals and actions of Brampton Grow Green.*
- b) Expand the role of the Brampton Clean City Committee to act as EMP community resource for education and outreach.
 - *In 2015, the Region changed their grant formula, which resulted in the City withdrawing from the delivery of waste education, terminating the Clean City program, and redirecting resources to sports and recreation programming.*
- c) Establish a Sustainability Hub/Environmental Learning Centre to champion the environment to Brampton residents, business and stakeholders.

- *In late 2019, City Council approved a conceptual plan of the establishment of Trailhead Eco Park, in collaboration with the Credit Valley Conservation (CVC), near Bovaird Drive and Heritage Road within the Credit River watershed.*
 - *The park will be a prominent, centre for environmental learning and outdoor education, and will include “The Landmark” – a signature building that will function as a multi-use community and base of operations for CVC public education and stewardship services, a public-facing environmental interpretation centre and even space, and aligned not-for-profit and community agencies.*
 - *In 2020, City Council directed staff to establish a Centre for Community Transformation (CCET), a not-for-profit community organization to help Brampton accelerate toward a low carbon future and act as a catalysts to implement the Community Energy and Emissions Reduction Plan (CEERP).*
- d) Develop a Mandate for the Sustainability Hub to promote, coordinate and monitor Community Actions to achieve improvements to the City’s environmental performance.
- *The Sustainability Hub has not been established.*
 - *Nevertheless, City staff are working with community partners, such as the Toronto and Region Conservation Authority, Credit Valley Conservation, Region of Peel, and members of the Grow Green Network to promote, coordinate, and/or monitor the Community actions identified in the EMP.*
 - *The City is also in the process of establishing the not-for-profit community organization Centre for Community Transformation (CCET), which will function as a hub for leading Brampton’s energy transition.*
- e) Host an Environmental Event in conjunction with the Brampton Environmental Planning Advisory Committee and Brampton Clean City Committee to share and learn best practices being implemented at home and abroad.
- *Environmental Planning staff and BEAC have partnered with Parks Community Programs staff to host an annual Earth Day community tree planting event, which includes booths providing information on various community organizations, environmental initiatives, as well as education materials.*
 - *City staff will continue to work with community partners to increase the scale, participation, and impact of this annual event.*
- f) Develop annual environmental recognition/incentives for businesses, institutions and citizens.
- *An annual Grow Green recognition program has not been established, and has been carried forward as a recommended action in the EMP refresh.*
 - *In 2020, the City launched the Advance Brampton Fund (ABF), a community granting program that supports non-profit sector development and provides municipal funding to Brampton-based non-profit or charitable organizations for strong project proposals that*

align with the Terms of Council priorities, including the “Brampton is a Green City” priority.

- The ABF Green City stream prioritizes environmental stewardship projects on City-owned property that support the Brampton Grow Green Environmental Master Plan by: enhancing the city’s urban forest and natural heritage system, encouraging active transportation (e.g. walking or cycling), and/or providing opportunities for residents to learn about environmental issues and solutions.*
- Environmental Planning staff are currently exploring opportunities to establish incentives for environmental actions that support the goals of Brampton Grow Green on private property.*

g) Develop a comprehensive Brampton Grow Green Communication Strategy.

- A Brampton Grow Green Communication Strategy has been developed outlining variety of tactics, including traditional and digital media as well as community events to education and engage staff, residents, businesses, and other partners to support the Environmental Master Plan and to take steps to achieve its goals.*
- To help maximize reach, the strategy aims to leverage existing network of environmentally focused organizations, residents and staff; develop a clear, concise and powerful message that promotes environmental stewardship; and equip advocates with a message and materials to inspire action among their own networks.*

3) Establish data collection and performance monitoring

The impact of the EMP cannot be known without baseline data collection, ongoing monitoring and a refinement of the environmental performance framework and strategies over time to ensure effectiveness. Quantitative tracking of environmental metrics will demonstrate whether the City is making progress towards its environmental goals and provide powerful evidence to support additional environmental initiatives.

Performance benchmarking is a key element of the EMP and involves choosing metrics that reflect attributes that are important to the city. Establishing performance targets for priority metrics and targets (based on a knowledge of current performance and precedents), and monitoring actual performance over time is necessary to evaluate Brampton’s environmental performance.

The following actions are required to establish the basis for a successful long-term monitoring of the City’s environmental progress.

a) Determine baseline data, and confirm and/or develop targets for all priority metrics.

- Over the last three years Environmental Planning staff have worked with the Grow Green Team and community partners to gather available data related to the EMP metrics, which has been used to refine baselines and inform new performance targets.*

- b) Identify departmental and corporate responsibilities for monitoring of Corporate and Community EMP Performance Targets, including data management and reporting.
- *EMP implementation monitoring and reporting is currently being coordinated by Environmental Planning, in cooperation with the Grow Green Team, and community partners such as the TRCA, CVC, and Region of Peel.*
- c) Establish protocols for data collection, analysis and reporting for each EMP Performance Target.
- *Protocols for data collection, analysis, and reporting on the Brampton Grow Green performance metrics have been established and will be regularly updated as new data sources, collection, analysis, and reporting methods become available.*
- d) Engage a third party environmental auditor to review data collection, analysis and reporting protocols, and annual environmental performance results.
- *A third part environmental auditor has not been engaged.*
 - *The City of Brampton is a member of the Global Covenant of Mayors for Climate and Energy (GCoM), a global alliance of more than 9,200 cities leading the fight against climate change. As part of this commitment, the City provided Brampton's GHG emission data gathered as part of the Community Energy and Emission Reduction Plan to GCoM for validation.*
- e) Annually update the Canvas of Environmental Initiatives, a snapshot of current ways in which Brampton and its conservation partners are improving the City's environmental performance.
- *Environmental Planning staff maintains the Canvas of Environmental Initiatives, which is available on the City's webpage.*
- f) Prepare an annual Council report that describes the status of the implementation of the Environmental Master Plan.
- *In 2018 Council received the first status update on the City's implementation of Brampton Grow Green. It highlighted the City's progress, and provided direction on ways to improve and strengthen Brampton's performance as it becomes a more healthy, resilient, and environmentally sustainable city.,*
- g) Prepare a Sustainable Brampton Report that describes and shares the status of the City's Corporate and Community environmental performance, issued at 5-year intervals.

- *In 2019, Environmental Planning staff commenced the review of the first five years of EMP implementation, culminating in the Brampton Grow Green EMP Refresh, as well as the Grow Green Achievements Snapshot: 2014-2020, which provide a summary of Corporate and Community environmental performance.*

4) Detail a budget and decision-making framework

How Brampton budgets for and makes decisions about environmental initiatives and programs is key to the implementation of the EMP. Successful implementation of the EMP will require a commitment of resources, both capital and staff, and institutional resources. The decision making framework of each City department needs to closely consider the EMP's environmental framework, directions and priorities, as well as the environmental cost of its action and inactions. The EMP can open up access to external resources such as Provincial and Federal funding sources, staff internships and partnerships. Providing such support to the EMP will assist with its long-term success.

- a) Allocate a portion of the City's annual budget to implementation of the EMP, with an allocation of funds for municipal staff and funding for pilot projects.
 - *Annual budgets for have allocated funding to the implementation of the Brampton Grow Green EMP.*
 - *As part of its approval of City of Brampton's 2021 Budget, City Council endorsed a substantial increase in the budget allocated for the implementation the EMP, with \$1.5 million distributed over three years to expedite project related to climate change and environmental sustainability priorities.*
- b) Initiate a True Cost Accounting approach to decision making in all City departments. The environmental cost of options (GHG emissions; water pollution, etc.) and actions should be directly included in budgeting and reporting process.
 - *A True Cost Accounting approach to decision making in all City departments has not been established.*
- c) Tie budgets to environmental performance; projects that make a contribution to the environment should rank higher on the priority list.
 - *Budgets and project prioritization has not been tied to environmental performance.*
- d) Develop a strategy to secure external funding opportunities and partners to help supplement the municipal resources and budget for environmental initiatives.
 - *While an external funding strategy has not been developed, City staff have pursued and secured multiple partnership and external funding opportunities since the launch of the EMP. Recent examples include, but are not limited to:*

- *\$10 million in Clean Water Waste Water Funding from the Federal and Provincial governments;*
- *\$300,000 from the Federation of Canadian Municipalities (FCM) for Haggert Avenue Low Impact Development (LID) project;*
- *\$90,000 from the Ministry of Energy, Northern Development, and Mines toward completion of the Community Energy and Emissions Reduction Plan;*
- *\$11.15 million in Federal funding for battery electric buses in Brampton; and*
- *\$25,000 sponsorship from CN Rail for anti-litter campaigns.*

5) Manage municipal operations and procurement standards

Municipal procurement is defined as the acquisition of goods, services and works and can range from the purchasing of office supplies or the procurement of food, to funding complex, large-scale municipal contracts such as building a recreational facility. Through procurement practices, cities are becoming increasingly focused on how environmentally sustainable their contractors, suppliers and service providers offer services and manage their internal operations.

The following actions describe how the City of Brampton can incorporate environmental practices into the planning and operation of municipal facilities and services provided to the City

a) Develop a Sustainable Procurement Strategy.

- *In May 2020, City Council endorsed a Sustainable Procurement Framework as the basis for the development of a Sustainable Procurement Strategy, with the aim of using the procurement process to generate social, economic, and environmental value through public spending on goods, services, and construction.*
- *One of the Framework objective is to “increase environmental sustainability considerations in City procurements by incorporating environmental requirements for acquisitions and evaluation of supplier’s environmental practices”.*
- *The Framework also directly references the Brampton Grow Green goals for the EMP core components of Air, Water, Land, Energy, and Waste.*

b) Follow the practices of the G.I.P.P.E.R.’s (Governments Incorporating Procurement Policies to Eliminate Refuse) Guide to Environmental Purchasing that provides recommendations and guidance to City staff at all levels for environmentally responsible procurement.

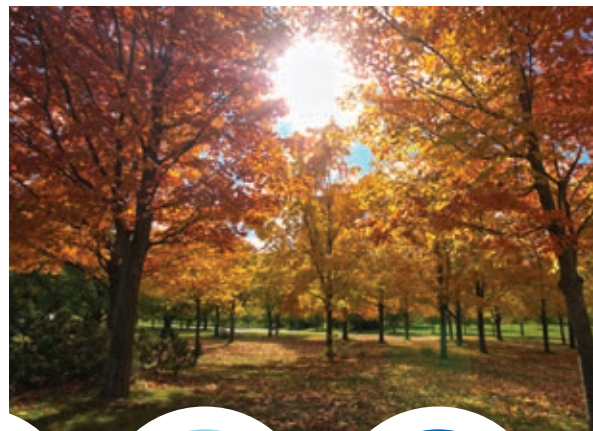
- *The City’s Sustainable Procurement Framework include reducing waste generation as one of the sustainability factors that may be considered for any procurement.*
- *City staff will review the G.I.P.P.E.R.’s Guide when developing the final Sustainable Procurement Strategy.*

c) Develop a code of sustainable qualifications that vendors/contractors are encouraged to meet when managing their operations or providing services to the City.

- *This will be considered when developing the final Sustainable Procurement Strategy.*
- d) Require contracts with professional service providers to demonstrate an internal responsibility to sustainability and, through product delivery, how they are reducing environmental impacts.
- *This will be considered when developing the final Sustainable Procurement Strategy.*
- e) Develop an assessment protocol that evaluates the environmental consequences of an acquisition at various life cycle stages. Consider life cycle costing for products, buildings and facilities and demonstrate how they meet the City's environmental performance goals.
- *An assessment protocol that evaluates the environmental consequences of an acquisition at various lifecycle stages has not yet been developed.*
 - *In 2016, the City of Brampton released its first Corporate Asset Management Plan, which acknowledges that "Comprehensive Asset Management is an integrated set of processes to minimize lifecycle costs of owning, operating and maintaining assets, at an acceptable level of risk while continuously delivering established levels of service."*
 - *It also includes an Asset Management Roadmap with the ISO 55000 as the backbone to implement the Asset Management Strategies, which aims to provide multiple benefits, including but not limited to decisions being based on the triple bottom line (social, environmental, economic), and minimizing lifecycle costs.*

GROW GREEN ACHIEVEMENTS

Snapshot



2014 - 2020

 **BRAMPTON**

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In 2014, City Council approved the Brampton Grow Green Environmental Master Plan (EMP), the City's first blueprint for improving environmental sustainability at both the City (internal) and community (external) level.

Brampton Grow Green directs the City's environmental sustainability approach, and identifies six core components – People, Air, Water, Land, Energy, and Waste – through which the EMP goals, metrics, actions, and targets are organized.

Significant progress has been made since the launch of Brampton Grow Green, as Brampton works toward becoming a more healthy, resilient, and sustainable city. This Grow Green Achievements: Snapshot document highlights some of Brampton's accomplishments over the last 6 years.

PEOPLE



Invest in people to create a healthy, livable, safe community.

Grow Green Network

In 2017, the City's Environment Advisory Committee launched the Grow Green Network, a collective of local organizations focusing on environmental stewardship and sustainability. To date, over 20 organizations have joined the Network. Members can identify like priorities and leverage each other's skills, resources, and ideas. As a result, members are able to expand their reach and impact. The Network also provides an effective forum for the City to engage with active community groups, and learn about activities beyond City initiatives.



Grow Green Team

The Grow Green Team is a group of cross-departmental City staff that help facilitate the implementation of the Brampton Grow Green Environmental Master Plan, track progress, and promote a culture of conservation. The benefits of having one team are multifaceted, including shared information, improved communication, and increased collaboration between departments. In addition, the Grow Green Team has been instrumental in providing an in-depth understanding of the successes, opportunities, and challenges of implementing Brampton Grow Green.



Grow Green Eco Pledge

The Grow Green Eco Pledge Program started in 2017 and encourages residents and City staff to commit to simple, eco-friendly actions for a specific period of time. Some actions are easy and others are more ambitious - participants decide what works best for their lifestyle and interests. They are also encouraged to challenge their friends, family, classmates, or coworkers to also make a pledge.



Recreation Programming

Recreation programs in Brampton are offered to grades 1 through 12 and provide a variety of opportunities for youth to learn in experiential programming and workshops. This includes outdoor environmental education programs which offer students hands-on interactive activities and age appropriate sessions with curriculum based programs, such as lessons on biodiversity, wildlife, ecosystems, sustainable agriculture, water systems, and human impact on the environment. Between 2014 and 2019, over 1700 students participated in these programs.



Lighthouse Program

In 2019, the City of Brampton launched the Lighthouse Program, which coordinates faith-based organizations to offer their facilities as refuge during times of citywide emergency. The City aims to create a network of "lighthouses" accessible to all community members, regardless of their belief system. The Lighthouse Program will boost Brampton's emergency preparedness and in response increase the city's resilience against natural disasters, such as floods and storms, and other emergency events.



Blue Dot Movement Signatory

In 2016, the City of Brampton joined the Blue Dot Movement along with 173 other Canadian municipalities. Led by the David Suzuki Foundation, Blue Dot advocates that everyone in Canada deserves the right to a healthy environment and that the Federal and Provincial governments should amend appropriate legislation to include this right. Joining the Blue Dot Movement confirms that the City recognizes that people are part of the environment, and that a healthy environment is inextricably linked to community well-being.



Advance Brampton Fun

The Advance Brampton Fund (ABF) launched in late 2019. It provides grant funding for charitable and non-profit organizations in Brampton for projects that align with and advance Term of Council Priorities, which include the "Brampton is a Green City" priority. The ABF Green City stream prioritizes environmental stewardship projects that support the Brampton Grow Green Environmental Master Plan by enhancing the city's urban forest and natural heritage system (e.g. naturalization/restoration planting, tree planting, invasive species removal), encouraging active transportation (e.g. walking or cycling), and/or providing opportunities for residents to learn about environmental issues and solutions.



Parks Environmental Stewardship Education Program

In 2016, the City's Parks Maintenance & Forestry team began offering a variety of educational stewardship programs for students in Kindergarten through Grade 8, primarily focused on parks and natural heritage stewardship. Educational programs are free of charge, adhere to the Ontario Curriculum, and include in-classroom and outdoor lessons and activities, as well as tree planting. The program has reached over 18,000 students across more than 70 schools in Brampton so far.



Community Parks Week

Each October, the Parks Maintenance & Operations team hosts a Community Parks Week event for five elementary schools that are located next to a Brampton park. At a local park, students learn about park stewardship and how to become a "Park Hero" through various activities, such as tree and wildflower planting. Students also learn how Parks staff keep Brampton's parks clean, green, and safe.



Our Ecosystem, Our Home, Our Responsibility

All residents and living beings in Brampton rely on the interconnected system of natural and built environments. This is Brampton's ecosystem. The Our Ecosystem, Our Home, Our Responsibility campaign commenced in 2020, and advocates that Brampton's residents and businesses have a responsibility to take ownership and stewardship of our surroundings, including the natural environment, through our daily activities and life-long decisions.



AIR



Reduce impacts on air quality.

Transportation Master Plan

In 2015, the City updated its Transportation Master Plan, the blueprint for strategic transportation planning and direction for the future. The Plan addresses existing challenges and makes recommendations for sustainable transportation solutions to manage the transportation impacts and address travel demand associated with future growth. It outlines a transportation system to better serve residents, employers, employees and visitors while accommodating multiple modes of transportation (e.g. public transit, commuter travel, commercial vehicles, and active transportation).



Active Transportation Master Plan

In 2019, the City of Brampton released the Let's Connect: Active Transportation Master Plan, which outlines a network plan, policies, and programs to support a mosaic of safe and integrated transportation choices, emphasizing walk, cycling, and transit. It underscores the importance of providing accessible, high quality and connected active transportation infrastructure to encourage the use of active modes and to build sustainable and livable communities.



Active Transportation Infrastructure

Active Transportation, which includes walking, cycling and other self-propelled mobility options, presents one of the greatest untapped opportunities for reducing single occupant vehicle trips, and for addressing a host of environmental, community design and public health issues. Incorporating global best practices in active transportation and promoting the concept of complete streets and sustainable community design is a guiding principle for the City's efforts. Since 2014, the City introduced over 140 kilometers of bike lanes, multi-use paths, recreational trails, and signed bike routes to the transportation network.



Franceschini Bridge

To protect the health and safety of Brampton residents during the COVID-19 pandemic, the City created temporary bike lanes along the Voddan Street corridor. The lanes provided an additional cycling option to recreational trails for residents and allowed cyclists to maintain physical distancing.



Grow Green Achievements | Air 2

Cycling Advisory Committee

Established in 2015, the Cycling Advisory Committee advises City Council on utilitarian and recreational cycling matters in Brampton. The Committee advocates for cycling-supportive legislation and policies, provides input to City staff on the delivery of cycling infrastructure and programs, and organizes, delivers, and participates in educational and awareness activities to promote the benefits of cycling.



Bike the Creek

Launched in 2014, Bike the Creek is a free annual event aimed at encouraging people of all ages to discover the joys of cycling. A partnership between the City of Brampton, Town of Caledon, Living City Foundation, Toronto & Region Conservation Authority, and Bike Brampton, the event attracts hundreds of cyclists to one of five routes along the Etobicoke Creek depending on their skill level.



Bicycle Friendly Community Award

The City of Brampton is working toward building a bicycle-friendly city, and its efforts have been recognized through the Bicycle Friendly Community awards with a Bronze status, announced by the Share the Road Cycling Coalition at the 2017 Ontario Bike Summit awards. The City has made important commitments and investments in building a bicycle-friendly community, and championing bicycling as a safe, healthy and fun means of recreation and transportation.



Image source: TRCA

Bike to Work Day

Bike to Work Day is an annual event hosted by the City and the Downtown Brampton BIA. The event encourages residents to bike to work to support physical activity, reduce vehicle trips, and exploration of the city's active transportation infrastructure.



Etobicoke Creek Trail

In 2016, the City of Brampton in collaboration with the Toronto & Region Conservation and the Town of Caledon completed the Etobicoke Creek Trail Link. The 1.5 km recreational trail link expands Brampton's network of safe walking and cycling trails while providing a connection to Caledon.



Image source: TRCA

Bike and Ride

Cycling around the city has been made easier with the addition of bike racks on every Brampton Transit bus. All City buses are now equipped with racks to allow cyclist to take transit with their bikes. Bikers can now mount their bikes on the front of the bus, unload and ride to their destination.



Next Ride

In an effort to better connect Brampton's residents to transit, the City launched Next Ride, a web and mobile tool that provides real-time bus information for Brampton Transit bus stops. It is a subscription service that sends the rider notifications about selected bus departures, and helps make public transit a more attractive transportation option.



iRide Bus Routes

During the school year Brampton Transit extends its bus routes by adding school bus routes to encourage students to use public transit. The bus routes service 12 schools in the city providing students with the option of public transit to get to school.



Electric Bus Pilot Program

In 2019, the City welcomed a significant investment from the Government of Canada for the milestone Pan-Canadian Electric Bus Demonstration and Integration Trial in Brampton. The funding will be applied to Phase 1 of the pilot project, which will test battery electric buses in Brampton. This first-of-its-kind project is an unprecedented initiative that has brought multiple levels of government, bus and charger manufacturers, system integrators, academia, and funding partners together to implement electric buses in Brampton. This will be the largest single global deployment of standardized and fully interoperable battery electric buses and high powered overhead on-route charging systems, with eight electric buses (six by New Flyer Industries and two by Nova Bus) and four charging systems (three by ABB Group and one by Siemens).



In 2020, Council approved plans for Brampton Transit's fully electric transit maintenance and storage facility. This will be one of the largest new bus facilities in North America constructed to help support a fully electric, zero tailpipe emissions future bus fleet.



Züm Bus Rapid Transit Expansion

Züm is a public transit solution that supports high-capacity routes and has benefits similar to rail transportation – using world-class technologies to provide better and faster ways to connect people and places. Brampton Transit has expanded Züm services to five routes: Queen Street, Main Street, Steeles Avenue, Bovaird Drive, and Queen Street West. Public transit is highly utilized by Bramptonians, and the City continues to provide more transit options to connect residents and businesses locally and regionally.



Hurontario Light Rail Transit

Major construction of the Hurontario Light Rail Transit (HuLRT) began in spring 2020. The HuLRT will bring 18 kilometres of fast, reliable, rapid transit along the Hurontario corridor between the Brampton Gateway Terminal in Brampton and the Port Credit GO Station in Mississauga. This city-building and region-connecting project will transform Hurontario Street into a vibrant people-oriented corridor connecting communities and accommodating growth anticipated over the next 30 years. The HuLRT will play a transformative role in contributing to better air quality in nearby communities by offering an efficient and convenient alternative to using a car. In addition, the HuLRT vehicles will be electric powered, emitting near zero emissions, which in turn will aid in a substantial reduction of greenhouse gas emissions and other air pollutants. The anticipated completion of the HuLRT is fall 2024.



Electric Vehicle Charging Stations

Since 2015, the City EV network has rapidly expanded among city facilities. Currently the City owns and operates over 50 electric vehicle charging stations across 13 City facilities to help make electric vehicle use more convenient for residents and businesses in Brampton. All the stations are level-2 charging stations, which can fully charge a vehicle in 3 to 6 hours, depending on vehicle type. Expanding electric vehicle infrastructure supports the growth of a cleaner, more sustainable transportation options.

At the Brampton Soccer Centres, electricity use and costs from electric vehicle (EV) charging stations are reduced using electricity generated from solar panels. The panels are located above the EV charging station, and can also act as a canopy to provide protection from the elements while an electric vehicle is being recharged.



EV charger at Springdale Library

Global Covenant of Mayors for Climate and Energy

In 2019, the City of Brampton joined the Global Covenant of Mayor for Climate and Energy (GCoM), a global alliance leading to fight against climate change. The City was also selected by GCoM to join Showcase Cities, a pilot project led by GCoM, where the City will receive support to help reduce greenhouse gas (GHG) emissions and adapt to climate change.



Climate Emergency Declaration

In 2019, Brampton City Council voted unanimously to declare a climate emergency, joining a growing list of municipalities across Canada and the world. The motion highlighted actions the City is already taking to mitigate and adapt to climate change, and also recommended a greenhouse gas emission reduction for Brampton of 80 per cent by 2050.



WATER



Protect and respect water as a non-renewable, life critical resource.

City Hall Green Roof

In 2018, the City installed green roofs on City Hall, complimenting the green roofs constructed as part of the West Tower City Hall expansion. The roofs provide insulation and decrease heating/cooling costs. Vegetation on the roofs absorb rainwater and decrease stormwater runoff. As well the roofs provide wildlife habitat and improve the aesthetics of the buildings "fifth facade".





Image source: TRCA



County Court Bioswale

In 2014 as part of County Court SNAP, the City installed its first bioswales along County Court Boulevard in concert with the scheduled road resurfacing. The primary role of the bioswales is to collect and clean storm water run-off from County Court Boulevard before it enters the Etobicoke Creek. Ongoing monitoring of the bio-filter swale has revealed that this feature has successfully reduce concentrations and loads of typical stormwater pollutants, and reduce runoff volume and peak flow rates from their road drainage areas.



The County Court Bioswales capture over 240,000 litres of water, reducing stormwater runoff by up to 34%. They also decrease the amount of pollutants in the water released by up to 77%. Some of the pollutants they capture included chromium, copper, nitrogen, oil and grease, iron, and zinc.

Glendale Public School Rain Garden

As part of Fletchers Creek Sustainable Neighbourhood Action Plan the City of Brampton and Credit Valley Conservation (CVC) worked with Glendale Public School to establish a rain garden on their property in 2019. Based on a “treatment train” approach, the garden captures rainwater from the school roof and playground surface, which previously pooled in the schoolyard making the field too soggy to play on. It also helps to cool water before it enters Fletchers Creek, which is home to Redside Dace. The garden has enhanced aesthetics of school property through plantings and landscaped features and showcases benefits of Green Infrastructure Low Impact Development solutions. In addition to helping design the garden, students helped planting it with bird and pollinator friendly plants. Additional learning opportunities for students and the community regarding stormwater management, native species and pollinators were created and an information sign installed.



Stormwater Management Charge

Stormwater management is an important part of community safety and environmental protection. Due to factors such as climate change, aging infrastructure, and a growing community, the City developed a proactive program to manage stormwater infrastructure in a sustainable and fiscally responsible manner to ensure the City continues to provide the services the community expects. The Stormwater Charge, which commenced in June 2020, is a fair and equitable means of paying for stormwater services, and is based on the amount of runoff from a property. The Stormwater Charge will ensure that the City can provide dedicated and sustainable funding for stormwater services that increase public safety, reduce flooding and erosion, and protects property and the environment.



LAND



Manage Land to sustain the natural environment.

Stormwater Management Charge

A catalytic action identified in the Brampton 2040 Vision, the Brampton Eco Park Strategy aims to enhance and maintain natural systems and processes, while integrating opportunities for meaningful social and environmental interactions and experiences. Through seven guiding principles and a detailed action plan, it outlines how to establish an interconnected network of urban and green spaces that allow people and the environment to live and thrive together. Brampton's Natural Heritage System will form the foundation of the Brampton Eco Park, and will be coupled with Eco Spaces, such as parks and utility corridors, to become a showcase for the city that fosters healthier people, places, and ecosystems. The strategy was approved in 2020.



Brampton One Million Trees Program

The Brampton One Million Trees Program is a framework for the City and its partnering organizations to increase tree plantings and meet its one million tree planting target outlined in the Brampton 2040 Vision: Living the Mosaic. Approved in 2020, it contains goals, strategies, and actions including but not limited to, planting opportunities within streetscapes, parks, new and existing development, as well as community education and engagement.



Tree Planting Tracker Map

The tree planting tracker map is a great tool the City of Brampton launched to help track and report progress toward achieving the one million tree planting goal. Anyone who plants a tree in Brampton is encouraged to record the tree planting on the map, including a photo of the tree.



The City of Brampton currently plants approximately 7000 trees annually, while its partners including the TRCA, CVC, and development industry plant a combined total of approximately 36,000 trees a year.



Fletchers Creek Valley: Before Valley Naturalization



Fletchers Creek Valley: After Valley Naturalization

Natural Heritage and Environmental Management Strategy

The Natural Heritage and Environmental Management Strategy, released in 2016, is a proactive approach to ensure that the natural heritage and built green spaces are conserved, restored, connected, and enhanced to support the health and diversity of the natural and built environments. To do so, the Strategy examines Brampton's natural heritage with a full systems approach that recognizes the challenges and opportunities presented by conserving natural features, functions, and linkages in an urban setting. It includes an action plan, performance indicators, and targets for the long term sustainability, biodiversity, and health of the city and its watersheds for future generations.



Valley Naturalization Program

The Valley Naturalization Program is designed to restore native plant communities in valleys that were stripped of native vegetation by past agricultural practices and development. The new plantings, over time, restore the vegetation in these areas to a pre-agricultural state, dramatically improving their ecological value by introducing new wildlife habitat, improving fish habitat, and flood plain stabilization. The City has naturalized over 220 hectares since the launch of the program, 104 hectares of which were planted between 2014 and 2019.



Natural Heritage Restoration Program

In 2018, the City of Brampton launched the Natural Heritage Restoration Program that focuses on projects that protect, restore, connect, and enhance the natural heritage system. The primary program goal is to manage Brampton's natural features to maximize the ecosystem services they provide. The program helps the City identify and prioritize areas for restoration and enhancement. It also focuses education and outreach, as well as partnerships with Conservation Authorities, community groups and residents.



Don't Mow, Let it Grow

In 2018, the City of Brampton launched Don't Mow, Let it Grow, an initiative focused on strategically converting areas of public space from turf grass into naturalized meadows and pollinator gardens. The "No Mow" zones contribute a range of environmental, financial, and aesthetic benefits. For example, they provide support for pollinators and wildlife, reduce green house gas emissions, and help manage stormwater.





Natural Heritage Brochure Series

In 2019, the City of Brampton released a series of educational brochures to help build awareness on natural heritage features, the services they provide, and what actions people can take to responsibly enjoy and conserve them. The brochures are visually attractive, include animated characters to attract young readers, and are available at City facilities and distributed at public events.



Riverstone

In 2017, the City moved forward with purchasing Riverstone Golf Club, which comprises of 60+ hectares of valleyland. The existing facility will be converted to a recreation centre while the surrounding golf course will be re-naturalized by the City, in cooperation with the TRCA and the Ontario Ministry of Natural Resources and Forestry. In addition to providing more opportunities for Bramptonians to interact with and enjoy nature, this initiative will aid in conserving the West Humber tributary and will provide protected habitat for Redside Dace, an endangered fish. It will offer a new connection for active transportation on the east side of Brampton.



Sustainable Neighbourhood Action Program

The Sustainable Neighbourhood Action Programs (SNAPs) are a partnership initiative between the City of Brampton, TRCA, CVC, and Region of Peel. SNAPs focus on environmental improvements and urban renewal of existing neighborhoods, and promote widespread adoption of sustainable technologies, practices, and lifestyle in the community. The SNAPs result in numerous environmental achievements, such as tree planting, stormwater management projects, natural heritage restoration, community festivals, residential energy and water conservation activities, and community empowerment initiatives.



Brampton currently has two SNAPS, the County Court SNAP and the Fletchers Creek SNAP, with a third SNAP (Bramalea) on its way!



Community Garden Program

Community Garden program allows a group of community members to join together to manage and maintain an identified plot of land for the purpose of growing fresh produce and plants. Although the actual space is owned by the City of Brampton, the garden itself is overseen by a Community Garden Group. In addition to providing access to fresh produce and nutritionally rich foods, these community gardens provide areas for recreation and exercise, offer a place to share knowledge, add beauty to the community, heighten people's awareness and appreciation for living things, and reduce fuel consumption and packaging.



Backyard Garden Program

Launched in 2020, the Backyard Garden Program aimed to increase food security in the city and encourage Brampton residents to get active at home amid the COVID-19 pandemic. The program provided soil and seed to residents to grow produce and herbs in their backyards for their own consumption and/or to be donated to local food banks and community organizations. Through the Backyard Garden Program, more than 10,000 lbs of produce was donated to those in need from April to October 2020.



Community Planting Programs

City's Community Planting Program encourages the public to get involved in greening their communities by planting trees, shrubs, and wildflowers in public spaces across the city. The planting events bring together families, friends and communities, and builds environmental awareness, creates habitat, promotes physical activity and mental health, and fosters local engagement.



Adopt-a-Park Program

The City of Brampton encourages families, neighbourhoods, civic groups, businesses, and individuals to get involved in the preservation and enhancement of the parks system through the Adopt-a-Park program. The volunteer group commits to maintain the park for two years through activities such as clean-ups and other park stewardship activities. Volunteers donate time and resources to give special care to a City park by helping maintain, beautify, enhance and keep the park safe for all to enjoy. Over 80 parks across Brampton are adopted.



Friends & Stewards of Dorchester Park



Heart Lake Road Wildlife Crossings

Heart Lake Road bisects a Provincially Significant Wildlife complex in north Brampton, and through a study known as the Heart Lake Road Ecology Volunteer Monitoring Project it was revealed that a high incidence of vehicle-related wildlife mortality was occurring on this road as wildlife tried to move between their habitats by crossing the road. This included The City of Brampton in partnership with the TRCA implemented mitigation measure to protect local biodiversity and Species at Risk, and enhance habitat connectivity, including the installation of:

- wildlife culverts, also referred to as eco passages, beneath the road at three locations along Heart Lake Rd, between Sandalwood Pkwy and Mayfield Rd in Brampton,
- wildlife directional fencing to keep animals from accessing road and guide them to safe passageways (e.g. culverts),
- signs to raise awareness and alert public to potential small wildlife on roads, and
- Optical Speed Bars painted to cause a visual effect intended to reduce driver's speed.

Citizen scientists have been instrumental in collecting the data needed to support this initiative.



Brampton 2040 Vision: Living the Mosaic

The Brampton 2040 Vision: Living the Mosaic, endorsed in 2018, proposes a bold new vision for Brampton's future. Informed by one of the largest and most innovative public engagement exercises ever undertaken by the City, the Vision entails seven ambitious vision statements with its first being "Sustainability and the Environment". It envisions Brampton as mosaic of sustainable urban places, sitting within an interconnected green park network, with its citizens as environmental stewards. To achieve this future, the Vision calls for the establishment of an Institute of Sustainable Brampton, a Brampton Eco Park Strategy, and a Brampton Millions Trees Project. The remaining vision statements further support an urban transformation to a more sustainable Brampton through the provision of urban centres, complete communities, multi-modal transportation and social and cultural programming.



Term of Council Priorities

The 2018-2022 Term of Council Priorities is a set of twenty-two priorities that will inform the city's activities, decisions, and budgets. There are five directions in which the priorities are organized, including "Brampton is a Green City". Council has directed staff to prioritize how Brampton will build sustainably by improving transit and active transportation, focusing on energy efficiency and revitalizing natural spaces and the urban tree canopy.



Sustainability Performance Metrics for New Development

In support of the City's commitment to elevate the level of sustainable development in Brampton, the City of Brampton in partnership with the Cities of Vaughan and Richmond Hill released series of sustainability performance metrics that have an associated point value, which evaluate and score the sustainability performance of new development and encourage builders/developers to achieve a minimum level of performance.

As of 2015 development applicants are required to indicate which metrics their proposal achieves and the total point score via an online Sustainability Assessment Tool (SAT). In 2018, the City of Brampton mandated applicants achieve a final score within the Bronze threshold.

By adopting these performance metrics and thresholds as a lens through which to evaluate development, the City is facilitating more livable communities that are environmentally, economically, and socially sustainable.





Seedy Saturday and Garden Show

Each spring the City hosts the Seedy Saturday and Garden Show in collaboration with the Brampton Horticultural Society. The show provides attendees the opportunities to hear from experts, get gardening information, swap and buy seeds, join gardening programs and engage with fellow gardening enthusiasts. Hundreds of participants enjoy this annual event, which has grown in scale over the last five years.



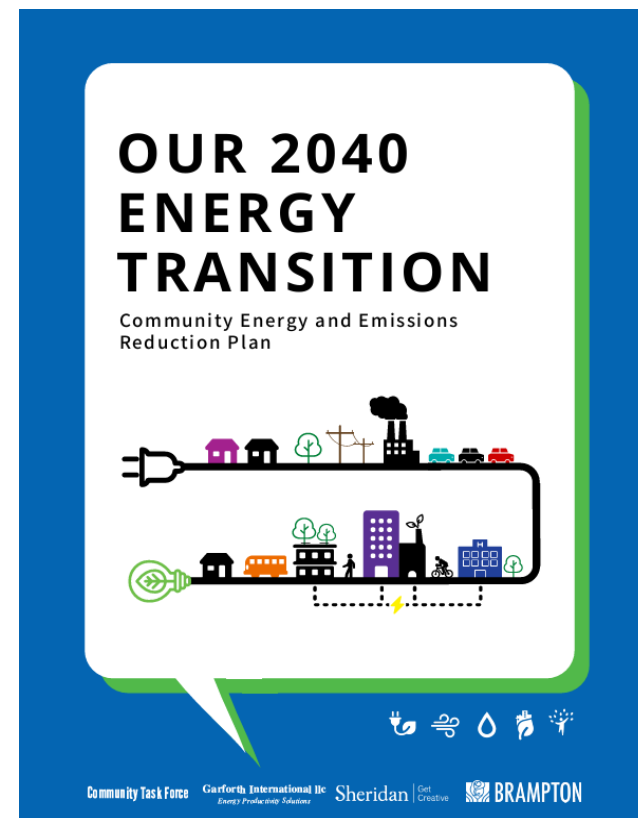
ENERGY



Reduce energy consumption and manage the impact of energy usage on the environment.

Community Energy & Emissions Reduction Plan

The Community Energy and Emissions Reduction Plan (CEERP) is an evidence-based, comprehensive plan approved in 2020 to drive innovation, employment and economic development while achieving the City's environmental and climate change goals, along with its associated social benefits. CEERP offers a roadmap that will improve energy efficiency, reduce greenhouse gas emissions, create economic advantage, ensure energy security, and increase Brampton's resilience to climate change. The CEERP has three goals: reduce community wide energy use by 50% by 2041; reduce community-wide emissions by 50% by 2041 while establishing a pathway to reduce emissions by 80% by 2050; and retain at least \$26 billion in cumulative energy costs by 2041. Alongside the Brampton Grow Green Environmental Master Plan, the CEERP is the City's climate change mitigation plan.



Grow Green Achievement | **Energy 1**



Energy Conservation at City Facilities

Between 2014 and 2019, a total of 50 energy conservation projects were completed on City facilities, resulting in an energy savings of 31,442,000 ekWh in total over the five years and the potential to reduce 1,190 tons of CO₂e of GHG emissions per year. Projects were guided by the City's Corporate Energy Management Plan, and include, but are not limited to, instantaneous water heaters, swimming pool heat recovery, de-stratification fans, high efficiency lighting, and emerging technologies such as REALice heat saver. The simple payback of these projects is estimated to be seven years.



The City of Brampton has saved \$2.9 million in energy costs through energy conservation projects from 2014 to 2019.

LEED (Leadership in Energy and Environmental Design) Certified Facilities

The City continues its commitment to sustainability in building design, construction and operations by participating in the Leadership in Energy and Environmental Design (LEED™) green building program for new construction and major renovations. The City has constructed 7 LEED certified buildings achieved green building certification, and all were rated Gold. These buildings were designed to optimize energy and water efficiency, while addressing construction waste management and recycling, indoor environmental quality, and durability in material selection, amongst other environmental friendly features.



BOMA BEST Sustainable Buildings Certification

BOMA BEST Sustainable Buildings certification recognizes excellence in energy and environmental management and performance in commercial real estate. The Program is managed by the Building Owners and Managers Association (BOMA) of Canada. The City of Brampton operates three BOMA BEST certified buildings, including City Hall (2 Wellington Street West), the Brampton Provincial Offences Act Building (5 Ray Lawson Boulevard), and Brampton Civic Centre (150 Central Park Drive).



LEED Gold Certified Williams Parkway Operations Centre

Renewable Energy Projects

The City has implemented many renewable energy projects between 2014 and 2019, such as the installation of a geothermal system at Springdale Library and Williams Parkway Operations Centre, a solar photovoltaic (PV) system at Cassie Campbell Community Centre, and the solar thermal system at Brampton Apparatus and Maintenance Facility and Fire Station 11. Between 2014 and 2019 City renewable energy projects produced 11,123,754 ekWh of clean energy.



Between 2014 and 2019 City renewable energy projects produced 11,123,754 ekWh of clean energy.



LED Street Light Installation

In 2017, the City commenced the LED Streetlight Conversion project to reduce its energy consumption, maintenance costs and the environmental impact associated with its extensive network of streetlights. By converting from traditional high pressure sodium (HPS) to light-emitting diode (LED) streetlights, the City not only achieves energy, cost, and GHG savings but also improve its overall lighting quality and roadway safety for both vehicle and pedestrian traffic. Since the program launch, the City has completed over 24,000 LED installations. It is estimated that the LED conversions will also result in an 80% reduction in maintenance costs, and that approximately 12,340 metric tonnes of GHGs will be eliminated over the life of each luminaire. The City aims to completed an additional 7854 conversions in 2020.



The City have completed over 16,000 LED street light conversions, achieving a 69% decrease in energy consumption, and 48% reduction in energy costs.

LED Traffic Signal Installation

The City of Brampton was the first municipality in Peel to undertake a city-wide street lighting retrofit project. In 2003, Traffic Services began replacing incandescent traffic signal lamps with more efficient LED (light-emitting diode) technology that had a lifecycle of approximately 10 years.



Solar Power Flashing Traffic Beacons

Traffic Services have been installing solar powered flashing traffic beacons key areas requiring extra caution by the average driver, such as school zones, fire stations, and wildlife crossings. Powered only by the solar panel, these beacons helps reduce energy consumption versus traditional flashing traffic beacons.



Earth Hour

Every March, the City of Brampton join millions of individuals, businesses and governments around the world by turning off all non-essential lights for Earth Hour. The City encourages everyone in Brampton to join the global campaign to send a message that they care about protecting our environment. In 2019, City facilities achieved an overall 25% energy reduction during earth hour.





Solar Powered Transit Shelters

In 2016, Brampton Transit introduced solar powered bus shelters, whereby energy is stored in batteries built into advertising panels. The panels automatically light up once surrounding natural light drops to a low enough level. By relying on renewable energy, these shelters reduce GHG emissions and save on electricity costs. To date, Brampton Transit has installed 179 solar shelters across the city. They are planning to replace all shelters reaching the end of their life cycle and retrofit all other existing shelters to solar powered LED interior lighting. New solar powered shelters are strategically placed based on ridership, sun exposure, adjacent land use, and service frequency.



Centre for Community Energy Transformation

In 2020, Council directed staff to move forward with establishing a Centre for Community Energy Transformation (CCET), a not-for-profit community based organization to help Brampton accelerate towards a low carbon future and act as a catalyst to implement the Community Energy and Emissions Reduction Plan (CEERP). The CCET was formerly referred to as the Institute for Sustainable Brampton, as identified in the Brampton 2040 Vision.



WASTE



Reduce waste generation to limit resource use, GHG emissions, preserve habitats and resource, and decrease management costs.

Parks Clean-Up Program

The City of Brampton promotes cleanup campaigns each year, launching in Spring (April) and ending in Fall (November). Both campaigns give residents and businesses opportunities to collect litter in parks and other green spaces. Participants that register receive free Cleanup kits to clean the location of their choice. In 2019 alone, over 45,000 people helped clean-up litter across Brampton.



Don't Be Trashy Anti-Litter Campaign

The Don't Be Trashy litter campaign ran in 2019 and was designed to improve litter awareness, encourage proper waste disposal, and reduce the amount of litter in Brampton. The campaign included street decals, posters, school challenges, and social media posts, and was sponsored by CN. The campaign is part of the City's ongoing commitment to a clean and green Brampton, and a response to growing community concern about the negative impact litter has on human health, wildlife and the natural environment.



Printer Fleet Replacement Project

In 2016, the City of Brampton undertook a printer fleet replacement program, which included a commitment to environmental sustainability. Over 300 printers were consolidated and replaced with just over 200 units strategically placed in central locations, providing ongoing savings in energy, as well as hardware and maintenance fees. The new printers also include controls that help reduce the amount of printing, including default black and white double-sided printing, and swipe-and-release technology, and automatic deletion of jobs not released for print within 24 hours.



Within the first month of rolling out the new printer fleet, the City saw over 80,000 sheets of paper saved.



BRAMPTON GROW GREEN

Environmental Master Plan

Refresh (2020)



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Introduction

Municipalities are at the centre of sustainability efforts and the global movement toward reducing our impact on the planet. In 2014, City Council approved the Brampton Grow Green Environmental Master Plan (EMP), the City's first blueprint for improving environmental sustainability at both the City (internal) and community (external) level. The outcome of extensive research, consultation, and collaboration, Brampton Grow Green outlines a vision, guiding principles, goals, and actions for a more sustainable future, as well as performance metrics and targets to drive and evaluate our progress.

The Plan is organized around the six core components of People, Air, Water, Land, Energy, and Waste, recognizing the multifaceted nature of environmental sustainability. The actions and targets identified under the core components are not independent, but work together to deliver results. Brampton Grow Green is a long-term, comprehensive plan that aims to position the city as a model for responsible growth and meaningful environmental action.

Brampton Grow Green, like other master plans, is a living document that should be regularly updated to ensure it remains current, relevant, and reflective of the City's evolving environmental priorities and ambitions. The original Environmental Master Plan recommends that this exercise be undertaken every five years. This updated Brampton Grow Green Environmental Master Plan is the second generation of the pivotal document.



The intent of this renewed Brampton Grow Green Environmental Master Plan is not a complete reinvention or redesign of the Plan. The Brampton Grow Green vision, guiding principles, and core components remain pertinent, and will continue to act as the foundation of the Environmental Master Plan. Instead, this update focuses on providing a refreshed and streamlined Action Plan and Metrics that:

- reflects knowledge garnered from the first five years of implementation,
- aligns with the Brampton 2040 Vision and the Term of Council Priorities,
- connects to the City's strategic documents and their long term vision, and
- integrates the community's desired direction for the future of Brampton.

In addition, it includes refined metrics that are clear, relevant, actionable, and based on data availability. These metrics will continue to be used for monitoring progress towards Brampton's environmental goals - to highlight successes, to reveal challenges, and to inform action.



Brampton Grow Green Vision

Brampton is a community that will conserve, enhance, and balance our natural and built environments to create a healthy, resilient, and sustainable city. We will carry out our responsibilities to meet the needs of the present community without compromising the ability of future generations to meet their own needs.

Guiding Principles

Leadership

We will be innovative, lead by example, and advocate environmental sustainability within and beyond our community.

Balance

We will achieve our environmental goals within a balanced environmental, social, cultural, and fiscal agenda.

Stewardship

We will inform, educate, engage, and participate with the community to protect, conserve and enhance our natural and built environments.

Responsibility

We will integrate community and natural systems sustainability into everything we do.

Accountability

We will be open in our decision-making and actions, and we will monitor, evaluate, and report our environmental progress.

Partnership

We recognize the need for, and value of, partnerships with other levels of government, conservation agencies, conservation groups, stakeholders, and the community.



Core Components



People

Invest in people to create a healthy, livable, and safe community.



Air

Reduce impacts on air quality.



Water

Protect and respect water as a non-renewable, life critical resource.



Land

Manage land to sustain the natural environment.



Energy

Reduce energy consumption and manage the impact of energy usage on our environment.



Waste

Reduce and manage the materials considered waste.

How Have We Done So Far?

Brampton has come a long way since City Council approved the Brampton Grow Green Environmental Master Plan in 2014. Brampton Grow Green has been the catalyst for many of the City's plans, policies, projects, and practices that are improving Brampton's environmental performance, quality of life, and economic development.

Strategic Documents

A broader suite of plans were developed following the launch of Brampton Grow Green that reinforce the objectives of the Environmental Master Plan, and provide more detailed direction for achieving its goals. These include, but are not limited to:

Transportation Master Plan (2015)

The City's Transportation Master Plan (TMP) provides strategic direction for the development of Brampton's transportation network to support the city's growth over the next 25 years. A key focus of the Plan is to implement a truly multi-modal transportation system that supports sustainable growth. The City is currently completing an update of this Plan.

Natural Heritage and Environmental Management Strategy (2016)

The Natural Heritage and Environmental Management Strategy (NHEMS) outlines a proactive approach to ensure that the abundance of natural heritage and built green spaces found in the city are conserved, restored, connected, and enhanced to support the green diversity and health of the natural and built environments. The goals, objectives, and actions support the maximization of ecosystem structure, function, and services.

Parks and Recreation Master Plan (2017)

The Parks and Recreation Master Plan (PRMP) looks at providing a sustainable system of parks, facilities, and programs. The Plan contains over one hundred recommendations spanning the delivery of parks and recreation facilities and services. In addition to providing recreational and social opportunities and spaces, one of the primary goals of PRMP is to protect and enhance Brampton's natural heritage features through initiatives including the naturalization of park spaces.

Brampton 2040 Vision: Living the Mosaic (2018)

The City of Brampton's 2040 Vision is a strategic plan that captures the community's vision for how Brampton should evolve until 2040. It provides seven target vision statements, each with a set of catalytic actions. The first vision statement (Vision 1), "Sustainability and the Environment", calls for 'one-planet living'.

Let Connect: Active Transportation Master Plan (2019)

The Active Transportation Master Plan (ATMP) outlines a network plan, policies and programs to support a mosaic of safe, integrated transportation choices, emphasizing walking, cycling, and transit. It underscores the importance of providing accessible, high quality, and connected active transportation infrastructure to encourage the use of active modes and to build sustainable and livable communities.



Corporate Energy and Emissions Management Plan 2019-2024: A Zero Carbon Transition (2019)

The City's Corporate Energy and Emissions Management Plan supports the federal and provincial emissions reduction targets while providing a transition plan for zero carbon and high-performance City facilities. The Plan sets out a pathway to minimize energy and emissions intensity and maximize cost recovery for City-owned buildings.

Brampton Eco Park Strategy (2020)

A catalytic action identified in the Brampton 2040 Vision, the Brampton Eco Park Strategy calls for an interconnected network of sustainable urban and natural spaces interwoven and embedded in the city's urban form. It defines what Brampton Eco Park is, characterizes its formation, and sets out the vision, goals, and actions to guide Brampton Eco Park implementation.

Our 2040 Energy Transition: Community Energy and Emissions Reduction Plan (2020)

Brampton's Community Energy and Emissions Reduction Plan (CEERP) is an evidence-based, comprehensive plan that will drive innovation, economic development, and social benefits while achieving the City's environmental and climate change goals. It provides a roadmap to improve energy efficiency, reduce greenhouse gas emissions, create economic advantage, ensure energy security, and increase Brampton's resilience to climate change.

There are also several strategic documents in the process of being developed by the City that are inspired by the Brampton Grow Green, such as the:

- Sustainable Fleet Strategy
- Urban Forest Management Plan
- Complete Street Guidelines
- Sustainable Procurement Strategy



Programs and Initiatives

A range of other initiatives related to Brampton Grow Green have commenced or been expanded since the launch of the Environmental Master Plan, such as:

People

- Advance Brampton Fund: Green City Stream
- Blue Dot Movement Signatory
- Grow Green Eco Pledge Program
- Grow Green Network
- Grow Green Team
- Lighthouse Program
- Our Ecosystem, Our Home, Our Responsibility Campaign
- Parks Environmental Stewardship Education Program

Air

- Active Transportation Infrastructure Expansion
- Bike the Creek Event
- Bike to Work Day
- Brampton Cycling Advisory Committee
- Council Climate Emergency Declaration
- Electric Bus Pilot Program
- Electric Vehicle Charging Stations Initiative
- Global Covenant of Mayors Membership
- iRide School Bus Routes
- Bike & Ride
- Next Ride
- Solar Powered Brampton Transit Shelters Initiative
- ZUM Expansion

Water

- County Court Bio-filter Swale
- Glendale Public School Rain Garden
- Stormwater Management Charge

Land

- Adopt-a-Park Program
- Backyard Garden Program
- Brampton One Million Trees Program

- Community Gardens Program
- Don't Mow Let it Grow Initiative
- Heart Lake Wildlife Crossings
- Landscape Development Guidelines
- Natural Heritage Brochure Series
- Natural Heritage Restoration Program
- Perennial Planting Conversion Initiative
- Sustainability Metrics for New Developments
- Sustainable Community Development Guidelines
- Tableland Tree Assessment Guidelines
- Tree Planting Tracker Map
- Valley Naturalization Program

Energy

- Renewable energy projects
- Energy conservation and efficiency projects
- Green roof construction
- Leadership Energy and Environmental Design (LEED) Certifications
- LED Street Light Retrofit Program
- LED Traffic Signal Retrofit Program
- Solar Powered Brampton Transit Shelters Initiative
- Solar Powered Flashing Traffic Beacons Initiative
- Solar Powered Parking Meter Initiative

Waste

- Cleanup Program
- Printer Fleet Replacement Project
- Don't be Trashy Anti-Litter Campaign

For more details on the plans and projects that translated the strategic direction of Brampton Grow Green into meaningful action, refer to the Canvas of Environmental Initiatives and the Grow Green Achievement Summary.



By the Numbers

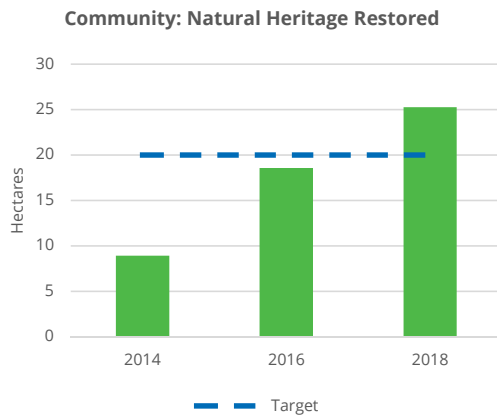
The Brampton Grow Green Environmental Master Plan identified a series of City and community performance metrics to help measure and monitor the environmental performance in each of the core components of People, Air, Water, Land, Energy, and Waste. The EMP also included ambitious performance targets for a majority of the metrics to motivate action and drive change.

As outlined in the table below, three metrics are on target, five are progressing toward their targets, while four are off target. The remaining metrics either had no or limited data available or had no targets established in the first iteration of the EMP.

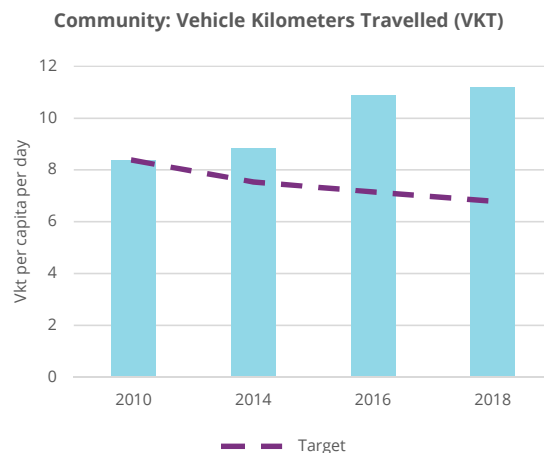
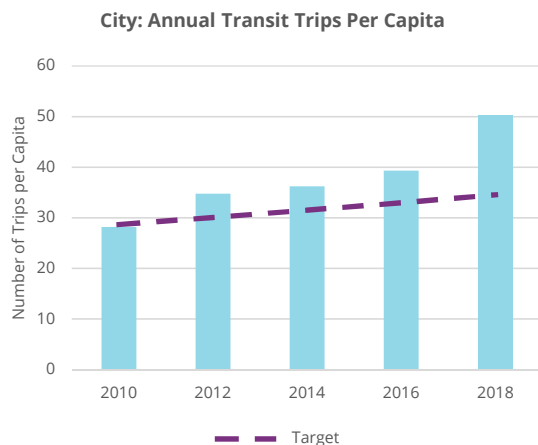
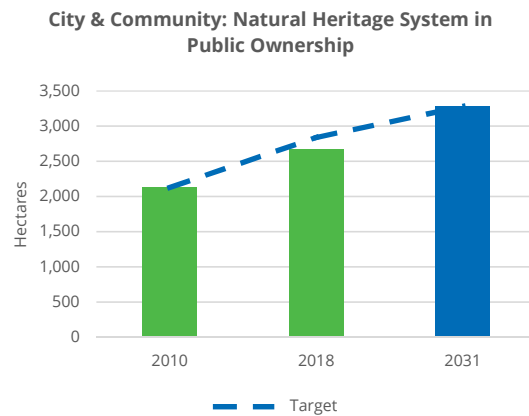
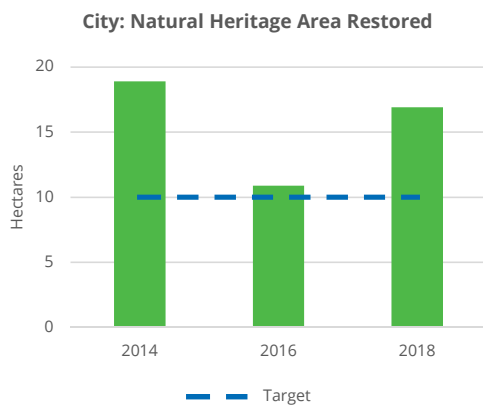
Brampton Grow Green includes City/corporate (internal) and community (external) actions, metrics, and targets. The use of the term City, with a capital "C" refers to the Corporation of the City of Brampton – the organization itself.

On Target	Progressing Toward Target	Off Target	No Target Established in Original EMP	Data Unavailable	Limited Data
City: Transit trips	City: Building energy use intensity	Comm: Vehicle km traveled	Comm: GHG emissions	Comm: Renewable energy	Comm: Energy intensity
City: NHS restoration	City: NHS in public ownership	Comm: Public participation in programs	City: GHG emissions	City: Waste diversion	
Comm: NHS restoration	City: Community environmental programs	City: Staff participation in programs	City: Watercourse channel naturalization		
	Comm: Waste Diversion	Comm: Potable water demand	City: Trees planted		
	Comm: Density	City: Potable water demand	Comm: Trees planted		





Land-related metrics, particularly related to natural heritage restoration, illustrate the expanding restoration programs and partnerships between the City and its Conservation Authority partners (Toronto & Region Conservation Authority and Credit Valley Conservation). Transit has performed exceptionally well, with Brampton Transit being one of the fastest growing transit systems in Canada. Yet while public transportation use is increasing, so is the average distance Brampton drivers are travelling each day, highlighting the need to create complete communities, foster local economic development, and invest in multi-modal transportation options.

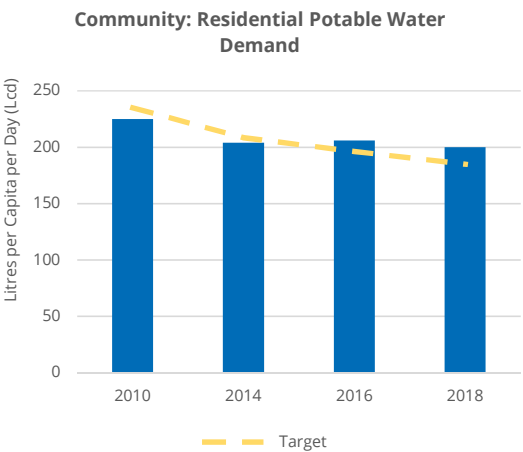
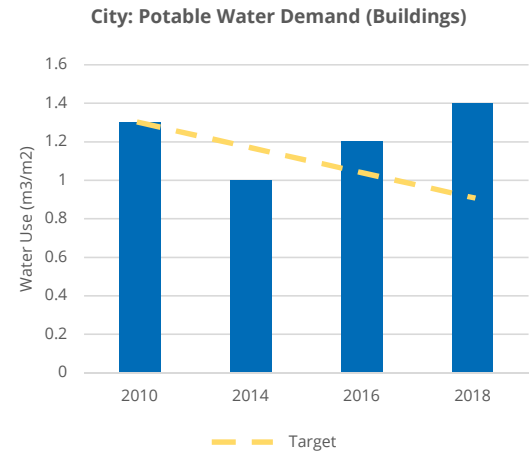


Building energy use intensity of City facilities has improved, largely driven by the guidance of the City's Energy Management team and their Corporate Energy and Emissions Management Plan. The City's greenhouse gas (GHG) emissions, on the other hand, have been trending in the wrong direction, primarily due to our fleet. To change the direction of this trend, the City has embarked on the development of a Sustainable Fleet Strategy.

The City must also change the trajectory of its potable water use through the creation and application of Water Efficiency Strategies for both facilities and outdoor amenities. The Community per capita water use has declined, but not at a rate that would achieve the long term target. The City will continue to collaborate with the Region of Peel on water efficiency and conservation efforts of residents and businesses.



*Energy usage intensities are weather normalized, except for 2018.
 ** Other type of facilities include a Transit Terminal Lunch room, a greenhouse, garages, warehouses, a vehicle wash facility, an animal shelter, and libraries.
 ***Includes CAA Centre, which is not operated by the City of Brampton.

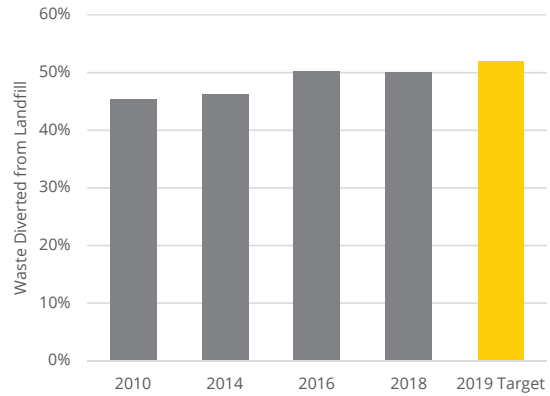


While the Community waste diversion rate across Peel region has improved over the last several years, progress regarding waste cannot yet be evaluated for City indoor and outdoor facilities because this information is not currently being tracked.

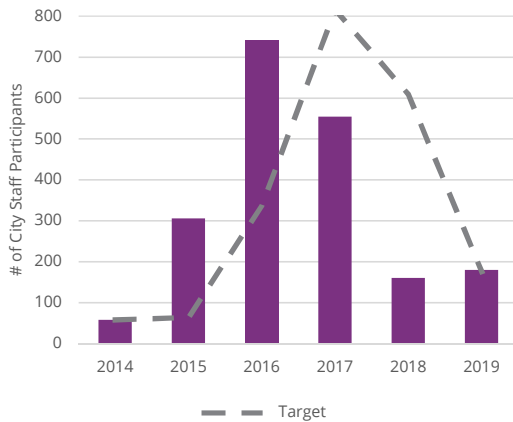
Community and City staff participation in environmental initiatives and events have seen declines, mainly attributed to the wind down of the Brampton Clean City team and the Smart Commute Brampton-Caledon initiative.

Through the development of Our Energy Transition: Community Energy and Emissions Reduction Plan, community energy use and GHG emission baselines and targets are now available, and the implementation of the Plan will result in a pathway to achieve an 80% GHG emissions reduction by 2050.

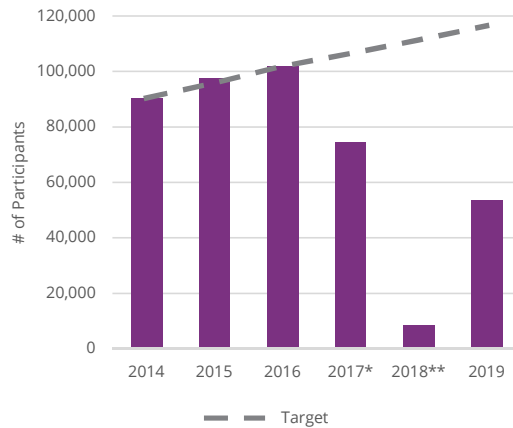
Community: Waste Diversion Rate



City: Staff Participation in Environmental Initiatives



Community: Public Participation in Environmental Initiatives



* Participation data for the Spring Cleanup was not available for 2017

** Participation data for the Spring and Harvest Cleanups was not available for 2018



What Has Evolved?

The Brampton Grow Green Environmental Master Plan was approved in 2014, and in the years since, several notable changes have occurred.

Empowered City Staff

The endorsement of the Brampton Grow Green Environmental Master Plan by Council emboldened City staff to increasingly apply an environmental sustainability lens to their work and decision making. For example, the City's Energy Management team leveraged the goals, targets, and actions identified under the Energy component of Brampton Grow Green to drive energy efficiency and renewable energy projects in City facilities.

The momentum was amplified by the establishment of a corporate Grow Green Team, a group of cross-departmental staff that help facilitate the implementation of the Brampton Grow Green Action Plan, track progress, and promote a culture of conservation. The benefits of having one team are multifaceted, including shared information, improved communication, and increased collaboration between departments. In addition, the Grow Green Team has been instrumental in providing an in-depth understanding of the successes, opportunities, and challenges of implementing Brampton Grow Green.

Building Awareness

As directed by the Brampton Grow Green EMP, the City has increased its outreach efforts for both internal staff and the general public to develop awareness of the Plan, local environmental issues and initiatives, and steps that can be taken at work and home to reduce impact on the planet. Examples include the natural heritage brochure series, anti-litter campaigns, Eco Pledge Program for residents and staff, information signage in parks and valleylands, social media posts, and information booths at community events across the city. It also includes completing on-the-ground-projects, such as tree plantings and pollinator gardens, as demonstration and motivation for the public. These efforts were not simply to inform, but to inspire behavioural change as well. The City has leveraged the Grow Green Network of over 20 organizations (see "Connecting Community Organizations" below), as well as an email list of close to 1000 residents who are interested in learning about environmental initiatives happening in Brampton. The role of Brampton's Environment Advisory Committee has also pivoted to be more public facing, assisting the City with engaging the community.

Growing Expectations

As environmental awareness has increased, so too has the public's call for environmental action locally, nationally, and globally. Whether resource depletion, pollution, biodiversity loss, climate change, or rising inequalities, there is widespread recognition that the human impacts on the earth have reached a tipping point and that immediate, targeted, and sustained efforts are necessary from all levels of government, business, and civil society. Through the public consultation process for the Brampton 2040 Vision, the largest public engagement exercise ever undertaken by the City to date, such a large number of residents appealed for a greener Brampton, that "Sustainability and the Environment" was selected as the first vision statement of this seminal document. Public expectation also helped cultivate Climate Emergency Declarations by municipalities around the globe, including Brampton.



Incorporating Sustainability into Plans and Programs

Environmental sustainability has been incorporated into a broader suite of City strategic documents and directives, most notably the Brampton 2040 Vision and the Term of Council Priorities. In addition, since the launch of Brampton Grow Green, directions identified in the EMP Action Plan have been further developed and delivered through other plans and programs, such as the Active Transportation Master Plan and the Brampton One Million Trees Program. Environmental sustainability is increasingly becoming a core element of policies, programs, and practices corporate-wide.

Connecting Community Organizations

In 2017, City staff, in collaboration with Brampton's Environmental Advisory Committee, launched the Grow Green Network - a collective of local organizations focusing on environmental stewardship and sustainability. To date, over 20 organizations have joined this network, including Sheridan College, Sierra Club Peel, David Suzuki Foundation, Toronto & Region Conservation Authority (TRCA), and Credit Valley Conservation (CVC). Network members can identify like priorities, and leverage each other's resources and ideas. As a result, members are able to expand their reach and impact. The network also provides an effective forum for the City to engage with active community groups, and track activities beyond City initiatives.

More recently, Council directed staff to establish a Centre for Community Energy Transformation (CCET), a not-for-profit community organization to help Brampton accelerate towards a low carbon future and act as a catalyst to implement the Community Energy and Emissions Reduction Plan.



Incorporating the Three Dimensions of Sustainability

Sustainability is comprised of the three E's – environment, economy, and equity. When the Brampton Grow Green Environmental Master Plan was initially developed, it did not fully acknowledge their interrelated nature, and instead it focused only on improving Brampton's environmental performance. This updated EMP aims to better recognize the correlation between environmental, economic, and equity issues, because to spark the transformation needed to achieve our environmental goals, we need an integrated approach that also includes efforts toward Brampton's economic development and social equity goals.

Equity

The intersection between environmental sustainability and social equity is increasingly recognized as a critical component of a sustainable and thriving community. Marginalized populations, which generally include low income earners, racialized communities, persons with disabilities, seniors, and other impoverished groups, are the first and most affected by the negative impacts of environmental degradation and destruction. For example, low-income communities are more likely to be located in areas with low tree canopy cover, less access to green space, and air pollution hot spots.

Climate change is compounding the exposure to and burden of negative environmental conditions and hazards on all communities, especially on marginalized ones. An increase in heat waves and flood events, particularly in urban areas, is anticipated in Ontario as a result of climate change, both of which marginalized communities are poorly equipped to deal with and recover from. Local governments are major actors in fostering healthy, vibrant, and resilience communities through the adoption of policies, regulations, and programs that promote social equity and provide quality of life for all.

Strategic environmental actions can improve a community's livability and economic development, however, if done without considering marginalized communities they can further contribute to greater marginalization and inequalities. Advancing social equity involves "...putting forth efforts toward rectifying previous environmental injustices, avoiding environmental injustices going forward, and providing equal access to participate in sustainability activities and shape their development".² It requires responsible and strategic decisions and investments. For example, as marginalized groups will feel the brunt of climate change, greater priority, investment, and focus should be afforded to mitigating the severity of these impacts on these groups.

Municipalities can simultaneously address environmental sustainability and social equity goals through increasing policies, programs, and services that support:

- food security/urban agriculture;
- housing choice and affordability;
- reducing energy costs;
- access to transit and active transportation;
- improving air quality;
- reducing and mitigating urban heat island effect;
- exposure to and stewardship of natural heritage;
- neighbourhood renewal;
- empowering community organizations;
- local economic opportunity and workforce development;
- disaster/emergency preparedness;
- public health and wellbeing; and
- civic engagement.

Social equity refers to the fair and equal access to resources, and the equal opportunities to develop and prosper in the community. It stresses inclusiveness and the sharing of benefits across all members of society.¹

The City of Brampton has already commenced numerous initiatives reflective of the list noted above, such as the Community Garden Program, Active Transportation Master Plan, School Walking Route Program, Sustainable Neighbourhood Action Program, Sustainability Performance Metrics for new development, Natural Heritage Restoration Program, Eco Park Strategy, One Million Trees Program, and the Lighthouse Program (refer to the Canvas of Environmental Initiatives for more details). Better integrating the social equity lens will only improve outcomes and help ensure under-served or harder-to-reach populations contribute to and benefit from the City's environmental efforts.

The effectiveness of the City's efforts to incorporate social equity in our sustainability approach will rest on the ability to:

- identify current marginalized populations and local equity issues;
- assess the outcomes of previous actions taken for vulnerable communities;
- expand opportunities for and quality of public engagement and action;
- create explicit social equity goals and related actions;
- thoughtfully consider implications of choices on marginalized populations prior to action development/implementation;
- target policy direction and investments; and
- build capacity within local marginalized groups to articulate issues and contribute toward solutions.

Environmental sustainability initiatives can be a vehicle for delivering a more equitable society and improve the lives of all residents. It takes careful planning and execution to realize mutually reinforcing benefits, whereby social conditions and opportunities enhance environmental protection and vice versa. The Brampton Grow Green EMP provides the foundation for meaningful integration of social equity into the City's implementation of environmental action and creating a more fair and truly sustainable Brampton.

Economy

Traditionally viewed as disparate goals, there is growing interest in economic progress that contributes to stronger ecosystems and improved quality of life for all. A green response is also being acknowledged by many governments, international organizations, and academia as the way forward from the economic and environmental crises experienced globally in recent decades. More investors are now using environmental, social, and governance (ESG) criteria when evaluating the companies in which to invest in.

As a new and growing engine of economic growth, the green economy focuses on key sectors such as renewable energy production and distribution, building retrofits and green building construction for increased energy efficiency, decarbonisation of transport, water management, waste reduction and management, and natural heritage conservation. These sectors involve ongoing innovation, require and support the development of a skilled and agile workforce, and can generate millions of new jobs. Moving forward with focused policies and investment to transition to a low-carbon, energy and resource efficient economy, in particular, can result in expand businesses, jobs, and incomes, poverty reduction, higher standards of living, and social inclusion.³

Studies have shown that meeting Canada's climate change goals could generate over 3.3 million direct jobs by 2050 in the building trades alone. This number rises to 17 million jobs if induced, indirect, and supply chain jobs are included in the total.⁴ According to Statistics Canada, environmental and clean technology industry continue to grow, accounting for up 3.1% of Canadian gross domestic product (GDP) and accounting for 282,000 jobs (versus 203,000 workers in the oil sector) in 2017. The average worker in Canada earns \$63,600 per year, while the average annual income in the clean-economy sector is almost 50% higher at \$94,000.⁵



In addition to triggering new investments and employment, greening the economy offers the opportunity to improve social equity and the inclusiveness of economic growth. For example, a carefully planned and targeted program for energy conservation through building retrofits and new construction can lower energy costs and address energy poverty. In addition, education and skills training in green economy sectors can be aimed at marginalized and underemployed communities.

Improving local economic development also brings jobs closer to the local workforce, reducing total vehicle kilometers travelled to get to work and making active transportation and transit a more appealing choice, helping decrease GHG emissions related to commuting.

Talent, industries, and investors are increasingly moving to and staying in cities that are leaders in environmental sustainability and actively fostering green economies. When determining where to locate, leading businesses today are looking for cities with robust public transit networks, transit oriented development, a mix of housing types, and parks and other public green spaces/amenities, because these attributes are what increasingly attract talent and capital.⁶ Global consultancy firm Bain & Company conducted a survey in 2018 of just under 300 global companies, and 81% stated that sustainability is more important to their business today than it was five years ago, and 85% believe that it will be even more important in five years.⁷

The City of Vancouver showcases these benefits. With a long history of sustainability and a commitment to becoming the 'Greenest City' by 2050, Vancouver continues to be one of the top performing and most diverse economies in Canada, and is often ranked one of the best places to live in North America.⁸

“

A green economy is defined as low carbon, resource efficient and socially inclusive. In a green economy, growth in employment and income are driven by public and private investment into such economic activities, infrastructure and assets that allow reduced carbon emissions and pollution, enhanced energy and resource efficiency, and prevention of the loss of biodiversity and ecosystem services.”

- United Nations



Through policies, programs, investments, and incentives, municipalities play an important role in nurturing and benefiting from a green economy. The early integration of a green lens into the City's economic strategies is crucial in gaining economic competitive advantage in both local and global markets.

This updated EMP illustrates an evolution in our sustainability approach. The new Action Plan aims to better acknowledge, constructively influence, and strategically leverage the interrelationships between environment, economic, and equity. This includes initiatives to support the local growth of green industry, as well as green business practices in Brampton.

In addition to Brampton Grow Green EMP, the City's commitment toward cultivating a greener economy is also illustrated through the:

- Brampton 2040 Vision: Living the Mosaic
- Community Energy and Emissions Reduction Plan
- Sustainable Community Design Guidelines and Performance Metrics for new development
- Corporate Energy and Emissions Management Plan
- Efforts to establish a Centre for Community Energy Transformation

The City of Brampton must now, more than ever, work toward transformative change. Moving towards a green economy can lead Brampton towards greater economic prosperity and standard of living while also achieving its environmental goals.

Advancing the EMP

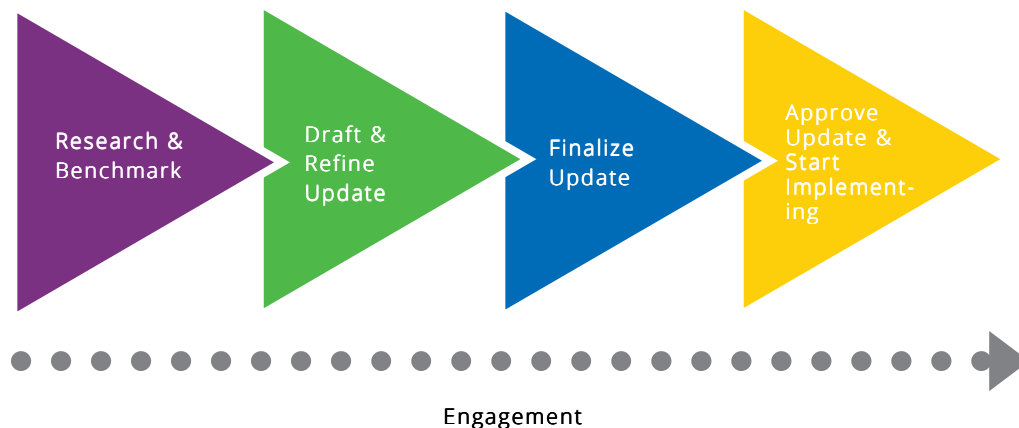
Brampton Grow Green Update Process

The update of the Brampton Grow Green Environmental Master Plan was an iterative process that involved:

- evaluating and understanding the City's progress toward achieving the goals and actions identified in the initial Brampton Grow Green Environmental Master Plan, including the successes and challenges of the first five years of implementation;
- reviewing the City's strategic documents that were approved since the launch of the Brampton Grow Green EMP;
- leveraging information gathered as part of other city-wide plans that recently underwent public engagement and input, such as the Brampton 2040 Vision and the Community Energy and Emissions Reduction Plan;
- performing a jurisdictional scan to identify current international, federal, provincial and local plans, policies, and priorities for environmental sustainability;
- benchmarking against environmental plans of other municipalities of similar size;
- undertaking interviews and meetings with City staff and other stakeholders, including Councillors;
- conducting an online survey for public input on potential actions and their prioritization; and
- consulting with Brampton's Environment Advisory Committee.

The City's Grow Green Team acted as the technical advisory committee for this project, providing information and input that was critical to the successful development of a refreshed Action Plan and Metrics.

Due to the coronavirus (COVID-19) pandemic and associated precautions, the engagement process for this updated EMP was scoped, pivoting to primarily online tactics. Nevertheless, stakeholder/public input was gathered throughout the project, and helped inform the final outcome.



As part of the background research for the Brampton Grow Green update, a range of sustainability plans of partner agencies and upper level governments were reviewed including, but not limited to, the Region of Peel's Climate Change Master Plan, the Province of Ontario's Made in Ontario Environment Plan, the Government of Canada's Federal Sustainable Development Strategy and the Pan-Canadian Framework on Clean Growth and Climate Change, as well as the United Nation's Sustainable Development Goals. The top themes that emerged are listed below, and guided the development of the new EMP Action Plan.

- Building partnerships
- Empowering the community
- Expanding multimodal transportation
- Creating complete communities
- Fostering natural heritage stewardship
- Improving water quality
- Advancing public health
- Cultivating green jobs
- Supporting a circular economy
- Transitioning to a low-carbon future (climate change mitigation)
- Increasing climate change adaptation and resilience



Refined Metrics

Brampton Grow Green included metrics to keep the pulse on how we are performing against the Plan. These metrics and their associated targets were established with the understanding and expectation that they would be refined over time. Implementing the EMP revealed better things and ways to measure, calculate, and report progress. It also uncovered challenges related to data quality and usability. As a result, while the majority of the metrics remain the same, several metrics, baselines, and targets have been refined based on:

- review of metric suitability;
- availability and accuracy of data;
- methodological improvements related to gathering, calculating, and/or interpreting data; and
- direction garnered from technical studies and plans developed following the establishment of the Brampton Grow Green EMP.

Above all, the refresh exercise ensures that metrics moving forward are clear, pragmatic, useful, and locally relevant. The metrics will continue to help assess progress toward our sustainability goals, as well as inform future plans, policies, and programs.



Performance Metrics

PEOPLE	Baseline	Targets
City: Number of environmental education and engagement initiatives per year	-	At least 1 initiative per core component
City: Number of staff participants in environmental education and engagement initiatives per year	742 (2016)	10% increase per year
Community: Number of public participants in environmental education and engagement initiatives per year	101 880 (2016)	10% increase per year
AIR	Baseline	Targets
City: Greenhouse Gas emissions per year (tonnes of eCO ₂)	50,208 (2010)	20% reduction by 2024 30% reduction by 2030 <i>Informed by Corporate Energy & Emissions Management Plan (2019)</i>
Community: Greenhouse Gas emissions per capita per year (tonnes of eCO ₂)	5.6 (2016)	2% reduction by 2020 9% reduction by 2025 30% reduction by 2030 <i>Informed by Community Energy & Emissions Reduction Plan (2020)</i>
Community: Number of Brampton Transit trips per capita per year	50.23 (2018)	44.2 trips by 2020 52.2 trips by 2025 66.8 trips by 2030 <i>Informed by Transportation Master Plan (2015)</i>
Community: Vehicle kilometers travelled (VKT) per capita per day	10.88 (2016)	Establish new targets through Transportation Master Plan update <i>Targets should support Community Energy & Emissions Reduction Plan (2020)</i>
WATER	Baseline	Targets
City: Potable water demand per year (meter ³ per meter ²)	1.4 (Building) (2018)	Establish targets through development of Water Efficiency Strategies (buildings and outdoor amenities)
Community: Potable water demand (litres per capita per day)	206 Lcd (2016)	174 Lcd by 2020 150 Lcd by 2025 <i>Informed by the Region of Peel's Water Efficiency Strategy (2012)</i>
City & Community: Removal of hard surfaces (e.g. concrete) from watercourse channels (meters) *	500 m (2018)	1000 meters every five years



LAND	Baseline	Targets
City: Number of trees planted per year	8409 (2016)	10 000 trees per year <i>Informed by the Brampton One Million Trees Strategy (2019)</i>
Community: Number of trees planted per year	38,744 (2016)	40 000 trees per year <i>Informed by the Brampton One Million Trees Strategy (2019)</i>
City: Density (residents and jobs per hectare)	Downtown Brampton: 85 residents & jobs per ha (2020) Greenfield Area: 56 residents & jobs per ha (2020)	Downtown Brampton (Urban Growth Centre) = 200 residents & jobs per ha by 2031; <i>Informed by A Place to Grow: Growth Plan for the Greater Golden Horseshoe (2020)</i> Designated Greenfield Area = 51 people & jobs per ha <i>Informed by Region of Peel Official Plan (2018)</i>
City & Community: Natural Heritage System in public ownership (hectares) *	2670 (2018)	3280 ha by 2030 4200 ha by 2040
City: Natural heritage enhancement/restoration per year (hectares)	10.9 (2016)	10 hectares per year
Community: Natural heritage enhancement/restoration per year (hectares)	18.5 (2016)	20 hectares per year
Community: Number of development proposals that achieve a Sustainability Score above the Bronze threshold **	N/A	Determine baseline and targets as part of the update to the Sustainability Metrics and Thresholds.
ENERGY	Baseline	Targets
City: Building energy use intensity per year (kilowatt hours per meter ²)	Admin: 289 F&ES: 367 Rec: 489 Trans 514 Works: 529 Other: 392 (2016)	8% reduction by 2020 29% reduction by 2025 39% reduction by 2030 <i>Informed by Community Energy & Emissions Reduction Plan. May be subject to revision.</i>
Community: Energy use reduction per capita per year (gigajoules) *	150 GJ (2016)	6% reduction by 2020 18% reduction by 2025 30% reduction by 2030 <i>Informed by Community Energy & Emissions Reduction Plan.</i>
City: Energy supply coming from on-site renewable sources *	N/A	1% by 2020 2% by 2025 4% by 2030 <i>Informed by Community Energy & Emissions Reduction Plan. May be subject to revision.</i>
WASTE	Baseline	Targets
City: Waste diversion rate	N/A	Establish baseline and targets through a Corporate Waste Diversion Strategy
Community: Waste diversion rate	50.1 (2016)	74% waste diversion by 2034 <i>Informed by Region of Peels community waste diversion target.</i>

* Metric revised from the original Brampton Grow Green EMP (2014)

** New metric not included in the original Brampton Grow Green EMP (2014)





































A Refreshed Action Plan














The refreshed action plan focuses on the next ten years and charts the course for a greener Brampton. It carries forward and adapts key actions from the original EMP that have yet to be achieved, and adds new actions reflective of best practice and tailored to the qualities, needs, and opportunities of Brampton. It aims to accelerate our efforts, and demonstrate commitment to and leadership in environmental sustainability at the municipal level. Many of the actions will require technical work, detailed design, and stakeholder engagement prior to implementation.

































Action Plan































	PEOPLE	Benefits	City or Community	Priority	Lead Department
1	Establish a Grow Green recognition program to acknowledge and celebrate environmental leaders within the corporation.		City	Short Term	Public Works & Eng: Env Planning
2	Establish a Grow Green recognition program to acknowledge and celebrate environmental leaders within the community.		Community	Short Term	Public Works & Eng: Env Planning
3	Host an annual City-wide Grow Green celebration and showcase event.		City	Short Term	Public Works & Eng: Env Planning
4	Add an Environmental Sustainability Implications section to reports for Council and its Committees.		City	Short Term	Legislative Services: City Clerk
5	Establish an Environmental Education Centre on City lands at Bovaird Dr and Heritage Rd in collaboration with the Credit Valley Conservation and other partners.	     	Community	Long Term	Public Works & Eng: Bldg Design & Construction
6	Develop and publish a Brampton green business inventory.		Community	Long Term	Plng, Bldg & Ec Dev: Ec Development
7	Develop and commence implementation of initiatives to attract jobs and investments in the green economy as part of the Investment Cornerstone of the City's Economic Recovery Strategy.	     	Community	Medium Term	Plng, Bldg & Ec Dev: Ec Development
8	Collaborate with regional organizations like Partners in Project Green to promote green businesses and environmentally friendly business practices.	     	Community	Long Term	Plng, Bldg & Ec Dev: Ec Development
	AIR	Benefits	City or Community	Priority	Lead Department
9	Update and commence implementation of the Transportation Master Plan.	 	City	Short Term	Plng, Bldg & Ec Dev: Transportation Plng
10	Develop and commence implementation of a Sustainable Fleet Strategy.	 	City	Short Term	Public Works & Eng: Fleet Services
11	Develop and commence implementation of a Corporate Transportation Demand Management (TDM) strategy to reduce single occupancy auto vehicle trips generated by City staff and for City operations.	 	City	Short Term	Plng, Bldg & Ec Dev: Transportation Plng
12	Develop Complete Street Guidelines and update City standards to implement these guidelines.	  	City	Short Term	Plng, Bldg & Ec Dev: Transportation Plng
13	Establish policies/procedures for new City facilities to provide 10% of parking spaces with electric vehicle supply equipment (EVSE), and 25% of remaining parking spaces designed to permit future EVSE installation.		City	Short Term	Public Works & Eng.: Bldg Design & Construction
14	Complete a Network Electrification Feasibility Analysis for Brampton Transit.		City	Short Term	Brampton Transit














15	Establish policies/procedures that ensure new City facilities strive to achieve and maintain net zero carbon emissions in their annual operations.		City	Medium Term	Public Works & Eng.: Bldg Design & Construction
16	Establish policies/procedures that ensure retrofits of existing City facilities to strive to achieve and maintain net zero carbon emissions in their annual operations.		City	Long Term	Public Works & Eng: Facilities Ops & Maint
17	Collaborate with the Province and/or Region of Peel to establish air quality monitoring stations in Brampton.		Community	Medium Term	Public Works & Eng: Env Planning
18	Develop and commence implementation of a targeted enforcement strategy for the City's anti-idling by-law.		Community	Medium Term	Legislative Services: Enforcement & By-law Services
WATER		Benefits	City or Community	Priority	Lead Department
19	Develop and commence a Water Efficiency Strategy for City buildings, including potable water reduction targets, as well as water efficiency standards for buildings retrofits and new construction.		City	Medium Term	Public Works & Eng: Bldg Design & Construction
20	Develop and commence a Water Efficiency Strategy for the City's outdoor amenities (e.g. sports fields, splash pads, garden beds), including reducing potable water use for irrigation.		City	Medium Term	Comm Services: Parks Maint & Forestry
21	Transition at least 50% of City's planting beds from annual plants to draught tolerant, non-invasive, perennial plants.		City	Medium Term	Comm. Services: Forestry, Hort & Cem Services
22	Establish policies and guidelines that require the submission of a Water Conservation Plan as part of development applications, which recommends measures that can facilitate potable water conservation.		Community	Medium Term	Public Works & Eng: Env Planning
23	Establish policies/procedures for City facilities to provide a minimum of 50% green roof, blue roof, and/or cool roof.		City	Medium Term	Public Works & Eng: Bldg Design & Construction
24	Establish policies and incentives to encourage green roofs, blue roofs, and cool roofs on new commercial, institutional, and residential development with a minimum gross floor area.		Community	Medium Term	Public Works & Eng: Env Planning
25	Update and commence the implementation of a Lake Management Strategy to improve the water quality, recreational use, and ecosystem health of Brampton's lakes.		City	Medium Term	Public Works & Eng: Env Engineering
26	Establish a water quality monitoring program for stormwater management assets.		City	Medium Term	Public Works & Eng: Env Engineering
27	Develop policies/procedures to evaluate the opportunity to incorporate Low Impact Development (LID) into major City capital projects (roads, parks, and buildings).		City	Medium Term	Public Works & Eng: Env Engineering

28	Develop and commence implementation of an outreach and education strategy regarding stormwater management.	 	City	Short Term	Public Works & Eng: Env Engineering
29	Update and commence implementation of a Salt Management Strategy for City's operations.	 	City	Medium Term	Public Works & Eng: Road Maint, Ops & Fleet
30	Develop and commence implementation of a Climate Change Adaptation Plan.	  	City	Medium Term	Public Works & Eng: Env Planning
LAND		Benefits	City or Community	Priority	Lead Department
31	Develop and commence implementation of an Urban Forest Management Plan.	    	City	Short Term	Comm Services: Forestry, Hort & Cem Services
32	Update the Tree Preservation By-law to enhance preservation of healthy tableland trees.	   	City	Short Term	Comm Services: Forestry, Hort & Cem Services
33	Launch a marketing campaign to increase awareness of and compliance with the Tree Preservation By-law.	 	City	Short Term	Comm Services: Forestry, Hort & Cem Services
34	Develop and commence implementation of a Woodland Management Strategy for City-owned woodlands.	   	City	Medium Term	Public Works & Eng: Env Planning
35	Transition the Valleyland Naturalization Program to the Naturalization Program to widen its scope from solely valleyland restoration to both valleyland restoration and tableland naturalization.	   	City	Short Term	Comm Services: Open Space Dev
36	Develop and commence implementation of a Naturalization Communications Strategy to increase awareness of and support for naturalization efforts on both public and private land.	 	Community	Short Term	Public Works & Eng: Env Planning
37	Review and update the City by-laws to ensure they do not restrict designed naturalization efforts on public and private lands.		City	Short Term	Public Works & Eng: Env Planning
38	Develop and host workshops to promote gardening and naturalization on private property in collaboration with Conservation Authorities and the Region of Peel.	 	Community	Medium Term	Comm Services: Parks Comm Programs
39	Develop and commence implementation of an Invasive Species Management Strategy for City-owned land.		City	Short Term	Comm Services: Forestry, Hort & Cem Services
40	Develop planning policies that require invasive species management to be undertaken as part of new development.		Community	Medium Term	Public Works & Eng: Env Planning
41	Pursue the Bee City designation from Bee City Canada to facilitate and celebrate efforts that support pollinators.		City	Short Term	Comm Services: Parks Comm Programs
42	Pursue a Bird Friendly designation to facilitate and celebrate efforts that support birds.		City	Medium Term	Public Works & Eng: Parks Comm Programs
43	Develop and commence implementation of a city-wide Road Ecology Strategy in collaboration with the Province, Region of Peel,		City	Medium Term	Public Works & Eng: Env Planning



	Conservation Authorities, and the Ontario Road Ecology Group.				
44	Expand the City's Alternative Design Standards for public right-of-ways (e.g. roads, streets, sidewalks) to improve active transportation, naturalization, street tree health, and stormwater management.		City	Short Term	Public Works & Eng: Capital Works
45	Integrate natural assets into the City's Annual Financial Statement.		City	Medium Term	Corp Support Services: Finance
46	Develop and commence implementation of a strategy to expand the Community Gardens program, including supporting community gardens on private lands, requiring new recreation centres and large parks to provide community gardens, and increasing opportunities for year-round gardening.	 	Community	Long Term	Comm Services: Parks Comm Programs
47	Establish a pilot project with a local school to create horticultural lessons that can support community gardening and naturalization initiatives.	 	Community	Long Term	Comm Services: Parks Comm Programs
48	Develop a communication strategy to promote the Adopt-a-Park program and increase participation.	 	Community	Medium Term	Comm Services: Parks Comm Programs
49	Update and commence implementation of an updated Sustainability Communities Program: New Development (i.e. Sustainability Metrics and Thresholds).	    	Community	Medium Term	Public Works & Eng: Env Planning
50	Establish upgraded Sustainability Thresholds for urban centres as part of the Sustainability Communities Program: New Development.	    	Community	Medium Term	Public Works & Eng: Env Planning
51	Develop a strategy to expand the Sustainable Neighbourhood Action Program (SNAP) across the city in collaboration with the Region of Peel and Conservation Authorities.	     	Community	Long Term	Public Works & Eng: Env Planning
ENERGY		Benefits	City or Community	Priority	Lead Department
52	Establish policies that require the submission of an Integrated Energy Management Plan as part development applications, which recommends potential measures to increase energy efficiency and conserve energy, and explores opportunities for district energy.	 	Community	Short Term	Public Works & Eng: Env Planning
53	Facilitate the launch of a Centre for Community Energy Transformation (formerly referred to as the Institute of Sustainable Brampton) in collaboration with Sheridan College and other partners.	  	Community	Medium Term	Public Works & Eng: Env Planning
WASTE		Benefits	City or Community	Priority	Lead Department
54	Develop and commence implementation of a Waste Diversion Strategy for City indoor and	 	City	Long Term	TBD



	outdoor facilities, including a minimum 75% diversion target.				
55	Explore the opportunity to develop a waste management team to facilitate a centralized model for waste diversion for City operations.		City	Long Term	TBD
56	Develop and commence implementation of a Green/Sustainable Procurement Strategy.	    	City	Long Term	Corp Support Services: Purchasing
57	Develop policies/procedures for lifecycle assessments, including lifecycle GHG emissions, of major capital projects.	    	City	Long Term	Corp Support Services: Corp Asset Management

Growing the Momentum

Education

Building upon the foundational work that is already underway, the City and its partners must expand education efforts and capacity building both in-house and community wide. Education and engagement should not only focus on building knowledge about and support for environmental causes and initiatives, but also on fostering participation and empowering people, business, and institutions to take action.

Collaboration

Central to the success of the Brampton Grow Green EMP is the continued collaboration and partnership between the City, residents, schools, business, places of worship, community groups, the development industry, conservation authorities, and other government agencies.

Monitoring

With a revamped action plan, metrics, and targets, the City will continue monitoring performance to help us understand where we are, where we are going, and if we are moving in the right direction.

Reporting

Reporting will take the form of progress reporting to Council every two years. A comprehensive update will be commenced in another five years to rejuvenate the Plan. Reporting will also include posting information on the City website, such as new, ongoing, and completed initiatives, as well as a performance dashboard to illustrate progress toward achieving targets.



Conclusion

The update of the Brampton Grow Green EMP aims to accelerate progress in creating a more healthy, resilient, and environmentally sustainable city. While Brampton has made great strides since the launch of the Plan in 2014, gradual progress must be replaced with transformative action if we are to address today's environmental challenges and avert climate disaster.

As noted in the initial Brampton Grow Green EMP, environmental sustainability has to be embedded in the corporate culture - the environmental lens must be an imperative when developing new or revising existing plans and policies, establishing and assessing capital projects, operations, and programming, making purchases, and designing infrastructure systems. Realizing the Grow Green vision will require support from leadership, inter-department cooperation, sustained and dedicated resources, ongoing education, sector-wide collaboration, and persistence.

Under this renewed Plan, tomorrow's Brampton will be characterized by mix of housing that accommodates people of all incomes and stages of life, a range of jobs that contribute to a circular economy, and a community of informed and active stewards of our build and natural spaces living in resilient neighbourhoods. Electric vehicles and buses along with cyclists and pedestrians will dominate our complete streets, while urban agriculture supplies affordable healthy food to residents and visitors. Brampton will have a destination environmental education centre, provide recycling and green bins at all its public spaces. It will be a local leader in and mentor on clean energy and GHG emission reductions. Brampton will be a better place for both people and planet.

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BRAMPTON GROW GREEN

Environmental Master Plan

Refresh (2020)



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Introduction

Municipalities are at the centre of sustainability efforts and the global movement toward reducing our impact on the planet. In 2014, City Council approved the Brampton Grow Green Environmental Master Plan (EMP), the City's first blueprint for improving environmental sustainability at both the City (internal) and community (external) level. The outcome of extensive research, consultation, and collaboration, Brampton Grow Green outlines a vision, guiding principles, goals, and actions for a more sustainable future, as well as performance metrics and targets to drive and evaluate our progress.

The Plan is organized around the six core components of People, Air, Water, Land, Energy, and Waste, recognizing the multifaceted nature of environmental sustainability. The actions and targets identified under the core components are not independent, but work together to deliver results. Brampton Grow Green is a long-term, comprehensive plan that aims to position the city as a model for responsible growth and meaningful environmental action.

Brampton Grow Green, like other master plans, is a living document that should be regularly updated to ensure it remains current, relevant, and reflective of the City's evolving environmental priorities and ambitions. The original Environmental Master Plan recommends that this exercise be undertaken every five years. This updated Brampton Grow Green Environmental Master Plan is the second generation of the pivotal document.



The intent of this renewed Brampton Grow Green Environmental Master Plan is not a complete reinvention or redesign of the Plan. The Brampton Grow Green vision, guiding principles, and core components remain pertinent, and will continue to act as the foundation of the Environmental Master Plan. Instead, this update focuses on providing a refreshed and streamlined Action Plan and Metrics that:

- reflects knowledge garnered from the first five years of implementation,
- aligns with the Brampton 2040 Vision and the Term of Council Priorities,
- connects to the City's strategic documents and their long term vision, and
- integrates the community's desired direction for the future of Brampton.

In addition, it includes refined metrics that are clear, relevant, actionable, and based on data availability. These metrics will continue to be used for monitoring progress towards Brampton's environmental goals - to highlight successes, to reveal challenges, and to inform action.



Brampton Grow Green Vision

Brampton is a community that will conserve, enhance, and balance our natural and built environments to create a healthy, resilient, and sustainable city. We will carry out our responsibilities to meet the needs of the present community without compromising the ability of future generations to meet their own needs.

Guiding Principles

Leadership

We will be innovative, lead by example, and advocate environmental sustainability within and beyond our community.

Balance

We will achieve our environmental goals within a balanced environmental, social, cultural, and fiscal agenda.

Stewardship

We will inform, educate, engage, and participate with the community to protect, conserve and enhance our natural and built environments.

Responsibility

We will integrate community and natural systems sustainability into everything we do.

Accountability

We will be open in our decision-making and actions, and we will monitor, evaluate, and report our environmental progress.

Partnership

We recognize the need for, and value of, partnerships with other levels of government, conservation agencies, conservation groups, stakeholders, and the community.



Core Components



People

Invest in people to create a healthy, livable, and safe community.



Air

Reduce impacts on air quality.



Water

Protect and respect water as a non-renewable, life critical resource.



Land

Manage land to sustain the natural environment.



Energy

Reduce energy consumption and manage the impact of energy usage on our environment.



Waste

Reduce and manage the materials considered waste.



How Have We Done So Far?

Brampton has come a long way since City Council approved the Brampton Grow Green Environmental Master Plan in 2014. Brampton Grow Green has been the catalyst for many of the City's plans, policies, projects, and practices that are improving Brampton's environmental performance, quality of life, and economic development.

Strategic Documents

A broader suite of plans were developed following the launch of Brampton Grow Green that reinforce the objectives of the Environmental Master Plan, and provide more detailed direction for achieving its goals. These include, but are not limited to:

Transportation Master Plan (2015)

The City's Transportation Master Plan (TMP) provides strategic direction for the development of Brampton's transportation network to support the city's growth over the next 25 years. A key focus of the Plan is to implement a truly multi-modal transportation system that supports sustainable growth. The City is currently completing an update of this Plan.

Natural Heritage and Environmental Management Strategy (2016)

The Natural Heritage and Environmental Management Strategy (NHEMS) outlines a proactive approach to ensure that the abundance of natural heritage and built green spaces found in the city are conserved, restored, connected, and enhanced to support the green diversity and health of the natural and built environments. The goals, objectives, and actions support the maximization of ecosystem structure, function, and services.

Parks and Recreation Master Plan (2017)

The Parks and Recreation Master Plan (PRMP) looks at providing a sustainable system of parks, facilities, and programs. The Plan contains over one hundred recommendations spanning the delivery of parks and recreation facilities and services. In addition to providing recreational and social opportunities and spaces, one of the primary goals of PRMP is to protect and enhance Brampton's natural heritage features through initiatives including the naturalization of park spaces.

Brampton 2040 Vision: Living the Mosaic (2018)

The City of Brampton's 2040 Vision is a strategic plan that captures the community's vision for how Brampton should evolve until 2040. It provides seven target vision statements, each with a set of catalytic actions. The first vision statement (Vision 1), "Sustainability and the Environment", calls for 'one-planet living'.

Let Connect: Active Transportation Master Plan (2019)

The Active Transportation Master Plan (ATMP) outlines a network plan, policies and programs to support a mosaic of safe, integrated transportation choices, emphasizing walking, cycling, and transit. It underscores the importance of providing accessible, high quality, and connected active transportation infrastructure to encourage the use of active modes and to build sustainable and livable communities.



Corporate Energy and Emissions Management Plan 2019-2024: A Zero Carbon Transition (2019)

The City's Corporate Energy and Emissions Management Plan supports the federal and provincial emissions reduction targets while providing a transition plan for zero carbon and high-performance City facilities. The Plan sets out a pathway to minimize energy and emissions intensity and maximize cost recovery for City-owned buildings.

Brampton Eco Park Strategy (2020)

A catalytic action identified in the Brampton 2040 Vision, the Brampton Eco Park Strategy calls for an interconnected network of sustainable urban and natural spaces interwoven and embedded in the city's urban form. It defines what Brampton Eco Park is, characterizes its formation, and sets out the vision, goals, and actions to guide Brampton Eco Park implementation.

Our 2040 Energy Transition: Community Energy and Emissions Reduction Plan (2020)

Brampton's Community Energy and Emissions Reduction Plan (CEERP) is an evidence-based, comprehensive plan that will drive innovation, economic development, and social benefits while achieving the City's environmental and climate change goals. It provides a roadmap to improve energy efficiency, reduce greenhouse gas emissions, create economic advantage, ensure energy security, and increase Brampton's resilience to climate change.

There are also several strategic documents in the process of being developed by the City that are inspired by the Brampton Grow Green, such as the:

- Sustainable Fleet Strategy
- Urban Forest Management Plan
- Complete Street Guidelines
- Sustainable Procurement Strategy



Programs and Initiatives

A range of other initiatives related to Brampton Grow Green have commenced or been expanded since the launch of the Environmental Master Plan, such as:

People

- Advance Brampton Fund: Green City Stream
- Blue Dot Movement Signatory
- Grow Green Eco Pledge Program
- Grow Green Network
- Grow Green Team
- Lighthouse Program
- Our Ecosystem, Our Home, Our Responsibility Campaign
- Parks Environmental Stewardship Education Program

Air

- Active Transportation Infrastructure Expansion
- Bike the Creek Event
- Bike to Work Day
- Brampton Cycling Advisory Committee
- Council Climate Emergency Declaration
- Electric Bus Pilot Program
- Electric Vehicle Charging Stations Initiative
- Global Covenant of Mayors Membership
- iRide School Bus Routes
- Bike & Ride
- Next Ride
- Solar Powered Brampton Transit Shelters Initiative
- ZUM Expansion

Water

- County Court Bio-filter Swale
- Glendale Public School Rain Garden
- Stormwater Management Charge

Land

- Adopt-a-Park Program
- Backyard Garden Program
- Brampton One Million Trees Program

- Community Gardens Program
- Don't Mow Let it Grow Initiative
- Heart Lake Wildlife Crossings
- Landscape Development Guidelines
- Natural Heritage Brochure Series
- Natural Heritage Restoration Program
- Perennial Planting Conversion Initiative
- Sustainability Metrics for New Developments
- Sustainable Community Development Guidelines
- Tableland Tree Assessment Guidelines
- Tree Planting Tracker Map
- Valley Naturalization Program

Energy

- Renewable energy projects
- Energy conservation and efficiency projects
- Green roof construction
- Leadership Energy and Environmental Design (LEED) Certifications
- LED Street Light Retrofit Program
- LED Traffic Signal Retrofit Program
- Solar Powered Brampton Transit Shelters Initiative
- Solar Powered Flashing Traffic Beacons Initiative
- Solar Powered Parking Meter Initiative

Waste

- Cleanup Program
- Printer Fleet Replacement Project
- Don't be Trashy Anti-Litter Campaign

For more details on the plans and projects that translated the strategic direction of Brampton Grow Green into meaningful action, refer to the Canvas of Environmental Initiatives and the Grow Green Achievement Summary.



By the Numbers

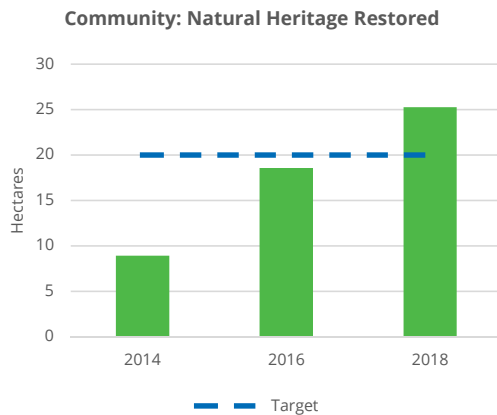
The Brampton Grow Green Environmental Master Plan identified a series of City and community performance metrics to help measure and monitor the environmental performance in each of the core components of People, Air, Water, Land, Energy, and Waste. The EMP also included ambitious performance targets for a majority of the metrics to motivate action and drive change.

As outlined in the table below, three metrics are on target, five are progressing toward their targets, while four are off target. The remaining metrics either had no or limited data available or had no targets established in the first iteration of the EMP.

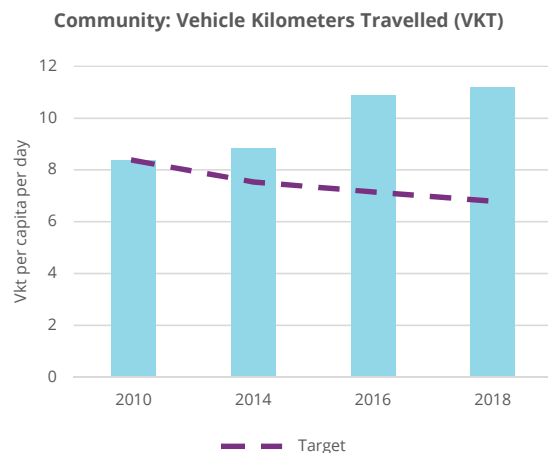
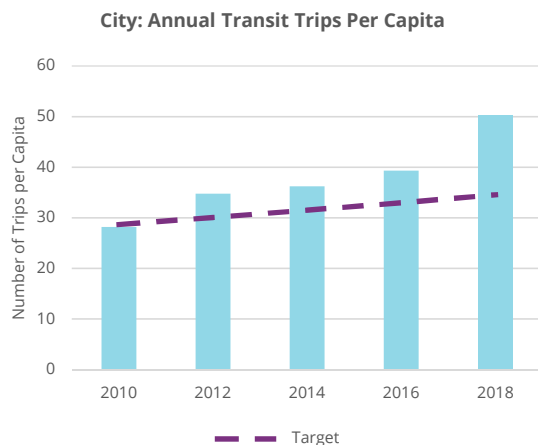
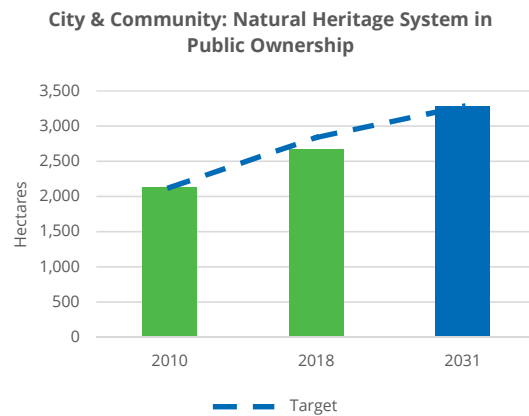
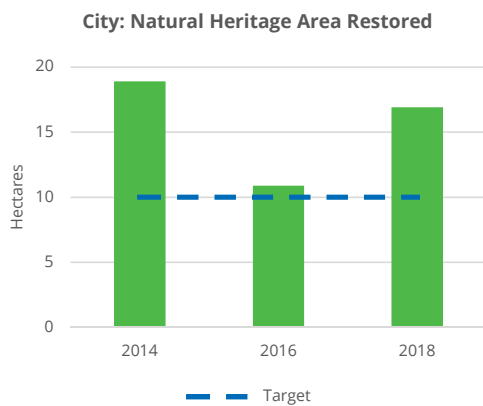
Brampton Grow Green includes City/corporate (internal) and community (external) actions, metrics, and targets. The use of the term City, with a capital "C" refers to the Corporation of the City of Brampton – the organization itself.

On Target	Progressing Toward Target	Off Target	No Target Established in Original EMP	Data Unavailable	Limited Data
City: Transit trips	City: Building energy use intensity	Comm: Vehicle km traveled	Comm: GHG emissions	Comm: Renewable energy	Comm: Energy intensity
City: NHS restoration	City: NHS in public ownership	Comm: Public participation in programs	City: GHG emissions	City: Waste diversion	
Comm: NHS restoration	City: Community environmental programs	City: Staff participation in programs	City: Watercourse channel naturalization		
	Comm: Waste Diversion	Comm: Potable water demand	City: Trees planted		
	Comm: Density	City: Potable water demand	Comm: Trees planted		



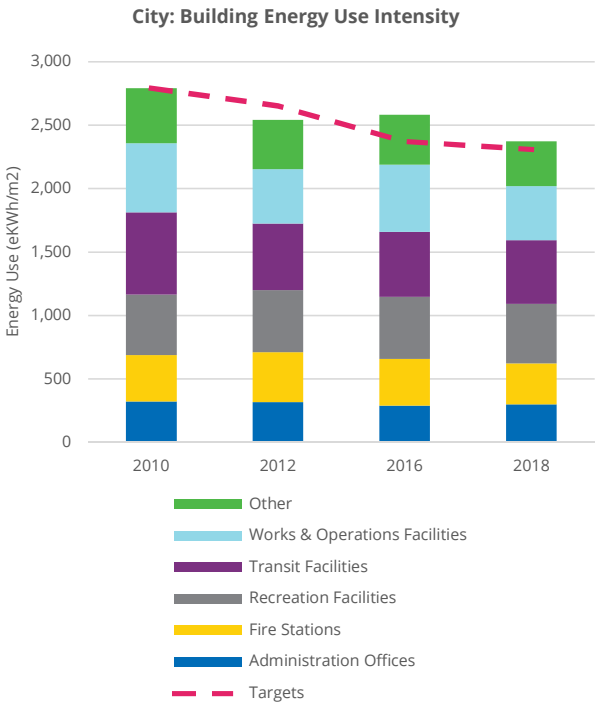


Land-related metrics, particularly related to natural heritage restoration, illustrate the expanding restoration programs and partnerships between the City and its Conservation Authority partners (Toronto & Region Conservation Authority and Credit Valley Conservation). Transit has performed exceptionally well, with Brampton Transit being one of the fastest growing transit systems in Canada. Yet while public transportation use is increasing, so is the average distance Brampton drivers are travelling each day, highlighting the need to create complete communities, foster local economic development, and invest in multi-modal transportation options.

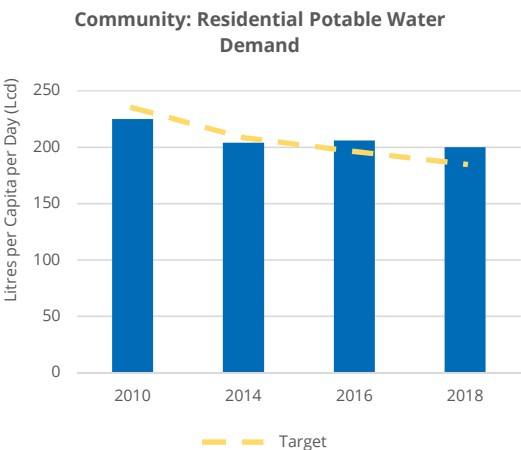
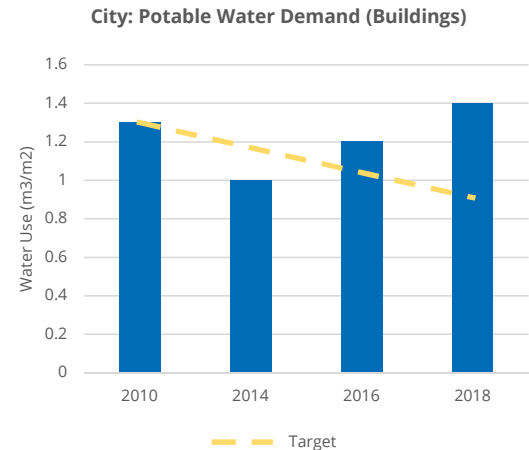


Building energy use intensity of City facilities has improved, largely driven by the guidance of the City's Energy Management team and their Corporate Energy and Emissions Management Plan. The City's greenhouse gas (GHG) emissions, on the other hand, have been trending in the wrong direction, primarily due to our fleet. To change the direction of this trend, the City has embarked on the development of a Sustainable Fleet Strategy.

The City must also change the trajectory of its potable water use through the creation and application of Water Efficiency Strategies for both facilities and outdoor amenities. The Community per capita water use has declined, but not at a rate that would achieve the long term target. The City will continue to collaborate with the Region of Peel on water efficiency and conservation efforts of residents and businesses.



*Energy usage intensities are weather normalized, except for 2018.
 ** Other type of facilities include a Transit Terminal Lunch room, a greenhouse, garages, warehouses, a vehicle wash facility, an animal shelter, and libraries.
 ***Includes CAA Centre, which is not operated by the City of Brampton.

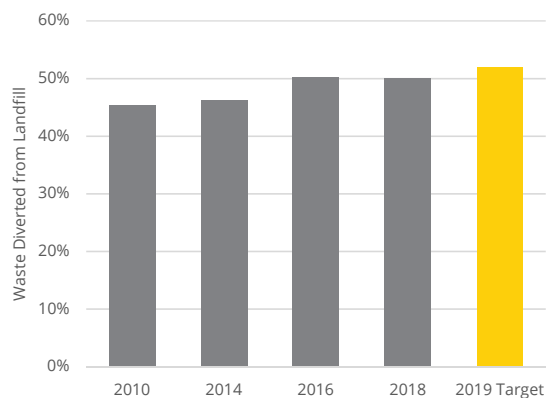


While the Community waste diversion rate across Peel region has improved over the last several years, progress regarding waste cannot yet be evaluated for City indoor and outdoor facilities because this information is not currently being tracked.

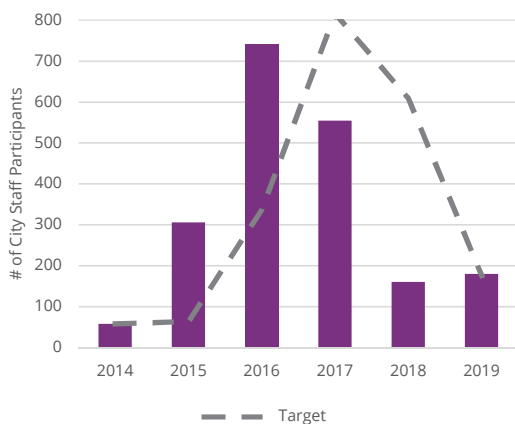
Community and City staff participation in environmental initiatives and events have seen declines, mainly attributed to the wind down of the Brampton Clean City team and the Smart Commute Brampton-Caledon initiative.

Through the development of Our Energy Transition: Community Energy and Emissions Reduction Plan, community energy use and GHG emission baselines and targets are now available, and the implementation of the Plan will result in a pathway to achieve an 80% GHG emissions reduction by 2050.

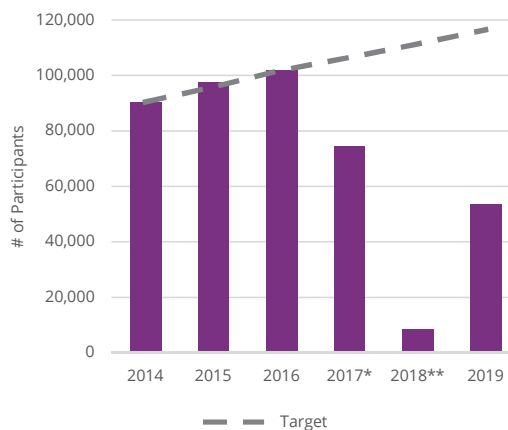
Community: Waste Diversion Rate



City: Staff Participation in Environmental Initiatives



Community: Public Participation in Environmental Initiatives



* Participation data for the Spring Cleanup was not available for 2017

** Participation data for the Spring and Harvest Cleanups was not available for 2018



What Has Evolved?

The Brampton Grow Green Environmental Master Plan was approved in 2014, and in the years since, several notable changes have occurred.

Empowered City Staff

The endorsement of the Brampton Grow Green Environmental Master Plan by Council emboldened City staff to increasingly apply an environmental sustainability lens to their work and decision making. For example, the City's Energy Management team leveraged the goals, targets, and actions identified under the Energy component of Brampton Grow Green to drive energy efficiency and renewable energy projects in City facilities.

The momentum was amplified by the establishment of a corporate Grow Green Team, a group of cross-departmental staff that help facilitate the implementation of the Brampton Grow Green Action Plan, track progress, and promote a culture of conservation. The benefits of having one team are multifaceted, including shared information, improved communication, and increased collaboration between departments. In addition, the Grow Green Team has been instrumental in providing an in-depth understanding of the successes, opportunities, and challenges of implementing Brampton Grow Green.

Building Awareness

As directed by the Brampton Grow Green EMP, the City has increased its outreach efforts for both internal staff and the general public to develop awareness of the Plan, local environmental issues and initiatives, and steps that can be taken at work and home to reduce impact on the planet. Examples include the natural heritage brochure series, anti-litter campaigns, Eco Pledge Program for residents and staff, information signage in parks and valleylands, social media posts, and information booths at community events across the city. It also includes completing on-the-ground-projects, such as tree plantings and pollinator gardens, as demonstration and motivation for the public. These efforts were not simply to inform, but to inspire behavioural change as well. The City has leveraged the Grow Green Network of over 20 organizations (see "Connecting Community Organizations" below), as well as an email list of close to 1000 residents who are interested in learning about environmental initiatives happening in Brampton. The role of Brampton's Environment Advisory Committee has also pivoted to be more public facing, assisting the City with engaging the community.

Growing Expectations

As environmental awareness has increased, so too has the public's call for environmental action locally, nationally, and globally. Whether resource depletion, pollution, biodiversity loss, climate change, or rising inequalities, there is widespread recognition that the human impacts on the earth have reached a tipping point and that immediate, targeted, and sustained efforts are necessary from all levels of government, business, and civil society. Through the public consultation process for the Brampton 2040 Vision, the largest public engagement exercise ever undertaken by the City to date, such a large number of residents appealed for a greener Brampton, that "Sustainability and the Environment" was selected as the first vision statement of this seminal document. Public expectation also helped cultivate Climate Emergency Declarations by municipalities around the globe, including Brampton.



Incorporating Sustainability into Plans and Programs

Environmental sustainability has been incorporated into a broader suite of City strategic documents and directives, most notably the Brampton 2040 Vision and the Term of Council Priorities. In addition, since the launch of Brampton Grow Green, directions identified in the EMP Action Plan have been further developed and delivered through other plans and programs, such as the Active Transportation Master Plan and the Brampton One Million Trees Program. Environmental sustainability is increasingly becoming a core element of policies, programs, and practices corporate-wide.

Connecting Community Organizations

In 2017, City staff, in collaboration with Brampton's Environmental Advisory Committee, launched the Grow Green Network - a collective of local organizations focusing on environmental stewardship and sustainability. To date, over 20 organizations have joined this network, including Sheridan College, Sierra Club Peel, David Suzuki Foundation, Toronto & Region Conservation Authority (TRCA), and Credit Valley Conservation (CVC). Network members can identify like priorities, and leverage each other's resources and ideas. As a result, members are able to expand their reach and impact. The network also provides an effective forum for the City to engage with active community groups, and track activities beyond City initiatives.

More recently, Council directed staff to establish a Centre for Community Energy Transformation (CCET), a not-for-profit community organization to help Brampton accelerate towards a low carbon future and act as a catalyst to implement the Community Energy and Emissions Reduction Plan.



Incorporating the Three Dimensions of Sustainability

Sustainability is comprised of the three E's – environment, economy, and equity. When the Brampton Grow Green Environmental Master Plan was initially developed, it did not fully acknowledge their interrelated nature, and instead it focused only on improving Brampton's environmental performance. This updated EMP aims to better recognize the correlation between environmental, economic, and equity issues, because to spark the transformation needed to achieve our environmental goals, we need an integrated approach that also includes efforts toward Brampton's economic development and social equity goals.

Equity

The intersection between environmental sustainability and social equity is increasingly recognized as a critical component of a sustainable and thriving community. Marginalized populations, which generally include low income earners, racialized communities, persons with disabilities, seniors, and other impoverished groups, are the first and most affected by the negative impacts of environmental degradation and destruction. For example, low-income communities are more likely to be located in areas with low tree canopy cover, less access to green space, and air pollution hot spots.

Climate change is compounding the exposure to and burden of negative environmental conditions and hazards on all communities, especially on marginalized ones. An increase in heat waves and flood events, particularly in urban areas, is anticipated in Ontario as a result of climate change, both of which marginalized communities are poorly equipped to deal with and recover from. Local governments are major actors in fostering healthy, vibrant, and resilience communities through the adoption of policies, regulations, and programs that promote social equity and provide quality of life for all.

Strategic environmental actions can improve a community's livability and economic development, however, if done without considering marginalized communities they can further contribute to greater marginalization and inequalities. Advancing social equity involves "...putting forth efforts toward rectifying previous environmental injustices, avoiding environmental injustices going forward, and providing equal access to participate in sustainability activities and shape their development".² It requires responsible and strategic decisions and investments. For example, as marginalized groups will feel the brunt of climate change, greater priority, investment, and focus should be afforded to mitigating the severity of these impacts on these groups.

Municipalities can simultaneously address environmental sustainability and social equity goals through increasing policies, programs, and services that support:

- food security/urban agriculture;
- housing choice and affordability;
- reducing energy costs;
- access to transit and active transportation;
- improving air quality;
- reducing and mitigating urban heat island effect;
- exposure to and stewardship of natural heritage;
- neighbourhood renewal;
- empowering community organizations;
- local economic opportunity and workforce development;
- disaster/emergency preparedness;
- public health and wellbeing; and
- civic engagement.

Social equity refers to the fair and equal access to resources, and the equal opportunities to develop and prosper in the community. It stresses inclusiveness and the sharing of benefits across all members of society.¹

The City of Brampton has already commenced numerous initiatives reflective of the list noted above, such as the Community Garden Program, Active Transportation Master Plan, School Walking Route Program, Sustainable Neighbourhood Action Program, Sustainability Performance Metrics for new development, Natural Heritage Restoration Program, Eco Park Strategy, One Million Trees Program, and the Lighthouse Program (refer to the Canvas of Environmental Initiatives for more details). Better integrating the social equity lens will only improve outcomes and help ensure under-served or harder-to-reach populations contribute to and benefit from the City's environmental efforts.

The effectiveness of the City's efforts to incorporate social equity in our sustainability approach will rest on the ability to:

- identify current marginalized populations and local equity issues;
- assess the outcomes of previous actions taken for vulnerable communities;
- expand opportunities for and quality of public engagement and action;
- create explicit social equity goals and related actions;
- thoughtfully consider implications of choices on marginalized populations prior to action development/implementation;
- target policy direction and investments; and
- build capacity within local marginalized groups to articulate issues and contribute toward solutions.

Environmental sustainability initiatives can be a vehicle for delivering a more equitable society and improve the lives of all residents. It takes careful planning and execution to realize mutually reinforcing benefits, whereby social conditions and opportunities enhance environmental protection and vice versa. The Brampton Grow Green EMP provides the foundation for meaningful integration of social equity into the City's implementation of environmental action and creating a more fair and truly sustainable Brampton.

Economy

Traditionally viewed as disparate goals, there is growing interest in economic progress that contributes to stronger ecosystems and improved quality of life for all. A green response is also being acknowledged by many governments, international organizations, and academia as the way forward from the economic and environmental crises experienced globally in recent decades. More investors are now using environmental, social, and governance (ESG) criteria when evaluating the companies in which to invest in.

As a new and growing engine of economic growth, the green economy focuses on key sectors such as renewable energy production and distribution, building retrofits and green building construction for increased energy efficiency, decarbonisation of transport, water management, waste reduction and management, and natural heritage conservation. These sectors involve ongoing innovation, require and support the development of a skilled and agile workforce, and can generate millions of new jobs. Moving forward with focused policies and investment to transition to a low-carbon, energy and resource efficient economy, in particular, can result in expand businesses, jobs, and incomes, poverty reduction, higher standards of living, and social inclusion.³

Studies have shown that meeting Canada's climate change goals could generate over 3.3 million direct jobs by 2050 in the building trades alone. This number rises to 17 million jobs if induced, indirect, and supply chain jobs are included in the total.⁴ According to Statistics Canada, environmental and clean technology industry continue to grow, accounting for up 3.1% of Canadian gross domestic product (GDP) and accounting for 282,000 jobs (versus 203,000 workers in the oil sector) in 2017. The average worker in Canada earns \$63,600 per year, while the average annual income in the clean-economy sector is almost 50% higher at \$94,000.⁵



In addition to triggering new investments and employment, greening the economy offers the opportunity to improve social equity and the inclusiveness of economic growth. For example, a carefully planned and targeted program for energy conservation through building retrofits and new construction can lower energy costs and address energy poverty. In addition, education and skills training in green economy sectors can be aimed at marginalized and underemployed communities.

Improving local economic development also brings jobs closer to the local workforce, reducing total vehicle kilometers travelled to get to work and making active transportation and transit a more appealing choice, helping decrease GHG emissions related to commuting.

Talent, industries, and investors are increasingly moving to and staying in cities that are leaders in environmental sustainability and actively fostering green economies. When determining where to locate, leading businesses today are looking for cities with robust public transit networks, transit oriented development, a mix of housing types, and parks and other public green spaces/amenities, because these attributes are what increasingly attract talent and capital.⁶ Global consultancy firm Bain & Company conducted a survey in 2018 of just under 300 global companies, and 81% stated that sustainability is more important to their business today than it was five years ago, and 85% believe that it will be even more important in five years.⁷

The City of Vancouver showcases these benefits. With a long history of sustainability and a commitment to becoming the 'Greenest City' by 2050, Vancouver continues to be one of the top performing and most diverse economies in Canada, and is often ranked one of the best places to live in North America.⁸

“

A green economy is defined as low carbon, resource efficient and socially inclusive. In a green economy, growth in employment and income are driven by public and private investment into such economic activities, infrastructure and assets that allow reduced carbon emissions and pollution, enhanced energy and resource efficiency, and prevention of the loss of biodiversity and ecosystem services.”

- United Nations



Through policies, programs, investments, and incentives, municipalities play an important role in nurturing and benefiting from a green economy. The early integration of a green lens into the City's economic strategies is crucial in gaining economic competitive advantage in both local and global markets.

This updated EMP illustrates an evolution in our sustainability approach. The new Action Plan aims to better acknowledge, constructively influence, and strategically leverage the interrelationships between environment, economic, and equity. This includes initiatives to support the local growth of green industry, as well as green business practices in Brampton.

In addition to Brampton Grow Green EMP, the City's commitment toward cultivating a greener economy is also illustrated through the:

- Brampton 2040 Vision: Living the Mosaic
- Community Energy and Emissions Reduction Plan
- Sustainable Community Design Guidelines and Performance Metrics for new development
- Corporate Energy and Emissions Management Plan
- Efforts to establish a Centre for Community Energy Transformation

The City of Brampton must now, more than ever, work toward transformative change. Moving towards a green economy can lead Brampton towards greater economic prosperity and standard of living while also achieving its environmental goals.



Advancing the EMP

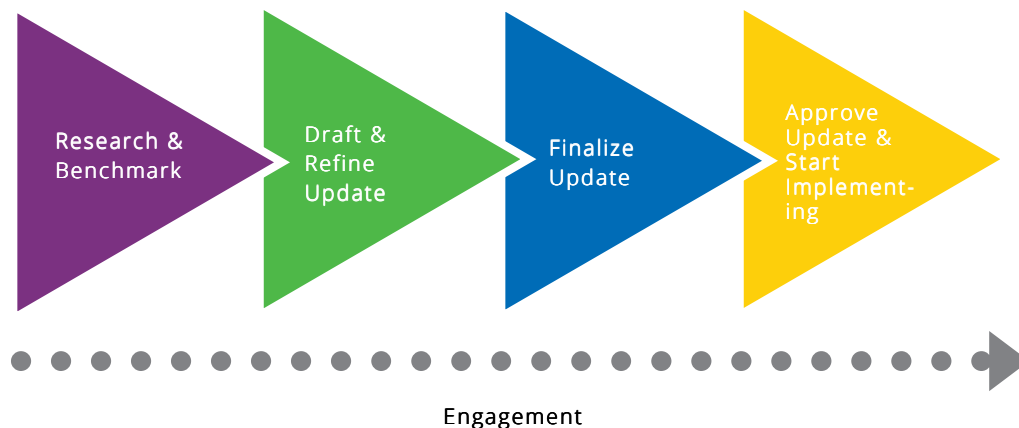
Brampton Grow Green Update Process

The update of the Brampton Grow Green Environmental Master Plan was an iterative process that involved:

- evaluating and understanding the City's progress toward achieving the goals and actions identified in the initial Brampton Grow Green Environmental Master Plan, including the successes and challenges of the first five years of implementation;
- reviewing the City's strategic documents that were approved since the launch of the Brampton Grow Green EMP;
- leveraging information gathered as part of other city-wide plans that recently underwent public engagement and input, such as the Brampton 2040 Vision and the Community Energy and Emissions Reduction Plan;
- performing a jurisdictional scan to identify current international, federal, provincial and local plans, policies, and priorities for environmental sustainability;
- benchmarking against environmental plans of other municipalities of similar size;
- undertaking interviews and meetings with City staff and other stakeholders, including Councillors;
- conducting an online survey for public input on potential actions and their prioritization; and
- consulting with Brampton's Environment Advisory Committee.

The City's Grow Green Team acted as the technical advisory committee for this project, providing information and input that was critical to the successful development of a refreshed Action Plan and Metrics.

Due to the coronavirus (COVID-19) pandemic and associated precautions, the engagement process for this updated EMP was scoped, pivoting to primarily online tactics. Nevertheless, stakeholder/public input was gathered throughout the project, and helped inform the final outcome.



As part of the background research for the Brampton Grow Green update, a range of sustainability plans of partner agencies and upper level governments were reviewed including, but not limited to, the Region of Peel's Climate Change Master Plan, the Province of Ontario's Made in Ontario Environment Plan, the Government of Canada's Federal Sustainable Development Strategy and the Pan-Canadian Framework on Clean Growth and Climate Change, as well as the United Nation's Sustainable Development Goals. The top themes that emerged are listed below, and guided the development of the new EMP Action Plan.

- Building partnerships
- Empowering the community
- Expanding multimodal transportation
- Creating complete communities
- Fostering natural heritage stewardship
- Improving water quality
- Advancing public health
- Cultivating green jobs
- Supporting a circular economy
- Transitioning to a low-carbon future (climate change mitigation)
- Increasing climate change adaptation and resilience



Refined Metrics

Brampton Grow Green included metrics to keep the pulse on how we are performing against the Plan. These metrics and their associated targets were established with the understanding and expectation that they would be refined over time. Implementing the EMP revealed better things and ways to measure, calculate, and report progress. It also uncovered challenges related to data quality and usability. As a result, while the majority of the metrics remain the same, several metrics, baselines, and targets have been refined based on:

- review of metric suitability;
- availability and accuracy of data;
- methodological improvements related to gathering, calculating, and/or interpreting data; and
- direction garnered from technical studies and plans developed following the establishment of the Brampton Grow Green EMP.

Above all, the refresh exercise ensures that metrics moving forward are clear, pragmatic, useful, and locally relevant. The metrics will continue to help assess progress toward our sustainability goals, as well as inform future plans, policies, and programs.



Performance Metrics

PEOPLE	Baseline	Targets
City: Number of environmental education and engagement initiatives per year	-	At least 1 initiative per core component
City: Number of staff participants in environmental education and engagement initiatives per year	742 (2016)	10% increase per year
Community: Number of public participants in environmental education and engagement initiatives per year	101 880 (2016)	10% increase per year
AIR	Baseline	Targets
City: Greenhouse Gas emissions per year (tonnes of eCO2)	50,208 (2010)	20% reduction by 2024 30% reduction by 2030 <i>Informed by Corporate Energy & Emissions Management Plan (2019)</i>
Community: Greenhouse Gas emissions per year (tonnes of eCO2)	3,500,000 (2016)	2% reduction by 2020 9% reduction by 2025 30% reduction by 2030 <i>Informed by Community Energy & Emissions Reduction Plan (2020)</i>
Community: Number of Brampton Transit trips per capita per year	50.23 (2018)	44.2 trips by 2020 52.2 trips by 2025 66.8 trips by 2030 <i>Informed by Transportation Master Plan (2015)</i>
Community: Vehicle kilometers travelled (VKT) per capita per day	10.88 (2016)	Establish new targets through Transportation Master Plan update <i>Targets should support Community Energy & Emissions Reduction Plan (2020)</i>
WATER	Baseline	Targets
City: Potable water demand per year (meter ³ per meter ²)	1.4 (Building) (2018)	Establish targets through development of Water Efficiency Strategies (buildings and outdoor amenities)
Community: Potable water demand (litres per capita per day)	206 Lcd (2016)	174 Lcd by 2020 150 Lcd by 2025 <i>Informed by the Region of Peel's Water Efficiency Strategy (2012)</i>
City & Community: Removal of hard surfaces (e.g. concrete) from watercourse channels (meters) *	500 m (2018)	1000 meters every five years



LAND	Baseline	Targets
City: Number of trees planted per year	8409 (2016)	10 000 trees per year <i>Informed by the Brampton One Million Trees Strategy (2019)</i>
Community: Number of trees planted per year	38,744 (2016)	40 000 trees per year <i>Informed by the Brampton One Million Trees Strategy (2019)</i>
City: Density (residents and jobs per hectare)	Downtown Brampton: 85 residents & jobs per ha (2020) Greenfield Area: 56 residents & jobs per ha (2020)	Downtown Brampton (Urban Growth Centre) = 200 residents & jobs per ha by 2031; <i>Informed by A Place to Grow: Growth Plan for the Greater Golden Horseshoe (2020)</i> Designated Greenfield Area = 51 people & jobs per ha <i>Informed by Region of Peel Official Plan (2018)</i>
City & Community: Natural Heritage System in public ownership (hectares) *	2670 (2018)	3280 ha by 2030 4200 ha by 2040
City: Natural heritage enhancement/restoration per year (hectares)	10.9 (2016)	10 hectares per year
Community: Natural heritage enhancement/restoration per year (hectares)	18.5 (2016)	20 hectares per year
Community: Number of development proposals that achieve a Sustainability Score above the Bronze threshold **	N/A	Determine baseline and targets as part of the update to the Sustainability Metrics and Thresholds.
ENERGY	Baseline	Targets
City: Building energy use intensity per year (kilowatt hours per meter ²)	Admin: 289 F&ES: 367 Rec: 489 Trans 514 Works: 529 Other: 392 (2016)	8% reduction by 2020 29% reduction by 2025 39% reduction by 2030 <i>Informed by Community Energy & Emissions Reduction Plan. May be subject to revision.</i>
Community: Energy use reduction per capita per year (gigajoules) *	150 GJ (2016)	6% reduction by 2020 18% reduction by 2025 30% reduction by 2030 <i>Informed by Community Energy & Emissions Reduction Plan.</i>
City: Energy supply coming from on-site renewable sources *	N/A	1% by 2020 2% by 2025 4% by 2030 <i>Informed by Community Energy & Emissions Reduction Plan. May be subject to revision.</i>
WASTE	Baseline	Targets
City: Waste diversion rate	N/A	Establish baseline and targets through a Corporate Waste Diversion Strategy
Community: Waste diversion rate	50.1 (2016)	74% waste diversion by 2034 <i>Informed by Region of Peels community waste diversion target.</i>

* Metric revised from the original Brampton Grow Green EMP (2014)

** New metric not included in the original Brampton Grow Green EMP (2014)





































A Refreshed Action Plan














The refreshed action plan focuses on the next ten years and charts the course for a greener Brampton. It carries forward and adapts key actions from the original EMP that have yet to be achieved, and adds new actions reflective of best practice and tailored to the qualities, needs, and opportunities of Brampton. It aims to accelerate our efforts, and demonstrate commitment to and leadership in environmental sustainability at the municipal level. Many of the actions will require technical work, detailed design, and stakeholder engagement prior to implementation.




































Action Plan
































	PEOPLE	Benefits	City or Community	Priority	Lead Department
1	Establish a Grow Green recognition program to acknowledge and celebrate environmental leaders within the corporation.		City	Short Term	Public Works & Eng: Env Planning
2	Establish a Grow Green recognition program to acknowledge and celebrate environmental leaders within the community.		Community	Short Term	Public Works & Eng: Env Planning
3	Host an annual City-wide Grow Green celebration and showcase event.		City	Short Term	Public Works & Eng: Env Planning
4	Add an Environmental Sustainability Implications section to reports for Council and its Committees.		City	Short Term	Legislative Services: City Clerk
5	Establish an Environmental Education Centre on City lands at Bovaird Dr and Heritage Rd in collaboration with the Credit Valley Conservation and other partners.	     	Community	Long Term	Public Works & Eng: Bldg Design & Construction
6	Develop and publish a Brampton green business inventory.		Community	Long Term	Plng, Bldg & Ec Dev: Ec Development
7	Develop and commence implementation of initiatives to attract jobs and investments in the green economy as part of the Investment Cornerstone of the City's Economic Recovery Strategy.	     	Community	Medium Term	Plng, Bldg & Ec Dev: Ec Development
8	Collaborate with regional organizations like Partners in Project Green to promote green businesses and environmentally friendly business practices.	     	Community	Long Term	Plng, Bldg & Ec Dev: Ec Development
	AIR	Benefits	City or Community	Priority	Lead Department
9	Update and commence implementation of the Transportation Master Plan.	 	City	Short Term	Plng, Bldg & Ec Dev: Transportation Plng
10	Develop and commence implementation of a Sustainable Fleet Strategy.	 	City	Short Term	Public Works & Eng: Fleet Services
11	Develop and commence implementation of a Corporate Transportation Demand Management (TDM) strategy to reduce single occupancy auto vehicle trips generated by City staff and for City operations.	 	City	Short Term	Plng, Bldg & Ec Dev: Transportation Plng
12	Develop Complete Street Guidelines and update City standards to implement these guidelines.	  	City	Short Term	Plng, Bldg & Ec Dev: Transportation Plng
13	Establish policies/procedures for new City facilities to provide 10% of parking spaces with electric vehicle supply equipment (EVSE), and 25% of remaining parking spaces designed to permit future EVSE installation.		City	Short Term	Public Works & Eng.: Bldg Design & Construction
14	Complete a Network Electrification Feasibility Analysis for Brampton Transit.		City	Short Term	Brampton Transit














15	Establish policies/procedures that ensure new City facilities strive to achieve and maintain net zero carbon emissions in their annual operations.		City	Medium Term	Public Works & Eng.: Bldg Design & Construction
16	Establish policies/procedures that ensure retrofits of existing City facilities to strive to achieve and maintain net zero carbon emissions in their annual operations.		City	Long Term	Public Works & Eng: Facilities Ops & Maint
17	Collaborate with the Province and/or Region of Peel to establish air quality monitoring stations in Brampton.		Community	Medium Term	Public Works & Eng: Env Planning
18	Develop and commence implementation of a targeted enforcement strategy for the City's anti-idling by-law.		Community	Medium Term	Legislative Services: Enforcement & By-law Services
WATER		Benefits	City or Community	Priority	Lead Department
19	Develop and commence a Water Efficiency Strategy for City buildings, including potable water reduction targets, as well as water efficiency standards for buildings retrofits and new construction.		City	Medium Term	Public Works & Eng: Bldg Design & Construction
20	Develop and commence a Water Efficiency Strategy for the City's outdoor amenities (e.g. sports fields, splash pads, garden beds), including reducing potable water use for irrigation.		City	Medium Term	Comm Services: Parks Maint & Forestry
21	Transition at least 50% of City's planting beds from annual plants to draught tolerant, non-invasive, perennial plants.		City	Medium Term	Comm. Services: Forestry, Hort & Cem Services
22	Establish policies and guidelines that require the submission of a Water Conservation Plan as part of development applications, which recommends measures that can facilitate potable water conservation.		Community	Medium Term	Public Works & Eng: Env Planning
23	Establish policies/procedures for City facilities to provide a minimum of 50% green roof, blue roof, and/or cool roof.		City	Medium Term	Public Works & Eng: Bldg Design & Construction
24	Establish policies and incentives to encourage green roofs, blue roofs, and cool roofs on new commercial, institutional, and residential development with a minimum gross floor area.		Community	Medium Term	Public Works & Eng: Env Planning
25	Update and commence the implementation of a Lake Management Strategy to improve the water quality, recreational use, and ecosystem health of Brampton's lakes.		City	Medium Term	Public Works & Eng: Env Engineering
26	Establish a water quality monitoring program for stormwater management assets.		City	Medium Term	Public Works & Eng: Env Engineering
27	Develop policies/procedures to evaluate the opportunity to incorporate Low Impact Development (LID) into major City capital projects (roads, parks, and buildings).		City	Medium Term	Public Works & Eng: Env Engineering

28	Develop and commence implementation of an outreach and education strategy regarding stormwater management.	 	City	Short Term	Public Works & Eng: Env Engineering
29	Update and commence implementation of a Salt Management Strategy for City's operations.	 	City	Medium Term	Public Works & Eng: Road Maint, Ops & Fleet
30	Develop and commence implementation of a Climate Change Adaptation Plan.	  	City	Medium Term	Public Works & Eng: Env Planning
LAND		Benefits	City or Community	Priority	Lead Department
31	Develop and commence implementation of an Urban Forest Management Plan.	    	City	Short Term	Comm Services: Forestry, Hort & Cem Services
32	Update the Tree Preservation By-law to enhance preservation of healthy tableland trees.	   	City	Short Term	Comm Services: Forestry, Hort & Cem Services
33	Launch a marketing campaign to increase awareness of and compliance with the Tree Preservation By-law.	 	City	Short Term	Comm Services: Forestry, Hort & Cem Services
34	Develop and commence implementation of a Woodland Management Strategy for City-owned woodlands.	   	City	Medium Term	Public Works & Eng: Env Planning
35	Transition the Valleyland Naturalization Program to the Naturalization Program to widen its scope from solely valleyland restoration to both valleyland restoration and tableland naturalization.	   	City	Short Term	Comm Services: Open Space Dev
36	Develop and commence implementation of a Naturalization Communications Strategy to increase awareness of and support for naturalization efforts on both public and private land.	 	Community	Short Term	Public Works & Eng: Env Planning
37	Review and update the City by-laws to ensure they do not restrict designed naturalization efforts on public and private lands.		City	Short Term	Public Works & Eng: Env Planning
38	Develop and host workshops to promote gardening and naturalization on private property in collaboration with Conservation Authorities and the Region of Peel.	 	Community	Medium Term	Comm Services: Parks Comm Programs
39	Develop and commence implementation of an Invasive Species Management Strategy for City-owned land.		City	Short Term	Comm Services: Forestry, Hort & Cem Services
40	Develop planning policies that require invasive species management to be undertaken as part of new development.		Community	Medium Term	Public Works & Eng: Env Planning
41	Pursue the Bee City designation from Bee City Canada to facilitate and celebrate efforts that support pollinators.		City	Short Term	Comm Services: Parks Comm Programs
42	Pursue a Bird Friendly designation to facilitate and celebrate efforts that support birds.		City	Medium Term	Public Works & Eng: Parks Comm Programs
43	Develop and commence implementation of a city-wide Road Ecology Strategy in collaboration with the Province, Region of Peel,		City	Medium Term	Public Works & Eng: Env Planning



	Conservation Authorities, and the Ontario Road Ecology Group.				
44	Expand the City's Alternative Design Standards for public right-of-ways (e.g. roads, streets, sidewalks) to improve active transportation, naturalization, street tree health, and stormwater management.		City	Short Term	Public Works & Eng: Capital Works
45	Integrate natural assets into the City's Annual Financial Statement.		City	Medium Term	Corp Support Services: Finance
46	Develop and commence implementation of a strategy to expand the Community Gardens program, including supporting community gardens on private lands, requiring new recreation centres and large parks to provide community gardens, and increasing opportunities for year-round gardening.	 	Community	Long Term	Comm Services: Parks Comm Programs
47	Establish a pilot project with a local school to create horticultural lessons that can support community gardening and naturalization initiatives.	 	Community	Long Term	Comm Services: Parks Comm Programs
48	Develop a communication strategy to promote the Adopt-a-Park program and increase participation.	 	Community	Medium Term	Comm Services: Parks Comm Programs
49	Update and commence implementation of an updated Sustainability Communities Program: New Development (i.e. Sustainability Metrics and Thresholds).	    	Community	Medium Term	Public Works & Eng: Env Planning
50	Establish upgraded Sustainability Thresholds for urban centres as part of the Sustainability Communities Program: New Development.	    	Community	Medium Term	Public Works & Eng: Env Planning
51	Develop a strategy to expand the Sustainable Neighbourhood Action Program (SNAP) across the city in collaboration with the Region of Peel and Conservation Authorities.	     	Community	Long Term	Public Works & Eng: Env Planning
ENERGY		Benefits	City or Community	Priority	Lead Department
52	Establish policies that require the submission of an Integrated Energy Management Plan as part development applications, which recommends potential measures to increase energy efficiency and conserve energy, and explores opportunities for district energy.	 	Community	Short Term	Public Works & Eng: Env Planning
53	Facilitate the launch of a Centre for Community Energy Transformation (formerly referred to as the Institute of Sustainable Brampton) in collaboration with Sheridan College and other partners.	  	Community	Medium Term	Public Works & Eng: Env Planning
WASTE		Benefits	City or Community	Priority	Lead Department
54	Develop and commence implementation of a Waste Diversion Strategy for City indoor and	 	City	Long Term	TBD



	outdoor facilities, including a minimum 75% diversion target.				
55	Explore the opportunity to develop a waste management team to facilitate a centralized model for waste diversion for City operations.		City	Long Term	TBD
56	Develop and commence implementation of a Green/Sustainable Procurement Strategy.	    	City	Long Term	Corp Support Services: Purchasing
57	Develop policies/procedures for lifecycle assessments, including lifecycle GHG emissions, of major capital projects.	    	City	Long Term	Corp Support Services: Corp Asset Management

Growing the Momentum

Education

Building upon the foundational work that is already underway, the City and its partners must expand education efforts and capacity building both in-house and community wide. Education and engagement should not only focus on building knowledge about and support for environmental causes and initiatives, but also on fostering participation and empowering people, business, and institutions to take action.

Collaboration

Central to the success of the Brampton Grow Green EMP is the continued collaboration and partnership between the City, residents, schools, business, places of worship, community groups, the development industry, conservation authorities, and other government agencies.

Monitoring

With a revamped action plan, metrics, and targets, the City will continue monitoring performance to help us understand where we are, where we are going, and if we are moving in the right direction.

Reporting

Reporting will take the form of progress reporting to Council every two years. A comprehensive update will be commenced in another five years to rejuvenate the Plan. Reporting will also include posting information on the City website, such as new, ongoing, and completed initiatives, as well as a performance dashboard to illustrate progress toward achieving targets.



Conclusion

The update of the Brampton Grow Green EMP aims to accelerate progress in creating a more healthy, resilient, and environmentally sustainable city. While Brampton has made great strides since the launch of the Plan in 2014, gradual progress must be replaced with transformative action if we are to address today's environmental challenges and avert climate disaster.

As noted in the initial Brampton Grow Green EMP, environmental sustainability has to be embedded in the corporate culture - the environmental lens must be an imperative when developing new or revising existing plans and policies, establishing and assessing capital projects, operations, and programming, making purchases, and designing infrastructure systems. Realizing the Grow Green vision will require support from leadership, inter-department cooperation, sustained and dedicated resources, ongoing education, sector-wide collaboration, and persistence.

Under this renewed Plan, tomorrow's Brampton will be characterized by mix of housing that accommodates people of all incomes and stages of life, a range of jobs that contribute to a circular economy, and a community of informed and active stewards of our build and natural spaces living in resilient neighbourhoods. Electric vehicles and buses along with cyclists and pedestrians will dominate our complete streets, while urban agriculture supplies affordable healthy food to residents and visitors. Brampton will have a destination environmental education centre, provide recycling and green bins at all its public spaces. It will be a local leader in and mentor on clean energy and GHG emission reductions. Brampton will be a better place for both people and planet.



References










































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CANVAS OF ENVIRONMENTAL INITIATIVES

An outcome of the *Brampton Grow Green Environmental Master Plan*, the Canvas of Environmental Initiatives is a snapshot of the many ways in which the City of Brampton and its conservation partners are currently improving the Brampton's environmental performance. Initiatives listed include programs and events, as well as plans, policies, programs, standards, and guidelines that are spearheaded by the City of Brampton and its conservation partners, including the Region of Peel, Credit Valley Conservation (CVC), and the Toronto and Region Conservation Authority (TRCA). The Canvas of Environmental Initiatives is intended to be a working list, and will be updated to reflect new environmentally sustainable initiatives as they are identified and implemented.





















CITY OF BRAMPTON

INITIATIVE			LEAD DEPARTMENT		SUPPORTING COMPONENTS						MORE INFORMATION
PEOPLE											
1.	Brampton's Environment Advisory Committee	Public Works & Engineering							Link		
2.	Earth Day Programming	Public Works & Engineering									
3.	Grow Green Eco Pledge Program	Public Works & Engineering							Link		
4.	Grow Green Network	Public Works & Engineering							Link		
5.	Grow Green Team	Public Works & Engineering									
6.	Our Ecosystem, Our Home, Our Responsibility Campaign	Public Works & Engineering							Link		
7.	Community Parks Week Program	Public Works & Engineering									
8.	Parks Environmental Stewardship Education Program	Public Works & Engineering							Link		

















CANVAS OF ENVIRONMENTAL INITIATIVES

INITIATIVE		LEAD DEPARTMENT	SUPPORTING COMPONENTS						MORE INFORMATION
9.	Urban Design Awards	Planning, Building & Economic Development Services							Link
10.	Lighthouse Program (Emergency Management)	Fire & Emergency Services							Link
11.	Advance Brampton Fund	Corporate Support Services							Link
12.	Blue Dot Movement Signatory	Public Works & Engineering							
AIR									
13.	Active Transportation Master Plan	Planning, Building & Economic Development Services							Link
14.	Alternative Design Standards (Active Transportation)	Planning, Building & Economic Development Services							
15.	Bike & Ride Initiative	Brampton Transit							Link
16.	Brampton Cycling Advisory Committee	Planning, Building & Economic Development Services							Link
17.	Electric Bus Pilot Program	Brampton Transit							Link
18.	Hybrid Diesel-Electric Buses	Brampton Transit							Link
19.	Employee Brampton Transit Pass Program	Brampton Transit							





























CANVAS OF ENVIRONMENTAL INITIATIVES

INITIATIVE		LEAD DEPARTMENT	SUPPORTING COMPONENTS				MORE INFORMATION
20.	Electric Vehicle Charging Station Initiative	Public Works & Engineering					Link
21.	Green Fleet Program	Public Works & Engineering					Link
22.	Global Covenant of Mayors	Public Works & Engineering					Link
23.	Idling Control By-law	Legislative Services					Link
24.	iRide School Bus Routes	Brampton Transit					Link
25.	NextRide	Brampton Transit					Link
26.	Pedestrian Safety Plan	Public Works & Engineering					Link
27.	Pathways Master Plan	Public Works & Engineering					Link
28.	School Walking Route Program	Public Works & Engineering					Link
29.	Solar Powered Brampton Transit Shelters Initiative	Brampton Transit					
30.	Traffic Signal Corridor Review Program	Public Works & Engineering					
31.	Transportation Master Plan	Planning, Building & Economic Development Services					Link























CANVAS OF ENVIRONMENTAL INITIATIVES

INITIATIVE		LEAD DEPARTMENT	SUPPORTING COMPONENTS	MORE INFORMATION
32.	ZUM (Bus Rapid Brampton Transit) Expansion	Brampton Transit		Link
WATER				
33.	Salt Management Plan	Public Works & Engineering	 	
34.	Spring Street Sweeping Program	Public Works & Engineering		Link
35.	Stormwater Management Facility Maintenance Program	Public Works & Engineering		Link
36.	Stormwater Management Master Plan	Public Works & Engineering	 	
37.	Stormwater Management Retrofit & Enhancement Study	Public Works & Engineering	 	
38.	Lake Management and Monitoring	Public Works & Engineering		
39.	Sewage By-law	Legislative Services		Link
40.	City-wide Watercourse Erosion Study	Public Works & Engineering	 	
41.	Downtown Etobicoke Creek Revitalization Study (DECRS) / Riverwalk	Public Works & Engineering	 	Link
42.	Loafers Lake Management Plan	Public Works & Engineering		















CANVAS OF ENVIRONMENTAL INITIATIVES

INITIATIVE		LEAD DEPARTMENT	SUPPORTING COMPONENTS					MORE INFORMATION
43.	County Court Bio-filter Swale	Public Works & Engineering						
LAND								
44.	Adopt-a-Park Program	Public Works & Engineering						Link
45.	Brampton Natural Areas Inventory	Public Works & Engineering						Link
46.	Boulevard Bulb Planting Initiative	Community Services						
47.	Brampton One Million Trees Program	Community Services						Link
48.	Brampton Eco Park Strategy	Public Works & Engineering						Link
49.	Tree Planting Tracker Map	Public Works & Engineering						Link
50.	Heart Lake Wildlife Crossings	Public Works & Engineering						
51.	Community Gardens Program	Public Works & Engineering						Link
52.	Backyard Garden Program	Community Services						Link
53.	Natural Heritage and Environmental Management Strategy (NHEMS)	Public Works & Engineering						Link































CANVAS OF ENVIRONMENTAL INITIATIVES

INITIATIVE		LEAD DEPARTMENT	SUPPORTING COMPONENTS				MORE INFORMATION
54.	Natural Heritage Restoration Program	Public Works & Engineering					Link
55.	Natural Heritage Brochure Series	Public Works & Engineering					Link
56.	Parklands Dedication By-law	Public Works & Engineering					Link
57.	Parks and Recreation Master Plan	Public Works & Engineering					Link
58.	Parks Cleanup Program	Community Services					Link
59.	Valley Naturalization Program	Community Services					Link
60.	Woodland Conservation By-law	Public Works & Engineering					Link
61.	Woodland Management Plan Guidelines	Public Works & Engineering					Link
62.	Woodland Management Program	Public Works & Engineering					
63.	Brampton EAB Management Program	Public Works & Engineering					Link
64.	Community Tree Planting Program	Public Works & Engineering					Link
65.	Ice Storm and Emerald Ash Borer Tree Recovery Program	Public Works & Engineering					Link
































CANVAS OF ENVIRONMENTAL INITIATIVES

INITIATIVE		LEAD DEPARTMENT	SUPPORTING COMPONENTS		MORE INFORMATION
66.	Street and Park Tree Replacement Program	Public Works & Engineering			Link
67.	Tableland Tree Assessment Guidelines	Public Works & Engineering			Link
68.	Tree Dedication Program	Public Works & Engineering			Link
69.	Tree Planting Standards	Public Works & Engineering			
70.	Tree Preservation By-law	Public Works & Engineering			Link
71.	Urban Forest Management Program	Public Works & Engineering			Link
72.	Invasive Species Management Program	Public Works & Engineering			
73.	Perennial Planting Conversion Initiative	Public Works & Engineering			
74.	Topsoil Removal By-law	Public Works & Engineering			Link
75.	Don't Mow Let it Grow Initiative	Community Services			Link
76.	Brampton Farmer's Market	Economic Development & Culture			Link
77.	Seedy Saturday & Garden Show	Public Works & Engineering			Link

CANVAS OF ENVIRONMENTAL INITIATIVES






















INITIATIVE		LEAD DEPARTMENT	SUPPORTING COMPONENTS					MORE INFORMATION
78.	Development Design Guidelines	Planning, Building & Economic Development Services						Link
79.	Sustainable Community Development Guidelines	Planning, Building & Economic Development Services						Link
80.	Sustainability Metrics for New Developments	Public Works & Engineering						
ENERGY								
81.	Energy Conservation and Demand Management Plan	Public Works & Engineering						Link
82.	Community Energy and Emissions Reduction Program	Public Works & Engineering						Link
83.	Solar Powered Flashing Traffic Beacons Initiative	Public Works & Engineering						
84.	Solar Powered Parking Meter Initiative	Public Works & Engineering						
85.	Solar Powered Brampton Transit Shelters Initiative	Brampton Transit						Link
86.	Leadership in Environmental Design (LEED) Certifications	Public Works & Engineering						
87.	Green Roofs	Public Works & Engineering						
88.	LED Traffic Signal Retrofit Program	Public Works & Engineering						

CANVAS OF ENVIRONMENTAL INITIATIVES







INITIATIVE		LEAD DEPARTMENT	SUPPORTING COMPONENTS					MORE INFORMATION	
89.	LED Street Light Retrofit Program	Public Works & Engineering							
WASTE									
90.	Designated Heritage Property Incentive Grant Program	Planning, Building & Economic Development Services							Link
91.	Think Green - Corporate Printing Strategy	Corporate Support Services							
92.	Printer Fleet Replacement Project	Corporate Support Services							
STRATEGIC DOCUMENTS									
93.	Term of Council Priorities	Office of the CAO							Link
94.	Grow Green Environmental Master Plan	Public Works & Engineering							Link
95.	City of Brampton Official Plan	Planning, Building & Economic Development Services							Link
96.	Brampton 2040 Vision: Living the Mosaic	Office of the CAO							Link

CANVAS OF ENVIRONMENTAL INITIATIVES




CONSERVATION PARTNERS

INITIATIVE		ORGANIZATION	CORE COMPONENT			MORE INFORMATION
PEOPLE						
1.	Peel Children’s Water Festival	Region of Peel				Link
2.	Peel Water Story Bus Tour	Region of Peel				Link
3.	The Great Gulp Event	Region of Peel				Link
4.	Bike the Creek	Toronto & Region Conservation Authority				Link
5.	Conservation Youth Corps	Toronto & Region Conservation Authority				Link
6.	Partners in Project Green	Toronto & Region Conservation Authority			 	Link
7.	Conservation Youth Corps	Credit Valley Conservation				Link
8.	Branch Out!	Credit Valley Conservation				Link
AIR						
9.	Active Transportation Plan	Region of Peel				Link





















CANVAS OF ENVIRONMENTAL INITIATIVES

10.	Peel Air Quality Monitoring Program	Region of Peel			
11.	Peel Climate Change Strategy	Region of Peel			Link
12.	Smog Response Plan	Region of Peel			
13.	Walk and Roll Peel	Region of Peel			Link





















WATER

14.	Downspout Disconnect Rebate Program	Region of Peel			Link
15.	Indoor Water Assessments Program	Region of Peel			Link
16.	Peel Rural Water Quality Program	Region of Peel			Link
17.	Private Well Abandonment Program	Region of Peel			Link
18.	Sanitary Backwater Valve Rebate Program	Region of Peel			Link
19.	Water Efficiency Strategy	Region of Peel			Link
20.	Water Smart Peel Program	Region of Peel			Link
21.	County Court SNAP	Toronto & Region Conservation Authority		    	Link
























CANVAS OF ENVIRONMENTAL INITIATIVES

22.	Humber River Fisheries Management Plan	Toronto & Region Conservation Authority		Link
23.	Humber River Watershed Plan	Toronto & Region Conservation Authority		Link
24.	Humber Watershed Alliance	Toronto & Region Conservation Authority		Link
25.	Low Impact Development Stormwater Management Planning and Design Guideline	Toronto & Region Conservation Authority		Link
26.	Peel Region Channel Remediation Strategy	Toronto & Region Conservation Authority	 	
27.	Credit River Fisheries Management Plan	Credit Valley Conservation		Link
28.	Credit River Flow Management Study	Credit Valley Conservation		
29.	Credit River Water Management Strategy	Credit Valley Conservation		Link
30.	Credit River Watershed Natural Heritage Strategy	Credit Valley Conservation		Link
31.	CVC Stormwater Management Criteria	Credit Valley Conservation		Link
32.	CVC Watershed Planning and Regulations Policies	Credit Valley Conservation		Link
33.	Fletcher's Creek Restoration Study	Credit Valley Conservation	 	Link
34.	Fletcher's Creek SNAP	Credit Valley Conservation	     	Link

CANVAS OF ENVIRONMENTAL INITIATIVES

35.	Low Impact Development (LID) Infrastructure Performance Assessment Program	Credit Valley Conservation			Link	
36.	Low Impact Development (LID) Stormwater Management Planning and Design Guideline	Credit Valley Conservation			Link	
37.	Stormwater Management Monitoring Strategy	Credit Valley Conservation			Link	
38.	Stream of Dreams Program	Credit Valley Conservation			Link	
LAND						
39	Fusion Landscaping Program	Region of Peel			Link	
40.	Greenlands Securement Program	Region of Peel			Link	
41.	Healthy Development Assessment (HDA) and HDA User Guide	Region of Peel			Link	
42.	Peel Region Urban Forest Strategy	Region of Peel			Link	
43.	Peel Natural Areas Inventory	Region of Peel			Link	
44.	Priority Tree Planting Areas to Grow Peel's Urban Forest Project	Region of Peel				
45.	Claireville Conservation Area Management Plan	Toronto & Region Conservation Authority				Link
46.	Emerald Ash Borer Management Program	Toronto & Region Conservation Authority			Link	

CANVAS OF ENVIRONMENTAL INITIATIVES

47.	Greenland Acquisition Project	Toronto & Region Conservation Authority				Link	
48.	Heart Lake Conservation Area Management Plan	Toronto & Region Conservation Authority				Link	
49.	Heart Lake Road Ecology Monitoring Project	Toronto & Region Conservation Authority				Link	
50.	Terrestrial Natural Heritage System Strategy	Toronto & Region Conservation Authority				Link	
51.	Greening Corporate Grounds	Credit Valley Conservation				Link	
52.	Greenland Securement Strategy	Credit Valley Conservation				Link	
53.	Invasive Species Strategy	Credit Valley Conservation				Link	
54.	Your Green Yard Program	Credit Valley Conservation				Link	
WASTE							
55.	Long-term Waste Resource Management Strategy	Region of Peel				Link	
STRATEGIC POLICIES							
56.	Region of Peel Official Plan	Region of Peel				  	Link
57.	The Living City Policies	Toronto & Region Conservation Authority				  	Link

Environment Advisory Committee *Orientation*

June 27, 2023

Overview

1. Committee Process and Meetings
2. Role of Committee Members

Environment Advisory Committee

- [Environment Advisory Committee](#) established by Council Resolution C374-2022 through adoption of Committee terms of reference.
- 2022-2026 term Committee Members appointed May 3, 2023 by Council Resolution C111-2023, until November 14, 2026 or until successors are appointed.

Environment Advisory Committee

Membership

- 11 members of the public, appointed until November 14, 2026, or until successors are appointed:

Sukran Balaban	Brajgeet Bhathal
Pushproop Brar	Charles Coimbra
Subhash Chander Duggal	Neil Fairhead
Hardik Mankad	Shailly Prajapati
Sherry-Ann Ram	Sandra Roppa
Raman Vasudev	
- 1 Councillor:
Regional Councillor Gurpartap Toor – Wards 9 and 10

Environment Advisory Committee

Attendance and Quorum

- **Quorum** = 6 citizen members
a majority of the 11 citizen members to be present to convene a meeting
- If a member is absent for three consecutive meetings, that position may be declared vacant and an alternate member is appointed
- *Please contact Sonya Pacheco if unable to attend a meeting*

Meeting dates and location

- Bi-Monthly (**Tuesdays at 6:00 p.m.**)
- Meetings held at City Hall - 4th floor Council Chambers, with option to participate virtually

Environment Advisory Committee

Purpose

- The Committee will assist, educate, and engage the community to advance the goals and actions of the City's Grow Green Environmental Master Plan (EMP). The Committee will advise City Council on environmental planning policy and sustainability matters to promote the protection, enhancement, and management of the City's natural and built environment.

Responsibility

- The Committee will act as the City's liaison/forum on environmental issues. The Committee will collaborate with other internal and external advisory committees and environmental partners and agencies to achieve the City's environmental mandate and goals.

Scope

- Serves an advisory, consultative role
- Does not have decision making authority, but may make recommendations to City Council through Committee of Council

Meeting Procedures, Agendas and Minutes



Meeting Procedures

- Council [Procedure By-law 160-2004](#), as amended

Agendas

- digitally published the Thursday before the scheduled meeting date
- available on the City [website](#)
- meeting information available in alternate formats, upon request

Minutes

- Committee recommendations/proceedings recorded in Committee Minutes
- Minutes presented to Committee of Council for approval
 - Committee of Council Minutes approved by Council

Agenda Sections

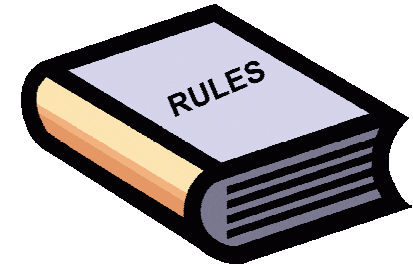


Committee Agenda:

1. Approval of the Agenda
2. Declarations of Interest under the Municipal Conflict of Interest Act
3. Previous Minutes
4. Delegations/Presentations
5. Reports/Updates
6. Sub-Committees
7. Other/New Business
8. Correspondence
9. Question Period
10. Public Question Period
11. Adjournment

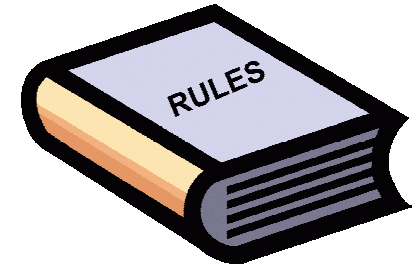
Municipal Conflict of Interest Act

- The Act applies where a **direct or indirect pecuniary (financial benefit) relationship** may exist for a member as a result of a matter before the Committee
 - “relationship” includes parent, spouse, child
- The member must declare a conflict of interest at the beginning of the meeting and excuse themselves from the proceedings and involvement in the decision
- Declaring a conflict is up to the individual member
- New requirement for declaration to also be in writing
- Can seek advice regarding conflict of interest from Integrity Commissioner



Rules of Debate and Decision-Making

- Considering an agenda item:
 - Chair calls the item
 - May be introduction of item by Chair, member, staff
 - Committee considers the item
 - May ask questions of staff/proponent
 - May speak in favor/against the item/issue/proposal
 - Speaking and debate must be relevant to item under consideration



Rules of Debate and Decision-Making

- Making a decision
 - Consensus-based decision-making
 - Committee member introduces a motion to do something
 - Verbal or in writing
 - Does not require a seconder
 - Motion debated and may be amended, referred, deferred
 - After debate, Chair puts motion to a vote
 - Majority vote to pass Motion (does not carry on tie vote)

City By-laws and Policy

- [Procedure By-law](#)
- [Code of Conduct](#)
- [Lobbyist Registry](#)
- [Grow Green Brampton](#)
- [Brampton's Environmental Master Plan](#)

Role of Committee Members

- Be familiar with Committee responsibilities
- Review agenda materials
- Attend meetings
- Listen to the presentations and debate; be respectful of everyone
- Contribute to discussions and ask questions for clarification
- **Work on sub-committees and participate at Committee events**
- Avoid emotional attachment
- If delegating to a Council or other Committee meeting, qualify your role (an interested citizen or Committee representative – if authorized)
- Support the Committee decision once approved
- Avoid criticizing Council decisions
- Refer media inquiries to the Chair or City staff
- Remember staff is available to help
- Enjoy the experience!

Environment Advisory Committee

Orientation – June 27, 2023

*Discussion
Questions?*

Committee Contact:

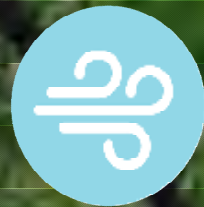
Sonya Pacheco, Legislative Coordinator

City Clerk's Office

905-874-2178

sonya.pacheco@brampton.ca

BRAMPTON'S ENVIRONMENTAL PROGRAM: AN OVERVIEW





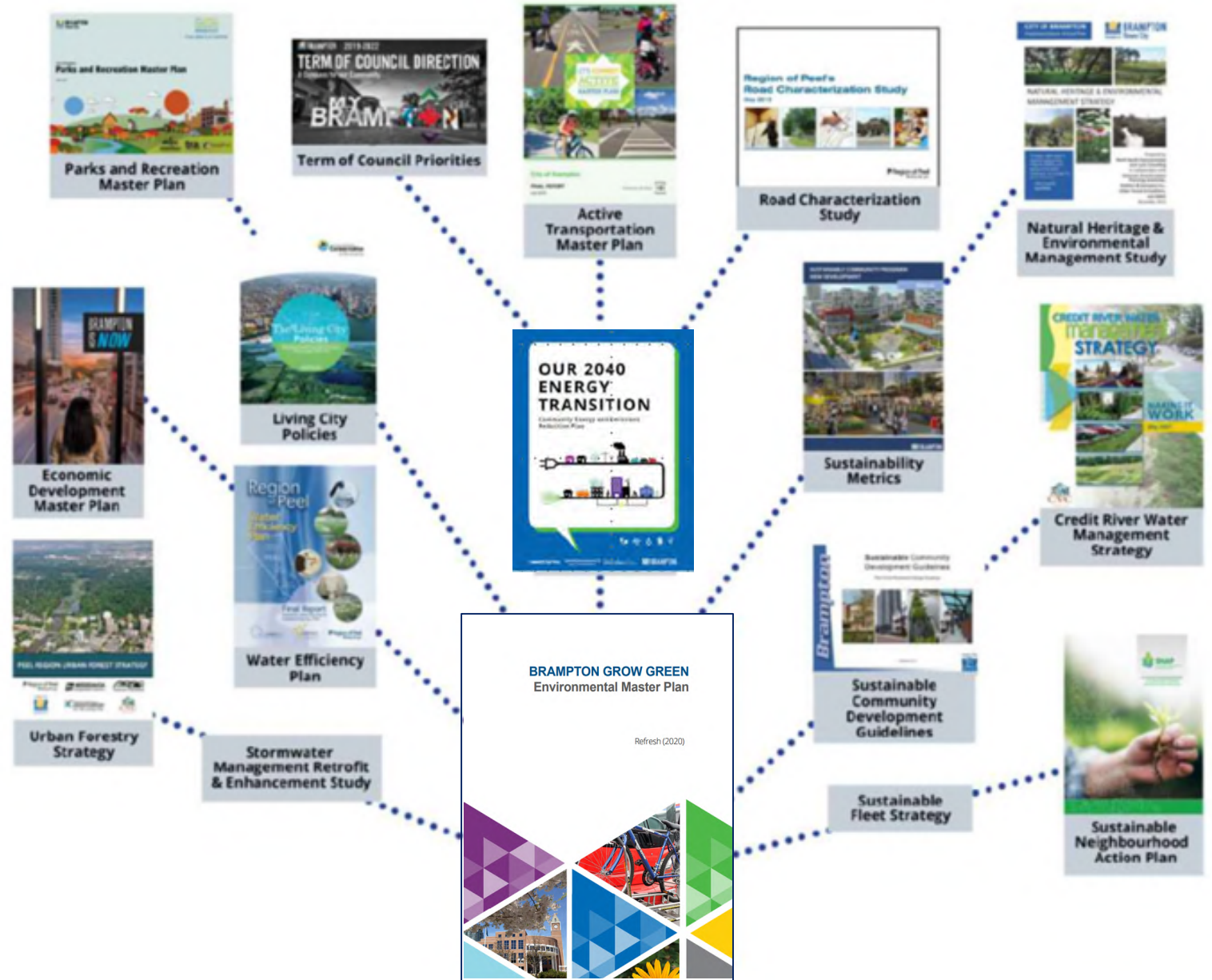
BRAMPTON
Environment Advisory Committee

ENVIRONMENTAL PLANNING: WHAT DO WE DO

- Responsible for City's Environmental Sustainability Program and Natural Heritage Planning
 - ✓ Policy development
 - ✓ Development application review
 - ✓ Master Plan development and implementation
 - ✓ Corporate resource for environmental sustainability, climate change, conserving energy and reducing GHGs and natural heritage initiatives
 - ✓ Community outreach and education



STRATEGIC FRAMEWORK:



STRATEGIC FRAMEWORK:

TERM OF COUNCIL STRATEGIC PRIORITIES 2022 - 2026

- Shared priorities of City Council over their term
- Six strategic directions, including “Environmental Resilience & Sustainability”
- June 19th workshop to prioritize the proposed Strategic Priorities
- Council Strategic Priorities will shape our projects and initiatives



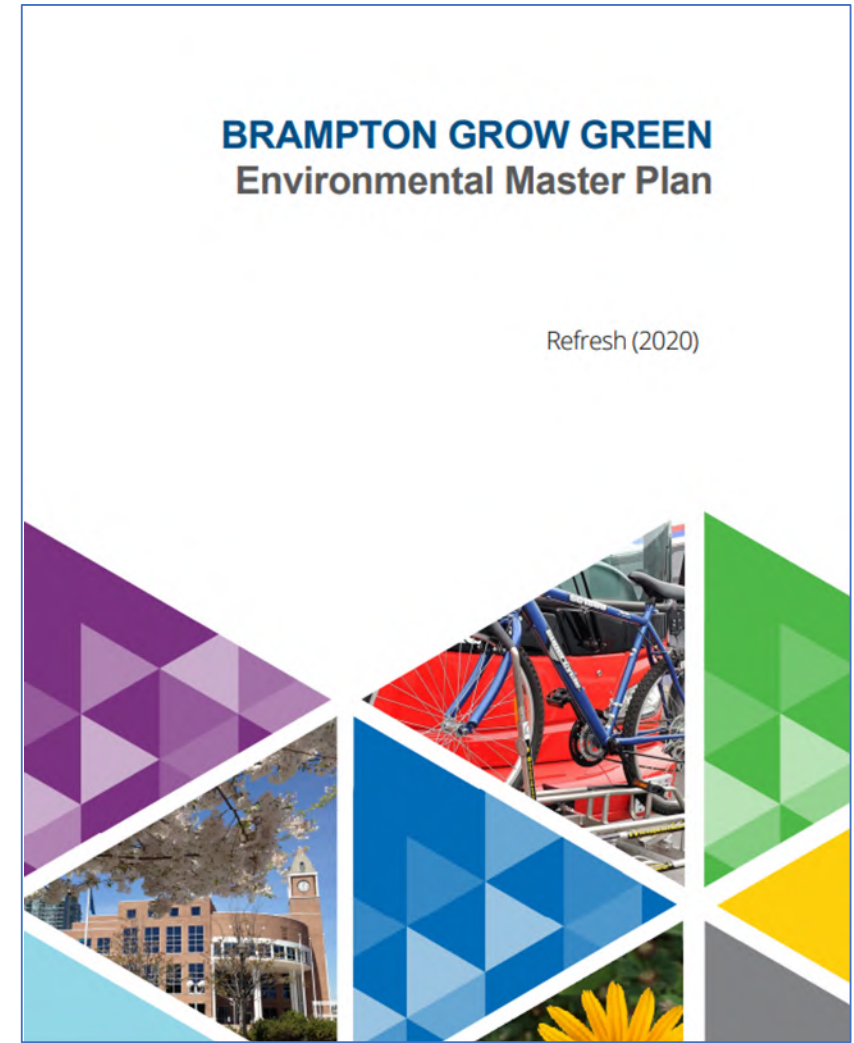
STRATEGIC FRAMEWORK: CITY OF BRAMPTON OFFICIAL PLAN

- Policy document that guides short-term and long-term development
- Provides a vision for Brampton
- Acts as a road map for city-building
- Land use, built form, transportation, natural heritage, etc.
- Update to the Official Plan currently underway, expected to be completed November.



STRATEGIC FRAMEWORK: BRAMPTON GROW GREEN

- Environmental sustainability framework for corporate and community actions
- Approved by Council in 2014
- Core components of People, Air, Water, Land, Energy, Waste
- Council approved an update 2021 with a new action plan
- Action Plan is comprised of approximately 60 actions items for a greener Brampton



STRATEGIC FRAMEWORK: NHEMS

- Natural Heritage and Environmental Management Strategy
- Approved by Council in 2015
- Strategy is a proactive approach to ensure that the abundance of natural heritage and built green spaces in Brampton are protected, enhanced, and restored.
- Priority goal within the NHEMS is to manage, restore, and enhance the natural heritage, urban forests, parks, and green infrastructure to maximize ecosystem services.
- Includes Action Plan, metrics, and targets



STRATEGIC FRAMEWORK: ECO PARK STRATEGY

- **Brampton Eco Park** is the interconnected network of sustainable urban and natural spaces interwoven and embedded in the city's urban form.
- Strategy was approved in 2020 by Council
- Principles:
 - Maximize ecological value
 - Reflect local identity
 - Provide opportunities for social services
 - Design with nature
 - Support innovation
 - Integrate with the surrounding community
 - Make nature visible



STRATEGIC FRAMEWORK:

URBAN FOREST MANAGEMENT PLAN

- The City approved its first UFMP in August 2022.
- Provides strategic guidance intended to maximize the environmental, social, economic, and health benefits that trees provide to the community.
- Guiding Principles:
 - Recognizing the urban forest as an essential municipal infrastructure
 - Collaboration and engagement with stakeholders
 - Developing sustainable urban forest management
 - Prioritizing preservation over replacement
 - Equitable access for all residents
 - Creating a diverse urban forestry
 - Implementing adaptive management and innovation



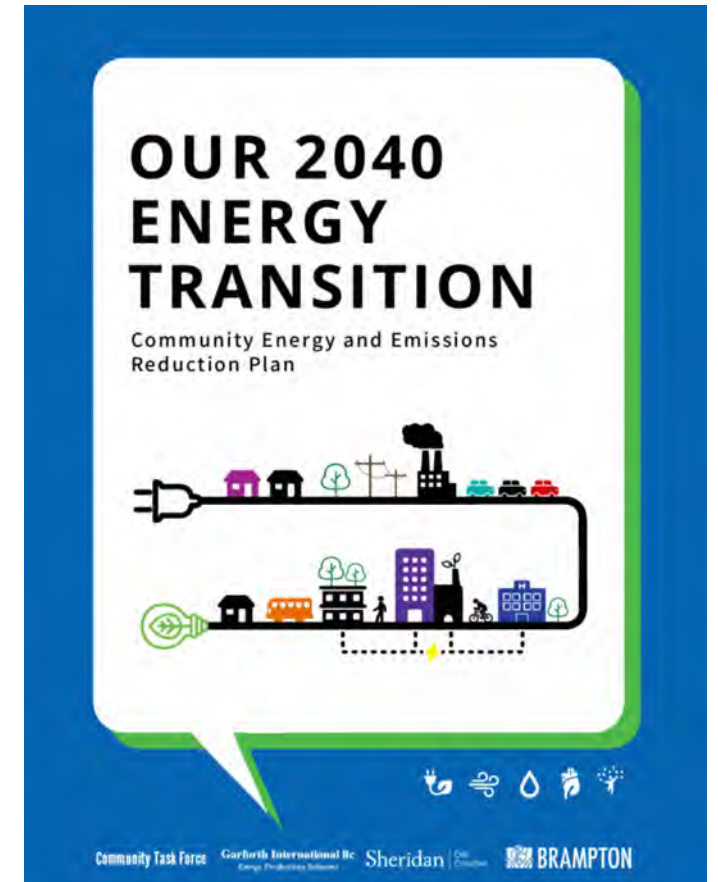
City of Brampton
Urban Forest
Management Plan
2022-2032

KEY INITIATIVES

KEY INITIATIVE: CEERP

COMMUNITY ENERGY & EMISSIONS REDUCTION PLAN

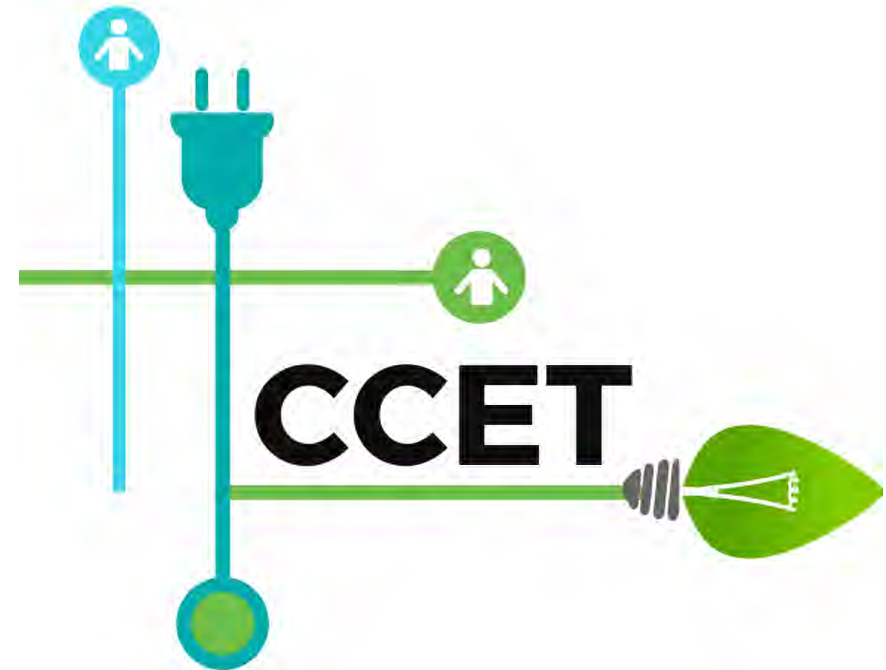
- Improve energy efficiency, reduce GHGs, stimulate economic development
- Set out energy efficiency and greenhouse gas emission reduction targets
 - 30% reduction in GHG emissions from 2016 levels by 2030,
 - 50% reduction by 2040, and
 - a pathway to reach 80% reduction by 2050
- Contains actions under six strategic directions
- Approved September 2020



KEY INITIATIVE: CCET

CENTRE FOR COMMUNITY ENERGY TRANSFORMATION

- Community-based non-profit organization to lead the energy transformation in Brampton and Peel Region and implement actions from the CEERP
- 4 Key Priority Areas:
 - Advancing deep home retrofits
 - Encouraging district energy
 - Spurring industrial, commercial, institutional energy efficiency
 - Promoting outreach and engagement related to climate change
- Council approved CCET funding in 2022
- Executive Director hired June 2023



KEY INITIATIVE: CCAP

CLIMATE CHANGE ADAPTATION PLAN

- Five-year plan to make Brampton a climate ready, resilient City
- Identify climate change risks & impacts, develop actions to reduce our vulnerability to these impacts
- Identified as an action in the Brampton Grow Green EMP
- Requirement of our membership to the Global Covenant of Mayors for Climate and Energy
- **Current status:** Development of a Risk and Vulnerability Assessment Report



KEY INITIATIVE: NHRP

NATURAL HERITAGE RESTORATION PROGRAM

- In 2018, the City of Brampton launched the Natural Heritage Restoration Program (NHRP) which focuses on protecting, restoring, connecting and enhancing the health and biodiversity of our Natural Heritage System.
- Goal of the program is to manage Brampton's natural features to maximize the ecosystem services they provide.
- Program allows the City to identify and prioritize areas for restoration or enhancement.
- Focus on partnerships with Conservation Authorities, community groups and residents.



KEY INITIATIVE: OMTP

ONE MILLION TREES PROGRAM

- In February 2020, Brampton Council approved the Brampton 1 Million Trees Program - a framework for the City and its partners to increase tree planting initiatives and realize the target of one million trees by 2040.
- Key themes: tree planting, tree stewardship, partnerships, education and outreach, urban forest monitoring, and resource planning.



KEY INITIATIVES: SNAP

SUSTAINABLE NEIGHBOURHOOD ACTION PLANS

- Environmental improvements and urban renewal of existing neighbourhoods
- Partnership with Conservation Authorities and Region of Peel
- **County Court SNAP (TRCA)**
 - Completed
- **Fletcher's Creek SNAP (CVC)**
 - Implementation phase
- **Bramalea SNAP (TRCA)**
 - Implementation phase



KEY INITIATIVES

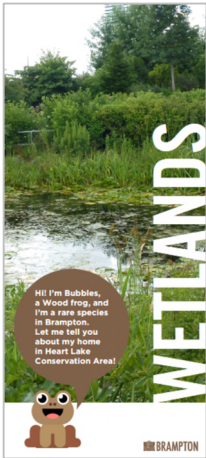
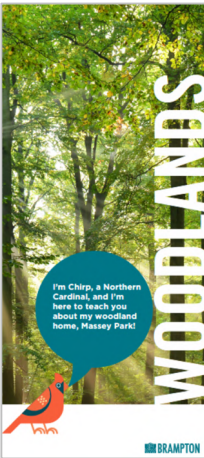
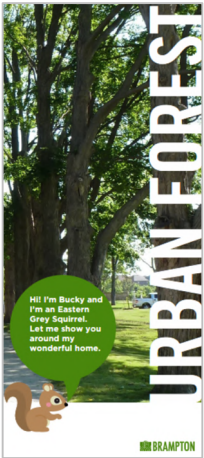
SUSTAINABLE NEW COMMUNITIES PROGRAM

- Encourages and evaluates the sustainability performance of new development
- Originally launched in 2015
- Updated program approved unanimously by Council in May 2022; launched July 1, 2022
- Over 120 Sustainability Metrics
- Minimum Bronze threshold
- As of January 2023, applicants must meet a minimum building energy/GHG performance



KEY INITIATIVES

OUTREACH & EDUCATION



KEY INITIATIVES

OUTREACH & EDUCATION



BEAC at Farmers Market



Earth Day 2017



Massey Woodland Engagement



Parks Environmental Education Program



Active Transportation Plan Engagement



Farmers Market

KEY INITIATIVES

OUTREACH & EDUCATION

Grow Green Network

Email Network

- Collective of local organizations focusing on environmental stewardship and sustainability
- Members of the public interested in environmental actions
- Over 1,000 subscribers



PARTNERSHIPS



YOUR ROLE:

COMMUNITY ENGAGEMENT

- Primary role is to assist, educate, and engage the community
 - Identifying opportunities for community engagement
 - Reviewing and distributing communication materials
 - Coordinating and hosting community events
- Build and maintain meaningful and effective relationships with community organizations



Brampton Grow Green

Environmental Master Plan



VISION

Brampton is a community that will conserve, enhance, and balance our natural and built environments to create a healthy, resilient, and sustainable city. We will carry out our responsibilities to meet the needs of the present community without compromising the ability of future generations to meet their own needs.

GROW GREEN FRAMEWORK

PEOPLE



Invest in people to create a healthy, livable, and safe community.

AIR



Reduce impacts on air quality.

WATER



Protect and respect water as a non-renewable, life critical resource.

LAND



Manage land to sustain the natural environment.

ENERGY



Reduce energy consumption and manage the impact of energy usage on our environment.

WASTE



Reduce and manage the materials considered waste.

ACTION PLAN: EXAMPLES



PEOPLE

- Develop and publish a Brampton Green Business Inventory
- Establish an Environmental Education Centre.



AIR

- Establish policies for new and existing City facilities to strive to achieve and maintain net zero emissions.
- Develop enforcement strategy for anti-idling.



WATER

- Establish a water quality monitoring program for stormwater management assets.
- Update Salt Management Strategy for City's operations.



LAND

- Develop a Woodland Management Strategy for City owned woodlands.
- Update City by-laws to ensure they do not restrict designed naturalization efforts on public and private lands.



ENERGY

- Reduce City building energy use intensity/year.
- Reduce community energy use per capita per year.
- City energy supply coming from on-site renewable sources.



WASTE

- Develop implementation of a Waste Diversion Strategy for City indoor and outdoor facilities.
- Develop policies & procedures for lifecycle assessments.

PERFORMANCE METRICS

Core Component

Indicators

Metrics



Engagement

Events and participation



GHG Emissions
Transportation

GHG emissions
Trips/capita, and VKT



Water Consumption
Water Course Restoration

Potable Water Demand
Meters Restored



Urban Tree Canopy
Built Environment

Trees Planted
Rate of Intensification,
and NHS protection



Energy Demand
Renewable Energy

Building energy intensity
Renewable energy supply



Solid Waste

Waste diversion

IMPLEMENTATION

1. GROW GREEN TEAM

Internal cross departmental team championing the Brampton Grow Green Environmental Master Plan.

2. PERFORMANCE MONITORING

Gathering performance data, defining lessons learned, and reporting progress.



ACTION PLAN & PERFORMANCE METRIC REFRESH

- Implementation Action Plan and Performance Metric refresh
 - Support the *Brampton Grow Green* vision, guiding principles, and goals
 - Reflect knowledge garnered from first five years of implementation
 - Align with new Term of Council priorities
 - Connect to the City's strategic documents and their long-term vision
 - Integrate the community's desired direction for the future of Brampton
- Iterative process
- Including consultation with BEAC



Most progress



Least progress

SOME ACHIEVEMENTS



YOUR NEXT STEPS

- Review work plan of previous term of EAC
- Establish priorities for current term of EAC
- Develop formal work plan
- Establish sub-committees, as needed



THANK YOU

