

City of Hamilton GENERAL ISSUES COMMITTEE AGENDA

Meeting #: 24-017

Date: October 16, 2024

Time: 9:30 a.m.

Location: Council Chambers (GIC)

Hamilton City Hall
71 Main Street West

Angela McRae, Legislative Coordinator (905) 546-2424 ext. 5987

1. CEREMONIAL ACTIVITIES

2. APPROVAL OF AGENDA

(Added Items, if applicable, will be noted with *)

- 3. DECLARATIONS OF INTEREST
- 4. APPROVAL OF MINUTES OF PREVIOUS MEETING
 - 4.1 October 2, 2024
- 5. COMMUNICATIONS
 - 5.1 Correspondence from Kelly Oucharek, respecting an all of Hamilton approach to homelessness.

Recommendation: Be received.

- 6. DELEGATION REQUESTS
- 7. DELEGATIONS
 - 7.1 Lee Fairbanks, respecting a plan to adjust existing tree planting policies to align them with the City's Climate Change Emergency and Urban Tree Canopy goals (In-Person) (Approved September 18, 2024)

Members of the public can contact the Clerk's Office to acquire the documents considered at this meeting, in an alternate format.

7.2 Ali T Ghouse, Muslim Council of Greater Hamilton, respecting information about the Muslim community's achievements, plans for Hamilton, aspirations and how it relates to activities in the City and City Council (In-Person) (Approved October 2, 2024)

8. STAFF PRESENTATIONS

8.1 Hamilton's Climate Action Strategy 2024 Annual Update (PED24166) (City Wide) 9Outstanding Business List Item)

9. CONSENT ITEMS

- 9.1 2023 Annual Energy Report (PW21049(c) / FCS24050) (City Wide)
- 9.2 Next Generation 9-1-1 Service Delivery Authority Agreements (FCS20082(f) / HSC20045(f)) (City Wide)
- 9.3 Business Improvement Area Sub-Committee Report 24-007 October 8, 2024

10. DISCUSSION ITEMS

10.1 Public Access to Hamilton Piers (PW24061) (Ward 5) (Outstanding Business List Item)

Please refer to Item 14.2 for Confidential Appendix "A" to this Report.

10.2 Reducing Homelessness and Managing Encampments (HSC24027(c)) (City Wide) (To be Distributed)

11. MOTIONS

12. NOTICES OF MOTION

13. GENERAL INFORMATION / OTHER BUSINESS

- 13.1 Amendments to the Outstanding Business List:
 - a. Items Requiring a New Due Date:

Internal Facilitation of Special Events including Traffic Control Plans as per Ontario Traffic Manual (OTM) Book 7 and Implementation of Temporary Road Closures for Event Organizers

Added: January 30, 2024

Original Due Date: June 30, 2024

Proposed New Due Date: December 4, 2024

b. Items Considered Complete and Needing to be Removed:

Reporting of Annual Expenditures on the Transportation Network in Alignment with the Asset Management Plan Added: January 30, 2024 at GIC Budget

Completed: October 2, 2024 at GIC - Item 8.2

14. PRIVATE AND CONFIDENTIAL

14.1 Closed Session Minutes - October 2, 2024

Pursuant to Section 9.3, Sub-section (c) and (j) of the City's Procedural By-law 21-021, as amended, and Section 239(2) sub-section (c) and (j) of the *Ontario Municipal Act, 2001*, as amended, as the subject matters pertain to a proposed or pending acquisition or disposition of land for City or a local board purposes; and a trade secret or scientific, technical, commercial or financial information that belongs to the City or a local board and has monetary value or potential monetary value

14.2 Confidential Appendix "A" to Item 10.1 - Public Access to Hamilton Piers (PW24061) (Ward 5) (Outstanding Business List Item)

Pursuant to Section 9.3, sub-sections (e) and (f) of the City's Procedural By-law 21-021, as amended, and Section 239(2) sub-sections (e) and (f) of the *Ontario Municipal Act, 2001*, as amended, as the subject matter pertains to litigation or potential litigation, including matters before administrative tribunals, affecting the City or a local board; and advice that is subject to solicitor-client privilege, including communications necessary for that purpose

Please see Item 10.1, for Public Access to Hamilton Piers (PW24061) (Ward 5) (Outstanding Business List Item)

15. ADJOURNMENT



GENERAL ISSUES COMMITTEE MINUTES 24-016

9:30 a.m. October 2, 2024 Council Chambers (Hybrid), City Hall, 2nd Floor 71 Main Street West, Hamilton, Ontario

Present: Deputy Mayor J. P. Danko (Chair)

Councillors J. Beattie, C. Cassar, B. Clark, M. Francis (Virtually), T. Hwang (Virtually), T. Jackson, C. Kroetsch (Virtually), T. McMeekin, N. Nann, E. Pauls, M. Spadafora, M. Tadeson, A. Wilson (Virtually) and M. Wilson

Absent: Mayor A. Horwath - Personal

THE FOLLOWING ITEMS WERE REFERRED TO COUNCIL FOR CONSIDERATION:

1. Economic Development Action Plan 2023 Update (PED24118) (City Wide) (Item 8.1)

(Cassar/Jackson)

That Report PED24118, Economic Development Action Plan 2023 Update, be received.

Result: MOTION, CARRIED by a vote of 15 to 0, as follows:

Absent	-	Mayor And	Irea Horwath
Yes	-	Ward 1	Councillor Maureen Wilson
Yes	-	Ward 2	Councillor Cameron Kroetsch
Yes	-	Ward 3	Councillor Nrinder Nann
Yes	-	Ward 4	Councillor Tammy Hwang
Yes	-	Ward 5	Councillor Matt Francis
Yes	-	Ward 6	Councillor Tom Jackson
Yes	-	Ward 7	Councillor Esther Pauls
Yes	-	Ward 8	Councillor J. P. Danko
Yes	-	Ward 9	Councillor Brad Clark
Yes	-	Ward 10	Councillor Jeff Beattie
Yes	-	Ward 11	Councillor Mark Tadeson
Yes	-	Ward 12	Councillor Craig Cassar
Yes	-	Ward 13	Councillor Alex Wilson
Yes	-	Ward 14	Councillor Mike Spadafora
Yes	-	Ward 15	Councillor Ted McMeekin

2. Reporting of Annual Expenditures on the Transportation Network in Alignment with the Asset Management Plan (PW24057 / FCS24045) (City Wide) (Outstanding Business List Item) (Item 8.2)

(McMeekin/Cassar)

- (a) That staff be directed to use the categorization for projects within the Roads / Bridges / Sidewalk / Street Lighting / Traffic budget as described in this report and detailed in Appendix "A" attached to Report PW24057/FCS24045, and that the General Manager, Public Works, or their designate, in consultation with the General Manager, Finance and Corporate Services or their designate, be authorized to revise categories as required;
- (b) That staff be directed to align budget and financing plan documents with the Transportation Asset Management Plan, including changing references to the Roads / Bridges / Sidewalk / Street Lighting / Traffic Budget to the Transportation Network Budget;
- (c) That the information contained in Report PW24057/FCS24045 be considered when proposed Levels of Service for the Transportation Network are brought forward in accordance with report PW22048 and;
- (d) That the information contained in Report PW24057/FCS24045 including the categories as identified in Appendix "A" attached to Report PW24057/FCS24045, be considered as part of the annual budget process.

Result: MOTION, CARRIED by a vote of 15 to 0, as follows:

Absent	-	Mayor And	Irea Horwath
Yes	-	Ward 1	Councillor Maureen Wilson
Yes	-	Ward 2	Councillor Cameron Kroetsch
Yes	-	Ward 3	Councillor Nrinder Nann
Yes	-	Ward 4	Councillor Tammy Hwang
Yes	-	Ward 5	Councillor Matt Francis
Yes	-	Ward 6	Councillor Tom Jackson
Yes	-	Ward 7	Councillor Esther Pauls
Yes	-	Ward 8	Councillor J. P. Danko
Yes	-	Ward 9	Councillor Brad Clark
Yes	-	Ward 10	Councillor Jeff Beattie
Yes	-	Ward 11	Councillor Mark Tadeson
Yes	-	Ward 12	Councillor Craig Cassar
Yes	-	Ward 13	Councillor Alex Wilson
Yes	-	Ward 14	Councillor Mike Spadafora
Yes	_	Ward 15	Councillor Ted McMeekin

3. Mayor's Task Force on Transparency, Access and Accountability Report 24-007 - September 18, 2024 (Item 9.1)

(Pauls/Nann)

(1) Discussion Items (Items 9.1 to 9.3)

That the following Discussion Items be received:

- (i) Mayor's Task Force on Transparency, Access and Accountability Project Progress Review (Item 9.1)
- (ii) Mayor's Task Force on Transparency, Access and Accountability Project Workplan Review (Item 9.2)
- (iii) Mayor's Task Force on Transparency, Access and Accountability Focus Groups Approach Review (Item 9.3)

Result: MOTION, CARRIED by a vote of 15 to 0, as follows:

Absent	-	Mayor And	drea Horwath
Yes	-	Ward 1	Councillor Maureen Wilson
Yes	-	Ward 2	Councillor Cameron Kroetsch
Yes	-	Ward 3	Councillor Nrinder Nann
Yes	-	Ward 4	Councillor Tammy Hwang
Yes	-	Ward 5	Councillor Matt Francis
Yes	-	Ward 6	Councillor Tom Jackson
Yes	-	Ward 7	Councillor Esther Pauls
Yes	-	Ward 8	Councillor J. P. Danko
Yes	-	Ward 9	Councillor Brad Clark
Yes	-	Ward 10	Councillor Jeff Beattie
Yes	-	Ward 11	Councillor Mark Tadeson
Yes	-	Ward 12	Councillor Craig Cassar
Yes	-	Ward 13	Councillor Alex Wilson
Yes	-	Ward 14	Councillor Mike Spadafora
Yes	-	Ward 15	Councillor Ted McMeekin

4. Cleanliness and Security in the Downtown Core Task Force Report 24-004 - September 12, 2024 (Item 9.2)

(Kroetsch/Nann)

That the Cleanliness and Security in the Downtown Core Task Force Report 24-004 of September 12, 2024, be received.

Result: MOTION, CARRIED by a vote of 15 to 0, as follows:

Absent - Mayor Andrea Horwath

Yes - Ward 1 Councillor Maureen Wilson

Yes	-	Ward 2	Councillor Cameron Kroetsch
Yes	-	Ward 3	Councillor Nrinder Nann
Yes	-	Ward 4	Councillor Tammy Hwang
Yes	-	Ward 5	Councillor Matt Francis
Yes	-	Ward 6	Councillor Tom Jackson
Yes	-	Ward 7	Councillor Esther Pauls
Yes	-	Ward 8	Councillor J. P. Danko
Yes	-	Ward 9	Councillor Brad Clark
Yes	-	Ward 10	Councillor Jeff Beattie
Yes	-	Ward 11	Councillor Mark Tadeson
Yes	-	Ward 12	Councillor Craig Cassar
Yes	-	Ward 13	Councillor Alex Wilson
Yes	-	Ward 14	Councillor Mike Spadafora
Yes	-	Ward 15	Councillor Ted McMeekin

5. Business Improvement Area Sub-Committee Report 24-006 - September 10, 2024 (Item 10.1)

(Hwang/Tadeson)

(1) Concession Street Business Improvement Area Expenditure Requests (Item 11.1)

That the expenditure request from the Concession Street Business Improvement Area, in the amount of \$11,412.46 be spent on holiday decorations and office furniture and equipment to be funded from the Contribution to Operating Budget Program for the Business Improvement Areas (BIA Payments Account 815010-56905), be approved.

- (2) Downtown Dundas Business Improvement Area Expenditure Requests (Item 11.2)
 - (a) That the expenditure request from the Downtown Dundas Business Improvement Area, in the amount of **\$12,591.29** be spent on holiday decorations and their maintenance to be funded from the Contribution to Operating Budget Program for the Business Improvement Areas (BIA Payments Account 815010-56905), be approved; and
 - (b) That the expenditure request from the Downtown Dundas Business Improvement Area, in the amount of \$24,568.94 be spent on holiday decorations and event programming to be funded from the Parking Revenue Sharing Program (Parking Revenue Account 815010-52505), be approved.

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(3) Waterdown Business Improvement Area Expenditure Requests (Item 11.3)

That the expenditure request from the Waterdown Business Improvement Area, in the amount of \$5,005.61 be spent on the purchase and maintenance of 32 hanging baskets to be funded from the Contribution to Operating Budget Program for the Business Improvement Areas (BIA Payments Account 815010-56905), be approved.

(4) International Village Business Improvement Area Expenditure Requests (Item 11.4)

That the expenditure request from the International Village Business Improvement Area, in the amount of \$7,581.15 be spent on decor and graffiti removal to be funded from the Contribution to Operating Budget Program for the Business Improvement Areas (BIA Payments Account 815010-56905), be approved.

Result: MAIN MOTION, As Amended, CARRIED by a vote of 15 to 0, as follows:

Absent Mayor Andrea Horwath Ward 1 Councillor Maureen Wilson Yes Yes - Ward 2 Councillor Cameron Kroetsch Yes - Ward 3 Councillor Nrinder Nann Yes - Ward 4 Councillor Tammy Hwang - Ward 5 **Councillor Matt Francis** Yes - Ward 6 Yes Councillor Tom Jackson Ward 7 **Councillor Esther Pauls** Yes Yes - Ward 8 Councillor J. P. Danko Yes - Ward 9 Councillor Brad Clark - Ward 10 Yes Councillor Jeff Beattie Yes - Ward 11 Councillor Mark Tadeson Yes - Ward 12 Councillor Craig Cassar - Ward 13 Councillor Alex Wilson Yes - Ward 14 Yes Councillor Mike Spadafora Yes - Ward 15 Councillor Ted McMeekin

6. Municipal Capital Facility John C. Munro Hamilton International Airport (PED24061) (City Wide) (Item 10.2)

(Pauls/Jackson)

(a) That the lands contained and described in a new Lease with TradePort International Corporation pursuant to confidential Report PED19084(j) known as the John C. Munro Hamilton International Airport, municipally located at 9300 Airport Road, Mount Hope (Hamilton) Ontario, be a municipal capital

facility operating as an international airport (CYHM, YHM), be exempted from taxation for municipal and school purposes;

- (b) That the Mayor and City Clerk be authorized and directed to execute Municipal Capital Facility Agreement, and any ancillary documents, substantially in the form attached as Appendix "A" to Report PED24061, with such amendments deemed reasonable and necessary to the satisfaction of the City Solicitor effective on the new Lease commencement date made pursuant to confidential Report PED19084(j) of the John C. Munro Hamilton International Airport;
- (c) That the By-law, attached as **Amended** Appendix "B" to Report PED24061, to establish the Municipal Capital Facility designation for the John C. Munro Hamilton International Airport, be passed;
 - (i) by replacing all January 1, 2024 dates with September 13, 2024.
- (d) That, upon approval by Council, staff be directed to give written notice of the By-law in respect of Recommendation (c) of Report PED24061 to the secretary of the school boards having jurisdiction, and the Municipal Property Assessment Corporation; and,
- (e) That the Clerk be directed to give written notice of the By-law approving this Report PED24061 in respect of Recommendation (c) to the Minister of Finance.

Result: MAIN MOTION, As Amended, CARRIED by a vote of 15 to 0, as follows:

Absent	-	Mayor And	drea Horwath
Yes	-	Ward 1	Councillor Maureen Wilson
Yes	-	Ward 2	Councillor Cameron Kroetsch
Yes	-	Ward 3	Councillor Nrinder Nann
Yes	-	Ward 4	Councillor Tammy Hwang
Yes	-	Ward 5	Councillor Matt Francis
Yes	-	Ward 6	Councillor Tom Jackson
Yes	-	Ward 7	Councillor Esther Pauls
Yes	-	Ward 8	Councillor J. P. Danko
Yes	-	Ward 9	Councillor Brad Clark
Yes	-	Ward 10	Councillor Jeff Beattie
Yes	-	Ward 11	Councillor Mark Tadeson
Yes	-	Ward 12	Councillor Craig Cassar
Yes	-	Ward 13	Councillor Alex Wilson
Yes	-	Ward 14	Councillor Mike Spadafora
Yes	-	Ward 15	Councillor Ted McMeekin

7. Publicly Releasing the City's Lease Agreement with the Municipal Capital Facility John C. Munro Hamilton International Airport (City Wide) (Generated from Item 10.2)

(Clark/Cassar)

That staff be directed to publicly release the City's lease agreement with the Municipal Capital Facility John C. Munro Hamilton International Airport, making any necessary redactions.

Result: MOTION, CARRIED by a vote of 15 to 0, as follows:

Absent	-	Mayor And	Irea Horwath
Yes	-	Ward 1	Councillor Maureen Wilson
Yes	-	Ward 2	Councillor Cameron Kroetsch
Yes	-	Ward 3	Councillor Nrinder Nann
Yes	-	Ward 4	Councillor Tammy Hwang
Yes	-	Ward 5	Councillor Matt Francis
Yes	-	Ward 6	Councillor Tom Jackson
Yes	-	Ward 7	Councillor Esther Pauls
Yes	-	Ward 8	Councillor J. P. Danko
Yes	-	Ward 9	Councillor Brad Clark
Yes	-	Ward 10	Councillor Jeff Beattie
Yes	-	Ward 11	Councillor Mark Tadeson
Yes	-	Ward 12	Councillor Craig Cassar
Yes	-	Ward 13	Councillor Alex Wilson
Yes	-	Ward 14	Councillor Mike Spadafora
Yes	-	Ward 15	Councillor Ted McMeekin

8. Establishing a Process to Appoint a Municipal Representative to the Hamilton-Oshawa Port Authority Board of Directors (PED23021(a)) (City Wide) (Outstanding Business List Item) (Item 10.3)

(Hwang/Nann)

That the City of Hamilton endorse the following process to Appoint a Municipal Representative to the Hamilton-Oshawa Port Authority Board of Directors;

- (i) Coinciding with the municipal election cycle and council term, the Hamilton-Oshawa Port Authority releases, on behalf of the City of Hamilton and the City of Oshawa, an open call for interested individuals who wish to serve on the Hamilton-Oshawa Port Authority Board of Directors as the municipally appointed director;
- (ii) The Hamilton-Oshawa Port Authority evaluates all applications received for the municipally appointed director, and provides a recommended candidate based on qualifications and eligibility criteria, for the City of Hamilton and City of Oshawa's consideration and endorsement;

- (iii) That if either the City of Hamilton or the City of Oshawa does not endorse the Hamilton-Oshawa Port Authority's candidate, the Board shall put forth the next highest-ranking candidate for endorsement, until such time that both Councils endorse the same candidate;
- (iv) The municipally appointed director shall serve a four-year term, coinciding with the municipal election cycle and council term., understanding that the first director so appointed will serve a truncated term so as to synchronize with the current council term;
- (v) That City of Hamilton staff and City of Oshawa staff be directed and authorized to work with Hamilton-Oshawa Port Authority staff to develop a recruitment package to ensure consistency and fairness in the recruitment process, with such recruitment package to include, but not necessarily be limited to, a role description, eligibility criteria and minimum qualifications.

Result: MOTION, CARRIED by a vote of 14 to 0, as follows:

Mayor Andrea Horwath Absent Councillor Maureen Wilson Yes Ward 1 - Ward 2 Councillor Cameron Kroetsch Absent Yes - Ward 3 Councillor Nrinder Nann - Ward 4 Yes Councillor Tammy Hwang Yes - Ward 5 Councillor Matt Francis - Ward 6 Councillor Tom Jackson Yes Yes - Ward 7 Councillor Esther Pauls - Ward 8 Councillor J. P. Danko Yes - Ward 9 Councillor Brad Clark Yes Yes - Ward 10 Councillor Jeff Beattie Yes - Ward 11 Councillor Mark Tadeson Yes - Ward 12 Councillor Craig Cassar Yes - Ward 13 Councillor Alex Wilson - Ward 14 Councillor Mike Spadafora Yes - Ward 15 Councillor Ted McMeekin Yes

9. Green and Inclusive Communities Building Program Intake 3 (FCS21055(b)) (City Wide) (Item 10.4)

(Cassar/Tadeson)

(a) That the General Manager, Finance and Corporate Services, or delegate, and the General Manager, Public Works, or delegate, be authorized to submit all necessary documentation to support the City of Hamilton's application, attached as Appendix "A" to Report FCS21055(b), for the Green and Inclusive Community Buildings Program Intake 3;

- (b) That the Mayor and City Clerk be authorized to execute all necessary documentation, including Funding Agreements to receive funding under the Green and inclusive Community Buildings Program Intake 3 with content satisfactory to the General Manager, Finance and Corporate Services, and in a form satisfactory to the City Solicitor;
- (c) That the City Solicitor be authorized and directed to prepare any necessary by laws for Council approval, for the purpose of giving effect to the City's acceptance of funding from the Green and Inclusive Community Buildings Program Intake 3;
- (d) That, should a project submission for the Green and Inclusive Community Buildings Program Intake 3 be approved, any unfunded municipal share be referred to the City's annual budget process; and,
- (e) That copies of Report FCS21055(b) be forwarded to local Members of Parliament.

Result: MOTION, CARRIED by a vote of 13 to 0, as follows:

Absent Mayor Andrea Horwath Councillor Maureen Wilson Yes Ward 1 - Ward 2 Councillor Cameron Kroetsch Absent Yes - Ward 3 Councillor Nrinder Nann Yes - Ward 4 Councillor Tammy Hwang - Ward 5 Councillor Matt Francis Absent Yes - Ward 6 Councillor Tom Jackson - Ward 7 Yes Councillor Esther Pauls - Ward 8 Yes Councillor J. P. Danko Yes - Ward 9 Councillor Brad Clark - Ward 10 Yes Councillor Jeff Beattie Yes - Ward 11 Councillor Mark Tadeson Yes - Ward 12 Councillor Craig Cassar Yes - Ward 13 Councillor Alex Wilson Yes - Ward 14 Councillor Mike Spadafora Councillor Ted McMeekin Yes - Ward 15

10. Accessibility Committee for Persons with Disabilities Report 24-008 - September 10, 2024 (Item 10.5)

(Clark/McMeekin)

- (a) That the Accessibility Committee for Persons with Disabilities Report 24-008 September 10, 2024, be received, and,
- (b) That Staff be directed to provide a Communications Item to the Accessibility Committee for Persons with Disabilities with upcoming relevant dates where items contained within the motion, Barrier Free

Access to Hamilton Street Railway (HSR) for Persons with Disabilities are being addressed.

Result: MAIN MOTION, As Amended, CARRIED by a vote of 13 to 0, as follows:

Absent Mayor Andrea Horwath Councillor Maureen Wilson Yes Ward 1 Absent - Ward 2 Councillor Cameron Kroetsch Yes - Ward 3 Councillor Nrinder Nann Yes - Ward 4 Councillor Tammy Hwang - Ward 5 Councillor Matt Francis Absent Yes - Ward 6 Councillor Tom Jackson Yes Ward 7 **Councillor Esther Pauls** Yes - Ward 8 Councillor J. P. Danko Yes - Ward 9 Councillor Brad Clark - Ward 10 Yes Councillor Jeff Beattie Councillor Mark Tadeson Yes Ward 11 Yes - Ward 12 Councillor Craig Cassar - Ward 13 Yes Councillor Alex Wilson Yes - Ward 14 Councillor Mike Spadafora - Ward 15 Councillor Ted McMeekin Yes

11. Light Rail Transit Sub-Committee Report 24-003 - September 20, 2024 (Item 10.6)

(M. Wilson/Cassar)

(1) Hamilton Light Rail Transit Project Communications and Engagement Update (PED24150) (City Wide) (Item 8.1)

That Report PED24150, respecting Hamilton Light Rail Transit Project Communications and Engagement Update, be received.

(2) Establishing a Baseline of Measures respecting Getting Hamilton's Light Rail Transit on the Right Track (Item 12.1)

That staff be directed to report back to the Light Rail Transit Sub-Committee respecting a Terms of Reference for establishing a baseline of measures that would enable the City to track changes over time with respect to a wide and comprehensive range of metrics including economic, environmental and social metrics.

(3) Hamilton Light Rail Transit Partial Property Acquisition Update (PED24083(a)) (City Wide) (Item 15.1)

That Report PED24083(a), respecting Hamilton Light Rail Transit Partial Property Acquisition Update, be received and remain confidential.

Result: MOTION, CARRIED by a vote of 13 to 0, as follows:

Absent - Mayor Andrea Horwath Ward 1 Councillor Maureen Wilson Yes - Ward 2 Councillor Cameron Kroetsch Absent - Ward 3 Councillor Nrinder Nann Yes Yes - Ward 4 Councillor Tammy Hwang Absent - Ward 5 **Councillor Matt Francis** - Ward 6 Councillor Tom Jackson Yes Yes Ward 7 Councillor Esther Pauls - Ward 8 Yes Councillor J. P. Danko Yes - Ward 9 Councillor Brad Clark Yes - Ward 10 Councillor Jeff Beattie - Ward 11 Yes Councillor Mark Tadeson Yes - Ward 12 Councillor Craig Cassar Yes - Ward 13 Councillor Alex Wilson Yes Ward 14 Councillor Mike Spadafora Councillor Ted McMeekin Yes - Ward 15

12. Confidential Correspondence from Hamilton Wentworth District School Board (Added Item 14.2)

(Clark/Beattie)

- (a) That the direction provided to staff in closed session respecting the Confidential Correspondence from Hamilton Wentworth District School Board, be approved and remain confidential; and,
- (b) That the Confidential Correspondence from Hamilton Wentworth District School Board, be received and remain confidential.

Result: MOTION, CARRIED by a vote of 9 to 1, as follows:

Absent	-	Mayor And	drea Horwath
No	-	Ward 1	Councillor Maureen Wilson
Absent	-	Ward 2	Councillor Cameron Kroetsch
Yes	-	Ward 3	Councillor Nrinder Nann
Absent	-	Ward 4	Councillor Tammy Hwang
Absent	-	Ward 5	Councillor Matt Francis
Yes	-	Ward 6	Councillor Tom Jackson
Absent	-	Ward 7	Councillor Esther Pauls
Yes	-	Ward 8	Councillor J. P. Danko
Yes	-	Ward 9	Councillor Brad Clark
Yes	-	Ward 10	Councillor Jeff Beattie
Yes	-	Ward 11	Councillor Mark Tadeson
Yes	-	Ward 12	Councillor Craig Cassar
Absent	_	Ward 13	Councillor Alex Wilson

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Yes - Ward 14 Councillor Mike Spadafora Yes - Ward 15 Councillor Ted McMeekin

13. Memorandum of Understanding with City and Aeon Studio Group on Barton-Tiffany Lands (PED19063(g)) (Ward 2) (Added Item 14.3)

(Clark/Beattie)

- (a) That the direction provided to staff in Closed Session respecting Report PED19063(g), Memorandum of Understanding with City and Aeon Studio Group on Barton-Tiffany Lands, be approved and remain confidential;
- (b) That Report PED19063(g), respecting the Memorandum of Understanding with City and Aeon Studio Group on Barton-Tiffany Lands, remain confidential.

Result: MOTION, CARRIED by a vote of 10 to 0, as follows:

Absent	_	Mavor And	Irea Horwath
Yes	_	Ward 1	Councillor Maureen Wilson
Absent	_	Ward 2	Councillor Cameron Kroetsch
Yes	_	Ward 3	Councillor Nrinder Nann
Absent	-	Ward 4	Councillor Tammy Hwang
Absent	-	Ward 5	Councillor Matt Francis
Yes	-	Ward 6	Councillor Tom Jackson
Absent	-	Ward 7	Councillor Esther Pauls
Yes	-	Ward 8	Councillor J. P. Danko
Yes	-	Ward 9	Councillor Brad Clark
Yes	-	Ward 10	Councillor Jeff Beattie
Yes	-	Ward 11	Councillor Mark Tadeson
Yes	-	Ward 12	Councillor Craig Cassar
Absent	-	Ward 13	Councillor Alex Wilson
Yes	-	Ward 14	Councillor Mike Spadafora
Yes	-	Ward 15	Councillor Ted McMeekin

FOR INFORMATION:

(a) APPROVAL OF AGENDA (Item 2)

The Committee Clerk advised of the following changes to the agenda:

6. DELEGATION REQUESTS

6.1 Ali T Ghouse, Muslim Council of Greater Hamilton, respecting information about the Muslim community's achievements, plans for Hamilton, aspirations and how it relates to activities in the City and City Council (In-Person) (For a future meeting)

8. STAFF PRESENTATIONS

8.1 Economic Development Action Plan 2023 Update (PED24118) (City Wide) - PRESENTATION REVISED

14. PRIVATE AND CONFIDENTIAL

- 14.2 Confidential Correspondence from Hamilton Wentworth District School Board
- 14.3 Memorandum of Understanding with City and Aeon Studio Group on Barton-Tiffany Lands (PED19063(g)) (Ward 2)

(Beattie/Pauls)

That the agenda for the October 2, 2024 General Issues Committee meeting, be approved, as amended.

Result: MOTION, CARRIED by a vote of 12 to 0, as follows:

Absent	-	Mayor And	drea Horwath
Yes	-	Ward 1	Councillor Maureen Wilson
Yes	-	Ward 2	Councillor Cameron Kroetsch
Absent	-	Ward 3	Councillor Nrinder Nann
Yes	-	Ward 4	Councillor Tammy Hwang
Yes	-	Ward 5	Councillor Matt Francis
Absent	-	Ward 6	Councillor Tom Jackson
Yes	-	Ward 7	Councillor Esther Pauls
Yes	-	Ward 8	Councillor J. P. Danko
Yes	-	Ward 9	Councillor Brad Clark
Yes	-	Ward 10	Councillor Jeff Beattie
Yes	-	Ward 11	Councillor Mark Tadeson
Yes	-	Ward 12	Councillor Craig Cassar
Yes	-	Ward 13	Councillor Alex Wilson
Absent	-	Ward 14	Councillor Mike Spadafora
Yes	-	Ward 15	Councillor Ted McMeekin

(b) DECLARATIONS OF INTEREST (Item 3)

Councillor Hwang declared a disqualifying interest to Item 14.3 - Memorandum of Understanding with City and Aeon Studio Group on Barton-Tiffany Land (PED19063(g)), as her business partner may still have a business relationship with Aeon Group.

Deputy Mayor Danko relinquished the Chair to Councillor Pauls to declare a declaration of interest.

Councillor Danko declared a non-disqualifying interest to Item 14.2 - Confidential Correspondence from Hamilton Wentworth District School Board, as his wife is the Chair of the Hamilton Wentworth District School Board.

Deputy Mayor Danko assumed the Chair.

(c) APPROVAL OF MINUTES OF PREVIOUS MEETINGS (Item 4)

(i) September 18, 2024 (Item 4.1)

(Cassar/Clark)

That the minutes of the September 18, 2024 General Issues Committee, be approved, as presented.

Result: MOTION, CARRIED by a vote of 12 to 0, as follows:

Absent		Mayor And	drog Horwath
Anseiii	-	Mayor And	drea Horwath
Yes	-	Ward 1	Councillor Maureen Wilson
Yes	-	Ward 2	Councillor Cameron Kroetsch
Absent	-	Ward 3	Councillor Nrinder Nann
Yes	-	Ward 4	Councillor Tammy Hwang
Yes	-	Ward 5	Councillor Matt Francis
Absent	-	Ward 6	Councillor Tom Jackson
Yes	-	Ward 7	Councillor Esther Pauls
Yes	-	Ward 8	Councillor J. P. Danko
Yes	-	Ward 9	Councillor Brad Clark
Yes	-	Ward 10	Councillor Jeff Beattie
Yes	-	Ward 11	Councillor Mark Tadeson
Yes	-	Ward 12	Councillor Craig Cassar
Yes	-	Ward 13	Councillor Alex Wilson
Absent	-	Ward 14	Councillor Mike Spadafora
Yes	-	Ward 15	Councillor Ted McMeekin

(d) DELEGATION REQUESTS (Item 6)

(i) (Clark/Pauls)

That the following Delegation Request, be approved:

(1) Ali T Ghouse, Muslim Council of Greater Hamilton, respecting information about the Muslim community's achievements, plans for Hamilton, aspirations and how it relates to activities in the City and City Council (In-Person) (For a future meeting) (Item 6.1)

Result: MOTION, CARRIED by a vote of 12 to 0, as follows:

Absent - Mayor Andrea Horwath

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Yes	-	Ward 1	Councillor Maureen Wilson
Yes	-	Ward 2	Councillor Cameron Kroetsch
Absent	-	Ward 3	Councillor Nrinder Nann
Yes	-	Ward 4	Councillor Tammy Hwang
Yes	-	Ward 5	Councillor Matt Francis
Absent	-	Ward 6	Councillor Tom Jackson
Yes	-	Ward 7	Councillor Esther Pauls
Yes	-	Ward 8	Councillor J. P. Danko
Yes	-	Ward 9	Councillor Brad Clark
Yes	-	Ward 10	Councillor Jeff Beattie
Yes	-	Ward 11	Councillor Mark Tadeson
Yes	-	Ward 12	Councillor Craig Cassar
Yes	-	Ward 13	Councillor Alex Wilson
Absent	-	Ward 14	Councillor Mike Spadafora
Yes	-	Ward 15	Councillor Ted McMeekin

(e) DELEGATIONS (Item 7)

(i) Sarah Warry, The Bridge From Prison to Community, respecting their program and need for assistance to help house those with criminal records, mental health issues and addictions in our transitional housing program (In-Person) (Approved September 4, 2024) (Item 7.1)

The delegate was not present when called upon.

(f) STAFF PRESENTATIONS (Item 8)

- (i) Economic Development Action Plan 2023 Update (PED24118) (City Wide) (Item 8.1)
 - (1) Norm Schleehahn, Director, Economic Development and Lisa Abbott, Director, Tourism and Culture, addressed the Committee with a presentation respecting Report PED24118, Economic Development Action Plan 2023 Update.

(Beattie/Spadafora)

That the staff presentation respecting Report PED24118, Economic Development Action Plan 2023 Update, be received.

Result: MOTION, CARRIED by a vote of 15 to 0, as follows:

Absent	-	Mayor Ar	ndrea Horwath
Yes	-	Ward 1	Councillor Maureen Wilson
Yes	-	Ward 2	Councillor Cameron Kroetsch
Yes	-	Ward 3	Councillor Nrinder Nann
Yes	-	Ward 4	Councillor Tammy Hwang

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Yes	-	Ward 5	Councillor Matt Francis
Yes	-	Ward 6	Councillor Tom Jackson
Yes	-	Ward 7	Councillor Esther Pauls
Yes	-	Ward 8	Councillor J. P. Danko
Yes	-	Ward 9	Councillor Brad Clark
Yes	-	Ward 10	Councillor Jeff Beattie
Yes	-	Ward 11	Councillor Mark Tadeson
Yes	-	Ward 12	Councillor Craig Cassar
Yes	-	Ward 13	Councillor Alex Wilson
Yes	-	Ward 14	Councillor Mike Spadafora
Yes	-	Ward 15	Councillor Ted McMeekin

For disposition of this mater, refer to Item 1.

- (ii) Reporting of Annual Expenditures on the Transportation Network in Alignment with the Asset Management Plan (PW24057 / FCS24045) (City Wide) (Outstanding Business List Item) (Item 8.2)
 - (1) Jackie Kennedy, Director, Engineering Services addressed the Committee with a presentation respecting Report PW24057 / FCS24045, Reporting of Annual Expenditures on the Transportation Network in Alignment with the Asset Management Plan.

(Clark/Beattie)

That the staff presentation respecting Report PW24057 / FCS24045, Reporting of Annual Expenditures on the Transportation Network in Alignment with the Asset Management Plan, be received.

Result: MOTION, CARRIED by a vote of 15 to 0, as follows:

Absent	-	Mayor And	drea Horwath
Yes	-	Ward 1	Councillor Maureen Wilson
Yes	-	Ward 2	Councillor Cameron Kroetsch
Yes	-	Ward 3	Councillor Nrinder Nann
Yes	-	Ward 4	Councillor Tammy Hwang
Yes	-	Ward 5	Councillor Matt Francis
Yes	-	Ward 6	Councillor Tom Jackson
Yes	-	Ward 7	Councillor Esther Pauls
Yes	-	Ward 8	Councillor J. P. Danko
Yes	-	Ward 9	Councillor Brad Clark
Yes	-	Ward 10	Councillor Jeff Beattie
Yes	-	Ward 11	Councillor Mark Tadeson
Yes	-	Ward 12	Councillor Craig Cassar
Yes	-	Ward 13	Councillor Alex Wilson
Yes	-	Ward 14	Councillor Mike Spadafora
Yes	-	Ward 15	Councillor Ted McMeekin

For disposition of this mater, refer to Item 2.

(g) DISCUSSION ITEMS (Item 10)

- (i) Business Improvement Area Sub-Committee Report 24-006 September 10, 2024 (Item 10.1)
 - (1) (Hwang/Tadeson)
 - (1) Concession Street Business Improvement Area Expenditure Requests (Item 11.1)

That the expenditure request from the Concession Street Business Improvement Area, in the amount of \$11,412.46 be spent on holiday decorations and office furniture and equipment to be funded from the Contribution to Operating Budget Program for the Business Improvement Areas (BIA Payments Account 815010-56905), be approved.

(2) Downtown Dundas Business Improvement Area Expenditure Requests (Item 11.2)

- (a) That the expenditure request from the Downtown Dundas Business Improvement Area, in the amount of \$13,953.66.00 be spent on holiday decorations and their maintenance to be funded from the Contribution to Operating Budget Program for the Business Improvement Areas (BIA Payments Account 815010-56905), be approved; and
- (b) That the expenditure request from the Downtown Dundas Business Improvement Area, in the amount of \$24,568.94 be spent on holiday decorations and event programming to be funded from the Parking Revenue Sharing Program (Parking Revenue Account 815010-52505), be approved.

(3) Waterdown Business Improvement Area Expenditure Requests (Item 11.3)

That the expenditure request from the Waterdown Business Improvement Area, in the amount of \$5,005.61 be spent on the purchase and maintenance of 32 hanging baskets to be funded from the Contribution to Operating Budget Program for the Business Improvement Areas (BIA Payments Account 815010-56905), be approved.

(4) International Village Business Improvement Area Expenditure Requests (Item 11.4)

That the expenditure request from the International Village Business Improvement Area, in the amount of \$7,581.15 be spent on decor and graffiti removal to be funded from the Contribution to Operating Budget Program for the Business Improvement Areas (BIA Payments Account 815010-56905), be approved.

(2) (Hwang/A. Wilson)

That Item 2(a), respecting Downtown Dundas Business Improvement Area Expenditure Requests, **be amended**, to reflect the correct amount, as follows:

(a) That the expenditure request from the Downtown Dundas Business Improvement Area, in the amount of \$13,953.66.00 \$12,591.29, be spent on holiday decorations and their maintenance to be funded from the Contribution to Operating Budget Program for the Business Improvement Areas (BIA Payments Account 815010-56905), be approved; and

Result: AMENDMENT, CARRIED by a vote of 15 to 0, as follows:

Absent	-	Mayor And	Irea Horwath
Yes	-	Ward 1	Councillor Maureen Wilson
Yes	-	Ward 2	Councillor Cameron Kroetsch
Yes	-	Ward 3	Councillor Nrinder Nann
Yes	-	Ward 4	Councillor Tammy Hwang
Yes	-	Ward 5	Councillor Matt Francis
Yes	-	Ward 6	Councillor Tom Jackson
Yes	-	Ward 7	Councillor Esther Pauls
Yes	-	Ward 8	Councillor J. P. Danko
Yes	-	Ward 9	Councillor Brad Clark
Yes	-	Ward 10	Councillor Jeff Beattie
Yes	-	Ward 11	Councillor Mark Tadeson
Yes	-	Ward 12	Councillor Craig Cassar
Yes	-	Ward 13	Councillor Alex Wilson
Yes	-	Ward 14	Councillor Mike Spadafora
Yes	-	Ward 15	Councillor Ted McMeekin

For further disposition of this matter, refer to Item 5.

(ii) Municipal Capital Facility John C. Munro Hamilton International Airport (PED24061) (City Wide) (Item 10.2)

(1) (Pauls/Jackson)

- That the lands contained and described in a new Lease with TradePort International Corporation pursuant to confidential Report PED19084(j) known as the John C. Munro Hamilton International Airport, municipally located at 9300 Airport Road, Mount Hope (Hamilton) Ontario, be a municipal capital facility operating as an international airport (CYHM, YHM), be exempted from taxation for municipal and school purposes;
- (b) That the Mayor and City Clerk be authorized and directed to execute Municipal Capital Facility Agreement, and any ancillary documents, substantially in the form attached as Appendix "A" to Report PED24061, with such amendments deemed reasonable and necessary to the satisfaction of the City Solicitor effective on the new Lease commencement date made pursuant to confidential Report PED19084(j) of the John C. Munro Hamilton International Airport;
- (c) That the By-law, attached as Appendix "B" to Report PED24061, to establish the Municipal Capital Facility designation for the John C. Munro Hamilton International Airport, be passed;
- (d) That, upon approval by Council, staff be directed to give written notice of the By-law in respect of Recommendation (c) of Report PED24061 to the secretary of the school boards having jurisdiction, and the Municipal Property Assessment Corporation; and,
- (e) That the Clerk be directed to give written notice of the By-law approving this Report PED24061 in respect of Recommendation (c) to the Minister of Finance.

Deputy Mayor Danko relinquished the Chair to Councillor Pauls, in order to introduce the following amendment:

(2) (Danko/Tadeson)

That Appendix "B" to Report PED24061, Municipal Capital Facility John C. Munro Hamilton International Airport, *be amended*, *by replacing all January 1, 2024 dates with September 13, 2024.*

Result: AMENDMENT, CARRIED by a vote of 15 to 0, as follows:

Mayor Andrea Horwath	
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Deputy Mayor Danko assumed the Chair.

For further disposition of this matter, refer to Item 6.

(iii) Recess

(Cassar/Pauls)

That the General Issues Committee recess for 37 minutes until 1:00 p.m.

Result: MOTION, CARRIED by a vote of 15 to 0, as follows:

Absent	-	Mayor And	drea Horwath
Yes	-	Ward 1	Councillor Maureen Wilson
Yes	-	Ward 2	Councillor Cameron Kroetsch
Yes	-	Ward 3	Councillor Nrinder Nann
Yes	-	Ward 4	Councillor Tammy Hwang
Yes	-	Ward 5	Councillor Matt Francis
Yes	-	Ward 6	Councillor Tom Jackson
Yes	-	Ward 7	Councillor Esther Pauls
Yes	-	Ward 8	Councillor J. P. Danko
Yes	-	Ward 9	Councillor Brad Clark
Yes	-	Ward 10	Councillor Jeff Beattie
Yes	-	Ward 11	Councillor Mark Tadeson
Yes	-	Ward 12	Councillor Craig Cassar
Yes	-	Ward 13	Councillor Alex Wilson
Yes	-	Ward 14	Councillor Mike Spadafora
Yes	_	Ward 15	Councillor Ted McMeekin

The General Issues Committee Meeting reconvened at 1:02 p.m.

(iv) Accessibility Committee for Persons with Disabilities Report 24-008 - September 10, 2024 (Item 10.5)

(Tadeson/McMeekin)

- (1) Barrier Free Access to Hamilton Street Railway (HSR) for Persons with Disabilities (Added Item 12.2)
 - (a) That the Accessibility Committee for Persons with Disabilities (ACPD) requests that Transit Division staff report back in Q4 2024 to the Public Works Committee on improvements that can be made to the Hamilton Street Railway (HSR) services for persons with disabilities, that would address the following identified barriers, including costs for the implementation of the modifications:
 - (1) Difficulties experienced by transit riders with disabilities when loading and unloading through the front entry doors;
 - (2) Difficulties experienced by transit riders with disabilities when loading and unloading through the rear entry doors; and
 - (3) Inaccessibility of PRESTO card readers by transit riders with disabilities.
 - (b) That Transit Division staff consider the following remediation suggestions to address the identified barriers in (a):
 - (1) and (2) the re-implementation of the rear door loading policy; and
 - (3) (i) standardizing the placement of PRESTO Card readers;
 - (ii) installing grab bars to make access to PRESTO card readers more accessible:
 - (iii) making portable PRESTO card readers available on all buses;
 - (iv) training drivers on how to assist transit riders with disabilities to scan their PRESTO card if they ask for assistance: and
 - (v) mandating drivers to assist transit riders with disabilities to scan their PRESTO card if they ask for assistance.

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(c) That Transit Division staff consider modifying transit fares for those who are unable to overcome the above barriers, if the current Hamilton Street Railway (HSR) services for persons with disabilities are not modified accordingly.

For disposition of this matter, refer to Item 10.

(h) PRIVATE & CONFIDENTIAL (Item 14)

Committee determined that discussion of Item 14.1 was not required in Closed Session; therefore, the matter was addressed in Open Session, as follows:

(i) Closed Session Minutes – September 18, 2024 (Item 14.1)

(McMeekin/Spadafora)

That the Closed Session minutes of the September 16, 2024 General Issues Committee meeting, be approved and remain confidential.

Result: MOTION, CARRIED by a vote of 13 to 0, as follows:

Absent	-	Mayor Andrea Horwath	
Yes	-	Ward 1	Councillor Maureen Wilson
Absent	-	Ward 2	Councillor Cameron Kroetsch
Yes	-	Ward 3	Councillor Nrinder Nann
Yes	-	Ward 4	Councillor Tammy Hwang
Absent	-	Ward 5	Councillor Matt Francis
Yes	-	Ward 6	Councillor Tom Jackson
Yes	-	Ward 7	Councillor Esther Pauls
Yes	-	Ward 8	Councillor J. P. Danko
Yes	-	Ward 9	Councillor Brad Clark
Yes	-	Ward 10	Councillor Jeff Beattie
Yes	-	Ward 11	Councillor Mark Tadeson
Yes	-	Ward 12	Councillor Craig Cassar
Yes	-	Ward 13	Councillor Alex Wilson
Yes	-	Ward 14	Councillor Mike Spadafora
Yes	-	Ward 15	Councillor Ted McMeekin

(ii) (Spadafora/Clark)

That Committee move into Closed Session for Items 14.2 and 14.3 pursuant to Section 9.3, Sub-sections (c), and (j) of the City's Procedural By-law 21-021, as amended, and Section 239(2), Sub-sections (c), and (j) of the *Ontario Municipal Act, 2001*, as amended, as the subject matter pertains to a proposed or pending acquisition or disposition of land by the municipality or local board; and a trade secret or scientific, technical, commercial, or

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financial information that belongs to the municipality or local board and has monetary value or potential monetary value.

Result: MOTION, CARRIED by a vote of 13 to 0, as follows:

Absent	_	Mayor And	drea Horwath
Yes	_	Ward 1	Councillor Maureen Wilson
Absent	_	Ward 2	Councillor Cameron Kroetsch
Yes	-	Ward 3	Councillor Nrinder Nann
Yes	-	Ward 4	Councillor Tammy Hwang
Absent	-	Ward 5	Councillor Matt Francis
Yes	-	Ward 6	Councillor Tom Jackson
Yes	-	Ward 7	Councillor Esther Pauls
Yes	-	Ward 8	Councillor J. P. Danko
Yes	-	Ward 9	Councillor Brad Clark
Yes	-	Ward 10	Councillor Jeff Beattie
Yes	-	Ward 11	Councillor Mark Tadeson
Yes	-	Ward 12	Councillor Craig Cassar
Yes	-	Ward 13	Councillor Alex Wilson
Yes	-	Ward 14	Councillor Mike Spadafora
Yes	-	Ward 15	Councillor Ted McMeekin

The General Issues Committee meeting reconvened in Open Session at 3:40 p.m.

(iii) Confidential Correspondence from Hamilton Wentworth District School Board (Added Item 14.2)

For disposition of this matter, refer to Item 12.

(iv) Memorandum of Understanding with City and Aeon Studio Group on Barton-Tiffany Lands (PED19063(g)) (Ward 2) (Added Item 14.3)

For disposition of this matter, refer to Item 13.

(i) ADJOURNMENT (Item 15)

(Nann/Spadafora)

That there being no further business, the General Issues Committee be adjourned at 3:44 p.m.

Result: MOTION, CARRIED by a vote of 9 to 1, as follows:

Absent - Mayor Andrea Horwath

Yes - Ward 1 Councillor Maureen Wilson
Absent - Ward 2 Councillor Cameron Kroetsch
Yes - Ward 3 Councillor Nrinder Nann

General Issues Committee Minutes 24-016

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Absent	-	Ward 4	Councillor Tammy Hwang
Absent	-	Ward 5	Councillor Matt Francis
Yes	-	Ward 6	Councillor Tom Jackson
Absent	-	Ward 7	Councillor Esther Pauls
No	-	Ward 8	Councillor J. P. Danko
Yes	-	Ward 9	Councillor Brad Clark
Yes	-	Ward 10	Councillor Jeff Beattie
Yes	-	Ward 11	Councillor Mark Tadeson
Yes	-	Ward 12	Councillor Craig Cassar
Absent	-	Ward 13	Councillor Alex Wilson
Yes	-	Ward 14	Councillor Mike Spadafora
Yes	-	Ward 15	Councillor Ted McMeekin

Respectfully submitted,

Deputy Mayor John Paul Danko Chair, General Issues Committee

Angela McRae Legislative Coordinator Office of the City Clerk From: Kelly & Bert Oucharek

Sent: Monday, October 7, 2024 3:16 AM

To: Blake, Danielle < Danielle. Blake@hamilton.ca>; clerk@hamilton.ca; Horwath, Andrea

<Andrea.Horwath@hamilton.ca>

Subject: All of Hamilton Approach to Homelessness?

Please enter this as a correspondence.

Hello

I would like to bring up again the issue of enforcement (or lack thereof) at Bayfront Park and Pier 4 and Gage Park.

If you could please advise if any enforcement will be happening prior to the sanctioned site? It seems wholly unfair to the lower city residents who used to use those parks, that there has been no enforcement for almost a year now.

Our mayor says we need to tackle homelessness using a "whole of Hamilton approach" I believe those were her words.

Where is the "whole of Hamilton" approach in this scenario? Why is the lower city bearing almost the entire burden of encampments? The continued neglect and complacency for what the residents in the nearby neighborhoods are experiencing is astounding.

I know my Ward 2 Councilor touts our encampment percentage like a strange badge of honor; **DO NOT** mistake that for community support for the continued **occupation** of our parks. There are 70+ tents at Bayfront/Pier 4, between approx 30 sites- mostly non-compliant.

You are not treating the residents of the lower city of Hamilton equal to the rest of Hamilton. It is **discriminatory** that you have allowed our neighborhoods to denigrate to their current conditions, fully knowing there are compliant locations on the mountain or elsewhere for encampments to exist within the rules.

I ask that you take immediate action to move the NON-COMPLIANT sites, please relocate them to one of the many compliant locations that exist within the city such as Dundurn Park, Confederation Park, McQueston Park, Dundas Driving Park, Cathedral Park to name a few. Valley

We do not have a shortage of compliant space in Hamilton, we have a lack of enforcement of the protocol you created.

I know enforcement is happening in other parks, so why not these?

Other cities take the approach of mapping out where campers can go within the rules, why doesn't Hamilton do the same?

Thank you, Kelly Oucharek Submitted on Thu, 09/05/2024 - 16:26

Submitted by: Anonymous

Submitted values are:

Committee Requested

Committee
General Issues Committee

Will you be delegating in-person or virtually? In-person

Will you be delegating via a pre-recorded video?

Requestor Information

Requestor Information Lee Fairbanks

Preferred Pronoun he/him

Reason(s) for delegation request To present a plan to adjust existing tree planting policies to align them with the City's Climate Change Emergency and Urban Tree Canopy goals

Will you be requesting funds from the City? Yes

Will you be submitting a formal presentation? Yes

Submitted on Wed, 09/25/2024 - 19:55

Submitted by: Anonymous

Submitted values are:

Committee Requested

Committee
General Issues Committee

Will you be delegating in-person or virtually? In-person

Will you be delegating via a pre-recorded video?

Requestor Information

Requestor Information
Ali T Ghouse
Muslim Council of Greater Hamilton



Preferred Pronoun he/him

Reason(s) for delegation request

The purpose will be to share information about the Muslim community's achievements, plans for Hamilton, aspirations and how it relates to activities in the City and City Council.

Will you be requesting funds from the City? No

Will you be submitting a formal presentation?



CITY OF HAMILTON PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT Office of Climate Change Initiatives

ТО:	Mayor and Members General Issues Committee
COMMITTEE DATE:	October 16, 2024
SUBJECT/REPORT NO:	Hamilton's Climate Action Strategy 2024 Annual Update (PED24166) (City Wide) (Outstanding Business List Item)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	Beatrice Ekwa Ekoko (905) 546-2424 Ext. 6885 Trevor Imhoff (905) 546-2424 Ext. 1308 Adam Watson (905) 546-2424 Ext. 7806 Cathrin Winkelmann (905) 546-2424 Ext. 3916
SUBMITTED BY:	Lynda Lukasik Director, Office of Climate Change Initiatives Planning & Economic Development Department
SIGNATURE:	L.M. Johnson

RECOMMENDATION

- (a) That Appendix "A" to Report PED24166 "Hamilton's Climate Action Strategy Annual Climate Change Update 2024" be received.
- (b) That Appendix "B" to Report PED24166 "Status Update Regarding Climate Actions in Hamilton's Climate Action Strategy" be received.
- (c) That the proposal to shift the Annual Update on Hamilton's Climate Action Strategy to June of each year, starting in 2025, be approved.
- (d) That the Office of Climate Change Initiatives, in partnership with Corporate Facilities and Energy Management, be directed to explore an accelerated timeline for realizing the net zero goal of Hamilton's Climate Action Strategy, building on Council priorities already in place to accelerate corporate greenhouse gas emission reduction timelines, and report back to the General Issues Committee in June 2025.

SUBJECT: Hamilton's Climate Action Strategy 2024 Annual Update (PED24166)

(City Wide) - Page 2 of 15

EXECUTIVE SUMMARY

In March of 2019, Hamilton City Council unanimously declared a climate emergency. Coming out of that declaration was a commitment to work with the broader community to create a community roadmap to net zero, now known as Hamilton's Climate Action Strategy. Since that time, the evidence continues to mount; we are in a climate emergency that demands aggressive climate mitigation and adaptation actions at the local level.

Hamilton's Climate Action Strategy, and the climate mitigation and adaptation plans found within it, was adopted in August 2022 (Report CM22016/ PED22058(a)/ HCS22030(a)) and it is the City's roadmap to drastically cutting carbon emissions and achieving net zero by 2050 or sooner.

As part of the City's Climate Action Strategy, the Office of Climate Change Initiatives was created in November 2022. This report is the second annual report of the Office on the implementation of Hamilton's Climate Action Strategy. It provides an update regarding on-going Priority Areas of Focus, as well as a status update on the implementation of both corporate and community-led actions found in Hamilton's Climate Action Strategy. This year's status update provides more detailed data on both the corporate and community side regarding climate mitigation and adaptation efforts.

This report is seeking Council approval for the Annual Update to occur earlier each calendar year to enable more timely updates. Direction is also being sought to explore an accelerated timeline for realizing the net zero goal of Hamilton's Climate Action Strategy, building on Council priorities already in place to accelerate corporate greenhouse gas emission reduction timelines.

Alternatives for Consideration – See Page 13

FINANCIAL - STAFFING - LEGAL IMPLICATIONS

Financial: There are no financial implications associated with the receipt of Hamilton's Climate Action Strategy Annual Climate Change Update 2024 attached as Appendix "A" to Report PED24166.

Staffing: There are no staffing implications associated with the adoption of this report.

Legal: Not applicable.

HISTORICAL BACKGROUND

March 27, 2019 – City Council Report 19-006 approves the Climate Emergency

SUBJECT: Hamilton's Climate Action Strategy 2024 Annual Update (PED24166) (City Wide) - Page 3 of 15

Declaration directing staff to investigate actions for Hamilton to reach net zero emissions by 2050.

August 2022 – City Council approves Hamilton's Climate Action Strategy and the mitigation and adaptation plans within it, including approving the creation and staffing of an Office of Climate Change Initiatives (Report CM22016/PED22058(a)/HSC22030(a)).

November 2022 – The Office of Climate Change Initiatives is officially established.

March 2023 – As part of the 2023 Operating Budget, City Council confirms a sustainable source of funding for the city's Climate Change Reserve via an annual charge to the General Tax Levy.

September 2023 – Council adopts its Term of Council Priorities which include as Outcome 3 "accelerate our response to climate change" and establishes as a Measures of Success the accelerated reduction in the City's greenhouse gas emissions and the assessment of infrastructure projects against the impact on the City's climate resilience and readiness.

October 2023 – Staff from the Office of Climate Change Initiatives present the first annual update on progress with implementation of Hamilton's Climate Action Strategy.

April 2024 – The newly constituted citizen Climate Change Advisory Committee holds its inaugural meeting.

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

Not applicable.

RELEVANT CONSULTATION

The 2024 Annual Update was prepared with the collaboration and input of internal staff from

- the Planning and Economic Development Department (Transportation Planning & Parking, Planning, Growth Management, Building, Economic Development, Municipal Law Enforcement Divisions),
- Corporate Services Department (Financial Planning, Administration and Policy Division),
- Public Works Department (Departmental Initiatives/Corporate Asset Management, Environmental Services, Office of Energy Initiatives, Hamilton Water, Transportation Divisions, Hamilton Street Railway), and

SUBJECT: Hamilton's Climate Action Strategy 2024 Annual Update (PED24166) (City Wide) - Page 4 of 15

 Healthy and Safe Communities Department (Healthy Environments, Hamilton Fire, Hamilton Paramedic Services, and Housing Services Divisions).

Review and input on priority indicators used to gauge progress with actions set out in Hamilton's Climate Action Strategy was provided by the citizen Climate Change Advisory Committee.

Data and other information regarding community progress implementing actions set out in the Strategy was provided by:

- Mohawk College,
- McMaster University,
- Bay Area Climate Change Council,
- · Hamilton Community Enterprises,
- Hamilton Conservation Authority,
- Halton Conservation Authority,
- Grand River Conservation Authority, and
- Niagara Peninsula Conservation Authority.

ANALYSIS AND RATIONALE FOR RECOMMENDATION

Hamilton is responding to the global climate emergency through a community-wide, comprehensive strategy. This is the second annual report from the Office of Climate Change Initiatives on the implementation of Hamilton's Climate Action Strategy. It provides an update on the Office's on-going Priority Areas of Focus, as well as a comprehensive status update on the implementation of both corporate and community-led actions found in the Climate Action Strategy.

Overview of Hamilton's Climate Action Strategy (HCAS)

Hamilton's Climate Action Strategy consists of two integrated and complimentary plans for climate mitigation and climate adaptation:

ReCharge Hamilton – Our Community Energy & Emissions Plan

The Community Energy and Emissions Plan addresses climate change mitigation through the reduction of greenhouse gases. The actions in this plan focus on five low-carbon transformations that are pivotal in achieving Hamilton's low-carbon future:

- 1. Innovating our Industry;
- 2. Transforming our Buildings;
- 3. Changing How We Move;

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- 4. Revolutionizing Renewables; and,
- 5. Growing Green.

Hamilton's Climate Change Impact Adaptation Plan

The Climate Change Impact Adaptation Plan addresses climate change adaptation by building up the City's resiliency to the impacts of a changing climate. Objectives and actions in this plan are organized around four resilient theme areas:

- 1. Built Environment;
- 2. People and Health;
- 3. Natural Environment, Agriculture and Water; and,
- 4. Energy and Economy.

These two integrated plans provide detailed analysis and actions to address the climate emergency by guiding Hamilton on a pathway to net zero carbon by or before 2050, while also increasing Hamilton's resiliency to the emerging impacts of climate change.

Hamilton Community Greenhouse Gas Inventory

The City of Hamilton follows the Global Protocol for Community-Scale Greenhouse Gas Inventories and has been tracking and annually reporting community-wide greenhouse gas emissions since 2008 from major sectors including:

- Industry comprised of emissions from the Federal Large-Emitters Database, as well as stationary energy sources reported through local energy distribution companies;
- Buildings comprised of emissions from grid-supplied energy including natural gas and electricity for commercial, institutional and residential buildings;
- Transportation comprised of emissions from all transportation sources through city-wide fuel consumption sale data;
- Waste comprised of emissions from Hamilton's municipal landfill;
- Wastewater comprised of process emissions from the Woodward Avenue wastewater treatment plant; and,
- Agriculture comprised of emissions based on livestock counts from provincial and federal government databases.

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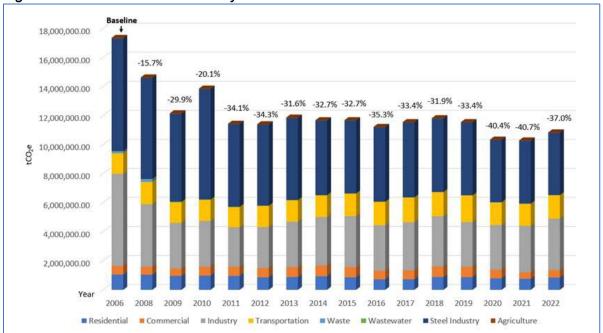


Figure 1.0 Hamilton's Community-Wide GHG Emissions 2006-2022

Hamilton's community-wide emissions in 2022 were estimated at 10,928,239 tonnes of carbon dioxide equivalent (tCO2_e). This represents an approximate 37.0% decrease based on Hamilton's 2006 baseline of 17,349,813 tCO2_e. Community emissions in 2022 increased by 6.2% however between 2022 and 2021. This was expected in 2022 coming out of the COVID-19 restrictions. Stationary energy, mainly from the commercial sector, increased the most between 2022 and 2021 at approximately 16.8%. However, it should be noted that all building sectors, including industrial and residential, increased between 2022 and 2021 at 13.4% and 10.6% respectively. Likely factors contributing to these increases include increased energy consumption in commercial and industrial buildings post-COVID, and the increased carbon intensity of Ontario's power grid as more fossil fuel in the form of natural gas is being used to power the system.

Hamilton's Corporate Greenhouse Gas Inventory

The City of Hamilton's Office of Energy Initiatives is responsible for reporting annually regarding corporate greenhouse gas emissions. The most recent report is being presented to GIC on October 16, 2024. The 2023 inventoried results show a 4.9% increase in corporate greenhouse gas emissions compared to 2022 and this comes following an increase of 6.5% in 2022 compared to 2021. As reported by the City's Office of Energy, these increases are due to the following factors:

• Corporate progress reducing emissions by improving energy efficiency in corporate buildings, street and traffic lighting has been cancelled out by a 40%

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increase in the provincial electricity emissions factor from 2021 to 2023. This is the direct result of increased reliance on fossil fuel natural gas to power Ontario's electrical grid, generating power that has a higher carbon intensity, resulting in increased greenhouse gas emissions.

- Transit fleet emissions have increased as service levels increase with new routes and more frequent service on existing routes. The bus fleet has grown by 15% in the last two years and continues to be powered by fossil fuels.
- Hamilton Water's Woodward biosolids processing facility, which began operations in 2020, has increased processing levels each year, driving higher electricity and natural gas consumption each year.



Figure 2.0 City of Hamilton Corporate Greenhouse Gas Emissions 2005-2023

Hamilton's Climate Action Strategy - Progress Report on Action Implementation

Some highlights related to implementation of a selection of specific actions found in Hamilton's Climate Action Strategy are provided below and a more detailed report can be found as Appendix "A" to Report PED24166.

Appendix "B" to Report PED24166 includes a summary chart with updates for every action in Hamilton's Climate Action Strategy. This year's progress report utilizes priority indicators where possible, to provide in-depth reporting on progress with both corporate and community-led efforts.

(i) Recharge Hamilton – Community Energy & Emissions Plan

Low-Carbon Transformation #1: Innovating Our Industry

Mitigation Action 1.0 calls for the creation of a net zero industrial working group in Hamilton, now referred to as the Hamilton Regional Decarbonization Hub. Efforts continue to secure funding to launch the Hub. In the meantime, a priority indicator associated with this Action calls for tracking large industrial greenhouse gas emitters

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who must report their emissions to the federal Greenhouse Gas Reporting Program. The Office of Climate Change Initiatives has started this tracking work by collating this publicly available data, confirming that a total of 19 industrial facilities in Hamilton exceed the 10,000 tCO2e emissions level that triggers the requirement to report to the federal Program. Of these 19 facilities, 9 or 50% of them reported 2022 greenhouse gas emission levels ranging from 8% to 97% lower than 2017 levels. The remaining 50% saw 2022 greenhouse gas emission increases ranging from 0.8% to 47% higher than levels reported in 2017.

Low Carbon Transformation #2: Transforming Our Buildings

Mitigation Action 4.0 directs the City to develop and implement city-wide green development standards to help meet community climate change objectives. Green Building Standards are being created to guide new private development in a manner that considers principles of environmental, social, and economic sustainability. Features proposed in Hamilton's Green Building Standards include energy efficiency, on-site greening, electric vehicle charging infrastructure, bike parking, and bird friendly building design. The draft Green Building Standard was endorsed by the City's Planning Committee on October 1st (Report PED24114), with the exception of building energy performance standards for which additional consultation will be undertaken with the Climate Change Advisory Committee. This will unfold concurrently with the development of a detailed implementation strategy, including incentives, with staff reporting back to Planning Committee in Q1 2025.

Low-Carbon Transformation #3: Changing How We Move

Mitigation Action 7.0 calls for expanding and connecting active transportation networks. In 2023 a total of \$1.39 M was invested in cycling infrastructure resulting in 10.4 kms of new bike lanes.

In January 2024 Council approved the Proposed Accelerated Active Transportation Implementation Plan (2024-2029) for the completion of additional active transportation projects over the next five years including 140 km of new and upgraded cycling, pedestrian, and multi-use trail projects. For 2024 the Public Works Transportation Division plans to complete a total of 23.6 km of active transportation infrastructure (18.3 km stand-alone and 5.3 km part of other infrastructure projects). This represents an approximate 76% increase in kms of bike lanes installed in 2024 versus 2023.

Low-Carbon Transformation #4: Revolutionizing Renewables

Mitigation Action 5.0 and 16.0 both relate to increasing the supply of renewable solar energy by increasing generation from rooftop solar installations on buildings and investigating other strategic locations for solar arrays.

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Corporate Facilities and Energy Management has a tender-ready 250 kW solar energy project for the Harry Howell Arena. The Office of Energy Initiatives is also developing a technical and financial business case for incorporating solar power on the roof of the new transit storage facility, which would bring an estimated 2 MW in power generation capacity. Nine additional projects are also under consideration in order to get more rooftop solar energy generation happening at City-owned facilities.

Low-Carbon Transformation #5: Growing Green

Mitigation Action 23 commits the broader community to planting 50,000 trees per year. Data collection was undertaken by the Office of Climate Change Initiatives to measure 2023 tree planting activity undertaken by the City and other external entities that engage in tree planting. This measurement will provide a baseline to compare progress on citywide tree planting efforts in subsequent years. In 2023, an estimated 46,540 trees were planted or provided to residents to plant within the City of Hamilton, with the following distribution by organization type: Conservation Authorities — 60%, City of Hamilton Forestry — 30%, Other External Organizations (Not-For-Profit & Volunteer Groups, Institutions) 10%. These counts do not include any tree stock purchased and planted by residential, commercial, industrial and most institutional property owners, making it likely that the 50,000-tree goal was met or even exceeded in 2023.

(ii) Hamilton's Climate Change Impact Adaptation Plan

Resilient Theme #1: Built Environment

Action 1.1 calls for development of requirements for incorporation of Low Impact Development features into new development and redevelopment projects. Low Impact Development guidelines were in development in 2023 and were taken to Planning Committee where they received approval on October 1st 2024.

Resilient Theme #2: People and Health

Action 6.2 calls for the exploration of opportunities to expand current cooling & warming centre programming and interventions. The City's Extreme Heat Working Group, established in 2023 by the Healthy Environments Division, is a place where a growing collective of City divisions and community partners come together to discuss how to continue to improve community response to extreme heat. In 2023, Hamilton Public Library, an active member of the Working Group, began opening the Hamilton Room at the Central Public Library on Statutory Holidays during Heat Warnings and Extended Heat Warnings. This service is an enhancement from previous years.

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Resilient Theme #3: Natural Environment, Agriculture and Water

Action 7.1 calls for continued efforts to enhance the management and restoration of existing natural areas and seek opportunities to dedicate land and natural areas for conservation. The City's Environmental Services Division has three multi-year projects underway to naturalize areas in Joe Sam's and Courtcliffe Parks, with naturalization efforts also initiated at Flamborough Centre Park in 2024. These projects are removing invasive plants and restoring wetlands, pit and mound swamps, and bringing more native trees and plants to these spaces.

Resilient Theme #4: Energy and Economy

Action 10.1 calls for the City to provide guidance to local businesses on how to maintain business continuity (e.g. supply chain) during extreme weather (i.e. through business continuity planning, green business practices, adaptation measures, etc.), The City's Economic Development Division completed an update of the Environmental Remediation and Site Enhancement (ERASE) Tax Assistance Program (TAP) in 2023 to include support for proponents interested in undertaking and certifying climate resilient building measures via recognized programs such as those offered via the Canada Green Building Council. The Division is currently engaged in a comprehensive review of the Hamilton LEEDing the Way Community Improvement Plan which is a private sector grant program designed to serve as an economic catalyst for sustainable building and land development practices.

Gaps, Barriers and Challenges with Strategy Implementation

With each Annual Update on Strategy implementation, attention must be given to gaps, barriers and challenges to effective progress with climate mitigation and adaptation efforts.

A major barrier to more immediate action is the funding gaps that exist for the municipality as more work is done to map out pathways to net zero through corporate action. One example of this is the substantial list of renewable energy projects that are viable and ready to move forward as soon as there is a source of funding to enable this work to happen. More is being done to identify and pursue methods to fund this work, including focused efforts to bring in more funding from higher levels of government and other external funding sources, and continuing to grow the municipality's Corporate Energy Reserve (see CEEP Enabling Action (ii)).

Another challenge is the increasing carbon intensity of our provincial electricity grid. With each passing year, the system's carbon intensity is on the rise with the growing use of methane gas to generate and feed power into the grid. This is reducing the progress made by Ontario communities to reduce greenhouse gas emissions.

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Finally, some Strategy actions where have yet to be initiated or have not yet moved from planning to implementation. This includes action to address food waste as a climate challenge, action to engage and support the agricultural community around building climate resilience, and initiating actions to encourage and support business and industry to decarbonize.

Office of Climate Change Initiatives On-Going Priority Areas of Focus

The Office of Climate Change Initiatives set out Priority Focus Areas, presented to the General Issues Committee in April of 2023 (Report PED23064). Priorities were identified in that first year to enable focused action right from the start. Below is a progress update on the on-going implementation of these Priority Focus Areas.

(i) Climate Change Governance & Innovation

In 2024, the following milestones have been achieved with respect to Focus Area #1 – Climate Change Governance & Innovation:

- Monthly meetings of the internal Climate Change Initiatives Steering
 Committee continue, with City Directors from across the corporation guided by a
 central mandate to facilitate corporate-wide monitoring and centralized reporting
 on progress with city-led actions in Hamilton's Climate Action Strategy
- Establishment of an internal Extended Leadership Group, made up of managers and other staff responsible for implementation of city-led Climate Action Strategy efforts is still to be completed. Comprehensive internal data collection efforts undertaken in 2024 have served to identify key staff who need to be recruited to serve on this group, which will be convened in Q4 2024/Q1 2025.
- The selection process for the **Climate Change Advisory Committee**, which helps to guide the implementation of Hamilton's Climate Action Strategy, was initiated in Q4 of 2023. Final appointments were made in February 2024, and the Committee held its first meeting on April 30th. The Committee has since held three additional meetings, with a fifth meeting scheduled for November 26.
- With the guidance of the Climate Change Initiatives Steering Committee, the
 internal process for applying for Climate Change Reserve funding for city-led
 initiatives was refined, and the 2024 application intake was administered.
 Projects recommended to receive 2024 Climate Change Reserve funding will be
 presented to GIC for approval in Q4 2024 along with an update on the progress
 of projects funded in 2023.

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(ii) Community Climate Outreach

In 2024, the following milestones have been achieved with respect to Focus Area #2 – Community Climate Change Outreach:

- In 2023, the City finalized an updated 4-year agreement and partnership with the Bay Area Climate Change Council, the multi-stakeholder organization supported by the cities of Hamilton and Burlington to facilitate regional solutions to climate issues. The Office of Climate Change Initiatives continues to benefit from the Council's collaborative support with efforts to develop and implement the City's climate action priorities. The Council hosts an Annual Climate Summit each year, and the 2024 event included a climate 'fireside chat' featuring Mayor Andrea Horwath and Burlington Mayor Marianne Mead Ward.
- Climate Communications and Engagement efforts have included an on-going community awareness campaign regarding Hamilton's Climate Action Strategy, and work to revamp, update, and expand content on the City's webpage for the Strategy. Engagement tactics continue to include social media, in-person presentations, participation in community events, and pop-up sessions in locations like the Hamilton Farmers Market. Efforts in 2024 include planning for a process to co-design a Climate Justice Framework for the City of Hamilton.

(iii) Carbon Budgeting & Accounting Framework

Staff in the Office of Climate Change Initiatives have initiated the development of Hamilton's first Carbon Budget and Accounting Framework. A detailed multi-year workplan has been completed and Phase 1 efforts are underway including the technical calculations for both a community and corporate carbon budget.

There are two main goals for this initiative:

Goal 1 - To develop a corporate carbon budget and accounting framework that systematically integrates climate action policies, including a carbon credit policy, and develops the tools and resources necessary to implement robust GHG emission calculations into existing budget reporting processes and templates; and

Goal 2 – To develop a community carbon budget broken down by sectors, and subsectors where possible, with an annual reporting methodology and reporting plan created that provides education and awareness that allows the community to make informed decisions about actions to reduce GHG emissions.

The calculated community and corporate carbon budgets, along with the draft

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accounting framework and implementation plan are anticipated to go to Council in Q2 2025.

(iv) Green Buildings

In 2024, the following milestones have been achieved with respect to Focus Area #4 Green Buildings:

Better Homes Hamilton Pilot Program

- The pilot home energy-efficiency retrofit program Better Homes Hamilton launched in December 2023 and 150+ homeowners applied to be selected for a loan of up to \$20,000 at the introductory rate of zero-percent interest to be paid back to the City annually through property taxes.
- 50 successful applicants were accepted in 2024 and now participating in the pilot program to install energy-efficient measures in their homes to reduce GHG emissions and increase home comfort. A robust methodology with equitable selection criteria was used to select the successful applicants, resulting in the participation of homes with a diverse mix of building characteristics and a broad geographic distribution, with extra focus on neighbourhoods identified as having high rates of energy poverty.

Corporate Net Zero Emissions/Zero Carbon & Green Building Performance Standard

- Building on the 2022 Pathway to Net Zero for [Existing] Corporate Buildings report, the Office of Climate Change Initiatives is leading the exploration of a parallel study for new corporate buildings.
- In 2024 a consultant was hired to provide technical services via a robust portfolio-level analysis to assist City staff in developing a corporate net zero emissions/zero carbon policy and green building performance standard for all new City facilities and large renovations/additions to existing facilities to support the City's transition to net zero emissions and zero carbon.
- The study will support a City staff report to Council in 2025 on the feasibility of and approach to implementing a corporate net-zero emissions/zero carbon policy by 2026 or sooner.

(v) Urban Greening

Hamilton's Climate Action Strategy sets the ambitious goal of seeing 50,000 trees planted each year across the municipality. The Office of Climate Change Initiatives has created a system to track the tree planting undertaken by key community partners, to enable the tracking of our community's success in realizing the annual 50,000 tree target. Our team will continue to revise this method into the future, by including elements like total tree sale numbers from local garden centres to provide as accurate

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an annual count as possible.

Looking Ahead to 2025 and Beyond

For its first two years, the Office of Climate Change Initiatives has provided its Annual Update in October. Given the urgent need to respond to the climate emergency in a swift manner, there is merit in shifting the reporting cycle in order that the Annual Report for the previous calendar year is presented earlier in the reporting year. For these reasons, staff recommend that the Annual Report be shifted to June of each calendar year, starting in 2025.

Finally, staff are seeking Council support to initiate an assessment of the feasibility of accelerating the corporate and community-wide target of realizing net zero carbon by 2050, and the associated baseline years for Hamilton's Climate Action Strategy. The latest science suggests that immediate and urgent action is needed to make deep emission reductions and limit global warming to 1.5 C or a 'low overshoot scenario'. Leading global organizations such as the World Wildlife Fund, the Carbon Disclosure Project. International Council for Local Environmental Initiatives (ICLEI), World Resources Institute, and C40 Cities have provided guidance to municipalities on the methodologies for calculating science-based climate targets and a 'fair-share' approach to meeting the global net-zero target by 2050. To maintain Hamilton's progress and leadership in climate action, staff recommend that an analysis of our net zero by 2050 target be undertaken to ensure alignment with global best scientific practices, and that the implications of accelerating timelines for implementing mitigation actions in Hamilton's Climate Action Strategy be explored. This might require adjusting any City policies and guidelines contributing to greenhouse gas emission reductions, and consideration of financial costs and benefits of accelerated action.

ALTERNATIVES FOR CONSIDERATION

Council could choose not to approve an earlier date for Hamilton's Climate Action Strategy Annual Update. This would impact on the timeliness of reporting on actions being taken in response to the climate emergency.

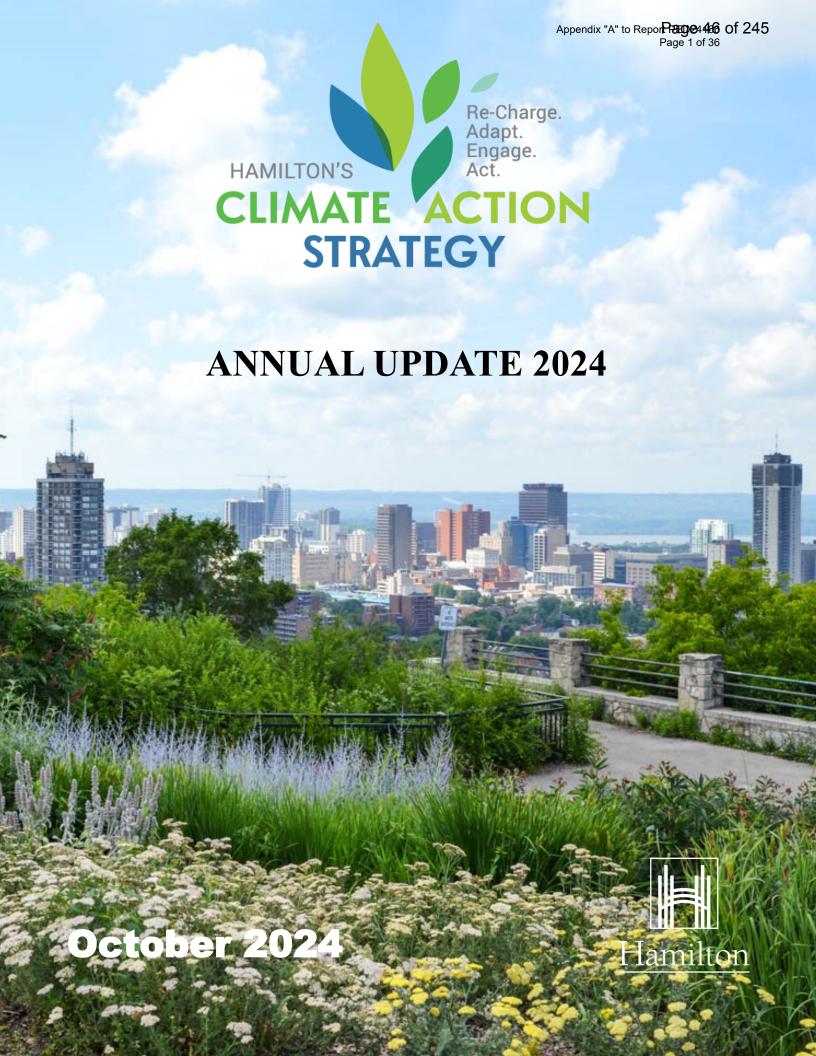
Council could choose not to give direction to staff to explore the implications of accelerating the 2050 timeline for reaching net zero. This could have implications regarding the future costs to address climate impacts, the local impacts from climate change if opportunities to front end key efforts are lost, and negative impacts on the City's efforts to establish itself as a climate leader.

APPENDICES AND SCHEDULES ATTACHED

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Appendix "A" to Report PED24166 – Hamilton's Climate Action Strategy Annual Climate Change Update 2024

Appendix "B" to Report PED24166 – Status Update Regarding Climate Actions in Hamilton's Climate Action Strategy



LAND ACKNOWLEDGMENT

We acknowledge the City of Hamilton is situated upon the traditional territories of the Erie, Neutral, Huron-Wendat, Haudenosaunee, and Mississaugas. This land is covered by the Dish With One Spoon Wampum Belt Covenant, which was an agreement between the Haudenosaunee and Anishinaabek to share and care for the resources around the Great Lakes. We further acknowledge that this land is covered by the Between the Lakes Purchase, 1792, between the Crown and the Mississaugas of the Credit First Nations.

Today, the City of Hamilton is home to many Indigenous people from across Turtle Island (North America) and we recognize that we must do more to learn about the rich history of this land so that we can better understand our roles as residents, neighbours, partners, and caretakers.





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City of Hamilton Announced as the National Winner of World Wildlife Fund's One Planet City Challenge

The City of Hamilton has been selected as the National Winner of World Wildlife Fund's (WWF) One Planet City Challenge (OPCC). OPCC is one of the largest and longest-running climate challenges for cities in the world, and this year, 359 cities participated from 48 countries, from which 62 finalists were selected.

Based on reported climate data, Hamilton, along with other shortlisted cities, was assessed by a jury of experts from a diverse range of organizations – from C40, to the African Development Bank to ICLEI and chaired by WWF Cities lead Dr. Jennifer Lenhart.



The City of Hamilton submitted robust climate data and information on its actions through the <u>Carbon Disclosure Project</u> and entered into the international <u>OPCC</u>. The OPCC encourages cities to develop ambitious climate targets and commitments in line with the targets of the Paris Agreement. This year showed that even more cities are participating and aligning their targets to limit global warming to 1.5 °C.

This year's jury was particularly impressed by the City of Hamilton's solid Climate Action Strategy, the active involvement of various partners and the creation of a dedicated Office of Climate Change Initiatives. The City demonstrates a strong focus on adaptation and resilience, complemented by well-defined mitigation targets.

As a national winner, the City of Hamilton is eligible to take part in <a href="https://www.www.eigh.com/www.



Introduction

The World Meteorological Organization (WMO) has confirmed that 2023 was the hottest year on record, with the global mean temperature at approximately 1.45 degrees Celsius above the 1850-1900 average. As the WMO notes, the increase in temperature comes with an increase in the frequency of extreme weather events including heatwaves, floods, droughts, wildfires and rapidly intensifying tropical cyclones.

The United Nations Environment Program's 2023 annual emissions gap report sums up this current planetary warming very bluntly, with its play-on-words title 'Broken Record – Temperatures hit new highs yet world fails to reduce emissions (again)'. The report provides an annual assessment of the emissions gap between 'pledged greenhouse gas (GHG) emissions reductions and the reductions required to align with the long-term temperature goal of the Paris Agreement'. The 2023 report recognizes the failure of high-emitting countries to stringently reduce their GHG emissions and subsequently calls for these countries to further accelerate the reduction of domestic emissions, including commitments to reaching net zero as soon as possible.

More and more Canadians are being impacted by our changing climate with each passing year. An August 2024 Leger Poll revealed that more than 1 in 3 Canadians reported being directly impacted by extreme weather events such as forest fires, heat waves, floods or tornadoes, an increase from the 1 in 4 Canadians reporting direct impacts in 2023. We are seeing and experiencing these impacts here in Hamilton, with extreme summer heat, flooding from extreme rainfall events, and climate fuelled changes like earlier and more extensive cyanobacteria (blue-green algae) blooms in our Harbour and along the Lake Ontario shoreline. The 2023 Office of Climate Change Initiatives update emphasized that there is still a window of opportunity to prevent the worst-case scenario of over 1.5 degrees Celsius increase in global temperatures. But, as the global average temperature trends are showing, that window is starting to close, making immediate action that much more urgent now, combined with the necessary financial investments and commitment to a fair transition to net zero greenhouse gas emissions.

Purpose of Report

Hamilton's Climate Action Strategy charts a pathway to reaching net zero greenhouse gas emissions by 2050 or sooner. This Annual Report provides an update on the City of Hamilton's progress with reducing its GHG emissions, and City efforts to support the broader community to do the same through the creation of actions, policies, plans, and incentives. In addition, this report provides an update on municipal efforts to prepare both the corporation and the community for the impacts of a changing climate. It is also important to acknowledge that Hamilton's Climate Action Strategy is a community-wide strategy that requires action well beyond the efforts of the City of Hamilton; businesses and industry, local educational institutions, hospitals, and residents all have an important role to play in doing what they can to mitigate and adapt to climate impacts. This report also includes updates on the progress of those broader community efforts.

¹See https://wmo.int/site/frontline-of-climate-action/state-of-climate

About the Office of Climate Change Initiatives

The Office of Climate Change Initiatives (OCCI) was established in November 2022 with a mandate to oversee the implementation of Hamilton's Climate Action Strategy. Hamilton's Climate Action Strategy included a recommendation that the Office be established to ensure that efforts were focused, and resources committed to initiate immediate climate action.

The OCCI team includes 5 full-time staff members. The newest addition to the team is Project Manager Adam Watson, who was transferred from the City's Healthy & Safe Communities Division in 2024.



Pictured left to right: Trevor Imhoff, Lynda Lukasik, Beatrice Ekoko, Cathrin Winkelmann, Adam Watson

You can reach out to the Office of Climate Change Initiatives to get more information about Hamilton's Climate Action Strategy, to request a presentation, or to explore the potential to collaborate on Strategy implementation. Email the Office at: climatechange@hamilton.ca. You can also reach out directly to members of the OCCI staff team:

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Beatrice Ekoko Project Manager	(905) 546-2424 x6885	Beatrice.Ekoko@hamilton.ca
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Adam Watson Project Manager	(905) 546-2424 x7806	Adam.Watson@hamilton.ca
Cathrin Winkelmann Senior Project Manager	(905) 546-2424 x3916	Cathrin.Winkelmann@hamilton.ca

Office of Climate Change Initiatives Priority Focus Areas

In April 2023, the Office of Climate Change Initiatives recommended and received Council approval to focus its efforts on several key priority areas. Work on these Priority Focus Areas has continued throughout 2023 and 2024.

Climate Change Governance and Innovation

Carbon Budgeting

Green Buildings

Urban Greening

Community Climate Outreach



Climate Justice Priority

As OCCI Staff embarks on its implementation of Hamilton's Climate Action Strategy it includes a strong commitment to ensuring that climate action is guided by climate justice principles. Climate justice recognizes the disproportionate impacts of climate change on frontline communities (Indigenous Peoples, low- income, marginalized, racialized communities). In the fall of 2023, Staff worked with students in the CityLab Semester in Residence program to lay the groundwork for the co-design of a Hamilton-specific Climate Justice Framework intended to be used as a tool to guide the implementation of Hamilton's Climate Action Strategy and other climate-related municipal work.

This work continued into 2024 with the completion of a project charter and workplan, along with continual learning and relationship building with local groups serving frontline communities. The start of consultation with Staff across divisions is underway, and exploration efforts have begun to better understand opportunities and challenges faced internally in implementing climate justice. Resources are being collected and put into a Sharepoint Resource Hub that will be made available for Staff across the Corporation.

OCCI PRIORITY: Climate Governance and Innovation

In order to develop and align processes across the City of Hamilton, establishing several critical governance pieces was identified as a priority for the OCCI in 2023. The Office was also charged with setting up a framework for administering the City's Climate Change Reserve, a sustainably funded reserve with funding earmarked to support testing new and innovative ways to mitigate and adapt to climate change.

The table below provides a brief update on the status of the priority items under climate governance and innovation.

Table 1.0 Hamilton's Climate Action Strategy Governance and Innovation

Governance/Innovation Piece	Status Update
City of Hamilton Climate Change Initiatives Steering Committee	ACTIVELY MEETING - This steering committee comprised of Directors from key City departments and divisions was established in September 2023 and has been meeting monthly since then.
City of Hamilton Climate Change Initiatives Extended Leadership Group	DELAYED - This group of managers and other relevant staff is expected to be formed in late 2024 following the direction of the Director-Level Steering Committee and guided by the on -going identification of key staff engaged directly in monitoring or implementing climate-related efforts
Climate Change Advisory Committee-	ACTIVELY MEETING – See Page 9 for a full update.
Climate Change Reserve	OPERATIONAL – Council approved a sustainable source of funding for the City's Climate Change Reserve as part of the 2023 municipal budget. Two rounds of funding for city-led initiatives – in 2023 and 2024 – have now occurred. See GIC Report PED24165 for an update on the progress of 2023-funded projects. A recommendation report with the list of city-led projects recommended to receive Reserve funding in 2024 is going to the General Issues Committee in Q4 2024

OCCI PRIORITY: Climate Governance and Innovation Cont'd...

Community Climate Change Advisory Committee

The Climate Change Advisory Committee was created to help provide advice to Council and City Staff on the prioritization, implementation and monitoring of Hamilton's Climate Action Strategy. In October 2023, OCCI Staff developed a selection criteria tool to assist the Interview Sub-Committee of the General Issues Committee with interviewing and selecting members of the public to serve on the Climate Change Advisory Committee.

Final appointments took place in February 2024, with the CCAC's first meeting on April 30th, 2024. Since then, the committee has had four meetings, with the next one scheduled for November 2024. Six working groups, which are open to the public, were recently established and include:

Table 2.0 Hamilton's Climate Change Advisory Committee's Working Groups

Working Groups	Brief Description
Climate Governance & Technical	Focus on how and when the City of Hamilton tracks its follow through on climate action implementation and overall climate accountability/governance. Review the technical and industrial components of the City's current and proposed climate change assessments, strategies, key performance indicators, and disclosures, and provide recommendations.
Community Engagement	The Community Engagement Working Group can advance community awareness and involvement in Hamilton's Climate Action Strategy.
Transportation	Informing, supporting and reviewing progress towards climate mitigation and adaptation efforts relating to City of Hamilton transportation efforts, decisions and outcomes. Identification of how to involve affected communities in decision-making and ensure that transportation policies and projects do not unintentionally or disproportionately harm vulnerable communities.
Buildings	Informing and tracking progress towards climate mitigation and adaptation efforts relating to City of Hamilton's community building decarbonization and resilience efforts, decisions and outcomes. Advancing an equitable lens on building decarbonization efforts to identify opportunities to advance carbon and energy poverty reductions.
Nature-Based Solutions (NBS)	Inform and support service mapping and assessments, actions and policies to ensure that the City of Hamilton is advancing leading NBS and incorporating ecological knowledge and Indigenous ways of knowing.
Climate Justice	Inform how the City of Hamilton is incorporating social justice/equity principles into climate plans, ensuring that frontline community members benefit from climate actions and that the burdens and benefits are fairly distributed. Identifying alignment opportunities related to United Nations Declaration on the Rights of Indigenous People (UNDRIP) and Hamilton's Urban Indigenous People

OCCI PRIORITY: Carbon Budget & Accounting Framework

The City of Hamilton is developing its first Carbon Budget and Accounting Framework (CBAF). The carbon budget, similar to a municipal budget, will include tools and calculators for the proper quantification of carbon emissions and corporate-wide processes to systematically track and report on carbon emissions, which will allow senior leadership and City Council to make informed decisions to better manage surplus or deficits.

Globally recognized organization <u>C40</u>, published a report *Deadline 2020: How cities will get the job done*. This report assessed the contribution of major high emitting, high GDP cities to the Paris Agreement's aspirations of limiting climate change to within 2 degrees and, ideally, 1.5 degrees Celsius average global temperature increase. The approach for a carbon budget is to allocate a fair portion of the global carbon budget, that aligns with the safe levels of warming below 1.5 and 2 degrees. It uses a global contraction-and-convergence approach, in which high emitters reduce emissions to a common per capita emission rate and low emitters increase to that rate by a set date (i.e. 2030).

City of Hamilton's Goals for Carbon Budget and Accounting Framework:

Goal 1 - To develop a corporate carbon budget and accounting framework that systematically integrates climate action policies, including a carbon credit policy, and develops the tools and resources necessary to implement robust GHG emission calculations into existing budget reporting processes and templates; and

Goal 2 – To develop a community carbon budget broken down by sectors, and subsectors where possible, with an annual reporting methodology and reporting plan created which provides education and awareness that allows the community to make informed actions to reduce GHG emission.

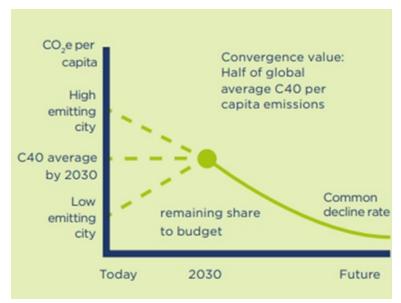


Figure 1.0 Emissions reduction trajectories using C40 Cities Convergence and Contraction Method

Status Update:

City Staff in the OCCI leading the development of the CBAF have retained a leading expert consultant in carbon budgeting and have formed an internal Technical Advisory Committee comprised of key divisions across the City from Corporate Finance, Public Works and Planning and Economic Development.

The community and corporate carbon budgets will be completed by the end of 2024. These carbon budgets, along with a detailed accounting framework and implementation plan are expected to go to Council in Q2 2025. If approved, a corporate-wide education and training plan will commence.

OCCI PRIORITY: Green Buildings







The OCCI is piloting a residential energy efficiency retrofit program called Better Homes Hamilton (BHH), which launched on December 1, 2023. The program provides property owners low barrier access to upfront capital for them to retrofit their homes, in order to reduce GHG emissions, improve energy efficiency, and live more comfortably. Eligible property types were single detached houses, semi-detached houses, and town homes. Over 150 homeowners applied for an opportunity to be selected for a loan of up to \$20,000 at the introductory rate of zero-percent interest to be paid back to the City annually through property taxes. Fifty (50) successful applicants were accepted in 2024 and are currently participating in the pilot program.

Based on extensive research and engagement, tenant rights and important equity considerations have been embedded into the BHH program, which is being implemented with applied climate justice principles, including:

- Prioritization of Hamilton homes located within neighbourhoods that have been identified as having high rates of energy poverty through the Canadian Urban Sustainability Practitioners (CUSP) Energy Poverty Mapping Tool;
- A robust methodology with equitable selection criteria was used to select the successful applications, resulting in the participation of homes with a diverse mix of building characteristics and a broad geographic distribution, with extra focus on those neighbourhoods identified as having high rates of energy poverty;

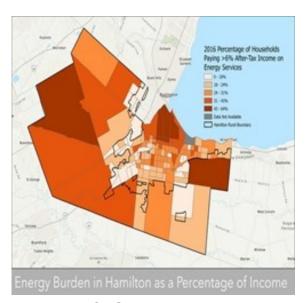


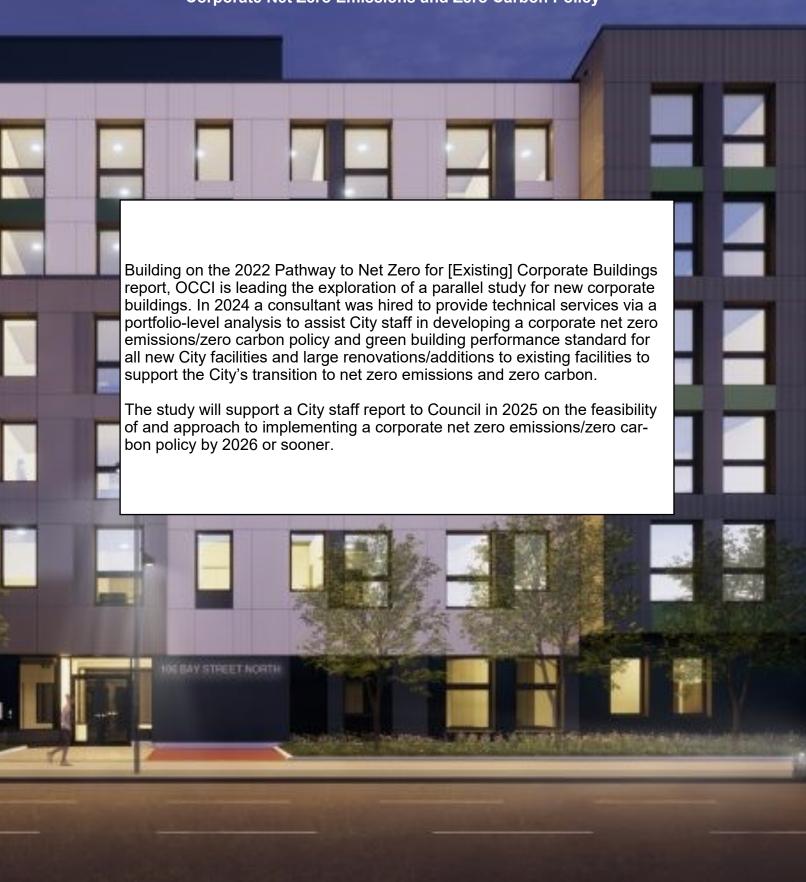
Figure 2.0 CUSP Energy Poverty Mapping Tool

- Ensuring that any retrofits that lead to the displacement of tenants will be deemed ineligible;
 and
- Providing low-barrier access to upfront capital for those who may not otherwise qualify for traditional financing.

For full details on the BHH program, including a list of eligible retrofit measures, helpful resources and energy-efficiency rebate programs, see <u>Better Homes Hamilton Program | City of Hamilton.</u>

OCCI PRIORITY: Green Buildings Cont'd...

Corporate Net Zero Emissions and Zero Carbon Policy



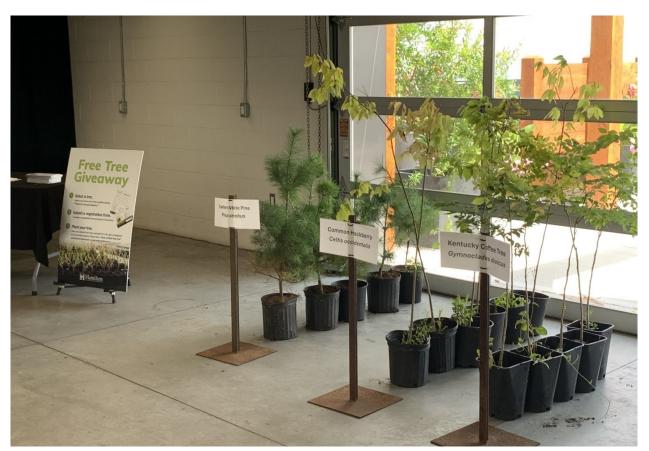
OCCI PRIORITY: Urban Greening

Greening urban areas is an essential way to adapt to climate impacts and to also help mitigate those impacts. The OCCI has worked in several ways to help to advance urban greening efforts in our community. During 2023 and into 2024 the OCCI has administered funding to enable community partner Green Venture to implement depave projects along Barton Street. The OCCI also helped to facilitate a collaboration between the City's Forestry and Horticulture Division and community partner the Hamilton Naturalists' Club to enable the implementation of a more efficient and effective delivery approach for the 2024 Free Tree Giveaway.

In 2024, the OCCI also created a framework for tracking community-wide tree planting efforts, to determine whether our community succeeded in 2023 in meeting the Climate Action Strategy target of planting 50,000 trees per year. Preliminary results indicate that the target was likely achieved, but efforts will continue into 2025 to improve the tracking framework to get a more accurate count for 2024 and subsequent years.

Staff in the OCCI also support the expanding network of community gardens located on City of Hamilton property and beyond. This work is done as part of the larger collective efforts of the Hamilton Community Gardening Network. Enhancing urban food growing and raising awareness about climate change and local food security is an important element of urban greening.

Finally, OCCI staff are in the early stages of convening a working group of City staff to explore innovative approaches to urban green infrastructure, including elements like depave projects and the urban 'sponge park' concept as a method for greening urban areas and creating functional stormwater features at the same time.



Forestry Division's Free Tree Giveaway at the Gage Park Greenhouse - 2024

OCCI PRIORITY: Climate Communications and Outreach

Communicating with and engaging the broader community around climate action is key to OCCI's mandate. Meaningful engagement involves reciprocal interactions, respectful listening to understand, and transparent communication.

Establishing relationships with local community organizations and maintaining these relationships has been a strong focus throughout 2023 and 2024.

Climate Communications and Climate Engagement Strategies

Climate Communications and Climate Engagement Strategy project charters were developed for both external and internal purposes, with support from the City's Corporate Communications, Engagement Team, Marketing Team, and diverse local community groups. In 2023-2024, some actions found in the workplan were implemented.

Between October 2023 and September 2024, OCCI engaged audiences from diverse sectors, including youth, faith groups, frontline communities and Indigenous community groups. OCCI did so by conducting outreach, attending events, offering presentations, talks, tours, webinars, tabling and pop-ups. Moving forward, OCCI will be looking to expand engagement to include the business community.

As well, OCCI has been working to understand best practices in educating Staff across the corporation and raising awareness about climate change and will be designing a survey to this end.

By the Numbers:

- 1,100+ residents reached via 17 community presentations;
- **60+ applications** received from residents to serve on City's Climate Change Advisory Committee:
- 150+ applications from homeowners to participate in the Better Homes Hamilton Energy Retrofit

Communications

Raising awareness about Hamilton's Climate Action Strategy and action the broader community can take, occurred in the form of social media messaging, and content in newsletters and written articles. Internally, OCCI continues to assist Staff across various departments and divisions with incorporating climate context and wording in their messaging.

Content for the revamping of the Hamilton's Climate Action Strategy webpage was developed and is being implemented. Discussions for a climate dashboard are underway.

The OCCI will continue to refine its communications and engagement techniques and ongoing tracking methodology.

OCCI PRIORITY: Climate Communications and Outreach Cont'd...

Internal Climate Communication and Engagement

In 2024, an internal Traditional Ecological Knowledge (TEK) interest group of Staff from various departments emerged after City Staff attended two gatherings at Six Nations of the Grand River. OCCI Staff is working with the Indigenous Relations Office to explore how this interest can be supported, as well as better ways to align and collaborate on various shared interests.

OCCI continues to work with the Climate Team in Public Works, Corporate Facilities and Energy Management (CFEM), Asset Management, Public Health and Light Rail Transit (LRT) teams, learning lessons to apply in our internal engagement methodology.

OCCI Engagements, Working Groups, Projects and Committees.

Climate change is impacting and influencing the work of almost every department and division across the City of Hamilton, as well as across the community. Beyond the OCCI's core work, we also have participated and collaborated with many internal and external partners to help ensure Hamilton's Climate Action Strategy is effectively implemented. This includes but is not limited to:

- Climate Change Initiatives Steering Committee
- Community Climate Change Advisory Committee
- LRT Steering Committee
- EV Strategy Working Group
- Urban Forest Strategy Working Group
- Extreme Heat Working Group
- Stormwater Utility Fee Steering Committee and Communications Working Group
- Natural Areas Inventory Steering Committee
- McMaster SCORE Project Policy Roundtable
- Global Covenant of Mayors & ICLEI Local Governments for Sustainability Implementation Cohort
- Annual Carbon Disclosure Project (CDP) Reporting
- Watershed Action Plan Steering Committee
- Environmental Assessment Working Group
- Twenty Road and Red Hill Valley Parkway Extension Environmental Assessment Technical Advisory Committee
- Green Building Standards Internal Working Group
- Ex-Officio Members Bay Area Climate Change Council
- Bay Area Climate Change Council Implementation Teams
- Hamilton Community Enterprises Energy Harvesting Technical Steering Committee

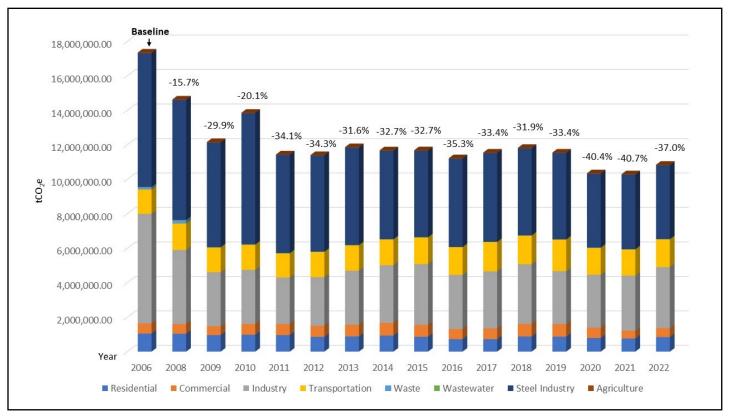
- Clean Air Hamilton
- Clean Air Partnerships Green Development Standard Community of Practice
- Efficiency Canada's Mandatory Building Performance Network
- Buildings Ontario Transformation Hub
- Advisor on McMaster's MacChangers
- Annual Environment, Social, Governance (ESG) Reporting for Finance Standard and Poor's (S&P) Global Ratings
- Annual Reporting for Top 100 Greenest Employers
- Planning and Economic Development Engagement Committee
- Traditional Ecological Knowledge (TEK) Advisory Committee at McMaster University
- Bayfront Industrial Area Strategy Steering Committee
- McMaster University Energy Mapping Research Project



HAMILTON'S COMMUNITY-WIDE GREENHOUSE GAS INVENTORY 2006 - 2022

Since 2008 the City of Hamilton has been tracking and annually reporting community-wide Greenhouse Gas (GHG) emissions from sectors including: Buildings (broken down by Residential, Commercial and Industrial), Transportation, Industrial Process Emissions, Waste, Wastewater, and Agriculture. Using the year 2006 as a baseline and the most recent GHG inventory year of 2022, it is estimated Hamilton's community-wide emissions have been reduced by approximately 37.0%. This equates to 10,928,239 tCO2_e in 2022 compared to 17,349,813 tCO2_e in 2006.

Figure 3.0 Hamilton's Community-Wide Greenhouse Gas Emission 2006-2022



Major Sources of Community-Wide Greenhouse Gases

The City of Hamilton follows the Global Protocol for Community-Scale Greenhouse Gas Inventory and includes tracking emissions from the major sources across Hamilton.

Table 3.0 to the right shows the breakdown of GHG emissions by major sectors including both the tonnes of carbon dioxide equivalent (tCO₂e) and as a percent of the total.

Table 3.0 Hamilton's GHG Emissions Breakdown 2022

Sector	GHG (tCO₂e)	Percent (%) of Total *
Industry	7,910,056	72.4%
Transportation	1,604,167	14.8%
Buildings	1,369,784	12.6%
Wastewater	561	0.01%
Solid Waste	16,169	0.15%
Agriculture	27,502	0.25%
Total	10,928,239	*Totals may not equal 100% due to rounding

HAMILTON'S CORPORATE GREENHOUSE GAS INVENTORY 2005 - 2023

Through the Corporate Facilities and Energy Management Division, City Staff report on Corporate GHG emissions and have recently completed the inventory for both 2022 and 2023.

Overall Hamilton's corporate emissions have seen a total reduction of 39% in 2022 and 36% in 2023 based on the 2005 baseline.

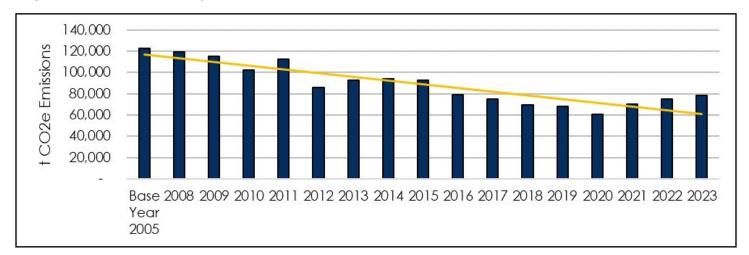


Figure 4.0 Hamilton's Corporate Greenhouse Gas Emissions 2005-2023

The 2023 inventoried results show a 4.9% increase in corporate greenhouse gas emissions and this comes following an increase of 6.5% in 2022 compared to 2021. As reported by the City's Office of Energy, these increases are due to the following factors:

- Corporate progress reducing emissions by improving energy efficiency in corporate buildings, street and traffic lighting has been cancelled out by a 40% increase in the provincial electricity emissions factor from 2021 to 2023. This is the direct result of increased reliance on natural gas generation in Ontario.
- Transit fleet emissions have increased as service levels increase with new routes and more frequent service on existing routes. The bus fleet has grown by 15% in the last two years.
- Hamilton Water's
 Woodward biosolids processing facility, which began operations in 2020,
 has increased processing levels each year, driving higher electricity and natural gas consumption each year.

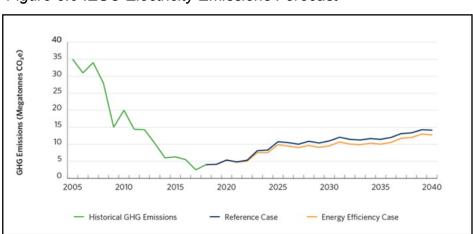


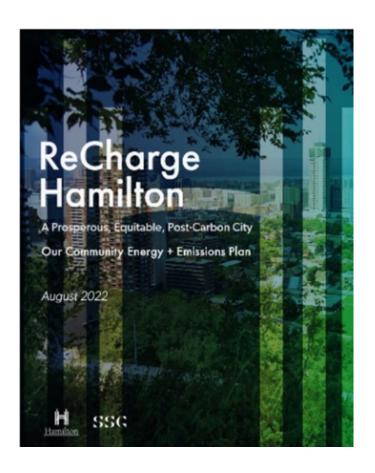
Figure 5.0 IESO Electricity Emissions Forecast

(Graph Adapted from: https://www.ieso.ca/Powering-Tomorrow/2020/The-IESOs-Annual-Planning-Outlook-in-Six-Graphs)

HAMILTON'S CLIMATE ACTION STRATEGY

Hamilton's Climate Action Strategy (HCAS) is the City's most ambitious and detailed climate strategy to date. It was developed between 2018 and 2022 through extensive research, technical modelling, community-wide engagement, and consultation. The HCAS includes both a climate mitigation plan to achieve net zero GHG emissions by 2050, and a climate adaptation plan to help our entire community reduce, prepare, and recover from the unavoidable impacts of climate change.

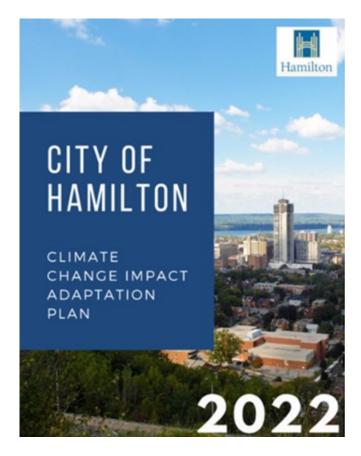




"ReCharge Hamilton – Our Community Energy and Emissions Plan"

Vision:

"ReCharge Hamilton identifies a pathway to net zero GHG emissions by 2050 that increases the resilience of the energy system and improves economic prosperity for all. Drawing on a history of work, policies, and initiatives in this area, ReCharge Hamilton builds on Hamilton's historic and current strengths as an industrial leader in the midst of a rich natural environment, and as a caring community."



"Hamilton's Climate Change Impact Adaptation"

Vision:

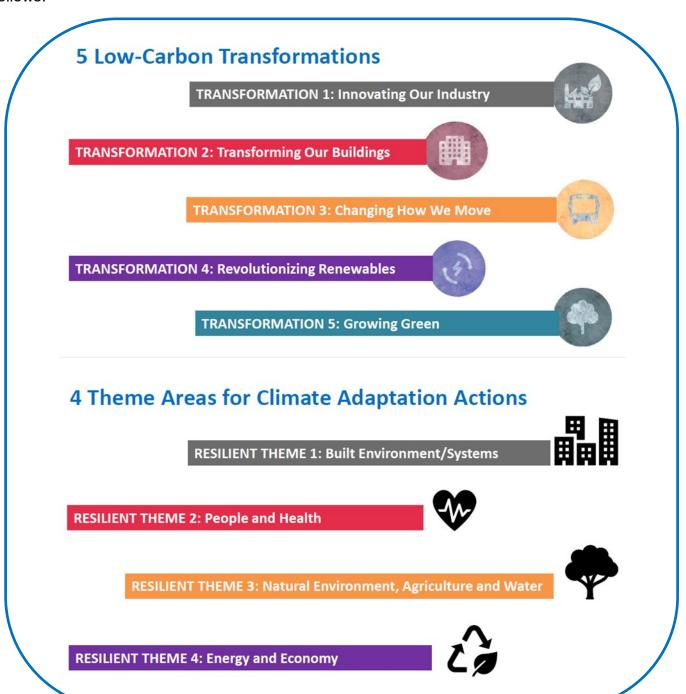
"The City of Hamilton will be a national leader on climate adaptation: a healthy, equitable, vibrant, and sustainable community that responds to the needs of residents, businesses and institutions, and is resilient in the face of a changing climate"

Low-Carbon Transformations and Resilient Themes

The remaining sections of this report are broken out into the Low-Carbon Transformations and Resilient Themes as outlined and approved within 'ReCharge Hamilton' and 'Hamilton's Climate Change Impact Adaptation Plan'.

The following sections include major and impactful actions within each Low-Carbon Transformation and Resilient Theme. For a complete list and status update for all of HCAS's specific actions see Appendix "B" to Report PED24166.

The Five (5) Low-Carbon Transformations and Four (4) Resilient Theme Areas are broken out as follows:



Low-Carbon Transformation #1: Innovating Our Industry

Monitoring Trends of Large Industrial Emitters of Greenhouse Gases

Hamilton's greenhouse gas emissions profile is dominated by industrial emitters. That is why our Climate Action Strategy includes a focus on innovating our industry to mitigate greenhouse gas emissions from this sector. Part of this work involves tracking industrial greenhouse gas emission trends. In Canada, industries emitting greater than 10,000 tCO2e annually must report these emissions to the federal Greenhouse Gas Reporting Program (GHGRP). In Hamilton, 19 industrial facilities are included on this list in 2022, the most recent year for which verified reporting data is publicly available through the GHGRP. The levels of emissions from these facilities range from 10,078 tCO2e to 3,960,611 tCO2e. Three of the facilities on the list reduced their emissions to below the 10,000 tCO2e threshold in 2022.

Table 4.0 Industrial GHGRP Reporting Trends in Hamilton 2017—2022

Facility Name	2022 GHG Emissions (*tCO2e)	GHG Emissions Trend 2017 - 2022
ArcelorMittal Dofasco – Main Plant	3,960,611	19.4% DECREASE
Carmeuse Lime	434,050	8.0% DECREASE
Stelco Inc (now Cleveland Cliffs)	279,095	9.6% INCREASE
Birla Carbon	202,082	13.9% DECREASE
Bunge Canada	49,866	0.5% INCREASE
RAIN Carbon	30,080	4.8% INCREASE
**Bartek Ingredients – Plant #2	30,037	18.2% INCREASE
Baycoat	29,303	14.0% INCREASE
Darling Ingredients (Rothsay)	23,416	4.0% INCREASE
Max Aicher North America	19,242	47.1% INCREASE
Maple Leaf Foods – Heritage Plant	16,243	10.3% DECREASE
ArcelorMittal Long Products	15,380	42.4% DECREASE
***Bimbo/ Canada Bread	12,110	2.3% DECREASE
NATT Tools Group Inc	11,103	7.7% INCREASE
Air Liquide Canada	10,548	10.1% DECREASE
Modelez Foods	10,078	0.9% INCREASE
Bartek Ingredients – Plant #1	8,694	27% DECREASE
BIOX Canada Limited	3,049	76% DECREASE
GFL Stoney Creek Landfill	1,394	97% DECREASE

^{*}For reference, 1 tCO2e represents the greenhouse gases emitted from driving an average internal combustion engine vehicle 2,500 miles or 4,023 kms.

^{**}Bartek Ingredients Plant #2 started reporting to GHGRP in 2019 – increase is since 2019.

^{***}Bimbo/Canada Bread plant opened in 2011 and started reporting to GHGRP in 2020, decrease reported is since 2020.

^{****} Total emissions stated here are different than total industrial emissions stated on page 16 due to methodology.

Low-Carbon Transformation #1: Innovating Our Industry

The City's Office of Climate Change Initiatives will continue to track annual GHG emission levels from facilities required to report to the federal Greenhouse Gas Reporting Program. In addition, the

Office is requesting information from large emitters regarding current or emerging efforts to develop plans for achieving net zero on or before 2050 at their local industrial operations. This information will be used to inform the collaborative efforts emerging through the Hamilton Regional Decarbonization Hub to support and, ideally, accelerate industrial decarbonization in our community.

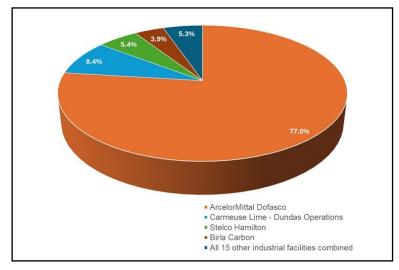


Figure 6.0 Facility Contributions GHGRP Reporting, 2022

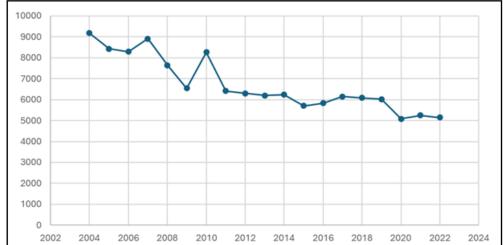


Figure 7.0 Hamilton Facilities Reporting to GHGRP 2004-2022 (kt CO₂e)

Additional Large Emitters in Hamilton

Although not classified as industrial, there are four (4) additional large emitters in Hamilton that report to the federal Greenhouse Gas Reporting Program.

Table 5.0 Non-Industrial Large Emitters Hamilton, 2022

Facility	2022 Emissions (tCO ₂ e)	GHG Emissions Trend 2017 - 2022
McMaster University	41,975	79.5% INCREASE
Woodward Ave Sewage Treatment Plant	25,687	34.8% INCREASE
Glanbrook Municipal Landfill Site	16,169	44.7% DECREASE
Juravinski Hospital Co-Generation Plant	11,293	42.5% DECREASE

Low-Carbon Transformation #2: Transforming Our Buildings

GREEN BUILDING STANDARDS



City-wide Green Building Standards are being created to guide new private development in a manner that considers principles of environmental, social and economic sustainability. Features proposed in Hamilton's Green Building

Standards include enhanced energy efficiency, on-site greening, electric vehicle charging infrastructure, bike parking, and bird friendly building design. The draft Green Building Standard will be brought forward in Q4 2024, followed by the development of a detailed implementation strategy, including incentives, in 2025.



Focus on Smart Buildings — In 2024, HCE and the City of Hamilton (Public Works) initiated a collaborative pilot project intended to install state-of-the-art automated control systems for heating, cooling and electricity in two signature buildings owned by the municipality. The goal is to compare

before and after performance data to determine the viability of incorporating smart building technologies into additional city facilities community wide.

Experience shows that optimization through digitization can improve a building's energy efficiency by between 10-20 percent and reduce the cost of building envelope upgrades. Equally important, affordable, smart building automation systems designed to communicate across multiple networks have become increasingly available to communities on the path to net zero. These systems enable buildings to act as distributed energy resources and virtual power plants in a dynamic, two-way power grid.

Results of the pilot are expected in late 2025 and will be shared with the OCCI, Hamilton City Council, and the community at large.

Contact Ryan Rogers, Vice President, Corporate Development, Hamilton Community Enterprises at ryan.rogers@hce.net to learn more.



Source: Electrical Contractor Magazine

Low-Carbon Transformation #2: Transforming Our Buildings

Community Spotlight—LiUNA and Fengate Asset Management



An exciting green development project is in the works at 500 Upper Wellington Street. The Laborers' International Union of North America (LiUNA) and Fengate Asset Management (Fengate) are the project leads of this six-story rental building, in partnership with The Hi-Rise Group (development manager) and Ingenuity (construction manager).

"The building will deliver long-term sustainable value for its occupants," said Victoria Mancinelli, LiUNA's Director of Public Relations, Marketing and Strategic Partnerships, pointing to the low carbon technology that is incorporated throughout the building's 261 residential suites and over 6,000 square feet of commercial space. Technology includes:

- ⇒ In-suite energy recovery ventilators (ERVs),
- ⇒ Heat recovery systems (HRS); and
- ⇒ A geothermal system comprising 94 deep geothermal wells that each reach about 600 feet.

"In combination, a total energy saving of 42.4% compared to the National Energy Code of Canada for Buildings 2017 standards is anticipated," Mancinelli said.

Low-Carbon Transformation #3: Changing How We Move

Active and Sustainable Mobility

The City of Hamilton's Transportation Planning and Parking Division, Planning and Economic Development is supporting Hamilton's shift to more sustainable travel options.

SMART COMMUTE HAMILTON is a Greater Toronto Hamilton Area (GTHA) program that helps individuals and organizations travel efficiently and sustainably. Hamilton's shared Micro-mobility Program comprises two complementary programs:

Hamilton Bike Share Initiative (HBSI)



2023 STATS:

- 900 bikes available
- 245,364 trips were taken
- 567,479 km of total travel

Shared Commercial E-Scooter Pilot Program



2023 STATS:

- 450 e-scooters available
- 119,283 trips were taken
- 269.614 km of total travel

City Council approved additional funding from the Climate Change Reserve to pilot 100 e-bikes as part of Hamilton Bike Share. E-bikes are currently being procured and delivery is expected in fall 2024

Equity-Based Programming

Throughout the 2023 e-scooter season, Bird Canada, the private operator of the e-scooter system offered subsidized rates for users starting and ending their trips in identified priority zones in geographic areas of the city where it is recognized that there is a need to consider cost and accessibility to shared micromobility systems. There was a total of 2,462 trips that started or ended in these priority neighbourhoods. Bird increased promotion of the discount in October 2023 and saw a large increase in rides as a result. Bird's trip data also showed a steady increase in monthly trips that started/stopped in priority neighbourhood zones.

HBSI's Everyone Rides Initiative continues to grow with an increase in funding from various sources. One of the fees included in the Bird contract is the 'E-Scooter Equity Fee' which goes directly into funding ride passes for members of the Everyone Rides Initiative and has enabled Hamilton Bike Share to increase the number of subsidized passes they can offer community members from 100 to 300 passes.

Low-Carbon Transformation #3: Changing How We Move

Electric Vehicles on the Rise in Hamilton

The City of Hamilton has committed to reducing corporate GHG emissions and achieving net zero emissions by 2050. A big part of the City's corporate emissions are from its fleet of vehicles.

The City is tackling this, in part, through its <u>Green</u> <u>Fleet Strategy</u> with a target to transition 89 internal combustion vehicles to battery all-electric by 2024.

Fleet has surpassed this target with the latest order of **51 SUVs**, and **25 pickup trucks** anticipated to be in service by the end of Q4 2024.





Currently, the Building Division is in the process of acquiring 25 electric vehicles (EVs) of this total, with the goal of being fully electric by 2025 with 19 more. SUVs were also acquired this year by:

- Licensing & By-Law Services (10),
- Environmental Services (5),
- Water (4),
- Transportation (3),
- Transportation Planning and Parking (2),
- Engineering (1); and
- Waste Management (1).

Beyond EV replacement, Fleet is also investing in biodiesel options—with 10 CNG garbage trucks by the end of 2024—and other alternative fuel solutions such as EcoDiesel and Hydrogen. As well, 47 'Level 2' charging stations (slow-fill, over-night charging) and 2 'Level 3' charging stations (direct charge, fast-fill, that top up batteries faster) have been installed at 14 City facilities. Ongoing challenges exist however with necessary infrastructure

Year	Counts
2016	132
2017	287
2018	633
2019	929
2020	1,250
2021	N/A
2022	2.906

for charging and parking spaces—especially within the downtown core. These challenges will be further investigated as part of the City's emerging EV Strategy.

Community-wide Electric Vehicle Registrations in Hamilton

Publicly accessible data is now available on Electric Vehicle uptake rates across Ontario. Information is provided in Table 6.0 and links below:

- Clean Air Partnership's EV Proliferation by Municipality; and
- Ontario's Electric Vehicles by Forwards Sortation Area

Table 6.0 Ministry of Transportation EV Registrations in Hamilton 2016 - 2022

Low-Carbon Transformation #4: Revolutionizing Renewables

Solar-Powered Ambulances



Hamilton Paramedic Service (HPS) is reaching for the sun! Six months into a pilot project in partnership with the company ACETECH, HPS has three (3) of its sixty -two (62) ambulance fleet outfitted with solar panels. Since ambulances draw continual power to keep pharmaceuticals and medical diagnostic equipment within a temperature-controlled environment, as well as for patient comfort, these vehicles must be plugged in or running to maintain battery capacity. When inside a designated station, shoreline power plugs are provided for this purpose, but when outdoors, shoreline power is not available.

"Installing solar panels on vehicles enables the auxiliary batteries to continue to run on solar power rather than on fuel—saving fuel, improving efficiency and reducing greenhouse gas emissions from constantly idling vehicles," said Deputy Chief, Cliff Eggleton, who is leading this innovative initiative.

Other benefits from solar-powered ambulances include extended battery life and vehicle downtime, lower maintenance costs, and decreased noise and air pollution in hospital areas from non-idling ambulances

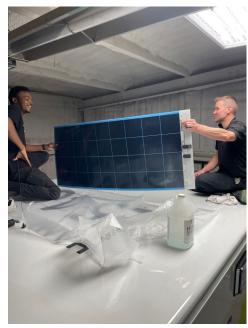
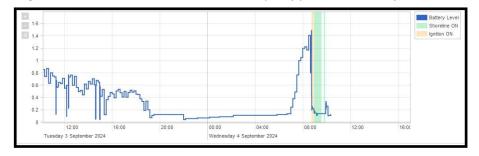


Figure 8.0 Paramedic Solar Power (Amp) Detailed Report



With over 307 daily responses to calls from the community and 83,965 transported to hospital in 2023 from across the City of Hamilton, utilizing technological advancement such as solar-powered ambulances is part of HPS's first 10-year Master Plan. Given the reality of our changing climate, the Master Plan is responding to the diverse and dynamic needs of people in Hamilton with the goal of establishing the groundwork towards transformative paramedic service.

Low-Carbon Transformation #4: Revolutionizing Renewables

Low-Carbon Building Heating Solutions

<u>Hamilton Community Enterprises</u> (HCE) — an award-winning, purpose-driven technology company owned by the City of Hamilton — is helping local residents, businesses and institutions benefit from low-carbon, higherfliciency building heating.

Through its energy division, HCE operates extensive thermal networks in downtown Hamilton and at McMaster Innovation Park. HCE's goal is to partner with the public, private and nonprofit sectors to modernize and expand these systems using clean energy sources, including waste heat harvested from heavy industry, data centres, and other sources.



To this end, HCE is leading the Energy Harvesting Study to determine the technical feasibility and commercial viability of a proposed thermal corridor that would heat buildings in neighbourhoods across lower city Hamilton using residual energy from manufacturers operating in Hamilton's Bayfront Industrial Area. This pathway to decarbonization is well established in the northern regions of Europe and is gaining strength throughout North America.



(Photo Courtesy of HCE)

The results of the two year study, due to be released in early 2025, confirm a positive business case for a thermal infrastructure project that has the potential to deliver low-carbon heating to more than 10 million square feet of building space and lower carbon emissions by roughly 80% compared to a business-as-usual scenario.

The next step is a Commercialization Phase set to begin in Q1 2025 that will focus on detailed engineering and cost estimates, customer acquisition, financing, ownership and governance, and other foundational elements. In addition to lowering local GHG emissions, this bold initiative, coined Canada's Thermal Corridor, would unlock other community benefits, including clean tech jobs, retention of local industry, relief from rising energy prices, and a pathway to effectively and affordably decarbonize existing buildings.

The OCCI looks forward to helping ensure this project continues to gain momentum as a key decarbonization strategy for our community.

2024 OCCI Annual Report—Gaps, Barriers, Challenges

With each Annual Update on the implementation of Hamilton's Climate Action Strategy (HCAS), attention must also be paid to gaps, barriers and challenges to effective progress with climate mitigation and adaptation efforts. The HCAS is comprehensive, which means that there is much work to be done by the corporation and the broader community to achieve net zero by 2050 or sooner.

Reflecting on progress made during 2023 has highlighted a number of gaps, barriers and challenges. A major barrier to more immediate action are the funding gaps that exist for the municipality as more work is done to map out pathways to net zero through corporate action. One example of this is the substantial list of renewable energy projects that are viable and ready to move forward as soon as there is a source of funding to enable this work to happen. More is being done to identify and pursue methods to fund this work, including focused efforts to bring in more funding from higher levels of government and other external funding sources, and continuing to grow the municipality's Corporate Energy Reserve (see CEEP Enabling Action (ii)).

Table 7.0 Ontario's Electricity Emission Factors 2017-2023¹

Year	*Annual Average Emissions Factor
2023	67
2022	51
2021	44
2020	36
2019	29
2018	29
2017	18

Another challenging problem is the increasing carbon intensity of our provincial electricity grid. Each year the grid is getting 'dirtier' with the growing use of methane gas to generate electricity. This is cancelling out progress made by Ontario communities to reduce GHG emissions. For 2023, the City of Hamilton's corporate emissions increased largely because of the increase in the annual average emissions factor from 51 in 2022 to 67 in 2023.

Since 2017, the province has seen a steady increase in the 'annual average emissions factor'.

Decarbonization of Ontario's grid is key to realizing net zero but the trends, as shown by emission factors, are taking the province in the wrong direction by increasing emissions and air pollution.

Finally, status updates and data shared regarding progress with implementation of mitigation and adaptation actions set out in Hamilton's Climate Action Strategy, also show that there continue to be gaps for some actions where no efforts have been initiated to date or actions have not yet moved from planning to implementation. This includes action that needs to be taken to address food waste as a climate challenge, action that needs to be taken to engage and support the agricultural community around building climate resilience, and initiating actions identified in the Strategy to encourage and support business and industry to decarbonize.

¹Source – The Atmospheric Fund – 'Ontario Electricity Emissions Factors & Guidelines – June 2024 Edition' https://taf.ca/custom/uploads/2024/06/TAF-Ontario-Emissions-Factors-2024.pdf

Low-Carbon Transformation #5: Growing Green

Getting to Our 50,000 Tree Planting Target

Throughout 2023 the City's Forestry and Horticulture Section in Public Works has ramped up their efforts to get trees into the ground through a variety of activities such as:

- Increasing annual planting goal from 12,000 to 20,000 trees per year starting in 2024;
- Surpassing 2023 Free Tree Giveaway goal of 3,000 to 3,927 trees; and
- Community Tree Planting Events increasing plantings to 3,536 trees in 2023.



As mentioned in the OCCI Priority Area 'Urban Greening,' the 50,000 tree planting target is a community-wide target and Staff are currently investigating processes and partnerships to scale up community-wide tree planting and improve tracking going into 2024. Tree planting is a climate action many residents of Hamilton can get involved with.

Data collection was completed to measure annual tree planting activity undertaken by the City of Hamilton Forestry Section as well as all other external organizations that regularly engage in tree planting (i.e. conservation authorities, Royal Botanical Gardens, environmental not-for-profits). This measurement will provide a baseline to compare progress on city-wide tree planting efforts in subsequent years.



CLIMATE ACTION HIGHLIGHT – Training the Workforce for Climate Action

<u>The Canadian Colleges for a Resilient Recovery</u> (C2R2) is a coalition of 15 colleges, *cégeps*, and polytechnics from across Canada with the proven ability to make an immediate impact and lead in training deployment and applied research that supports energy security and sustainability



Mohawk College is serving as the Coordinating Secretariat for the coalition, with postsecondary institutional partners in almost every province and territory in Canada. The curriculum inventory, reporting processes, financial structure and recent experience allows the opportunity for immediate impact and reduced administrative work.

Launched in 2023 **QUICKTRAIN Canada** is a skills training program that allows Canadian workers to upskill in weeks, not years. In its first year the program saw upskilling of over 10,000 learners across high-demand sectors.

As a delivering partner Mohawk College offered courses and provided training related to trades and building retrofits, electric vehicles, advanced renewable energy, carbon capture, business preparation for the low-carbon economy, as well as others.

Table 8.0 Mohawk College's Quick Train Enrolment 2023—2024

Postsecondary Institution	Course Offerings	Enrolment 2023	Early En- rolment 2024
Mohawk College	Building Information Modelling	81	52
Mohawk College	Understanding Climate Change & Sustainability	0	309
Mohawk College	Introduction to Green Building Technologies	32	180
Mohawk College	Electric and Hybrid Service Training	44	45
Mohawk College	Entry-level technical applications in hydrogen for process occupations	51	6
Mohawk College	Gray2Green Upcycling and Waste Management	58	14
Mohawk College	Heat Pump Training for Technicians	10	20
Mohawk College	Hydrogen awareness and understanding for process related occupations	0	90
Mohawk College	Operations Upskilling	180	0
Mohawk College	Skilled Trades Upskilling Microcredential	180	30

Total Quick Train enrollment 636

6

Resilient Theme #1: Built Environment

Stormwater Utility Fee and Incentive Program

The City of Hamilton is currently undertaking a <u>Stormwater Funding Review</u> to implement a more equitable stormwater funding model. The City currently spends approximately \$56 million on its stormwater program. Currently most stormwater funding comes from the City's water and wastewater utility revenues.

Throughout 2023 and 2024 City Staff presented and Council approved both:

<u>FCS22043(b)</u> Stormwater Funding Review Report – which proposed the Stormwater Rate Structure based on the Single-Family Unit Stormwater fee structure which best aligns with the previously approved guiding principles of fairness and equity, climate resilient and environmentally sustainable, affordable and financially sustainable, justifiable, and simple to understand and manage; and

<u>FCS22043(c)</u> Stormwater Fee Financial Incentive Program – with input from community engagement between October 31, 2023 to January 8, 2024 this unique 'made in Hamilton' incentive program includes a multi-stream credit program for industrial, commercial, institutional, agricultural, and multi-residential properties with greater than six units:

Stormwater Management Infrastructure Credit

Property owners can get up to 50% credit if they reduce stormwater runoff quantity or improve its quality.



Hamilton Harbour Discharge Credit

Property using private pipes to send stormwater directly to Lake Ontario can get up to a 90% credit.



Green Space Credit

Farms, parks, and similar properties without a direct connection to the City's stormwater system can qualify if their stormwater runoff goes to large green spaces. The amount of credit will be based on the ratio of hard surfaces to green space.



Single-family residential and multi-residential properties (six or fewer units), will have access to a program that provides a variety of discounts, subsidies and advisory services for implementing stormwater management measures.

Link to the City's website: https://www.hamilton.ca/home-neighbourhood/house-home/home-water-services/water-rates/stormwater-funding-review

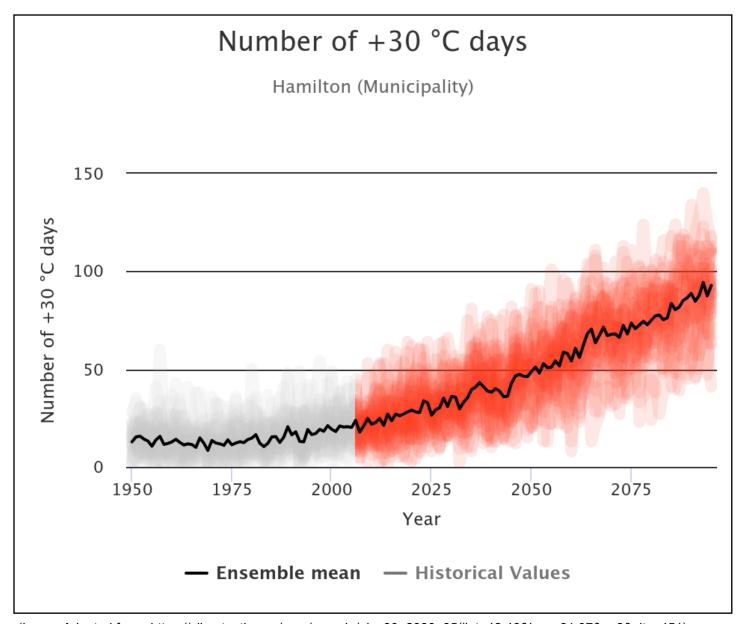
Resilient Theme #2: People and Health

Extreme Heat and Climate Action

Hotter weather is in Hamilton's future. Climate experts warn that we can expect more frequent, longer lasting and more intense heat events in Hamilton. While extreme heat events can be harmful to all of us, some community members are more at-risk for heat-related illness.

The Intact Centre at the University of Waterloo identified Hamilton as one of the top 10 "hottest" metropolitan areas in Canada for the future period of 2051-2080. Figure 9.0 below is from the Prairie Climate Centre which produced the Climate Atlas with projected number of days above 30 degrees Celsius in Hamilton for the period from now to 2080.

Figure 9.0 Climate Atlas Map: Projected Number of Days in Hamilton, ON



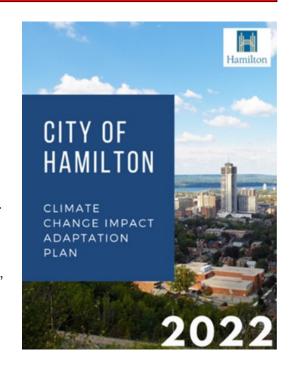
(Image Adapted from: https://climateatlas.ca/map/canada/plus30_2030_85#lat=42.46&lng=-81.07&z=8&city=451)

Resilient Theme #2: People and Health

Community Heat Response Strategy—Extreme Heat and Climate Action

Actions in Hamilton's Climate Change Impact Adaptation Plan have resulted in a Community Heat Response Strategy that is enhancing City programming, including supporting community efforts to protect vulnerable from the risks of extreme heat.

An Extreme Heat Working Group, coordinated by Shelley Rogers, Project Manager, Public Health Services developed the Strategy which was approved by Public Health Committee and Council. Rogers attributes the Strategy's success to this group, and its expanding diversity—with partners ranging from local organizations serving frontline communities, to City staff and academics.





Over the summer, 300 cool kits were provided to the Housing Services Team to distribute to unhoused people, with another 500 being distributed to people who are housed through members of the Extreme Heat Working Group.

"The cooling neckties and thermometers were very popular, as were sunscreen and sunglasses and hats," Rogers reported.

From the Strategy, other actions emerged this summer including the distribution of 2,000 free bus tickets and subsidy dollars for air conditioners for at-risk residents with immediate medical issues. Both these efforts were funded through the Climate Change Reserve. An education campaign went out to landlords, through a mail out and a page on the city's website, and the exploration of the potential for an Adequate Temperature Bylaw was started by Municipal Law Enforcement. As well, more access to water and cool indoor spaces was expanded, offering further options for relief from the heat.

"It's about continuous quality improvement, as we move forward and new information becomes available," said Dr. Sally Radisic, Health Hazard Specialist with Healthy and Safe Communities. "This year is really just the start of many more years of being able to serve our community and meet them where their needs are."

Resilient Theme #3: Natural Environment, Agriculture and Water

Action 7.1 calls for continued efforts to enhance the management and restoration of existing natural areas and seek opportunities to dedicate land and natural areas for conservation.

The City's Environmental Services Division has three multi-year projects underway to naturalize areas in Joe Sams, Courtcliffe and Flamborough Centre Parks, with additional naturalization efforts planned throughout 2024. These projects are removing invasive plants and restoring wetlands, pit and mound swamps, and bringing more native trees and plants to these spaces. In 2023 over 2.53 hectares of habitat was created or restored across these three sites, including planting over 6,000 native trees, shrubs and perennials, and the enhancement of over 500 metres of in-stream and riparian habitat.

A Mini Forest at Johnson Tew Park

In 2023, the Forestry section, with the help of neighbourhood volunteers, planted a mini forest at Johnson Tew Park in Ward 13, bringing the City's total number of these types of urban forests to six (the first of its kind was planted in 2021). Also called Miyawaki forests after the Japanese botanist Akira Miyawaki who is credited for the concept, these densely planted forests of very small trees are no bigger than the size of a tennis court.

"The idea is to encourage competition, forcing the trees to grow quicker because of the spacing," said Robyn Pollard, Manager with Forestry and Horticulture, Public Works. "The method works well in damaged urban areas that require soil remediation but would not support a traditional forest."

This innovative way of increasing tree canopy is producing remarkable results. Pollard points to the Windemere Park mini forest that was planted in 2021. "What we've seen at Windermere is within a three-year period, small saplings planted at a height of 8 to 12 inches, are in some cases 7 to 10 feet."

While plantings like this are city-led, they are completed by the community. Kristen Bill, Project Manager of Forest Health in Forestry works with the community to pick locations, plan species, and set up planting events. In many cases, groups like <u>Green Venture</u> that have environmental stewardship initiatives help with gathering volunteers to plant and do the aftercare and monitoring.

The Forestry team is preparing to add one new mini forest this fall at Albion Falls. The project is a collaboration between Niwasa Kendaaswin Teg, Xperience Annex, Hamilton Police Services, Forestry, Healthy and Safe Communities, and the Indigenous Relation Team.

(Source: Photo Adapted from: https://greenventure.ca/canopy-for-community/mini-forest-in-hamilton-project/)

Resilient Theme #4: Energy and Economy

Action 10.1 calls for guidance to be provided to local businesses on how to maintain business continuity (e.g. supply chain) during extreme weather.

The City of Hamilton's Economic Development Division has a long history of offering programs designed to help local businesses and industries get established and continue to thrive. These include initiatives focused on supporting sustainability measures, such as:

- The award-winning ERASE (Environmental Remediation and Site Enhancement) program that provides support to proponents for brownfield site remediation and redevelopment; and
- **'LEEDing the Way'**, a program that offers grants to proponents interested in implementing measures to get their buildings certified through the international LEED (Leadership in Energy and Environmental Design) certification program. The program works through grants provided by the City that support 50/50 cost sharing of incremental construction costs (to an



established maximum), consultant, energy modelling and certification fees with the applicant.

While several businesses have benefitted from the programs, the 'LEEDing the Way' initiative has had a low uptake and prompted the City's Economic Development Division to initiate a formal public review intended to update the program to make it more attractive to a broader audience of private sector players moving forward.

This update will facilitate the City's ability to encourage private sector players to implement climate resilient measures at their Hamilton facilities. This, in turn, will facilitate the City's ability to implement actions found within Hamilton's Climate Action Strategy.

Visit <u>engagehamilton.ca/leedcipreview</u> for more details on the comprehensive review and how you can get involved.



Conclusion

Hamilton's Climate Action Strategy (HCAS) is our community's pathway to a net zero future by 2050 or sooner. The climate emergency is real, and our community is already experiencing impacts from increasing summer heat to more intense rainfall events capable of causing flooding and erosion. This second Annual Update from the OCCI has highlighted the progress made in 2023 by the City of Hamilton and the broader community with climate mitigation and adaptation efforts.

There were stories of progress to share for 2023 under every transformation category of the climate mitigation focused Community Energy and Emissions Plan, and under every theme in the Climate Change Impact Adaptation Plan. But there are also challenges and barriers to moving forward with the changes that needs to happen to transition to a post carbon future. Determining how to finance climate actions is often cited as a major barrier, even though investing more up front to make these transitions happen yields many benefits, including financial savings, over the long term.

Looking forward to 2025 and beyond, the OCCI will continue to enhance the methods used for publicly tracking and reporting on progress with City and community efforts to implement Hamilton's Climate Action Strategy. In addition, the OCCI will continue to advance work falling under its priority focus areas including:

- Continuing with the development and implementation of a Carbon Budgeting and Accounting Framework for the City of Hamilton.
- Ensuring the strategic allocation of funding from the City's Climate Change Reserve to leverage effective climate mitigation and adaptation efforts.
- Supporting homeowners participating in the Better Homes Hamilton home energy retrofit pilot program who are now beginning to undertake deep home energy retrofits in their homes.
- Working with community members to co-design a Climate Justice Framework to guide climate actions undertaken by the municipality.
- Continuing with work to develop and implement a Net Zero Energy Performance standard for all new municipal facilities, and enabling the municipality to lead by example
- Exploring ways to accelerate the implementation of Hamilton's Climate Action Strategy to front end greenhouse gas emission reductions and, ideally, to realize net zero well before 2050.

Hamilton's Climate Action Strategy is a community-wide plan; everyone needs to do what they can to help our community to mitigate greenhouse gas emissions and to adapt to the impacts we are already experiencing. Our future depends on it!



APPENDIX "B" HAMILTON'S CLIMATE ACTION STRATEGY IMPLEMENTATION UPDATE 2024

The following table represents the most current update as of September 2024 on the actions found within Hamilton's Climate Action Strategy. The table below is broken out into actions found within the two plans that constitute the Strategy:

- ReCharge Hamilton Our Community Energy and Emissions Plan; and
- Hamilton's Climate Change Impact Adaptation Plan.

ReCharge Hamilton – Our Community Energy and Emissions Plan Update on 2023 Calendar Year Progress

Enabling Actions within Hamilton's Climate Action Strategy		
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
(Enabling Action i) Investigate and Design a Carbon Accounting Framework Office of Climate Change Initiatives, Planning & Economic Development	IN PROGRESS Multi-year Project Charter complete and approved internally. Procurement Policy 11 approved by PED General Manager.	Technical consultant has been retained and work has started. Community and Corporate 'fairshare' carbon budget complete with beta-test of GHG tools being piloted through 2025 budget planning.
(Enabling Action ii) Corporate Energy Reserve (revolving fund expansion) Corporate Facilities & Energy Management, Public Works	 Committed Funds by type for 2023: Renewable: Construction \$370K, Payback \$200K, Transfer Back \$2.0M Energy/Cost Saving: Payback \$1.8M *Note - Payback and Transfer back are funds that are committed but not actively in construction. 	
(Enabling Action iii) Municipal and Community Green Bond Assessment Financial Planning, Administration & Policy, Corporate Services	Initial investigation on framework development and a draft work plan were completed in 2023. Project put on hold in 2024 to accommodate other priorities. Framework development deemed non-urgent due to high-interest rates and debt issuance not being planned for 2024.	Project on hold during 2024 and will be launched in 2025.

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Enabling Actions within Hamilton's Climate Action Strategy		
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
	The project is currently planned to launch in 2025.	
(Enabling Action iv) Climate Change Reserve Office of Climate Change Initiatives, Planning & Economic Development	2023 allocation of funding for city-led initiatives successfully completed, utilizing a basic internal application process.	2024 allocation of \$2.5 million in CCR funding completed utilizing a refined internal application template for city-led initiatives that was developed with the input and endorsement of the internal Climate Change Initiatives Steering Committee. As of September 2024, a list of recommended projects must still
		be presented to Council for final approval.

Low-Carbon Transformation #1: Innovating Our Industry		
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable) 2023 Progress Update and Supporting Quantitative/Qualitative Information		2024 Accomplishments & Outlook
CEEP Action 1.0:	In May 2023 City Council approved \$240K over	Work has continued in 2024 to
Establish a net-zero Industrial	4 years to support the creation of a 'first-of-its-	secure external funding from
Working Group	kind' Hamilton Regional Decarbonization Hub.	entities including FedDev and the Province of Ontario to fund
2022 Onward	Total 4-year budget estimated for the initiative is \$3.2 M with the additional required funding	the multi-year Hub initiative.
Joint collaboration between:	being sought from federal government and	In the interim, opportunities are
City Manager's Office – Director	private stakeholders	being explored to engage local
of Digital and Innovation;		business and industry in
Office of Climate Change	INDICATOR - Number of facilities 50,000ft2	information updates and
Initiative and Economic	or larger facilities in Hamilton that are	learning opportunities around

Low-Carbon Transformation #1: Innovating Our Industry		
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
Development Division, Planning and Economic Development.	compliant with Ontario's Energy & Water Reporting Benchmark initiative: Total buildings reporting in 2021 = 70 Total buildings reporting in 2022 = 126 *NB - Reporting threshold changed from 100,000 ft2 to 50,000 ft2 for 2022 reporting year, contributing to the increase in facilities filing reports. Manufacturing, heavy industrial, and agricultural buildings are not included. INDICATOR - Total number of local industries on federal Greenhouse Gas Reporting Program (GHGRP) Large Emitter list: Tracking of greenhouse gas emission trends for large emitters has been completed for the 5- year period 2017 - 2022. A total of 19 Hamilton industries are on the 'large emitters' list as they exceed the 10 kt CO2e threshold reporting requirement set out by the GHGRP.	decarbonizing the private sector.
CEEP Action 1a: Development and deployment of a zero-emissions industry program 2022-2024 Office of Climate Change	INDICATOR - Number of industrial partners with corporate sustainability plans that are harmonized with the community-wide netzero target	Work has been initiated in 2024 to gather information regarding status of climate planning for local large industrial emitters reporting to the federal Greenhouse Gas Reporting Program.

Low-Carbon Transformation #1: Innovating Our Industry		
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
Initiatives, Planning & Economic Development (coordinating role)		
CEEP Action 2.0: Establish a cleantech accelerator 2022-2026 Joint collaboration between: City Manager's Office – Director of Digital and Innovation; Office of Climate Change Initiative and Economic Development Division, Planning and Economic Development. Development	 INDICATOR – City support for/influence over the establishment of cleantech businesses/industries in Hamilton. Work is underway to identify companies /partners who are focused on Decarbonization Technologies - a key subsector of strength identified in the City's Economic Development Division Manufacturing Strategy Via City's Goods Movement Strategy work is being done to highlight new technology, pilot projects and progress towards a low-carbon economy; support efforts to evaluate Hamilton's energy supply and relative potential for fleet charging needs and recommendations for enhancement. 	
industrial energy management training programs (incl. subsidized opportunities for marginalized populations) 2022-onwards Office of Climate Change Initiatives (Coordinating Role),	 INDICATOR - Number of trained/retrained industrial energy management professionals (including numbers from equity-owed populations if available) Canadian Colleges for a Resilient Recovery (C2R2) partners with 15 institutions across Canada – including Hamilton's Mohawk College - to offer online synchronous and asynchronous 'rapid cycle training'. 	210 learners have enrolled for these course offerings Canada- wide in 2024.

Low-Carbon Transformation #1: Innovating Our Industry		
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
Planning & Economic Development	 All training through C2R2 or Mohawk College was offered at no cost through the ESDC SWSP Quick Train program. C2R2 offered six (6) courses related to industrial energy management, with a total enrolment of 213 in 2023 across Canada. It is unclear how many Hamilton residents participated. 	
	INDICATOR – Number of bursaries/ subsidized training opportunities provided. C2R2 reported that for ALL micro-credential offerings across Canada 57% of learners self- identified as a member of an equity-deserving group.	

Low-Carbon Transformation #2: Transforming Our Buildings		
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
CEEP Action 4.0 Develop and	INDICATOR – Development & Integration of	Green Building Standards
integrate City-wide new green	City-wide Green Development Standards	implementation strategy will be
development standards	Green Building Standards final report will	brought forward for approval in
2022-2023	be brought forward to Council in Q4 2024, followed by the development of a detailed implementation strategy	2025.
Planning Division, Building	including incentives which will be brought	
Division, Planning & Economic	forward to Council in 2025	
Development		

Low-Carbon Transformation #2: Transforming Our Buildings		
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
	 INDICATOR - Energy and emissions intensity of new buildings (per sq/ft or m2) The Ontario Building Code is Provincial legislation, with minimum prescriptive requirements which guide building construction. The Building Division does not document, or report on energy and emission intensity of new buildings. This is not data that is collected during building permit application for review purposes, nor can the Division require that it be submitted 	
CEEP Action 5.0: Install solar PV on new and existing buildings.	INDICATOR – Megawatts of solar photovoltaics (PV) installed on new and existing buildings.	Future proposed INDICATOR - ESA Electrical Permits for Solar:
2022-onwards	 The Building Division reviews Solar PV installations through a lens of structural and installation requirements. The 	The Electrical Safety Authority has been recommended by the Building Division as a better
Building Division, Planning and Economic Development; Corporate Facilities and Energy Management, Public Works	Division does not review or inspect electrical components or tie-ins to the grid, nor does it track MW of specific equipment. (Electrical is regulated by ESA – see below)	source of data for electrical permits related to specific project types. Applicants seeking solar permits are advised by the Building Division that an ESA permit is or may be
	Building Division data regarding the number of solar permits issued for 2019-2024 is provided below. No data is available through City	required. Hamilton Water has initiated a

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Low-Carbon Transformation #2: Transforming Our Buildings					
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information				
	regarding MW energy/permit issued.		regarding MW energy/permit issued.		Solar Renewable Energy and Battery Energy Storage System
	Year	# Permits Issued	feasibility study for its site.		
	2019	9			
	2020	12	The City's Office of Energy		
	2021	34	Initiatives is working on		
	2022	52	technical and financial business		
	2023	72	cases for the incorporation of a		
	2024	13	solar system on the roof of the		
	currently has 1 properties and is working to alternative partner implementation of time, multiple multiple are ON HOLD during. Project: Harry Holsolar project (locales)	facilities (including ar). of Energy Initiatives roject ready for tender	new transit storage facility for the generation of an estimated 2 MW in generation capacity. Other future projects identified as a part of the Office of Energy Initiatives Net Zero study include: Solar PV system for entire building: Fire Station #5 complex (150 kw system), Morgan Firestone Arena (265 kw system), Traffic Operations (375kw system), Mountain Transit Centre (370kw system), 330 Wentworth (1000kw system), Dundas Town Hall (20kw system), Bennetto Recreation (20kw system), Stoney Creek Recreation (20kw		

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Low-Ca	Low-Carbon Transformation #2: Transforming Our Buildings		
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook	
		system), Kanetskare Recreation (60kw system)	
		Public Pool Heating Solar systems: Bennetto – preheat water 20kw system Bennetto – heating pool size unknown Stoney Creek -preheat water 20kw Stoney Creek – heating pool size unknown Westmount – heating pool size unknown	
CEEP Action 6.0: Design and plan for a mass deep energy retrofit program (may include retrofit delivery centre) 2022-2023 Office of Climate Change Initiatives, Planning and Economic Development	The Better Homes Hamilton Pilot Program approved by GIC in May 2023 with \$1.0M in approved loans and \$275K in fixed costs launched in December 2023. The application intake closed on February 1, 2024, with 150+applications received. Future proposed INDICATORS to assess pilot impact include: • Energy use and emissions reductions achieved through program.	Following the initial screening of applications for program eligibility, a rigorous evaluation was applied to remaining applications to ensure the objectives of the pilot are achieved. The 50 successful applicants have now been notified to proceed with getting contractor quotes.	

Low-Carbon Transformation #2: Transforming Our Buildings		
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
	 Number of homes participating within neighbourhoods identified as having high energy poverty burden. Number of building retrofits (number of properties, by type etc.) completed through City program. 	Moving forward the 50-home pilot will be used to inform future efforts to scale up the Better Homes Hamilton program.
CEEP Action 6a: Training and retraining programs 2022-onwards Office of Climate Change Initiatives (co-ordinating role), Planning and Economic Development	 INDICATOR - Tracking skilled graduates and workforce trends. The Canadian Colleges for a Resilient Recovery (C2R2) offered a total of 13 micro-credential courses related to trades and building retrofits. As a partner in C2R2 Mohawk College offered 3 of the 13 micro-credential courses and saw a total of 123 learners enrolled in 2023. INDICATOR - Number of low-income, marginalized/ equity-owed applicants participating in these training programs. C2R2 through voluntary self-identification reported that 57% of its students across Canada identified as being a member of an equity-deserving group. 	As of August 2024, Mohawk College reported that a total of 252 learners were enrolled through their micro-credential offerings related to trades and building retrofits.
CEEP Action 6b: Launch a small-scale neighbourhood deep energy and emissions retrofit	The Better Homes Hamilton Pilot Project (described above in Action 6.0) is targeting 50 low rise residential properties. However, this	Undertake assessment of feasibility of a small-scale residential neighbourhood deep

Low-Carbon Transformation #2: Transforming Our Buildings			
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook	
project in the residential sector 2022-2023 Office of Climate Change Initiatives, Planning and Economic Development	type of geographically focused neighbourhood approach will be further explored during the pilot phase and the feasibility of this approach reported to Council after the two-year Better Homes Hamilton pilot phase is completed. This approach is modelled after the Energiesprong method developed and implemented in the Netherlands. The federal government is supporting the piloting of this approach in Canada via the 'Greener Neighbourhoods Pilot Program' underway through Natural Resources Canada.	energy and emissions retrofit project (geographically focused on a specific neighbourhood, in contrast to BHH Program which includes participants from every ward in the municipality).	
CEEP Action 6c: Finance and deliver mass deep energy retrofit program for the residential sector, scaling up to city-wide program considering development of a commercial retrofit program 2023-onwards Office of Climate Change Initiatives, Planning and Economic Development	Future proposed INDICATORS to assess a mass deep energy building retrofit program include: • Number of building retrofits completed. • Trends in energy use and emissions intensity over subsequent years by sector (residential, institutional, commercial, industrial) • Number of homes participating within neighbourhoods identified as having high energy burden.	Feasibility for expanding Better Homes Hamilton (as described above in Action 6.0 and 6b) will be considered through the pilot phase with recommendations to Council following completion of the 2-year pilot project.	

Low-Carbon Transformation #3: Changing How We Move			
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook	
CEEP Action 7.0: Expand and connect active transportation networks 2022-onwards Transportation Operations, Public Works	 INDICATOR - Kilometers of total cycling infrastructure and breakdown of type (new, upgraded, separated, multi-use trail) 10.4 lane km of bike lanes were added in 2023. Total of 11 cycling infrastructure projects were delivered in 2023 via a joint effort between Transportation Planning and Parking (PED), and Transportation Division, and Engineering Services Division in Public Works. \$1.393 M was invested in cycling infrastructure in 2023. *NOTE - City Council approved acceleration of the Cycling Master Plan in 2023. Future potential INDICATORS for tracking progress with the expansion and connectivity of Hamilton's active transportation networks include: Kilometers of connected active transportation networks. Data regarding vulnerable roadway users - pedestrians, cyclists, high collision locations/intersections (Annual collision report - via Vision Zero initiative - provides this 		

Low-Carbon Transformation #3: Changing How We Move			
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook	
	information)		
CEEP Action 8.0: Decarbonize the bus fleet 2022-onwards Transit Services, Public Works	 INDICATOR – Track percentage/ number of decarbonized vs. fossil-fuel powered buses (including 'fuel type' breakdown - diesel, CNG, RNG, etc) By the end of 2023, 77.4% of HSR fleet was fuelled by compressed natural gas (CNG), an increase from 64% in 2023. The goal is to fully decommission all diesel buses by 2026. INDICATOR – Track number of decarbonized buses in operation. In 2023, there was one decarbonized bus in operation – an articulated bus powered by renewable natural gas (RNG). INDICATOR - Completion of technical analysis of bus charging and/or fuelling infrastructure required for fleet 	It is expected that diesel buses will be fully decommissioned by 2026. The current challenge is to replace natural gas with renewable natural gas and/or electric buses to effectively decarbonize the public transit fleet. This will become critically important as transit service frequency increases, new routes are added, and more buses are needed for the system. The HSR reported that, starting in 2024, it eliminated its initiative to fuel one of the HSR fleet's	
	decarbonization.No update available for 2023	articulated bus with RNG. The bus was promoted as Ontario's first 'carbon negative bus' when the initiative was launched in 2021.	
CEEP Action 9.0: Plan for and develop expanded urban and rural transit service and e-	INDICATOR – Track user statistics as e-mobility services are established.	2024 brought expansions for both the Hamilton Bike Share System and Bird e-scooter	

Low-Carbon Transformation #3: Changing How We Move		
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
mobility services 2022-onwards Transit Services, Public Works; Transportation Planning and Parking, Planning and Economic Development	 For April 3 – November 20, 2023 (first year of shared e-scooter system in Hamilton) 450 e-scooters were available within the same service area as the bike share system, plus an additional area east to Kenilworth Avenue. 119,283 trips were taken for a total of 269,614km travelled. During the same period the bike share system had 900 bikes operating in the service area and saw 245,364 trips totalling 567,479km travelled. INDICATOR - Track e-Scooter use in geographic areas identified as priority neighbourhoods where the private operator provides subsidized rates to users to 	system with new McMaster University financial agreements providing student access to both systems.
	 facilitate access/ support mobility justice. In 2023 there were a total of 2,462 trips that started or ended in these geographic zones. Bird increased promotion of the discount in October 2023 and saw a large increase in rides as a result. INDICATOR – Track e-scooter and bikeshare trips per capita in priority neighbourhoods Hamilton Bike Share's 'Everyone Rides Initiative' (ERI) was able to offer 200 	

Low-Carbon Transformation #3: Changing How We Move		
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
	additional subsidized ERI passes in 2023 (vs 100 in 2022) through an 'E-Scooter Equity Fee' which is part of the Bird Canada e-scooter contract. • Bird's e-scooter trip data also showed a steady increase in monthly trips that started/stopped in priority zones in 2023. INDICATOR - Track transit ridership and modal split trends over time • HSR ridership experienced a substantial decline (47%) during the height of the pandemic, with levels decreasing from 21.6 million to 11.7 million riders. • In 2023, ridership levels increased to 19.1 million - an 88% return of ridership levels. • In March 2024, HSR reported that, for February 2024, ridership hit 102.1%, surpassing 2019 pre-pandemic levels. INDICATOR - HSR Target and Level of Services • No data provided.	
CEEP Action 10.0: Establish then implement a city-wide EV Strategy (residential, commercial, and municipal)	Terms of Reference for a city-wide Electric Vehicle (EV) strategy were developed and an internal Steering Committee established in 2023.	A competitive Request for Proposal (RFP) for a consultant to develop the Strategy is expected to be released in Q4

Low-Carbon Transformation #3: Changing How We Move			
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook	
2022-2025 Transportation Planning and Parking, Planning and Economic Development	Future proposed INDICATORS to track effectiveness of EV Strategy implementation over time include: • Number of charging stations per km2 • Kwh/day/month/yr at each station • Number of networked charging stations • Number of EVs Registered within Hamilton • Number of public e-bike parking/ charging facilities	Additionally, as part of Parking Standards Review, new zoning requirements were developed to ensure new residential developments are EV ready.	
CEEP Action 11.0: Commercial Fleet Decarbonization Work Group 2022-onwards Office of Climate Change Initiatives (co-ordinating role), Planning and Economic Development	Work on this action was not initiated in 2023. Future proposed INDICATORS to track progress with commercial fleet decarbonization efforts include: • Number of private fleet operators committing to transition to net zero by 2050 via a fleet decarbonization plan	Work on this action was not initiated in 2024, but initiation of the Hamilton Regional Decarbonization Hub will support efforts to get this working group established.	
CEEP Action 12.0: EV mechanic training and retraining program 2022-onwards	INDICATOR - Number of trained/retrained low-carbon transportation mechanics. • Mohawk College partnered with the Canadian Colleges for a Resilient Recovery (C2R2) offered a total of 8 micro-credential courses related to	As of August 2024, Mohawk College saw a total of 45 learners enrol in the course offerings related to electric vehicle training during 2024.	

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Low-Carbon Transformation #3: Changing How We Move		
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
Office of Climate Change Initiatives (community co- ordinating role), Planning and Economic Development; Fleet Services, Corporate Asset Management, Public Works	electric vehicle training. Mohawk College offered 1 of those 8 micro-credentials and had a total of 44 learners enrolled in 2023.	
CEEP Action 13.0: Limit parking in the downtown core and promote EV parking 2022-2025	Since 2018 a total of 502 parking spaces in the Downtown have been repurposed for development. This represents 15% of the public parking supply. The installation of 40 EV chargers in public lots was completed in early 2023.	Public information meetings were held in January 2024, and the New City-Wide Parking Standards were presented at the City's Planning Committee in February 2024.
Transportation Planning and Parking, Planning and Economic Development	The Parking Master Plan has been adopted, with emphasis on integrating parking supply with new development and supporting expansion of EV parking infrastructure. Draft updated parking standards, including	The new standards were approved by Committee and Council but have been appealed to the Ontario Land Tribunal.
	eliminating parking minimums in some areas of the City and establishing zoning requirements for EV parking, were approved for consultation in August 2023.	

Low-Carbon Transformation #4: Revolutionizing Renewables		
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable) 2023 Progress Update and Supporting Quantitative/Qualitative Information 2024 Accomplishments & Outlook		2024 Accomplishments & Outlook
CEEP Action 14.0: Develop a	During 2023, City staff participated in	During 2024, staff have
next generation electrical grid	Independent Energy Service Operator (IESO)	continued to participate in IESO

Low-Carbon Transformation #4: Revolutionizing Renewables			
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable)		ate and Supporting itative Information	2024 Accomplishments & Outlook
2022-onwards Office of Climate Change Initiatives (co-ordinating role for community), Planning and Economic Development	a measure of the carbon emissions hour (kWh) of ele Ontario. As more added to power the carbon intensity of the carbon intensi	applicable Local articipate in n Air Partnership, Bay ouncil) that advocate to vincial agencies on the neration grid.	regional planning efforts and have met with local utility Alectra to discuss system needs and constraints. In Q4 of 2024, an internal Director-level 'Energy Transformation Roundtable' will be established to facilitate corporate-wide conversations about the transition to a next generation electrical grid and the need to complete a long-term electricity plan aligned with a net zero future and significant local electrification to get the community there. There remains a need to explore the creation of a simple and easy program for new connections to the electricity grid for solar PV and EV charging stations.

Low-Carbon Transformation #4: Revolutionizing Renewables			
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook	
	INDICATOR - Track system investments by Alectra, Hydro One, IESO, and/or the Province: • No data gathered for 2023.		
CEEP Action 15.0: Encourage development of local renewable energy cooperatives 2022-onwards Office of Climate Change Initiatives (co-ordinating role for community), Planning and Economic Development	No efforts were initiated in 2023 to encourage the development of local renewable energy cooperatives. Future potential INDICATORS include: • Number of cooperatives established. • MW of renewable energy generation systems installed by cooperatives (existing coops, and total MW existing in Hamilton)		
CEEP Action 16.0: Implement strategic renewable solar energy installations 2022-2025 Office of Climate Change Initiatives (co-ordinating role for community), Planning and Economic Development Corporate Facilities and Energy Management, Public Works	 kWh of renewable energy supplied corporately (City of Hamilton). MW of renewable energy capacity installed community-wide Local outcomes via provincial 'requests for proposals' for renewable energy projects. 	There is currently work underway through the City's Corporate Net Zero Roadmap for both deep energy retrofits and strategic solar renewable energy installations: • Tender ready Harry Howell Arena project— 250-kW solar project estimated at \$1.1M in 2023 dollars	

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Low-Carbon Transformation #4: Revolutionizing Renewables			
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook	
		See CEEP Action 5.0 above for list of other municipal renewable energy projects for which technical and financial business cases are currently being developed. More funding is required to make these projects reality.	
CEEP Action 17.0: Technical feasibility study of expanded anaerobic digestion facilities 2023-2025 Hamilton Water and Waste Management Division, Public Works	The City's Central Composting Facility (CCF) currently has a processing cap of 20,000 tonnes annually. In 2023, the City initiated a technical feasibility study to identify the best option for increasing capacity at the CCF, taking into consideration the capacity and potential for RNG production and local utilization. A Phase 1 organics opportunities report was initiated in 2023 and is now complete.	The RFP for Phase 2 of the 'organics opportunities' report was released in 2024 and is meant to select a preferred technology for processing organics which would also facilitate increased organics capacity. The RFP to complete a technical feasibility study for the 2nd phase of investigating options for organics management considering RNG is planned to be issued in Q3, 2024	
CEEP Action 18.0: Technical analysis of green hydrogen potential, costs, as well as actions to increase green	See update on Action 1.0 above. Hamilton Regional Decarbonization Hub mandate, although not 100% confirmed, will include feasibility assessments of clean technology		

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Low-Carbon Transformation #4: Revolutionizing Renewables		
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
hydrogen deployment in the City through the creation of a hydrogen hub. (Part of CEEP Actions #1-3)	(e.g. green hydrogen) to begin accelerating pilot initiatives and study the potential for scaling up.	
2024-2025		
Joint collaboration between: Chief Digital and Innovation, City Manager's Office; Office of Climate Change Initiatives and Economic Development Division, Planning and Economic Development		
CEEP Action 19.0: Decarbonize and expand HCE downtown district energy system	During 2023 City staff participated on the Hamilton Community Enterprises (HCE) technical steering committee for the Energy Harvesting Feasibility Study with a goal of	Progress has continued during 2024 with efforts to advance HCE's Energy Harvesting Feasibility Study, including next
2023-2025	developing a scalable model for low-carbon building heating using residual waste heat from	steps for making the proposed project reality, including a
Office of Climate Change Initiatives (co-ordinating role for	industry.	business case for the initiative.
the City), Planning and Economic Development	Future potential INDICATORS to track successful decarbonization and expansion of HCE's downtown district energy system: • *Private sector uptake of district energy incentive programs for	
	buildings.	

Low-Carbon Transformation #4: Revolutionizing Renewables		
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
	 Gigajoules of residual heat harnessed through the future energy harvesting system 	
	*The City's Economic Development Division currently offers incentive programs for buildings that are designed to connect to district energy and/or are district energy ready.	
CEEP Action 20.0: Technical + financial analysis for expanded organics collection and diversion 2022-onwards Waste Management Division, Public Works	See waste management updates provided in Action 17.0 above. Future proposed INDICATOR. • Tonnes of organics diverted from landfill.	See waste management updates provided in Action 17.0 above.

Low-Carbon Transformation #5: Growing Green		
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
CEEP Action 21.0 Review &	Phase 2 of the City Planning Division's	Phase 2 of the MCR work will
update Official Plan to address	Municipal Comprehensive Review (MCR) work	be ongoing in 2024.
climate change and energy	 – which will include addressing the elements of 	
policies	Action 21 - was delayed as a result of changing	The Terms of Reference work
	provincial planning policy causing planning staff	will be ongoing in 2024.
2022 – onwards	to adjust work plans.	

Low-Carbon Transformation #5: Growing Green		
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
Planning Division, Planning and Economic Development	The Terms of Reference for Climate Change Official Plan work was delayed as a result of changing provincial planning policy causing planning staff to have to pivot with work plans	
CEEP Action 22.0: Integrate community energy/climate action policy directions into Secondary Plans	Completion of an Official Plan review related to secondary plan requirements has yet to be completed.	These processes will continue over the next several years. A Terms of Reference for an Energy and Environmental
2022 – onwards	INDICATOR - Number of secondary plans integrating energy/ climate action policy direction:	Assessment will be completed.
Planning Division, Planning and Economic Development	 Work has been slowed due to changing provincial policy requiring planning staff to adjust work plans. 	
of 50,000 trees planted per year within City boundaries 2022 – onwards Office of Climate Change Initiatives, Planning & Economic Development (co-ordinating role for community) Environmental Services Division,	 INDICATOR - Number of trees planted annually through City's Forestry & Horticulture Division. Total number of trees added to Hamilton's Tree Canopy by Forestry was15,256 for 2023 surpassing the goal of 12,000. Of this 15,256 total: 3,536 were provided to residents through the 2023 Free Tree Giveaways 1000 were given to students at the Hamilton Children's Water 	The Forestry and Horticulture Division's tree planting target for 2024 is 20,000 trees.
Public Works	Festival,	

Low-Carbon Transformation #5: Growing Green		
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
	 3,927 were planted on City land via community volunteer planting events 6,779 were planted through the Forestry Operations Group in parks, cemeteries, streets, and public golf courses. INDICATOR - Number of trees planted annually through the efforts of community partners including conservation authorities, Royal Botanical Gardens, environmental organizations. Community partners planted a total of 32,578 trees on public and private land as follows: Area Conservation Authorities – 28,083 Environmental Not-For-Profits – 1,651 Royal Botanical Gardens – 2,238 McMaster/Mohawk – 626 TOTAL Trees planted by City and community partners in 2023 = 47,834 *This total does not include trees purchased and planted by residents, businesses, industry, and other private property owners. It is reasonable to conclude that the 50,000-tree target has likely been met and surpassed in 	The Office of Climate Change Initiatives will continue to improve the methods it uses to track the number of trees planted by community partners and other non-municipal entities. Work is currently underway to measure the canopy cover of the entire City area within the urban boundary for 2024. Staff will provide an update on this effort in 2025 through the City's first State of the Forest report.

Low-Carbon Transformation #5: Growing Green		
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
	2023.	

Hamilton's Climate Change Impact Adaptation Plan Update on 2023 Calendar Year Progress

Hamilton's Climate Change Impact Adaptation Plan Update on 2023 Calendar Year Progress		
Enabling Actions within Hamilton's Climate Action Strategy		
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
E.1 - Establish a Climate Change Office with staff dedicated to implementing and tracking the Climate Change Impact Adaptation Plan. Planning & Economic Development	The Office of Climate Change Initiatives was established in November 2022. A Senior Project Manager was transferred into the Office in November 2022, a Director was hired in December 2022, and a new Senior Project Manager and Project manager were funded in the 2023 Municipal Budget and hired during the summer of 2023.	An additional Project Manager was formally transferred to the OCCI from Healthy & Safe Communities Department in 2024, brining the staff complement up to five full-time positions. OCCI staff continued, during
	During 2023 staff in the OCCI facilitated and tracked progress with implementation of the CCIAP.	2024, to determine how to support CCIAP implementation.
E.2 - Designate key metrics for climate impacts in the City and task staff with collecting and tracking data over time (e.g. traffic accident reports, basement flood reports, etc.).	Preparation for the 2023 data collection process involved the establishment of a draft list of priority indicators for key actions set out in the CCIAP. This process involved engaging other City staff – a process that was coordinated through the director-level Climate Change Initiatives Steering Committee. Input was also	Moving forward, the process of establishing and applying indicators needs to be an iterative process that is responsive t emerging issues and lessons learned as implementation efforts proceed.
Office of Climate Change Initiatives, Planning & Economic	sought from community members serving on the City's Climate Change Advisory Committee.	

Enabling Actions within Hamilton's Climate Action Strategy		
HCAS Actions & Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
Development (in collaboration with internal Climate Change Initiatives Steering Committee)		

Resilient Theme #1: Built Environment		
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
requirements for the incorporation of Low Impact Development (LID) features and green infrastructure into new development and redevelopment projects and consider watershed and landscape scales in the development of plans and objectives. Long-term (>5 years) Growth Management, Planning and Economic Development	During 2023 work progressed with the development of both Low Impact Development Guidelines and Green Building Standards for the City of Hamilton. Future proposed INDICATORS to track progress with implementation of these new guidelines: • Number of LID features implemented. • Area covered by LID feature and associated diversion of stormwater. • Locations of LID features reported in site plans. • Watershed conditions in priority areas (i.e. water quality, erosion sites, etc.)	Low Impact Development Guidelines were approved by the City's Planning Committee, along with proposed Green Building Standards, on October 1, 2024. Looking ahead, work will be done to detail implementation plans in 2025.
CCIAP Action 1.2: Develop guidelines and incentives for homeowners and landlords to improve the resilience of	Efforts were accelerated during 2023 to develop a stormwater fee including exploration of incentives/ credits to support on-property stormwater management	The incentives program that accompanies the Stormwater Rate Structure was presented to the City's General Issues

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Resilient Theme #1: Built Environment		
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
residential buildings to climate- related risks through upgrades and/or retrofits.	measures as an integral part of the fee framework.	Committee on June 5th, 2024. Implementation of the stormwater fee and associated incentive
Short-term (<2 years)	Future proposed INDICATORS to track the impact of the stormwater fee incentive/ credit programs:	program will not occur until 2026 and so, no data related to uptake of incentives offered for on-
Hamilton Water (lead for stormwater fee development), Public Works	 Number and type of on-site stormwater management enhancements accessed by residential homeowners through 	property stormwater management will be available until after 2026.
Office of Climate Change Initiatives (lead for Better Homes Hamilton Pilot), Planning and Economic Development	 incentive program. Number and type of benefits resulting through the stormwater management credit program proposed for IC&I properties. 	
	 INDICATOR – Annual uptake in City's Protective Plumbing Program: A total of 349 backwater valves were installed through the program in 2023. 31 downspouts were disconnected at properties through the program in 2023. 	
	Better Homes Hamilton pilot home energy retrofit loan program – design was completed in 2023, and the intake of applications from residents was initiated in December 2023 See CEEP Action 6 above for a list of future	Moving forward, methods will continue to be refined for tracking uptake of building upgrades/ retrofits, including exploring the possibility of tracking relevant building permit data.

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Resilient Theme #1: Built Environment		
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
	INDICATORS that will be used to track progress with building retrofits, including the Better Homes Hamilton initiative.	
CCIAP Action 1.3: Conduct more studies or reviews to determine flooding and other risks throughout the City & develop plans (e.g. relocating sites where appropriate) to improve the resilience of infrastructure (i.e. buildings, roads, water/wastewater infrastructure, etc.) to climate-related risks from extreme weather and temperatures. Medium-term (2-5 years) Hamilton Water, Public Works	Flooding and Drainage Improvement Framework – Environmental Assessments - first one to be initiated Q4 2023, with more EAs to be completed in future years in other parts of the combined sewer shed. Ultimately these EAs will likely point to infrastructure solutions such as green infrastructure and sewer separation. Future potential INDICATORS to track progress with studies and reviews to determine flooding and other climate impact related risks from extreme weather and temperatures: • Percentage of the City that has been studied (geographic metric) as part of Flooding and Drainage Improvement Framework • Number/ size of impacted sites along the waterfront and Escarpment face that require mitigation due to climate-related weather impacts (roadway infrastructure, trail infrastructure)	Efforts have continued into 2024 to address stretches of trail, shoreline and other City amenities impacted by extreme weather events: • The Mountain Brow Rail Trail - from Mohawk Sports Park to Corktown Park – has been changed by storms and studies are ongoing to assess the impacts to this landscape. • Stormwater management issues have been identified at Hamilton Cemetery • Geotechnical studies have been undertaken at Sam Lawrence Park for escarpment pathways. • Confederation Beach & Hamilton Beach Shoreline Management Master Plan initiated in 2024 in response to fact that shorelines of Hamilton Beach, Confederation

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Resilient Theme #1: Built Environment				
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information		2024 Accomplishments & Outlook	
	INDICATOR - Number of flood-related calls and geographic distribution of those calls • 2023 numbers broken down by municipal ward:		Beach, and the adjacent Breezeway Trail have been impacted by erosion and flooding due to increased extreme high-water levels and more frequent intense	
	Ward Number	Number of calls	storm events.	
	Ward 1	130		
	Ward 2	56		
	Ward 3	145		
	Ward 4	121		
	Ward 5	51		
	Ward 6	57		
	Ward 7 75 Ward 8 71 Ward 9 18			
	Ward 10	26		
	Ward 11	12		
	Ward 12	24		
	Ward 13	58		
	Ward 14	55		
	Ward 15	9		
	Further details regarding flooding incidents are a Number of Events	as follows:		
	47	Nature of Flooding		
	47	Roads (catch basin, sidewalk, ditch,		
		roadway)		
		1 oddway)		

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Resilient Theme #1: Built Environment					
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information		2024 Accomplishments & Outlook		
	20	Property flooded by ground or stormwater Sewer backup on			
	820 Sewer main Sewer lateral backup in basement				
CCIAP Action 2.1: Improve	INDICATOR - Numb	per of kilometers of	On September 21, 2023, the City		
winter travel conditions through further expanding sidewalk clearing. Short-term (<2 years) Roads Operations, Public Works	 INDICATOR - Number of kilometers of sidewalks cleared. Starting in November 2022,		Council approved transitioning the Snow Angels program from a volunteer-based initiative to a snow clearing subsidy. The subsidy, now referred to as the snow clearing subsidy to better reflect this change, has been allocated funds to support up to 144 qualifying homeowners with up to a \$450 snow clearing subsidy for the winter season. Council has requested staff report back to Council annually on the snow clearing subsidy program.		

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Resilient Theme #1: Built Environment				
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook		
	 to City's Snow Angels program for help with snow clearing: 2022 – 23 Winter Season – 62 households or 73% of applicants were matched with a snow clearing volunteer. 2023 – 24 Winter Season – 67 households applied for the new 'snow clearing subsidy' launched in 2023 and 44 of those households were approved. Requests for support were lower due to lack of snow. Two other programs provided support for snow clearing in Winter 2023-2024: Flamborough Connects – supported 8 households with 6 volunteers but had 3 households on a wait list. Stoney Creek Outreach Services supported 105 seniors with 12 volunteers but had 60 residents on a wait list. 			
CCIAP Action 2.2: Encourage	In 2023, the City of Hamilton and its partners	For future reporting, Hamilton		
and promote safer travel practices, choices, and	offered several programs providing equitable access to sustainable transportation options	commuter data available through the annual Transportation		
alternatives through considering	including: Hamilton Bike Share's 'Everyone	Tomorrow Survey will be utilized		
all users of Hamilton's	Rides Initiative' subsidized bike share	as it provides a more statistically		
transportation network and by	memberships, reduced e-scooter fees in	rigorous assessment of any		

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Resilient Theme #1: Built Environment				
HCAS Actions and Timelin (Responsible City Department/Divinoted where applicable)		2024 Accomplishments & Outlook		
	priority neighbourhoods, and subsidized and/or free HSR transit fare programs. of INDICATOR – Annual number of registered Smart Commute users • In 2023 there were 1139 registered users on the City's Smart Commute tool and 913 residents completed	Modal shift trends. See: transportationtomorrow.on.ca HSR revamped its fare subsidy programming in 2024, launching a new 'Fare Assist' program for eligible community members.		
	Subsidized memberships increased from 100 in 2022 to 300 in 2023 as a result of support revenue generated through contract with e-scooter private operator.			

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	Resilient Theme #1: Built Environment			
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook		
	 INDICATOR - Number of road accidents involving vulnerable road users and geographic locations of these incidents where they are located (via City of Hamilton Annual Collision Report and Hamilton Police Collision reporting) In 2023 Hamilton Police report that there were 3 pedestrian fatalities and 1 cyclist fatality as a result of collisions with motor vehicles. The 2023 City of Hamilton Annual Collision report was not available at time of report preparation. Future potential INDICATORS to assess alternative transportation uses and equitable access: Number of participants in subsidized HSR programs 			

Resilient Theme #2: People and Health				
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments and Outlook		
CCIAP Action 3.1: Develop and	During 2023 a Heat Response Strategy was	The staff presentation of the Heat		
implement a response program	developed with input from community partners	Response Strategy to the Public		
for vulnerable populations to	from the Extreme Heat Working Group. The	Health Committee in Q1 2024		
protect residents from climate-				

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Resilient Theme #2: People and Health				
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments and Outlook		
related risks (i.e. extreme cold, extreme heat, etc.) Medium-term (2-5 years)	Strategy was presented to the City's Public Health Committee in April 2024. The city also has a Heat Response Plan that	led to additional enhancements to 2024 heat response efforts: • Free bus ticket giveaways at identified City facilities		
Public Health Services, Healthy and Safe Communities	is reviewed and updated annually. The Plan includes actions the City takes during Heat Warnings and Extended Heat Warnings, including criteria for activation of the Emergency Operations Centre.	and social service agencies to enable impacted residents to get to cooling centres		
	In 2023, Public Health Services initiated efforts to engage with Landlords to provide education about heat related illness and measures they can take to protect tenants. Building outreach was prioritized based on urban heat mapping.	Enhancement of the air conditioner subsidy program administered through Ontario Works to enable up to 200 more subsidies to be offered to qualifying residents.		
	INDICATOR - Number of annual weather- related (heat, cold, air quality related) emergency room visits for residents of Hamilton. • No data available for 2023 - this indicator began reporting in 2024	Meetings of the Extreme Heat Working Group continued during 2024, along with meetings of the I Community Heat Response Committee, which is made up of City		
	 INDICATOR - Number of annual weather-related (heat, cold, air quality related) deaths for residents of Hamilton. This indicator has a data lag period of approximately 5 - 6 years and is provided by the Ontario Ministry of 	staff and community partners who provide key supports during heat events. Public Health staff-initiated efforts		

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Resilient Theme #2: People and Health				
HCAS Actions and Timelines	2023 Progress Update and Supporting	2024 Accomplishments and		
(Responsible City Department/Division	Quantitative/Qualitative Information	Outlook		
noted where applicable)	Health's intelliHealth system. Most recent data available is from 2018 (BOH24005). INDICATOR - Number of weather-related (heat, cold, air quality related) paramedic calls for residents of Hamilton. No data available for 2023 - this indicator began reporting in 2024. INDICATOR - Air quality and health impacts tenant complaints. No 2023 data available due to database access issues In November 2023, the City launched a 'Winter Response Strategy' to support unhoused Hamiltonians during the period from Dec 1, 2023 – Mar 31, 2024. The program offered the following for those needing supports: Overnight warming bus Extended hours at some rec centres and HPL's Central Library 24-hr washrooms at 2 city parks 100 additional daytime shelter drop-in spaces 80 overnight shelter warming spaces.	to track heat-related illness and deaths in Hamiltonians in 2024 from May through September using existing data sources and staffing resources with the following two components: • Surveillance of emergency department complaints; and, • Annual assessments of heat-related emergency department visits, hospitalization visits and deaths. This information will be used to inform the service levels, planning and evaluation in the Health Hazards Program with respect to extreme heat response.		
CCIAP Action 3.2: Consolidate existing vulnerable persons'	During 2023 no progress was reported regarding efforts to consolidate existing			

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Resilient Theme #2: People and Health				
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments and Outlook		
contact lists and update/expand them to guide emergency response and/or other assistance programs. Medium-term (2-5 years) Public Health Services, Hamilton Paramedics, Healthy and Safe Communities	vulnerable persons contact lists. The Health Hazards & Vector-Borne Diseases program has proposed to maintain a consolidated inventory of agencies and/or city service providers that maintain lists that service vulnerable clients, including Hamilton Police Service, City Housing Hamilton, street outreach/ social housing organizations. Hamilton Paramedics currently maintains a database of clients who are part of its Mobile Integrated Health (MIH) program. Future potential INDICATOR designed to assess effectiveness of a consolidated vulnerable persons registry: • Number of vulnerable persons reached/supported during an extreme weather event/ climate-related emergency.			
CCIAP Action 3.3: Coordinate local efforts to address excessive indoor temperatures in rental housing Medium-term (2-5 years) Joint effort between Municipal Law Enforcement, Planning and	In 2023, Licensing and Bylaw Services, in collaboration with Public Health, was directed by Council to prepare an Adequate Temperature Bylaw for City Council review and approval in Q1 2024. A report authored by Municipal Law Enforcement is going to Planning Committee in October 2024.	A staff recommendation report from Municipal Law enforcement, entitled 'Amending the Property Standards By-Law Respecting Air Conditioning Appliances' will be presented to the Planning Committee in Q4 2024		

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Resilient Theme #2: People and Health				
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments and Outlook		
Economic Development; and Public Health Services, Healthy and Safe Communities.	Additionally, Public Health Services has initiated an outreach program targeting landlords in areas of the city that struggle more with heat, based on heat mapping data. INDICATOR - Number of health promotion sessions delivered including number of session attendees, whether attendees are from vulnerable groups, and number of resources provided for heat-related responses. • 1 pre-heat-season education and awareness webinar offered to members of the Hamilton and District Apartment Association (HDAA). • 7 Extreme Heat Working Group meetings among City and community partners toward development of the Hamilton Community Heat Strategy • 2 Community Heat Response Committee (CHRC) meetings in 2024 to review 2023 Heat Response Plan operational roles and responsibilities and debrief at end of heat season. INDICATOR - Number of media releases on			
	heat-related topics			

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Resilient Theme #2: People and Health				
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments and Outlook		
CCIAP Action 3.4: Align ongoing efforts within the City to continue expanding affordable housing to protect vulnerable populations to reduce climaterelated impacts from extreme weather and temperatures Long-term (>5 years) Housing Secretariat, Healthy and Safe Communities	 Four media releases were issued to alert the public to the four heat warnings that were issued during 2023. INDICATOR - Social media (number of posts, engagements, etc) 30 social media posts on various heatrelated topics during 2023 (heat & extended heat warnings, cancellation of warnings, 'Heat Wave Hero' landlord messaging) CityHousing Hamilton continued during 2023 to follow through on its commitment to retrofit existing units and build new social housing units that are constructed to climate resilient, passive house standards. CHH has been successful with securing 'green funding' from sources including the Federation of Canadian Municipalities' Green Municipal Fund to support this transition to greener building The City's Housing Secretariat has also been actively working to encourage and support climate resilient features in the new housing projects it is working to facilitate. INDICATOR - Number of affordable housing units 	Efforts continue into 2024 through CityHousing Hamilton and the Housing Secretariat to promote climate resilient features in new affordable housing. Social housing agencies on the community side continue on this front as well, utilizing Passive House design and other methods to provide affordable, safe, healthy and climate resilient housing for all.		

	Resilient Ti	heme #2: Peopl	e and Health	
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting			2024 Accomplishments and Outlook
	Year	# New Rent Geared to Income (RGI) Units	# New Affordable Market Units	
	2021	114	32	
	2022	15	n/a	
	2023	73	30	
	units (e.g. Passive House, CaGBC etc.) in affordable housing complexes. • The 73 RGI units with a 2023 occupancy date were built to National Energy Code/Ontario Building Code standards. INDICATOR - Shelter expansion and number of individuals served through expansion. • Housing Services Division reported no			
	INDICATOR - I units with coo awnings, etc.) • Informat	tion about numbe	al housing ons (fans, AC, er of units with	
	cooling interventions is currently not available to the City's Housing Services Division.			

Resilient Theme #2: People and Health		
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments and Outlook
	 INDICATOR – Average rental costs in the city. Average rent for all two-bedroom units rose to \$1,335 in Oct 2022, up 5% from \$1,271 in Oct 2021. Rents for vacant (available to rent) two-bedroom units in Hamilton jumped 12% between June 2022 and June 2023 to an average cost of \$2,298. Over the past decade, Hamilton rents for all units have risen 55% - more than double the 22% cost of living increase. INDICATOR – Average house price in Hamilton Hamilton's average house price in June 2023 was \$831,540, down 3.6% from the June 2022 average of \$863,016 but still substantially above the winter 2020 pre-pandemic value of \$607,939. INDICATOR – Diversification of housing options (e.g. co-ops, co-housing/co- 	
	 ownerships) These details will be provided in the Oct 2024 Housing Needs Assessment. 	

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Resilient Theme #2: People and Health		
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments and Outlook
cciap Action 4.1: Create educational campaigns on communicating the risks associated with climate change (i.e. health impacts, property damage, etc.) and what residents can do to prepare (GDS, LID, etc.) Short-term (<2 years) Office of Climate Change Initiatives, Planning and Economic Development	During 2023, the Office of Climate Change Initiatives began to create a communications strategy and develop associated outreach tools to engage and inform the community. These efforts continued to evolve over the year and included implementation of elements of the communications strategy. INDICATOR - Tracking public engagement including number of public events attended, number of presentations, and audience size, diversity of audiences etc. 1,100+ residents reached via 17 community presentations about Hamilton's Climate Action Strategy Tabled at 3 community events including Open Streets, HamOnt Youth Summit, Urban Indigenous Festival. Participated in urban community hikes focused on profiling community climate action through greening. INDICATOR - City website and social media posts analytics (e.g. number of visits, material downloads, etc.) Social media data unavailable Other City Departments and Divisions also engage in efforts to educate the broader	During 2024, the Office of Climate Change Initiatives has continued to develop engagement tools - including presentations, social media posts, website updates – to raise public awareness about the risks that the climate emergency is bringing.

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Resilient Theme #2: People and Health		
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments and Outlook
	public on these issues - for example - Public Health Services educates the public on the health impacts of issues associated with climate change including extreme heat and cold and vector borne diseases. See CCIAP Actions 3.3 and 5.1 for social media statistics regarding these posts.	
cciap Action 4.2: Evaluate and select programs for making emergency preparedness kits accessible to anyone, regardless of income (e.g. subsidies or free distribution campaigns)	In 2023, the Office of Climate Change Initiatives enlisted students in the CityLab program to undertake background research on emergency preparedness kits. A report was presented in April 2023 that provides advice and direction on key elements of a kit, costing various kits, and proposed pathways	In 2024, staff from the Office of Climate Change Initiatives and the Office of Emergency Management have been exploring the potential to combine efforts and run a pilot program designed both to raise awareness about
Medium-term (2-5 years) Office of Climate Change Initiatives, Planning and Economic Development; Office	forward. The report was shared with staff in the Office of Emergency Management. Future potential INDICATORS to track progress with raising awareness about and	Hamilton's Climate Action Strategy and to help residents prepare their own emergency preparedness kit.
of Emergency Management, Hamilton Fire.	 ensuring residents have emergency preparedness kits: Number of workshops/ presentations on how to build and maintain a personal emergency preparedness kit and associated emergency plan – including number of participants. Number of emergency preparedness kits provided through City efforts. 	The plan, starting in Q1 of 2025, is to organize sessions for community members most impacted by climate change but least able to respond. The sessions will share information about the risks from climate change and will offer basic emergency kit components and a guidebook on how to build a kit at no cost to session participants.

Resilient Theme #2: People and Health		
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments and Outlook
	 Number of other programs/ organizations raising awareness about and delivering emergency preparedness kits 	
CCIAP Action 4.3: Establish buddy systems/help-your-neighbour programs to implement during extreme weather events Short-term (<2 years) Public Health Services, Healthy and Safe Communities; Office of Climate Change Initiatives, Planning and Economic Development	Currently, Public Health Services encourages residents to check on their neighbours and family during Heat Warnings and Extended Heat Warnings. This is included in the messaging the City uses in its media releases during Heat Events, it is referenced on the City's website, and it is also included in promotional hand-outs. This action is also recognized in the 2024 Heat Response Strategy as something the City will continue to facilitate and support.	The Climate Action Strategy/ Emergency Preparedness Kits pilot workshops initiative described in CCIAP Action 4.2 above will also be used as opportunities to encourage and support residents to establish and/or expand neighbourhood networks of caring.
CCIAP Action 5.1: Work with local partners to ensure vulnerable groups are informed about and have the means to be adequately protected from vector-borne diseases (e.g. West Nile Virus, Lyme Disease, etc.) Long-term (>5 years) Public Health Services, Healthy and Safe Communities	City staff reported in 2023 that work with local partners to ensure vulnerable groups are aware of vector-borne diseases would begin in 2024. INDICATOR - Number of cases of vector-borne disease related illnesses: • West Nile Virus - 5 human cases in 2023 • Lyme disease - 81 human cases in 2023	

Resilient Theme #2: People and Health		
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments and Outlook
	 INDICATOR - City website and social media analytics (i.e. number of views/downloads, number of posts, post engagement, etc.) City created and posted Instagram reels focused on tick prevention (to avoid tick exposure and risk of Lyme Disease) and 'tick dragging' – the method used to sample the tick population. Tick Dragging reel had +70k Plays (second highest in Corporate channel's history) and +2K interactions - +11K plays - +200 interactions Tick Prevention Reel had +11k plays and +200 interactions 	
conjunction with the Biodiversity Action Plan, develop an Open Space Management Plan to guide City of Hamilton Natural Open Space Stewardship, including maintenance schedules to minimize ideal conditions for vectors (e.g. plants and animals, such as mosquitos, that can bring diseases, such as rabies, Lyme disease, to human populations)	Balancing the protection and enhancement of naturalized areas, while also limiting exposure of vectors to humans continues to be an ongoing issue. Signage exists with public warnings related to ticks in locations where people may be at risk of higher exposure. Where possible, City Parks staff mow one mower-width (2m or so) on either side of paths to keep a clear pathway for walking and to limit overhanging plants. At the same time, focusing on biodiversity (species diversity, healthy native habitats for	In June 2024, Hamilton's Biodiversity Action Plan and the city-led actions found within it, were endorsed by the City's Planning Committee.

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Resilient Theme #2: People and Health		
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments and Outlook
Long-term (>5 years) Environmental Services, Public Works; Public Health Services, Healthy and Safe Communities	native animals and plants) is a key strategy for increasing ecosystem resilience to invasive pests and disease. City staff put out communication updates when new diseases and pests arrive in the Hamilton area. Updates include information about what residents can do if they find these pests/diseases. Enlisting the public to observe and report is an important way to track the status of these invaders. INDICATOR - Number of ticks submitted to Public Health for identification each year. • 182 ticks submitted to PHS for identification in 2023. INDICATOR - Number of complaints about standing water. • 32 complaints were received about standing water in 2023 (not just in naturalized areas of the city)	
CCIAP Action 6.1: Continue to update existing municipal plans and policies to decrease health and safety risks associated with extreme weather and temperatures to outdoor workers	Current Hot Weather Safety guidelines remain in place and are reviewed and updated as needed. In 2023 the City's Health, Safety & Wellness Team began providing guidance to people leaders on how to protect outdoor workers during periods of poor air quality.	In 2024, the City's Human Resources Division released three updated occupational health and safety bulletins: • Managing Heat Stress • Sun Safety

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Resilient Theme #2: People and Health		
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments and Outlook
Medium-term (2-5 years) Human Resources, Corporate	In 2023, a new guideline was planned to provide guidance on reducing staff health risk by using the national Air Quality Health Index	Outdoor Air Quality and Your Health
Services	and corresponding health messages to provide recommendations for the workplace.	
	The City also continues to monitor the Ministry of Labour, Immigration, Training and Skills Development's consultation on regulating Heat Stress and Poor Outdoor Air Quality under the Occupational Health and Safety Act to prepare for any new employer duties related to heat and poor air quality for municipal outdoor workers.	
CCIAP Action 6.2: Explore	This action is addressed in the Heat	In 2024, Public Health Services,
opportunities to expand current	Response Strategy presented to the Public	through the Healthy Environments
cooling & warming centre	Health Committee in Q1 of 2024 and the	Team, developed and
programming and interventions.	potential to increase the number of cooling centres is regularly discussed in meeting of	implemented a 'Cool Kit' initiative designed to get simple resources
Short-term (<2 years)	the Extreme Heat Working Group.	designed to get simple resources designed to help residents without in-residence cooling to stay cool
Public Health Services, Healthy and Safe Communities	This action has also been addressed through City efforts to develop and implement a 'Winter Response Strategy' starting in January 2023. In its first season, the Strategy was in place until March 31 st and offered supports including additional daytime and overnight warming spaces for residents needing these supports. See CCIAP Action 3.1 above for more details on enhancements made to this	in the summer heat.

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Resilient Theme #2: People and Health		
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments and Outlook
	program for the Winter of 2023/24. In 2023 Hamilton Public Library began opening the Hamilton Room at the Central Library on Statutory Holidays during Heat Warnings and Extended Heat Warnings. This service is an enhancement from previous years. HPL also extended hours at the Central Library to provide warming spaces as part of the City's 2023/24 'Winter Response Strategy'	
CCIAP Action 6.3: Improve monitoring, data collection, and notification surrounding flooding & extreme weather/temperatures Long-term (>5 years) Public Health Services, Healthy and Safe Communities	This action is addressed in the Heat Response Strategy that was presented to the Public Health Committee in Q1 of 2024. Public Health Services uses epidemiological data along with heat mapping vulnerability data to determine highest risk areas to target for heat initiatives. INDICATOR - Number of heat alerts In 2023 there were 4 heat warning and extended heat warning events combined lasting a total of 11 days: June 1 - 2 (2 days) July 4 - 6 (3 days) July 26 - 28 (3 days), Sept 3 - 5 (3 days)	The Office of Climate Change Initiatives will expand this reporting to include indicators related to cold weather events and to include data related to tracking the risk of flooding based on the monitoring of flow and level meters in municipal creeks and sewer systems.

Resilient Theme #2: People and Health		
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments and Outlook
	 INDICATOR - Number of users of splash pads, parks, community centres, etc. Recreation staff have confirmed availability of data related to pool usage during extreme heat events and this data will be provided in future climate update reports. 	

Resilient Theme #3: Natural Environment, Agriculture and Water		
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
cciap Action 7.1: Continue to enhance the management and restoration of existing natural areas and seek opportunities to dedicate land and natural areas for conservation. Medium-term (2-5 years)	Work continued in 2023 on a number of ongoing naturalization efforts - all in partnership with Conservation Halton at Joe Sam's Park, Courtcliffe Park, and Flamborough Centre Park. Activities include natural habitat restoration, wetland creation, invasive species removal, creek restoration and realignment. Also in 2023, a bioswale was installed at	Future projects anticipated at: William Connell Park (invasive species removal & naturalization), Confederation Beach Park - natural shoreline erosion mitigation through native plantings.
Environmental Services, Public Works	INDICATOR - Enhancement of natural areas identified in plan: Joe Sam's Park (completed works): 390 m in-stream habitat enhanced, 50 m riparian habitat enhanced, 8529 m2 habitat restored, 775 native grassland/meadow plants planted,	

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Resilient Theme #3: Natural Environment, Agriculture and Water		
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
	145 native trees planted, 80 native shrubs planted. Courtcliffe Park (completed works): 13m in-stream habitat enhanced, 66m riparian habitat enhanced, 175 native trees planted, 1474 native shrubs planted, 3736m2 habitat improved. INDICATOR – Track acquisition of space to convert into natural areas to enhance core areas and linkages. • No update provided for 2023.	
CCIAP Action 8.1: Work with local partners to continue tree planting and preservation, explore community partnerships and naturalization programs to reduce urban heat island and enhance ecosystem function. Medium-term (2-5 years) Forestry and Horticulture Division, Public Works; Office of Climate Change	Expansion of Forestry's Community Tree Planting Program facilitated surpassing the 2023 target of 1,800 trees and planting 3,927 trees. Forestry staff have engaged CityLab to complete a literature review related to municipal woodlot management. Forestry staff engaged in Air Quality Day with Green Venture & participated in National Indigenous Peoples Day Gathering event on June 21st.	2024 tree planting target will be over 5000 trees to continue to expand naturalized planting areas with the assistance of volunteer partnerships and build on this success. 2024 Free Tree Giveaway target is 5000 trees. Forestry partnered with local not-for-profit Hamilton Naturalists' Club to deliver the 2024 program.
Initiatives, Planning and Economic Development	INDICATOR – Number of trees planted by Forestry Division each year:	2024 target for total number of trees planted and/or provided by Forestry is 20,000.

Resilient Theme #3: Natural Environment, Agriculture and Water		
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
	 3,927 – via Forestry hosted community tree planting events 6,779 – via Forestry plantings in parks, cemeteries, along streets, in public golf courses 	
	 INDICATOR – Number of trees distributed by Forestry to community for planting on private property: 3,536 – via Forestry's annual Free Tree Giveaway to residents, schools and not-for-profit organizations. 1,000 – via the annual Children's Water Festival 	
	INDICATOR – Total number of trees planted or provided by City's Forestry Division annually: • 2023 total = 15,256 trees	
CCIAP Action 8.2: Implement the Urban Forest Strategy (UFS) and consider additional measures to support it or expand its impact. Medium-term (2-5 years)	The Urban Forest Strategy (UFS) was approved by Council on June 21st, 2023. Associated recommendations supported by Council included: • Adoption of a 40% urban canopy cover target Initiation of the development of a City-wide tree protection by-law on private property	Additional resources were approved as part of the 2024 municipal budget to support the implementation of Hamilton's Urban Forest Strategy including: • 1 full-time employee in Forestry to monitor, report on, and facilitate the implementation of the UFS,

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Resilient Theme #3: Natural Environment, Agriculture and Water		
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
Environmental Services, Public Works	within the urban area. Future proposed INDICATORS to track implementation of the UFS and the key adaptation feature of equitable distribution of the 40% urban canopy cover: • Percentage canopy cover across Hamilton wards & neighbourhoods through Urban utilizing LiDAR data acquired as part of Urban Forest Strategy implementation.	 including prioritizing those areas with greatest need for urban canopy cover. 1 full-time employee in Forestry to support an increase in the annual Cityled tree planting target to 20,000 trees. Funding to purchase LiDAR (Laser Imaging Detection and Ranging) data to establish accurate percentage canopy cover measurements.
CCIAP Action 9.1: Educate and encourage community to participate in growing food locally (e.g. lot level or urban farms/gardens). Short-term (<2 years) Healthy and Safe Communities; Office of Climate Change Initiatives, Planning and Economic Development	Support for community gardens is reflected in a recommendation made in the Recreation Master Plan (2022) to increase the number of community gardens on municipal property. In 2023, a total of 18 community gardens were located on City property, mainly in parks and there are community gardens at all City Housing Hamilton seniors' building sites. Farm to school programming with schools near McQuesten Urban Farm. HWDSB Focus on Youth program partners with McQuesten Urban Farm for summer student placements.	In 2024 another community garden was established on City property – at the Stoney Creek Municipal Centre, bringing the total number of community gardens on City property to 19. In 2024, staff coordination of the City's network of community gardens is now undertaken through the Office of Climate Change Initiatives.

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Resilient Theme #3: Natural Environment, Agriculture and Water		
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
	Since the pandemic, the number of	
	community gardens has increased in	
	Hamilton. Many of these community gardens	
	are coordinated by community organizations, located off City property and supported by the	
	Community Garden Network coordinated by	
	Neighbour to Neighbour See:	
	www.n2ncentre.com/hamilton-community-	
	food-centre/community-garden-networking-	
	program/	
CCIAP Action 9.2: Expand	In 2023, the City's stormwater funding fee	A revised stormwater incentive
rainwater capture (i.e. rain	review was completed, and Council approved	program was approved by City
barrels, cisterns, etc.) as an	the fee structure.	Council in June 2024.
irrigation source for more localized food production (i.e.	Finance Staff, in consultation with the	Implementation of the stormwater
backyard farming, urban	initiative's internal Steering Committee and	fee framework and associated
gardens, soft landscapes, etc.)	Working Groups, launched a communications	incentive program will occur in
	and engagement plan across the City in	April 2026. The incentive
Medium-term (2-5 years)	October 2023 to consult on developing	program includes support for tools
	financial incentives for property owners to	to facilitate rainwater capture and
Hamilton Water, Public Works	capture rainfall and retain it on their property.	use on properties in the future.
CCIAP Action 9.3: Engage with	No City progress to report during 2023.	The municipality's stormwater
local agricultural leaders to		funding fee includes an
understand existing resources for farmers in addressing climate		incentive/credit program approved in 2024 and designed to facilitate
adaptation, and how the City can		the installation and/or
support or expand on those		enhancement of on-property
efforts.		stormwater management
		measures. The fees and
Medium-term (2-5 years)		incentive/credit programs will be

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Resilient Theme #3: Natural Environment, Agriculture and Water		
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
Office of Climate Change Initiatives, Economic Development, Planning and Economic Development; and Healthy and Safe Communities		implemented in April 2026.
cciap Action 9.4: Develop an educational campaign directed at restaurant and grocery industries, local farms and other possible food sources to better reduce and divert food waste and explore opportunities to reduce food waste.	During 2023, Office of Climate Change Initiatives staff worked with students from CityLab on a research project that generated a report entitled 'Developing a Circular Economy of Food in Hamilton – A Framework'. The report provides research findings and recommendations for pathways forward to address food waste.	
Medium-term (2-5 years) Waste Management, Public Works; Healthy and Safe Communities	Addressing food waste is also highlighted as an action within the Food Strategy that may be incorporated into future work. No other progress was made in 2023 on this action.	

Resilient Theme #4: Energy and Economy		
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
CCIAP Action 10.1: Provide	The City's Economic Development Division	In 2024, the City's Economic
guidance to local businesses on	offers several programs designed to help local	Development Division initiated a
how to maintain business	businesses pursue climate resilience and	formal public review of the
continuity (e.g. supply chain)	sustainability. These include:	'LEEDing the Way' Community

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Resilient Theme #4: Energy and Economy		
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
during extreme weather (i.e. through business continuity planning, green business practices, adaptation measures) Long-term (>5 years) Economic Development, Planning and Economic Development Development	 Various cost-sharing and tax increment-based grants through the Environmental Remediation and Site Enhancement (ERASE) Community Improvement Plan Grants to support Leadership in Energy and Environmental Design (LEED) certification through the LEEDing the Way Community Improvement Plan. INDICATOR – Uptake in programs being offered to promote climate resilience/ sustainability. In 2023 there were no applications made to the City's LEEDing the Way initiative. Between 2014 and 2023 a total of two applications have been made to this program. In 2023, there were 9 applications for ERASE Study grants, 6 applications for ERASE Redevelopment grants, and 2 applications for the new ERASE Affordable Housing grant. Future potential INDICATORS for tracking progress with building local business climate resilience: 	Improvement Plan, recognizing the low private sector uptake of the program's grants program and the emergence of many other new certification programs designed to support climate resilient, sustainable building features. The revamped program is scheduled to go to the City's Planning Committee in Q1 2025. Indicators will be updated in future to reflect the outcome of the review and update of the LEEDing the Way program. The Economic Development Division reports annually on proponent uptake of incentive/ and grant programs – including opportunities designed to promote sustainability /climate resilience.

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Resilient Theme #4: Energy and Economy		
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
	 Number of local businesses incorporating District Energy systems to reduce climate impacts. Number of businesses using sustainable/ low carbon options for moving cargo – ie container services and increased rail and intermodal operations. Number of local businesses with comprehensive climate action plans – including considerations of business-related climate adaptation measures. 	
CCIAP Action 11.1: Work with local partners to conduct vulnerability and risk assessments on local energy systems and identify opportunities to increase local energy generation (e.g. microgrids) to increase reliability (potentially as part of planned CEEP priority actions around identifying renewable energy generation sites within the City). Medium-term (2-5 years)	During 2023, the Energy Management Section continued discussions with Hamilton Community Enterprises (HCE) regarding the decarbonization of their district energy system, and the future addition of more loads in the downtown core. Leaders from the Energy Management Section also participate in various industry working groups that discuss provincial energy demand and supply and explore best practices and partnerships around this topic. INDICATOR - Local energy produced (private and public capacity of renewables)	The City's Energy Management Section plans, into the future, to conduct feasibility studies around renewable energy generation opportunities and battery storage at various municipal sites. The Energy Management Section will also continue to meet with key stakeholders including Alectra, IESO and HCE on the feasibility and implementation of renewable energy generation opportunities.

Resilient Theme #4: Energy and Economy		
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
Corporate Facilities and Energy Management, Public Works	within City)	
CCIAP Action 11.2: Establish low-carbon back-up power systems in all City-owned facilities to serve as community hubs during emergencies and create a policy to support and promote the use of low- or nocarbon emergency energy supplies such as batteries or energy storage for residents and businesses. Long-term (>5 years) Corporate Facilities and Energy Management, Public Works	During 2023, Corporate Facilities & Energy Management (CFEM) initiated a review of multiple generators within the Corporate Facilities portfolio and continues to assess opportunities to switch to low carbon fuel - including appropriate generator sizing for enhanced resiliency. INDICATOR - Number of zero and/or low carbon back-up retrofits • A lack of funding has delayed the implementation of proposed transitions to low carbon fuels. The Energy Management Section also continued with exploration of opportunities to increase biogas production at its two existing sites (Glanbrook Landfill and Woodward Wastewater Treatment Plant) and potential market opportunities to convert biogas into renewable natural gas (RNG) to support conversion from natural gas to low carbon fuel. This also includes consideration of purchasing RNG from gas utilities.	The Energy Management Section will continue with the review of fossil fuel back-up generators in City facilities and gradually replace with low carbon back up power systems as funding becomes available to do this.
	INDICATOR - Annual Greenhouse gas	

Appendix "B" to Report PED24166 Page 56 of 56

Resilient Theme #4: Energy and Economy		
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments & Outlook
	emissions estimates from (municipal) generators.	



2024 Annual Update



The Office of Climate Change Initiatives Team



From left to right:

Trevor Imhoff (Senior Project Manager), Lynda Lukasik (Director), Beatrice Ekoko (Project Manager), Cathrin Winkelmann (Senior Project Manager), Adam Watson (Project Manager)



Presentation Overview

- OCCI 'Priority Focus Areas' Progress Update
- Hamilton Greenhouse Gas Inventory Update
- Hamilton's Climate Action Strategy (HCAS)
 Mitigation & Adaptation Actions Status Update
- Looking Ahead to 2025 and Beyond





Office of Climate Change Initiatives Priority Focus Areas

Priority Focus Areas are organized under the following five themes:

- Climate Change Governance & Innovation
- Community Climate Outreach
- Carbon Budgeting
- Green Buildings
- Urban Greening

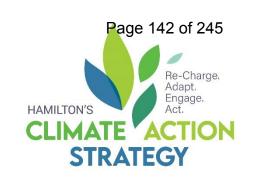




^{*}NB - OCCI priorities are in addition to the various climate change related initiatives already contained within workplans of multiple divisions across the City of Hamilton.

OCCI Priority Focus Area

Climate Change Governance & Innovation



- City of Hamilton Director-level Climate Change Initiatives
 Steering Committee has been meeting monthly since
 September 2023.
- City of Hamilton Climate Change Initiatives Extended
 Leadership Group being formed.
- Community Climate Change Advisory Committee –
 members appointed during 2023/24 and four meetings held
 to date.



Climate Change Advisory Committee

Purpose - Provide advice to Council and City staff on the prioritization, implementation and monitoring of Hamilton's Climate Action Strategy.

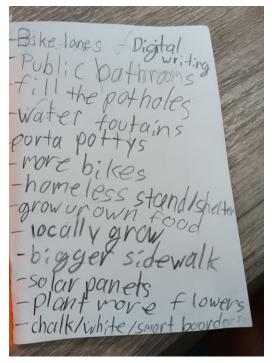
- 20 voting and 6 non-voting members from diverse backgrounds and representing both professional and lived experience with climate and social issues.
- Committee has created 6 working groups including: Transportation, Nature-Based Solutions, Buildings, Climate Governance & Technical, and Community Engagement.



Climate Justice Framework

Planning is underway for the development of a co-designed Climate Justice Framework to inform the City's climate action work.







OCCI 2023 Priority Focus Area

Community Climate Outreach

- Development of Climate
 Communications & Engagement
 Strategies, implementation underway.
- Climate Action Strategy webpage overhaul and enhancement underway.
- Community outreach efforts continue, including use of 'pop-up' events to raise public awareness about Hamilton's Climate Action Strategy.

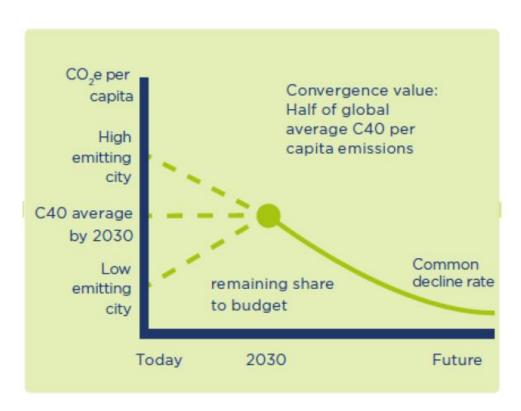






OCCI 2023 Priority Focus Area

Hamilton's Carbon Budget and Accounting Framework



What is a Carbon Budget?

A carbon budget is defined by the Intergovernmental Panel on Climate Change as the total net amount of carbon dioxide (CO2) that can still be emitted by human activities while limiting global warming to a specified level.

C40 Convergence and Contraction Method

A 'fair share' approach to decarbonization

Source: https://www.c40.org/wp-content/uploads/2021/07/Deadline 2020.pdf



Hamilton's Carbon Budget & Accounting Framework – Goals Statement

- 1) Develop a **Corporate Carbon Budget** and Accounting Framework that systematically integrates climate action policies and develops the tools and resources necessary to implement robust greenhouse gas emission calculations into existing municipal budget reporting processes and templates.
- 2) Develop a **Community Carbon Budget** broken down by sectors, and sub-sectors where possible, with an annual reporting methodology and reporting plan that provides education and awareness enabling the community to make informed decisions about actions to reduce greenhouse gas emissions.



Carbon Budget & Accounting Framework - Timelines

Phase	Description of Work	Timeline
Phase 1: Project Initiation	Finalize Project Charter and Work Plan, Establish Technical Advisory Committee	July –Sept 2024 (Completed)
Phase 2: Project Planning	Data collection, Carbon Budget Calculations, Change Management & Engagement Plan	Sept – Nov 2024
Phase 3: Project Execution	Finalize Corporate/Community Carbon Budgets, GHG inventory audit, GHG calculators/databases and procedures, Carbon Credit Policy and Implementation Plan	Nov 2024 – Oct 2025
Phase 4: Project Control & Reporting	Develop Key Performance Indicators, Initial Report to Council, through GIC	Mar – Apr 2025
Phase 5: Project Closure	Final Report to Council (through GIC)	Oct 2025



OCCI Priority Focus Area

Green Buildings

IMPLEMENTATION UPDATE: Better Homes Hamilton Pilot Residential Energy Efficiency Retrofit Program

- Application intake Dec 2023 Feb 2024.
- 50 households selected utilizing host of criteria including energy poverty data.
- Successful applicants have been notified
 & are taking next steps with retrofit plans.
- Staff are providing on-going coaching.
- Next steps will include evaluating program impact, challenges, benefits & determining how best to scale up residential retrofits across Hamilton.





OCCI 2023 Priority Focus Area

Green Buildings

UPDATE: Development of a 'Net Zero Emissions & Zero Carbon Standard' for New Municipal Facilities

- Collaborating with Corporate Facilities and Energy
 Management/Office of Energy Initiatives to develop the new
 standard.
- Consultant has been retained and work is underway.
- Standard will enable City to demonstrate leadership in the building sector.
- Anticipate bringing proposed standard to Council for approval by Q3 2025.



OCCI 2023 Priority Focus Area

Urban Greening

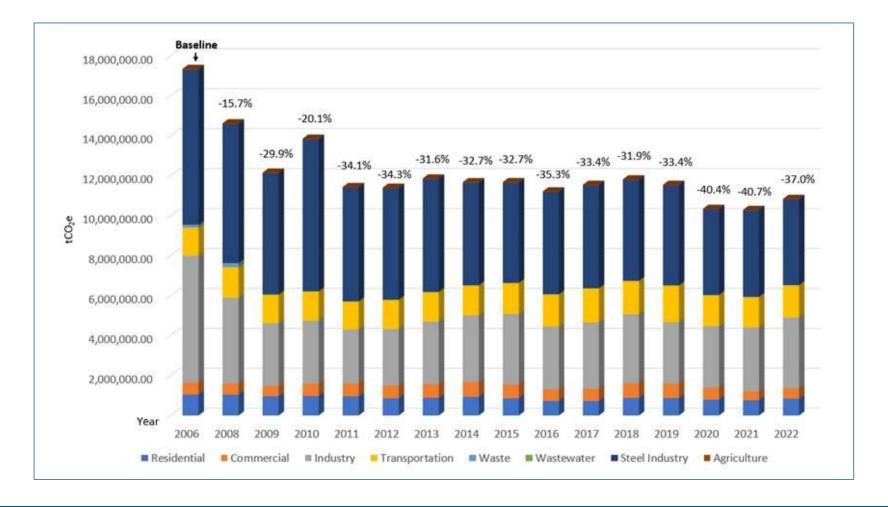
- Support for urban greening efforts including connecting City staff with community partners, administering funding for community depave projects, convening City staff to explore innovative green infrastructure projects.
- Development of a preliminary framework for tracking tree planting across Hamilton in 2023.
- Hand out native tree and plant seeds when participating in outreach/engagement events.





Hamilton's GHG Emissions Inventory Update

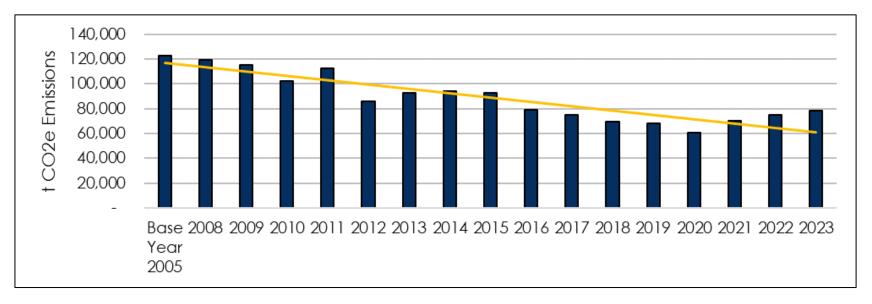
Community-Wide GHG Emissions 2006-2022





Hamilton's GHG Emissions Inventory Update

Corporate GHG Emissions 2005-2023

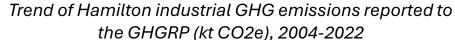


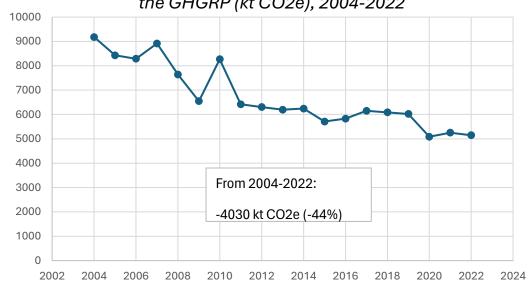
Source – City of Hamilton 2023 Annual Energy Report



TRANSFORMATION 1: Innovating Our Industry

- 19 local industries report as large emitters under the federal Greenhouse Gas Reporting Program.
- Overall industrial greenhouse gas emissions for these large emitters are decreasing.
- OCCI is reaching out to large emitters to gather information on climate planning and any commitments to net zero.







TRANSFORMATION 2: Transforming Our Buildings



- The Better Homes Hamilton home energy retrofit pilot project is now underway with 50 Hamilton households participating.
- Development of a Net Zero Emissions/ Zero Carbon Policy for all new municipal facilities is now underway.
- Draft 'Green Building Standards' were taken to the City's Planning Committee on October 1st 2024 for approval.

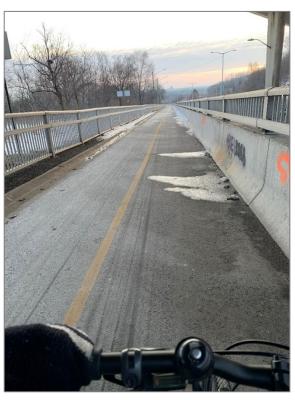
GREEN BUILDING STANDARDS





TRANSFORMATION 3: Changing How We Move





Cyclist's view heading down the Keddy Trail

- In 2023 a total of \$1.39 M was invested in cycling infrastructure resulting in 10.4 kms of new bike lanes.
- For 2024 the Public Works
 Transportation Division plans to complete a total of 23.6 km of active transportation infrastructure.
- Work continues with Hamilton's B-Line LRT System.



TRANSFORMATION 4: Revolutionizing Renewables



- Corporate Facilities and Energy Management has a tender-ready
 250 kW solar energy project for the Harry Howell Arena.
- The Office of Energy Initiatives is developing a business case for solar energy on the roof of the new transit storage facility, which would bring ~2 MW in power generation capacity.
- Hamilton Community Enterprises has built a positive business case for its proposed 'Energy Harvesting Project' which will use thermal infrastructure to extract waste heat from local industrial sources that could deliver low-carbon heating to more than 10 million square feet of building space via the City's District Energy System.



TRANSFORMATION 5: Growing Green



- The City of Hamilton, local Conservation
 Authorities, and other community
 institutions and organizations planted 46,540
 trees in 2023.
- Contributions to 2023 tree planting efforts were as follows:
 - City of Hamilton Forestry 30%
 - Conservation Authorities 60%
 - Other Organizations 10%





Climate Adaptation Actions Status Update



RESILIENT THEME 1: Built Environment/Systems

- Low Impact Development guidelines were developed in 2023 and taken to the City's Planning Committee for approval in October of 2024...
- A municipal stormwater fee has been developed, including incentive & credit programs to support on-property stormwater management measures, and will be implemented in 2026.

RESILIENT THEME 2: People and Health

- An Extreme Heat Working Group was established in 2023 that provided input on the City's Heat Response Strategy which was approved and enhanced at Public Health Committee in Q2 2024.
- Hamilton Public Library began opening the Central Library's Hamilton Room on statutory holidays during heat and extended heat warnings, enhancing existing services.



Climate Adaptation Actions Status Update



RESILIENT THEME 3: Natural Environment, Agriculture and Water

- The Forestry Division harnessed volunteer power to plant a mini forest at Johnson Tew Park, the City's 6th mini forest.
- The Environmental Services Division has three multi-year naturalization projects underway in City parks, removing invasives and creating 2.53 hectares of natural habitat in 2023.

RESILIENT THEME 4: Energy and Economy

 Economic Development updated its ERASE program to include climate resilience elements and is undertaking a comprehensive review of its 'LEEDing the Way' grant program to better support sustainable building and land development practices.



Recognizing Community Climate Action



LIUNA/ Fengate mixed use development at 500 Upper Wellington includes geothermal heating/cooling





Trees for Hamilton volunteer planting event at St. Joseph's Urgent Care



RECOMMENDATIONS:

- (a) That Appendix "A" to Report PED24166 "Hamilton's Climate Action Strategy Annual Climate Change Update 2024" be received.
- (b) That Appendix "B" to Report PED24166 "Status Update Regarding Climate Actions in Hamilton's Climate Action Strategy" be received.
- (c) That the proposal to shift the Annual Update on Hamilton's Climate Action Strategy to June of each year, starting in 2025, be approved.
- (d) That the Office of Climate Change Initiatives, in partnership with Corporate Facilities and Energy Management, be directed to explore the feasibility of accelerating the corporate and community-wide net zero targets and associated baselines, in alignment with global fairshare Science Based Target methodologies, and report back to the General Issues Committee in June 2025 with a recommended pathway forward.



Hamilton Named National Winner of One Planet City Challenge 2024

- Hamilton was short-listed by World Wildlife Fund's (WWF) International Jury along with Vancouver, Peterborough and Calgary.
- Hamilton has been announced as the National Winner for 2024!
- Hamilton is now participating in the WWF's Global 'We Love Cities' Campaign with voting open until October 31, 2024.











WE LOVE HAMILTON

Show Hamilton some love!

VOTE here:

welovecities.org/city/hamilton/









THANK YOU



INFORMATION REPORT

то:	Mayor and Members General Issues Committee
COMMITTEE DATE:	October 16, 2024
SUBJECT/REPORT NO:	2023 Annual Energy Report (PW21049(c)/FCS24050) (City Wide)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	Linda Campbell (905) 546-2424 Ext. 2810 Tracy Zmudczynski (905) 546-2424 Ext. 5356
SUBMITTED BY:	Indra Maharjan Director of Corporate Facilities & Energy Management Public Works
SIGNATURE:	Indra Mahayim.
SUBMITTED BY:	Brian McMullen Director - Financial Planning Administration and Policy Corporate Services
SIGNATURE:	Boll "weller

COUNCIL DIRECTION

As part of the City's Corporate Energy and Sustainability Policy (PW14050(a)) staff are directed to provide an annual energy report highlighting the progress and results of various City energy initiatives and commodity hedging agreements.

INFORMATION

The City of Hamilton's 2023 Annual Energy Report is attached as Appendix "A" to Report PW21049(c)/FCS24050. The Report provides a summary of energy usage, performance comparisons and cost savings initiatives for the calendar year 2023. This includes details on conservation efforts to reduce energy consumption and greenhouse gas emissions.

SUBJECT: 2023 Annual Energy Report (PW21049(c)/FCS24050) (City Wide) - Page 2 of 4

Previously there were two separate reports related to annual energy results. Based on feedback at Audit Finance & Administration Committee in 2023 to simplify the annual energy reporting and avoid duplication of information. A single Annual Energy Report now comprises three parts, as the energy-related results overlap with commodity and rate optimization activities and resulting greenhouse gas emissions inventory.

They are:

- 1. Energy Report Results
- 2. Corporate Report on Commodity Hedging and Rate Activities
- 3. Corporate Greenhouse Gas (GHG) Inventory Report

The City's Corporate Energy and Sustainability Policy has the following long-term targets in place, which will require collaborative and focused actions to achieve.

Table 1: Corporate Energy and Sustainability Targets

Year	Energy Intensity Reduction	Emissions Reduction
	Targets	Targets
2020	20%	20%
2030	45%	50%
2050	60%	100%*

In the Energy Results section, energy intensity (energy usage in equivalent kilowatt hours per square foot) is the key performance indicator for corporate buildings; as of 2023, it has declined by 29% from the base year of 2005. The report includes updated results for the City's overall utility consumption and costs, other key performance metrics and energy conservation project updates.

Table 2: 2023 Energy Intensity Comparison in Equivalent kilowatt hours per Square Foot (ekWh/sqft)

Energy Intensity	2005	2022	2023	2023 vs 2005	2023 vs 2022
City Total (ekWh/sqft)	45.69	33.21	32.40	-29%	-2%

Table 3: 2023 Combined Energy Usage Comparison (Electricity and Natural Gas) in equivalent kilowatt hours (ekWh)

	2005	2022	2023	2023 vs	2023 vs
				2005	2022
Total Combined					
Energy (ekWh)	400,722,256	361,676,039	369,617,838	-8%	2%
Total Energy					
Cost (\$)	\$27,177,303	\$29,165,903	\$31,625,422	16%	8%

SUBJECT: 2023 Annual Energy Report (PW21049(c)/FCS24050) (City Wide) - Page 3 of 4

The Corporate Report on Commodity Hedging and Rate Activities is presented under its own section in the report. This report has been integrated into the Annual Energy Report to provide the required information on a timelier basis and within its relevant context.

The primary objectives for the City's commodity price hedging program are as follows:

- 1. Adhere to statutory requirements.
- 2. Promote financial flexibility.
- 3. Limit financial risk exposure.

There are some specific reporting requirements related to commodity hedging, and they are addressed in the report, but specifically that the General Manager, Finance and Corporate Services, shall report to Council at least once each fiscal year with respect to any and all energy commodity price hedging agreements and other energy commodity agreements in place. The report shall contain, at a minimum, all requirements as set out in O. Reg. 653/05 (as it exists from time to time) and shall include:

- A statement about the status of the energy commodity price hedging agreements during the period of the report, including a comparison of the expected and actual results of using the agreements;
- 2. A statement by the General Manager, Finance and Corporate Services, indicating whether, in his opinion, all the agreements entered during the period of the report are consistent with this Energy Commodity Policy relating to the use of financial agreements to address commodity pricing and costs;
- 3. An overview of any agreements with contract agents (including, without limitation, actual costs, services provided and frequency of use) and a statement by the General Manager, Finance and Corporate Services, indicating whether, in his opinion, all these agreements are consistent with this Energy Commodity Policy with respect to the use of contract agents;
- 4. An overview of any co-operative energy purchasing initiatives and / or agreements and a statement by the General Manager, Finance and Corporate Services, indicating whether, in his opinion, all these agreements are consistent with this Energy Commodity Policy with respect to the use of co-operative energy purchasing;
- 5. Such other information as Council may require; and
- 6. Such other information as the General Manager, Finance and Corporate Services, considers appropriate to include in the report.

The 2023 Treasurer's Annual Statement on Commodity Price Hedging is included as Appendix "B" to Report PW21049(c)/FCS24050.

Finally, the report on the Corporate Greenhouse Gas Emission Inventory for calendar years 2022 and 2023 are also presented within the 2023 Annual Energy Report under its own section. The changes to the Broader Public Sector Reporting regulations (O.

SUBJECT: 2023 Annual Energy Report (PW21049(c)/FCS24050) (City Wide) - Page 4 of 4

Reg. 25/23) required energy and emissions reporting to include both years in 2024 submission, and prior-year data for all future reports. Data compiled for the greenhouse gas emissions inventory had previously been one year behind the energy intensity, energy usage and other related energy data.

The overall results of the Corporate Emissions Inventory for 2023 was a reduction of 36% as compared to the base year of 2005. The emissions inventory is impacted by both energy usage and energy emissions intensity factors. Rising electricity emissions factors have increased corporate emissions relative to 2021. Efficiency projects have limited the impact of the electricity emissions factor increase on total emissions to just 5% year-over-year.

Table 4: 2023 GHG Emissions Inventory Comparison in tonnes CO2e

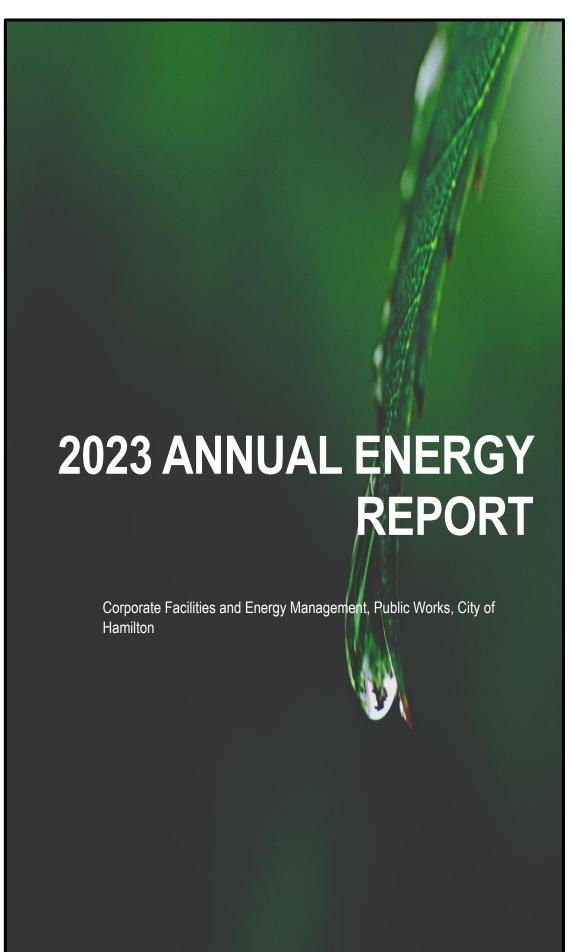
Sector	2022 Total CO2e	2023 Total CO2e	2023 vs 2005	2023 vs 2022
City Wide Total	74,835	78,487	-36%	5%

The report was shared with internal stakeholders including Office of Climate Change Initiatives (OCCI) and PW Asset Management/Fleet for their feedback and further use of information available in this report.

APPENDICES AND SCHEDULES ATTACHED

Appendix "A" to Report PW21049(c)/FCS24050 – 2023 Annual Energy Report

Appendix "B" to Report PW21049(c)/FCS24050 – 2023 Treasurer's Annual Statement on Commodity Price Hedging



Results of energy usage, energy savings and avoided energy costs, conservation and generation activities. commodity hedging comparisons and GHG emissions inventory

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EXECUTIVE SUMMARY

The City of Hamilton has been reporting on its annual energy data and related energy reductions, conservation activities and emissions data for several years. Over the past several years, climate change and climate action has been embedded in many of the decisions made by the City, both in its development of the Office of Climate Initiatives and its community policies, as well as with the already established policies, plans and projects across its corporate building and fleet assets.

In August 2024, the City also released its five year Conservation Demand Management Plan¹ as per O.Reg 25/23 that highlight the key areas of focus for next five years to continue moving corporate facilities toward its targets. These actions include energy generation, conservation and GHG mitigation.

Reducing energy use and emissions has been the catalyst for the City's Pathway to Net Zero activities and resulting conservation and generation projects.

The 2023 Annual Energy Report is presented in 3 parts:

- 1) PART 1: ANNUAL ENERGY REPORT RESULTS
- PART 2: CORPORATE REPORT ON COMMODITY HEDGING AND RATE ACTIVITIES
- 3) PART 3: CORPORATE GREENHOUSE GAS (GHG) EMISSIONS INVENTORY REPORT

The Annual Energy Report provides data for the City's corporate energy and fleet usage, utilities and fuel costs, energy intensity results, conservation, and a variety of other key performance indicators (KPIs). These KPIs include savings and avoided costs for different energy and cost reduction programs, strategies, and benchmarks.

The 2023 Annual Energy Report will now also include the <u>Corporate Report on Commodity Hedging and Rate Activities</u> outlining the results on commodity hedging, utility rate optimization and related comparisons to set benchmarks. Previously this data had been provided in a separate report, *Annual Report on Energy Commodity Price Hedging*. The Corporate Energy and Sustainability Policy (PW14050(a)) stipulates those details on energy commodity hedging agreements, other utility and commodity contracts and results be reported at least once annually. Recognizing the overlap of energy details in both reports, inclusion of this information as a section within the Annual Energy Report aligns the requirements of the policies with an effort to eliminate redundancy.

Also included in this report is the <u>Corporate Greenhouse Gas (GHG) Emissions Inventory Report</u> for 2023. Previous reporting on the corporate emissions inventory were one year behind other reporting metrics. However, the data timelines have now aligned with the annual reporting and the information is now available. These timelines also align with the newly updated Broader Public Sector reporting requirements outlined as Ontario Regulation 25/23. Results submitted as part of that reporting is included in the appendices of this report.

¹ City of Hamilton Conservation and Demand Management Plan is available: https://www.hamilton.ca/home-neighbourhood/environmental-stewardship/environmental-plans-strategies/office-energy

2023 RESULTS HIGHLIGHTS

6	Overall annual Utility Energy Spend of \$46.7 M for Electricity, Natural Gas, and Fuels	\$4.3M in Conservation Savings and Incentives for 2023
	Electricity use increased by 2% and Natural Gas use increased by 3% compared to 2022	Active energy efficiency projects reduced emissions by 1,546 t CO2e in 2023
	Energy Intensity reductions decreased to 29% lower than 2005 base year	Fuel costs fell by 24% while Fuel usage rose by 7% compared to 2022



Figure 1: Lister Block facility

CORPORATE ENERGY AND SUSTAINABILITY POLICY

One of the tools used to guide decision making around energy use reduction, sustainability, emissions and reporting for corporate assets and operations is the <u>Corporate Energy and Sustainability Policy</u>². The policy was revised in 2020 and was accepted by Council in February 2021. The Policy revisions aimed to further re-iterate the importance of considering energy and sustainability decisions in capital planning, and to align it with other City-wide initiatives including other corporate and community-based plans, such as addressing climate change, renewable energy and Fleet and Transit policies.

The existing policy confirms Corporate energy intensity targets and GHG emissions reduction targets to achieve Net Zero emissions by 2050. In addition, further actionable items are defined in the areas of building operations efficiency, sustainable building and Net Zero new construction, and operational set points and improvement measures.

The targets in the 2020 policy include:

Table 1: Corporate Energy Intensity and Emissions Reduction Targets

Year	Energy Intensity Reduction Targets	Emissions Reduction Targets
2020	20%	20%
2030	45%	50%
2050	60%	100%*

^{*}Net zero emissions

The policy document is revised every five years to ensure that it remains relevant to the existing regulatory environment and to other City-endorsed policies or initiatives on energy reduction and sustainability. The policy will begin its 5-year review in 2024. The review will look to incorporate more specific policies around the Pathway to Net Zero initiatives, green building for new construction of City facilities and inclusion of recently developed policies and best practices.

² Corporate Energy & Sustainability Policy is available: https://www.hamilton.ca/home-neighbourhood/environmental-stewardship/environmental-plans-strategies/office-energy

PART 1: ANNUAL ENERGY REPORT RESULTS

ENERGY STRATEGIES & PROGRAM KPI RESULTS

The City continually tracks and reports on a variety of the key performance indicators (KPI) to measure the City's successes and identify areas for improvement. These metrics have been instrumental in the evaluation of results from decisions made or strategies developed to meet different City goals and targets.

Although costs may be impacted by many outside factors, cost reduction and the avoidance of costs are a result of specific energy-related strategies and programs implemented by the City. Energy conservation projects, utilizing incentive programs, bill recovery from reviewing utility invoices or tax rebate programs, and utility rate optimization are a few of the methods used to contribute to annual cost savings or mitigation of energy costs for the City.

Overall, the total results from implementing the various energy strategies and programs in 2023 has resulted in a cumulative savings and avoided costs of \$10.5M. This is calculated from utility rates, cost recovery and energy conservation project incentives.

UTILITY RATES AND COMMODITIES STRATEGY

This category reports the results of the electricity and natural gas costs that would have been incurred by the City had no action been initiated to reduce costs. Actions include procurement strategies, natural gas hedging strategies and optimizing utility rates including switching rate class to increase benefits from Global Adjustment (GA) savings opportunities. Natural gas hedging strategies amounted to an avoided cost of \$854K for 2023 when compared to its benchmark. GA strategies resulted in an avoided cost of \$5.2M for 2023. The total avoided costs under this category \$6.1M in 2023. This category is discussed in greater detail under Part 2:_Corporate Report on Commodity Hedging and Rate Activities as it pertains directly to the risk management activities for utility rates and commodities.

COST RECOVERY

This category reports on the results of costs recovered due to the City's continuous efforts to review its utility accounts to correct any billing errors, as well as recover credits from fuel tax recovery programs. In 2023, the consistent review of the City's accounts and of corrected estimated billings resulted in \$145K of savings for this metric.

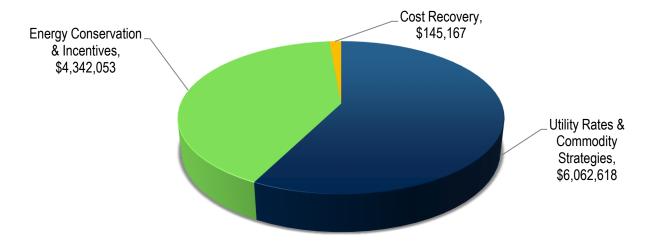
ENERGY CONSERVATION AND INCENTIVE PROGRAMS

This category reports the results of the savings achieved from implementing energy efficiency measures, equipment and processes within the City's building assets that lead to reductions in energy consumption as well as financial incentives received for completing those projects. Incentives in this context refers to those from utility providers, the Independent Electricity System Operator (IESO) or provincial or federal funding options that are provided to eligible energy efficiency projects. The energy efficiency project savings for 2023 was \$4.2M, with incentives received of \$98K, for a total savings of \$4.3M in this category. Project savings include projects completed in previous years as the project benefits continue. Any incentives

applied for, but not confirmed or received by the City, will be reported in the following year's report. Table 2 below shows the annual savings for the past three years reported for this category.

		2021-2023		
	2021	2022	2023	Cumulative
Energy Conservation (Projects)	\$3,853,812	\$4,353,341	\$4,243,615	\$12,450,768
Incentives	\$73,292	\$215,504	\$98,438	\$387,233
Totals	\$3,927,104	\$4,568,845	\$4,342,053	\$12,838,002

Chart 1: 2023 Breakdown of Cumulative Savings and Avoided Costs



OVERALL UTILITY COSTS

The City tracks costs and consumption to evaluate energy performance, but also to help prepare utility budget for upcoming years. Costs for electricity, natural gas and fuels are compiled and measured against the previous year and compared to the baseline year of 2005. The costs are normalized for usage in the 2023 year. In addition, for the purposes of this report, costs for sites connected to the district energy system (and supplied by HCE Energy Inc.) are included in electricity and natural gas costs.

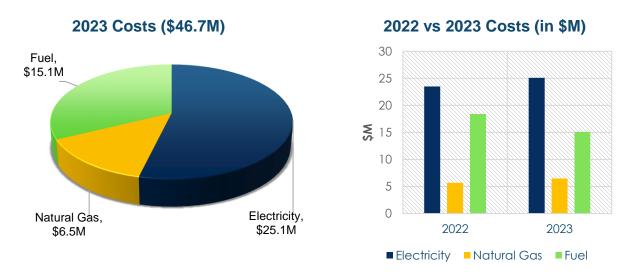
Energy costs are a significant operating budget item for corporate buildings and vehicle assets. Although cost mitigation actions from energy efficiency projects that reduce consumption can have a positive impact on costs, costs themselves are impacted by much more than usage. Regulatory changes, rate changes, inflation, global markets and weather can all impact costs despite reductions in usage. Costs for energy include regulated charges and market-based (commodity) charges.

Costs determined in this report are incurred by City-owned and operated buildings/sites and exclude City Housing Hamilton. Utilities include Alectra Utilities, Hydro One Utilities and Enbridge Gas Inc. Sites linked to the district energy system with utility costs provided from HCE are included in electricity and natural gas

respectively. Fuels include diesel, unleaded gasoline and compressed natural gas (CNG) for all Transit and Fleet operations (excluding Hamilton Police Services or Darts). Sites with partial data may be excluded.

The inclusion of buildings/sites in the report may vary from year to year. In any given reporting period, buildings and vehicles could be added (built or purchased) or removed (sales or demolitions). Major renovations may decommission a site for a time and may be excluded as a full year data set may not be available. As such, square footage is adjusted annually to include only reported sites.

Chart 2: (a) Total Overall Annual Utilities Costs 2023. (b) Compared to 2022



Increased energy use through 2023 and rising carbon tax rates resulted in facility cost increase year-over-year. The City's hedging strategy limited changes in commodity costs year-over-year, with most of the impact associated with scheduled increases in the carbon tax rate.

Fleet costs declined relative to 2022 as fuel rates declined and the City continued its shift from diesel and unleaded gasoline to lower-cost compressed natural gas (CNG).

Additional information on the impacts will be discussed in upcoming sections of this report. In 2023, the total spend for consumption of electricity, natural gas and vehicle fuels (diesel, unleaded gasoline and compressed natural gas (CNG)) was \$46.7 million, a decrease of 2% overall compared to 2022.

ENERGY PERFORMANCE AND KPI RESULTS

Gathering and reviewing data on energy usage and cost is instrumental in understanding trends and decision making for program and project activities within the facilities. This section reviews the comparison results of electricity, natural gas and energy intensity to the prior year (2022) and to the base year (2005).

The energy consumption and costs reported here are period normalized for 2023 and are calculated as usage and cost during the calendar year by site and may or may not coincide with a billing period for any

given account. In addition, the data reported here is for full year data set. If a property is added or removed mid-year it is not included on the reporting.

Additional charts on the results presented in this section are in Appendix A of this report.

ELECTRICITY CONSUMPTION AND COSTS

The table below shows the results for electricity in 2023. Electricity consumption in 2023 was up 2% from 2022 and down -13% from the base year of 2005. The costs and unit price also rose in 2023 when compared to the previous year.

Costs for electricity comprises commodity, delivery, transmission, and other regulatory charges. Commodity includes the Hourly Ontario Energy Price (HOEP) and the Global Adjustment (GA). Both portions of the commodity are determined by market-based factors and are administered by Ontario's Independent Electricity System Operator (IESO). The other charges, delivery, transmission and regulatory are regulated by the Ontario Energy Board (OEB), and any requests by a local utility (also called a local distribution company), to change such rates requires OEB approval. The City of Hamilton operates within two local distribution companies, Alectra Utilities and Hydro One.

Table 3: 2023 Electricity Consumption, Costs and Comparison

	2005	2022	2023	2023 vs 2005	2023 vs 2022
Total Electricity kWh	236,362,045	201,298,489	205,217,111	-13%	2%
Total Electricity Cost \$	\$20,657,050	\$23,501,278	\$25,132,616	22%	7%
Total Electricity \$/kWh	\$0.087	\$0.117	\$0.122	40%	5%

The City has a variety of rate classes due to the different sizes and needs of power across the City. There are small commercial (or residential) accounts, unmetered or static accounts (i.e. streetlights), large commercial or demand-based rate accounts, and a few high demand (Class A) accounts. The unit cost is a blend of the varying rates and therefore is not necessarily reflective of a specific account.

Chart 3: 2023 City of Hamilton Annual Average Electricity Price (¢/kWh)



The impacts to consumption (and cost) are varying, but typically relate to weather conditions, building capacity, operations, and energy efficiency. The 2% increase in electricity consumption matches a 2% increase in reported square footage for City operations.

NATURAL GAS CONSUMPTION AND COSTS

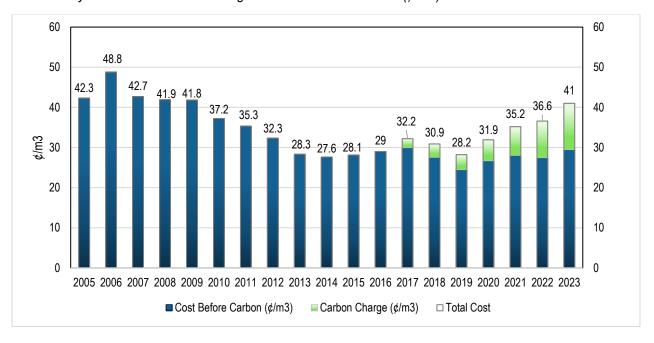
Natural gas results for 2023 are shown in the table below. Natural gas consumption for buildings in 2023 was a 3% increase over both 2022 and the base year of 2005. As with electricity, this consumption increase is largely aligned with the increase in reported square footage for City operations. The heating degree days (HDD) in 2023 for Hamilton were -12% lower than in 2022, which would typically result in lower natural gas consumption. Increases in consumption are in part due to additions in volume for the biosolids production program at the Hamilton Water Woodward site.

Table 4: 2023 Natural Gas Consumption, Costs and Comparisons

	2005	2022	2023	2023 vs 2005	2023 vs 2022
Total Natural Gas m3	15,403,956	15,480,459	15,868,796	3%	3%
Total Natural Gas Cost \$	\$6,520,253	\$5,664,625	\$6,492,806	0%	15%
Total Natural Gas \$/m3	\$0.423	\$0.366	\$0.409	-3%	12%

Costs for natural gas in 2023 were 15% higher when compared to 2022, and level with the 2005 base year. Costs for natural gas include the commodity charges, which the City purchases on the wholesale market via purchasing agreements, and distribution and transportation charges, which are provided by Enbridge Gas. The gas is delivered to the end user by Enbridge Gas regardless of where the commodity is purchased. A detailed breakdown of the City's natural gas commodity purchases is covered later in this report under Natural Gas Hedging.

Chart 4: City of Hamilton Annual Average Natural Gas Cost – All in (¢/m3)



The largest impact to costs continues to be the annual increase to the Federal Carbon Charge (FCC). The FCC, mandatory for provinces without a designated carbon reduction plan, was implemented in Ontario starting August 2019. The FCC is charged per cubic meter of consumption and is included on Enbridge Gas bills. The FCC increases annually every April and does increase costs as a result. The charge for the January to March 2023 period was $9.79 \text{ } \phi/\text{m}3$ and increased to $12.39 \text{ } \phi/\text{m}3$ as of April 2023.

COMBINED ENERGY CONSUMPTION AND COSTS

The combined consumption of electricity and natural gas converted to equivalent kilo-watt hours (ekWh) represents a 2% increase over 2022. There is a -8% decrease in consumption when compared to the base year of 2005. Overall, the cost for electricity and natural gas combined increased by 8% over 2022 and increased by 16% compared to the base year.

Table 5	$\cdot 2023$	Combined	Energy	Consun	nntion	Costs	and	Comparisons ³
I abic o	. 2020	CUIIIDIIIGU	LIIGIUV	CUIISUII	IDUOII.	CUSIS	ariu	CUIIIDAIISUIIS

	2005	2022	2023	2023 vs 2005	2023 vs 2022
Total Combined Energy (ekWh)	400,722,256	361,676,039	369,617,838	-8%	2%
Total Energy Cost \$	\$27,177,303	\$29,165,903	\$31,625,422	16%	8%
Total Energy \$/ekWh	\$0.068	\$0.081	\$0.086	26%	6%

Collectively, the total numbers show increases in consumption in line with square footage increases as staff are returning back to work. A detailed review of combined consumption information shown by facility grouping in the table below shows declines in 10 City groups. Hamilton Water saw 2023 energy consumption rise by 5% as compared to 2022, due in part to increasing natural gas consumption at the Woodward Biosolids facility which came in operations in 2020.

Table 6: 2023 Combined Energy Consumption by Facility Grouping (000's of ekWh)

	2005	2022	2023	2023 vs 2005	2023 vs 2022
City/Town Halls	13,775	8,662	7,570	-45%	-13%
Corporate Facilities	17,188	10,936	10,900	-37%	0%
Street Lighting	33,602	17,465	17,510	-48%	0%
Traffic Lighting	5,688	1,216	1,218	-79%	0%
Other City Operations	5,618	4,276	4,061	-28%	-5%
Hamilton Water	121,040	162,930	171,765	42%	5%
Yards	39,589	27,935	24,601	-38%	-12%
Arenas	39,904	28,967	33,743	-15%	16%
Community/Senior Centers	3,834	3,622	3,536	-8%	-2%
Rec Centres/Pools	26,789	30,043	29,621	11%	-1%
Tim Horton's Field	0	8,885	8,223	n/a	-7%

³ Combined usage is electricity in kWh plus natural gas in m3 converted to ekWh.

Rec Parks/Stadiums/Golf	8,332	5,296	5,250	-37%	-1%
Lodges (Macassa, Wentworth)	24,938	13,699	14,861	-40%	8%
Culture	5,383	3,975	3,715	-31%	-7%
Fire/ EMS	10,698	12,181	11,565	8%	-5%
Hamilton Public Libraries	9,343	10,351	9,595	3%	-7%
First Ontario Centre	10,122	n/a	n/a	n/a	n/a
First Ontario Concert Hall	5,466	n/a	n/a	n/a	n/a
Hamilton Convention Centre	4,656	n/a	n/a	n/a	n/a
Hamilton Police Services	14,757	11,238	11,884	-19%	6%
City Wide Total	400,722	361,676	369,618	-8%	2%

ENERGY INTENSITY

Energy intensity is one of the key metrics used across the industry as a measure of energy consumption in facilities and for the City, and it measures usage in equivalent kilowatt hours per square foot (ekWh/sqft) of operated space. Each year, the City reviews the electrical and natural gas usage and updates the square footage of occupied space to reflect changes in building portfolios. The forward targets outlined in the Corporate Energy & Sustainability Policy are a reduction in energy intensity of 45% by 2030 and 60% by 2050 as compared to the base year of 2005.

In 2023, the energy intensity represents a reduction of 29% as compared to the base year. Compared to 2022, there was a decrease of -2% in energy intensity.

Table 7: 2023 Energy Intensity Comparison by Portfolio

	2005	2022	2023	2023 vs 2005	2023 vs 2022
City Total (ekWh/sqft)	45.69	33.21	32.40	-29%	-2%
City Total (\$/sqft)	\$2.67	\$2.44	\$2.63	-1%	8%
Reported Square Footage	5,138,852	5,293,497	5,403,803		

The categories of Operational and Maintenance (O&M) and Hamilton Water are excluded from the energy intensity calculations. The O&M category includes such things as usage related to street lighting, traffic lighting, parking structures/lots, and park or path lighting. Hamilton Water includes usage related to pump stations, reservoirs, wells, or water towers. Both categories may have significant usage, but do not represent occupiable space or "building" usage.

The following table shows the energy intensity results for specific facilities groupings.

Table 8: 2023 Energy Intensity Comparison by Portfolio⁴

	2005	2022	2023	2023 vs 2005	2023 vs 2022
City/Town Halls	39.6	26.5	23.2	-42%	-13%
Corporate Facilities	44.6	23.1	23.0	-49%	0%
Street Lighting	n/a	n/a	n/a	n/a	n/a
Traffic Lighting	n/a	n/a	n/a	n/a	n/a
Other City Operations	n/a	n/a	n/a	n/a	n/a
Hamilton Water	n/a	n/a	n/a	n/a	n/a
Yards	38.1	27.7	24.7	-35%	-11%
Arenas	51.3	35.9	36.3	-29%	1%
Community/Senior Centers	31.1	21.9	21.1	-32%	-4%
Rec Centres/Pools	78.6	59.0	57.8	-26%	-2%
Tim Horton's Field	0.0	27.2	25.1	n/a	-7%
Rec Parks/Stadiums/Golf	36.5	26.2	26.6	-27%	1%
Lodges (Macassa, Wentworth)	113.6	39.4	42.8	-62%	8%
Culture	35.5	30.2	28.3	-20%	-6%
Fire/ EMS	45.2	34.2	32.5	-28%	-5%
Hamilton Public Libraries	25.1	28.7	26.6	6%	-7%
First Ontario Centre	22.5	n/a	n/a	n/a	n/a
First Ontario Concert Hall	57.8	n/a	n/a	n/a	n/a
Hamilton Convention Centre	37.2	n/a	n/a	n/a	n/a
Hamilton Police Services	59.8	40.5	42.8	-28%	6%
City Wide Total	45.7	33.2	32.4	-29%	-2%

Additional detailed energy intensity per facility site for the categories above is included in the Appendix A of this report.

VEHICLE FUELS

FUELS CONSUMPTION AND COSTS

Fuel for the City's fleet of vehicles is purchased on the wholesale market for all of the City's own fleet vehicles, including, but not limited to heavy vehicles for Roads, Waste, Hamilton Water, Fire and EMS and Transit, as well as smaller departmental vehicles, like small trucks and SUVs for Building and Bylaw. Fuels include diesel, unleaded gasoline and compressed natural gas (CNG).

2023 gasoline consumption was unchanged from 2022. Diesel consumption declined by -19% year-over-year as Transit continued its transition to CNG-powered buses. This resulted in a corresponding 38% increase in CNG use compared to the prior year. An increase in CNG usage is expected to continue as

⁴ Operational accounts (street lighting, traffic lighting, park lighting, and Hamilton Water) are not included in Energy Intensity calculations. Square footage by division is adjusted for any building not included in the calculation of energy intensity.

Transit replaces all its Diesel bus fleet to CNG over the next few years. An estimated 64% of the bus fleet was CNG by the end of 2023, with plans to increase the fleet to 90% CNG by 2025.

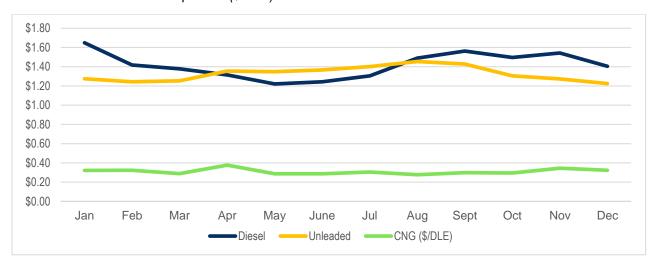
Fuel Type	Consumption Litres	Cost	Average \$/L	Consumption 2023 vs 2022	Average Price 2023 vs 2022
Diesel	6,237,613	\$8,848,289	\$1.42	-19%	-15%
Unleaded Gasoline	2,533,250	\$3,366,545	\$1.33	0%	-9%
CNG (DLE)	9,502,086	\$2,845,721	\$0.30	38%	3%
Total	18,272,949	15,060,555	\$0.82	7%	-24%

The 2023 budget prices for diesel and gasoline were both set at \$1.55 per litre. The actual average diesel and gasoline unit prices ended 2023 under budget. Prices for diesel and gasoline declined early in 2023 and stabilized as markets moved past 2022's political unrest and eased pressure on prices for oil and global demand for fuels. Diesel consumption was slightly lower than budgeted. The variance of actual to budget was -\$1.9 M in 2023. Table 10 shows the 2023 results as compared to budget.

Table 10: 2023 Actual Diesel and Gasoline Consumption and Costs Compared to Budget

Fuel Type	2023 Budget	2023 Actual	2023 Variance
			(Actual – Budget)
Diesel Consumption (L)	6,692,476	6,237,613	-454,863
Diesel Cost (\$)	\$10,373,341	\$8,848,289	-\$1,525,052
Diesel Unit Price (\$)	\$1.55	\$1.42	-\$0.13
Gasoline Consumption (L)	2,435,706	2,533,250	97,544
Gasoline Cost (\$)	\$3,775,348	\$3,366,545	-\$408,803
Gasoline Unit Price (\$)	\$1.55	\$1.33	-\$0.22
Total Consumption (L)	9,128,181	8,770,863	-357,319
Total Costs (\$)	\$14,148,689	\$12,214,834	-\$1,933,855

Chart 5: 2023 Fuel Cost Comparison (\$/DLE)



While CNG is a lower cost fuel compared to diesel and gasoline, the buses operate at approximately 74% efficiency per diesel litre equivalent (DLE) when compared to diesel fueled buses. Despite a lower fuel efficiency, when converted to diesel equivalent dollars and adjusted for efficiency, Transit avoided spending \$7.3M with their fleet of CNG buses than they would have using only diesel buses. In addition, the lower GHG emissions from using CNG fuel versus diesel is of benefit to the City overall and positively impacts the City's corporate GHG emissions inventory.

Table 11: 2023	Cost-Benefit of	CNG as	Compared to Diesel
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Fuel Type	Consumption Litres
Diesel Litre Equivalent (L)	9,502,086
Number of DLE Litres of Diesel Required*	7,126,564
DSL cost at \$1.42/L (Average Fuel Price)	\$10,119,721
2023 CNG Cost	\$2,845,721
Avoided fuel cost by using CNG	\$7,274,000



Figure 2: Carbon Neutral Bus

The City continued to operate a fully carbon-negative bus through 2023. The goal of the original pilot in 2021 and 2022 with Enbridge was to demonstrate reduced emissions from the City's public transit operations. The pilot was a success and its extension for the further year continued help to displace approximately 36,000 liters of diesel. RNG is a practical option that enables Transit to reduce emissions without compromising performance or reliability while using its existing fleet.

ENERGY CONSERVATION

Project activities at the City play an important role toward meeting the energy reduction and emissions targets and improving efficiencies within City buildings. Every year, these projects are evaluated using specific criteria to identify energy and emissions savings. Upgrades to existing corporate buildings by installing energy efficient lighting and equipment or utilizing new technologies can help to improve operational efficiencies, cost effectiveness, and help meet corporate targets for energy intensity and GHG reductions, including the goal of net zero emissions by 2050.

The City's project teams work closely with consultants, engineers, utility personnel and industry experts to retrofit existing buildings, construct new buildings, and upgrade equipment and processes. In addition,

securing funding and incentives for efficiency and GHG-reducing projects and the post project monitoring and verification of savings is an important process in reporting and tracking the efforts.

The City tracks the energy savings achieved from projects once they are complete. Annual savings from all completed projects totaled \$4.2M in 2023. The City received \$98K in incentives in 2023 from Enbridge and the IESO. As noted previously, annual project savings are captured from projects completed in prior years.

\$7 \$6 \$5 \$4 Millions \$3 \$2 \$1 2010 2013 2014 2015 2016 2019 2017 2018

Energy Conservation (Rate)

Incentives

Chart 6: Annual project Savings (Rate & Levy) and Incentives

■ Energy Conservation (Levy)

ENERGY EFFICIENCY PROJECTS

A variety of projects are undertaken annually with the intentions of reducing both energy usage and GHG emissions to help achieve the targets in place. Some highlights on energy efficiency projects that have been completed in 2023 are:

Wentworth Ops Centre LED Lighting Upgrade:

- This project converted existing indoor and select outdoor lighting to energy efficient LED technology.
- Benefits included energy efficiency, reduced GHG emissions, better light levels, and reduced operations and maintenance costs.
- Electricity reduction of 214,228 kWh with associated cost savings of \$27,864 annually.
- Combined GHG emissions reduction of over 10 Tonnes of CO2 annually.
- The City received total energy incentives of \$9,672 from the IESO program.

Wentworth Ops Centre Boiler and Condensers Upgrade Project:

- This project included the lifecycle replacement of space heating plant as well as the condensers for office space cooling with energy efficient condensing boilers and new condensers respectively.
- These retrofits helped reduce both natural gas and electricity consumption as part of the facility's Pathway to Net Zero.
- Benefits included energy efficiency, reduction in natural gas consumption, reduced GHG emissions, and reduced maintenance costs.
- Energy reduction in 22,915 m3 of natural gas and 4,620 kWh of electricity respectively, with combined utilities operational savings of \$10,000 annually.
- Combined GHG emissions reduction of 43.5 Tonnes of CO2 annually.
- The City received combined total energy incentives of \$13,057 from Enbridge Gas and IESO programs.



Glanbrook Town Hall Heating/Cooling Replacement Project

- This project included the lifecycle replacement of five existing, natural gas furnaces, central air conditioning and controls. These heating/cooling systems were replaced with five new energy efficient air source heat pumps (heating & cooling) with gas fired back-up and new smart thermostats.
- The installation of heat pump technology helps reduce natural gas consumption putting the facility on a pathway to net zero.
- Benefits included better energy efficiency, a reduction in natural gas consumption, reduced GHG emissions, and reduced maintenance costs.
- GHG emissions are expected to be reduced by 14 tonnes of CO2 annually.

Stoney Creek Municipal Service Centre Cooling Tower Replacement Project

- This project included the lifecycle replacement of the building's cooling tower and associated pumps, motors, piping and controls. A new tower was installed with energy efficient fans, motors, a variable frequency drive and new controls.
- Benefits included reduced electricity consumption, reduced equipment wear and tear, and reduced maintenance costs.
- Annual electricity savings are estimated at 21,600 kWh with a cost savings of \$3,200 per year.
- The City received incentives of \$ 2,875.20 from the IESO SaveOnEnergy program.

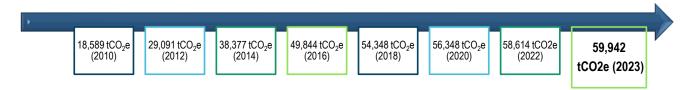


Replacement of Two Environmental Control Units (ECUs) for the IT Room / Datacenter:

- This project included the lifecycle replacement of two Environmental Control Units in the IT room with newer, higher-capacity units.
- The primary focus of this retrofit was life cycle replacement and cooling system reliability for the data room. There were no significant energy savings because the newer units were higher capacity than the existing ECUs.
- Benefits included better operational control, better cooling system reliability with full back up redundancy, better operational efficiency, and reduced maintenance costs.

The goal of energy efficiency projects is not only to achieve energy use reductions and save money, they are also key instruments in reducing GHG emissions that would have otherwise been emitted into the atmosphere. The various efficiency measures completed on projects in 2023 resulted in 1,443 tCO2e, with a cumulative total of 59,942 tCO2e reduction from project activities since 2005. This is the equivalent of removing approximately 12,700 cars from the road.

Chart 7: Cumulative GHG Savings from Project Activities



RENEWABLE ENERGY GENERATION

The City's biogas renewable generation operations are owned and managed through Hamilton Renewable Power Inc. (HRP Inc.). There are three 1.6 MW biogas-fueled systems. Two of the units are located at the Glanbrook landfill site. The third unit, a cogeneration unit, producing electricity and heat, is located at the Hamilton Water site at Woodward Avenue.

The three units use raw biogas as a renewable fuel source to produce electricity for the power grid through a long-term contract with the province. Using renewable fuel contributes to a more efficient and sustainable process, and further offsets GHG emissions.

Renewable natural gas is also produced at Woodward Avenue using a Biogas Purification Unit (BPU). The BPU captures excess methane gas from the anaerobic digestion process in the wastewater process. The raw biogas is purified, treated, and conditioned to yield the utility grade renewable natural gas that can be injected into Enbridge Gas distribution system.

The City of Hamilton currently has two facilities with solar generation. Hamilton Public Library installed a 30-kW rooftop solar PV on the Valley Park Library and Community Centre as part of its LEED Gold certification. The City also leases roof space to Alectra Utilities for a 250-kW rooftop solar PV installation at the Wentworth Operations Centre.

As the City moves forward to achieve its goals of net zero by 2050, renewable energy will need to play a key role in achieving those targets. A variety of feasibility studies are underway to propose the best way forward in utilizing the City's existing renewable assets through expansion of generation capacity as well as implementing additional renewable energy options. Staff will be working on new plan to explore renewable energy generation opportunities in all corporate facilities including Hamilton Water and its waste processing facilities. With the broader community strategies around solar, the City has been exploring solar opportunities for corporate sites, including at the new Transit facility currently under construction. There are various sites in the feasibility stage, The Pathway to Net Zero process has identified 8 potential solar PV opportunities totaling 2,140 kW of generation potential so far.

NET ZERO INITIATIVE

In 2019, City council declared a climate change emergency. As a response to this declaration, the City committed to becoming a net zero emissions city by 2050. This target was solidified in the five-year review of the Corporate Energy and Sustainability Policy document in 2020 which supports corporate goals. Additionally, the City created a Climate Change Office to help achieve these long-term targets by guiding overall City policy (community and corporate). There is no one clear route to achieving net zero emissions. It requires a broad combination of various projects and programs, operational changes, renewable energy generation and electrification. To facilitate all that must be accomplished, a forward-looking plan or "pathway" is required.

PATHWAY TO NET ZERO

To meet its net-zero goals, the City of Hamilton engaged an external consultant to prepare a portfolio-scale Net Zero Carbon Plan ("Pathway to Net Zero for Corporate Buildings" or PNZ) to provide recommendations and direction for actions necessary to achieve net-zero carbon across the City's corporate facility portfolio in alignment with the City's net-zero 2050 objective. The pathway includes four tiers of measures (all percentages based on 2050 Annual Emissions Reduction):

Tier 1: Scheduled Load Reductions – 20%

Enclosure improvements (and other select load reductions measures) in alignment with replacement schedules already planned by the City (at equipment and component end of life).

+Tier 2: Scheduled Load Reductions with Mechanical Measures – 72%

Rescheduling of mechanical equipment replacements to align with the enclosure improvements: creating more comprehensive retrofit project opportunities. Mechanical measures focus heavily on electrification, in addition to efficiency.

+Tier 3: Additional Electrification - 88%

Identification of additional electrification measures beyond mechanical system replacements already scheduled. After Tier 3 measures are applied this portfolio will be nearly all-electric (low carbon).

+Tier 4: Offsets - 100%

Application of existing City waste gas capture ("renewable" natural gas) to offset remaining emissions.

The City has developed site-specific Pathway to Net-Zero plans for the following facilities, focusing on the highest-emitting portfolios, namely Arenas, Pools, and Lodges:

Table 12: Current Pathway to Net Zero Plans by Portfolio

Pools	Arenas	Yards	Other Facilities
Kanétskare	Chedoke Twin Pad Arena	Mountain Transit	Fire Complex 5 (Fire)
Recreation Centre		Centre	
Stoney Creek	Harry Howell Arena	Traffic Operations	Macassa Lodge (Lodges)
Recreation Centre		Centre	
Pool			
Bennetto Recreation	Morgan Firestone Arena	Wentworth	Dundas Town Hall (Corporate)
Centre Pool		Operations	
		Centre	
Westmount	Inch Park Arena		Discovery Centre (Corporate)
Recreation Centre			
Pool			
Jimmy Thompson			Central Library (Libraries)
Pool			,

By focusing on specific portfolios, the City is streamlining the planning process to ensure identified measures can be applied to similar facilities within the portfolio. Going forward, the City plans to add five to ten site-specific PNZ plans per year, prioritized by emissions' impact and alignment with existing plans.

The Pathway to Net Zero Initiative also featured heavily in the City's Conservation and Demand Management Plan for 2024-2029⁵. The CDM plan was required as part of O. Reg. 25/23. The Plan, which outlines the City's activities and initiatives highlights the pathway approach of achieving the set targets already established in the Corporate Energy and Sustainability Policy and with the broader community actions of the Office of Climate Change Initiatives. A focus on efficient equipment, operational improvements and on developing future renewables generations opportunities will continue to drive the City toward its net zero targets.

⁵ O. Reg 25/23 Conservation and Demand Management Plan 2024 posted to City Hamilton website: Hamilton.ca/energy

Table 13: Projected Pathway to Net Zero Project Timeline⁶

Project Start Year	Project Type	Portfolio(s)	# of Projects	Emissions Savings (t CO2e)	Estimated Capital Cost (\$)
2023	Solar PV Installation	Arenas	1	26.6	\$1.8 M
	Heating Retrofits	Yards	1	23.2	
	Waste Heat Recovery	Rec Centres	2	19.6	
	LED Retrofits	Corporate, Yards, Fire	5	10.4	
	VFD Upgrades	Indoor Pools	1	1	
2024	Building Envelope Improvements	Yards	1	86.9	\$7.3 M
	Condensing Boiler Retrofits	Lodges	2	85.7	
	Solar Heating and Heating Electrification	Arenas, Rec Centres	3	76.5	
	Waste Heat Recovery	Lodges, Rec Centres	3	62.8	
	Solar PV Installation	Arenas, Rec Centres	3	37.2	
	Low-flow Water Installations	Arenas, Indoor Pools, Rec Centres	5	18.9	
	LED Retrofits	Yards	1	2.4	
2025	Solar PV Installation	Rec Centres, Yards	3	30.8	\$8.2 M
	Solar Heating and Heating Electrification	Arenas, Lodges, Rec Centres, Yards	10	279	
	Ground-source heat pump	Arenas	1	189.7	
	Waste Heat Recovery	Lodges, Yards	2	54.5	
	VFD Upgrades	Rec Centres	1	6.7	
	Building Envelope Improvements	Yards	1	4.2	
2026	Solar PV Installation	Fire	1	8.7	\$5.4 M
	Solar Heating and Heating Electrification	Fire, Rec Centres	6	241.6	
	Waste Heat Recovery	Yards	1	465.3	
2027	Solar PV Installation	Rec Centres, Yards	2	45.1	\$5.7 M
	Solar Heating and Heating Electrification	Indoor Pools	3	264.1	
	Building Envelope Improvements	Corporate, Yards	3	88.9	
Total			62	2,130	\$28.4 M

⁶ Pg 16-17 of City of Hamilton Conservation and Demand Management Plan 2024

PART 2: CORPORATE REPORT ON COMMODITY HEDGING AND RATE ACTIVITIES

BACKGROUND

This section was previously presented as its own separate report to communicate the various hedging and rate optimization activities. The requirement, stipulated in the Corporate Energy and Sustainability Policy is that this information is presented annually. The information had overlapped with the energy costs and consumption reported in the annual energy reporting and often duplicated information. To align the information and streamline the reporting process, the annual results of hedging and rate optimization will be included here. The required Treasurer's Annual Statement on Commodity Price Hedging is attached as Appendix B to this report.

Hedging is a risk management strategy to reduce price volatility by entering into energy supply contracts direct with commodity suppliers to fix the price for specific volumes and terms in the future. Rate optimization ensures that the correct utility rate class is selected for each account to reduce utility-related commodity costs (e.g. global adjustment for Class A customers).

OVERALL RESULTS

The utility rates and commodity strategies the City participated in for 2023 include Global Adjustment (GA) rate changes and natural gas hedging programs. For the 2023 calendar year, there was a total of \$6.1 M cost benefit; \$5.2 M as a result of global adjustment savings for Class A rate customers and \$0.9 M from hedging of natural gas when compared to the agreed benchmark.

Table 14: 2023 Utility Rates and Commodity Strategies Results

2023 Results	\$M	Levy	Rate
Global Adjustment	\$5.2M	11%	79%
Natural Gas Hedging	\$0.9M	70%	30%
Total	\$6.1M	72%	18%

Further breakdown of these results can be found below in the Electricity Rate Optimization and Natural Gas Risk Management sections in the report.

ELECTRICITY RATE OPTIMIZATION

The electricity market in Ontario itself is complex and volatile. The commodity portion of the electricity price is made up of the Hourly Ontario Electricity Price (HOEP) and the Global Adjustment (GA). Most of the GA costs are from contracts that the Independent Electricity System Operator (IESO) has with generators, many of which are fixed price or guaranteed revenue agreements.

When spot prices (HOEP) are lower, the generator does not earn enough revenue to meet its revenue guarantees. In that case, the IESO pays the generator to make up this difference and the costs are

recovered from consumers through the GA. Therefore, in a month when the market price of electricity is low, the GA will be higher and conversely when market prices are high, the GA will be lower.

It is possible to fix the price on forward terms for the HOEP. However, doing so does little to protect against the greater fluctuations of the GA rate. Staff recommendations have been to not hedge against the HOEP due to unfavorable market conditions.

For billing of the GA costs, most commercial consumers are on a Class B rate. Class B consumers pay a regulated GA rate set monthly and posted by the IESO. There is no market mechanism to hedge against the regulated GA rate. In 2023, Class B customers paid a combined average of \$0.1044/kWh, an increase of 4% from 2022, a result of a -37% decline in the HOEP and 40% increase in the GA rate.

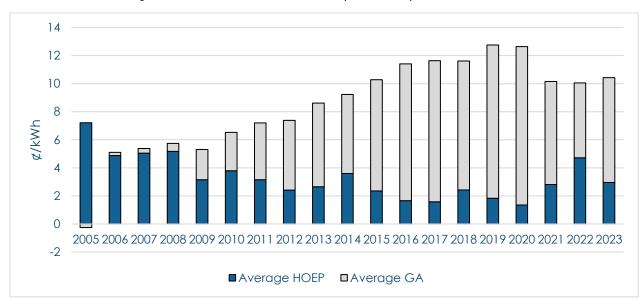


Chart 8: Annual Average Price of HOEP and Class B GA (2006-2023)

Eligible, high electrical demand customers can opt for a Class A⁷ rate. Class A rate customers pay the GA costs based on their percentage contribution to the total monthly provincial GA costs, calculated on the top five peaks during a peak setting period. This is called the peak demand factor (PDF). Class A customers can impact their GA costs by reducing demand during peak periods, resulting in lower costs.

Class A sites within the City include 900 Woodward Avenue, 700 Woodward Avenue, 850 Greenhill Avenue, 78 Kenilworth North, Tim Hortons Field, and CUP Operations. The results for 2023 was a cost benefit (avoided costs) of \$5.2M as shown in Table 15.

⁷ Class A also referred to as Industrial Conservation Initiative (ICI), eligibility details located here: https://ieso.ca/Sector-Participants/Settlements/Global-Adjustment-Class-A-Eligibility.

Table 15: 2023 Global Adjustment Class A Results8

Global Adjustment Class A Results	2023 Results	Cumulative Results
Levy (Tax) Supported Budget	\$1,099,794	\$13,244,414
Rate Supported Budget	\$4,108,398	\$42,297,702
Total	\$5,211,445	\$55,542,116

NATURAL GAS RISK MANAGEMENT (HEDGING)

Natural gas can be a volatile commodity. There are many factors that can influence prices in natural gas markets including weather, supply, demand, world political events and changes to refining and extraction technologies for the gas itself. To maintain control of costs and minimize the degree of price volatility, the City has purchased its natural gas directly from the wholesale market (since June 2006). The City has supply agreements with multiple parties to allow for competitive purchasing.

Overall, the strategy is dynamic and adapts to changes in market conditions. For example, a portion of natural gas supply may be purchased as much as two to three years in advance to protect against market volatility while other portions are purchased just a month or two in advance. Fixing the price on a portion of the City's natural gas volumes results in better budget predictability and protection against market fluctuations, particularly during extreme weather conditions or unforeseen events.

The City purchases natural gas for City-owned facilities (excluding CityHousing Hamilton) and for the Transit natural gas bus fleet, which is then compressed (CNG) for fueling. The average 2023 price for the natural gas (commodity only) was \$3.96 per gigajoule (GJ) (\$0.154/m3) including a blend of hedged and unhedged (variable) volumes. This does not include any Enbridge Gas charges such as delivery, storage or federal carbon charge which make up the total price.

The City fully hedged an average of 70% of natural gas supply in 2023, based on 2023 volume requirements across all contracts. A portion of volumes for forward terms have also been hedged. See A-5 in Appendix A for a detailed profile of the completed hedges covering 2023 shown with volumes (GJs) and prices.

The natural gas market declined steadily in 2023, particularly with next-day or next-month terms. Mild weather through the winter and summer months resulted in declining North American demand for natural gas and rising natural gas inventories. Declining demand globally also eased the impact of economic disruption and global unrest which had driven pricing volatility in 2022. Forward terms for purchases into 2024 and 2025 also increased to provide cost certainty with the lower rates. Staff monitors the market and continues to develop strategies for purchasing into the forward terms to capture agreeable market opportunities and help mitigate volatile and uncertain periods.

The City benchmarks its natural gas hedging performance against the procurement program that is offered by the Association of Municipalities of Ontario / Local Authority Services (AMO/LAS)⁹. The AMO/LAS purchasing program is available for municipalities that do not have their own hedging programs. The

⁸ Annual global adjustment Class A cumulative benefits are shown from 2011-2023

⁹ Association of Municipalities of Ontario business services Natural Gas services offering here: https://www.las.on.ca/naturalgas

comparison is shown in Chart 9 with overall results shown in Table 16. In 2023, the City's actual commodity costs were 18% lower than the posted AMO rate.

Chart 9: Annual Average Price Comparison of City to AMO/LAS10 Natural Gas Program

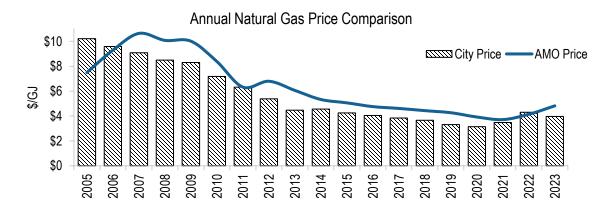


Table 16: 2023 Natural Gas Hedging Performance Results¹⁰

Natural Gas Hedging Performance Results	2023 Results	Cumulative Results
Levy (Tax) Supported Budget	\$600,529	\$8,321,216
Rate Supported Budget	\$253,897	\$1,633,656
Total	\$854,426	\$9,954,872

NATURAL GAS AGREEMENTS FOR SUPPLY, TRANSPORTATION, STORAGE AND DELIVERY

The City manages its portfolio by utilizing contract management of varying tools for supply, delivery and storage and transportation of natural gas. In 2023, the City had master agreements for natural gas supply in place with Shell Energy North America (Canada) Inc., Tidal Energy Marketing Inc., Royal Bank of Canada and Twin Eagle Resource Management Canada LLC. All current supply counterparties have credit ratings that are compliant with the Corporate Energy Policy.

In addition, the City has contracts in place with Enbridge Gas that are required to facilitate the transportation, delivery, and storage of the City's natural gas supply. The utility agreements include direct purchase agreement (DPAs) for a pool of City sites, two T1 rate storage contracts for managing the Transit CNG and Hamilton Water biosolids plant and an M13 rate contract for production of renewable natural gas.

The agreements outline the terms of service for delivery of natural gas, including designated delivery points, contract volumes and storage. The parameters are shown below in gigajoules (GJ) which is the unit in which gas is purchased to meet the requirements. Prices and consumption data on Enbridge Gas bills are reported in cubic metres (1 GJ = \sim 26 cubic metres (m3)). In 2023, the agreements and parameters on contract renewal were:

¹⁰ Performance relative to AMO/LAS natural gas annual hedging program

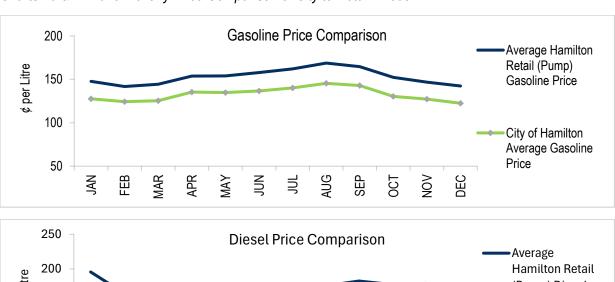
- SA7020 (pool) for 1,028 GJ/day (increased to 1,087 GJ/d as of June 2023) 253 miscellaneous City natural gas accounts which run from November 1 to October 31 each year.
- T1 for 832 GJ/day (increased to 1,045 GJ/day as of September 2023) For Transit's CNG bus fleet and transit site. The contract runs September 1 to August 31 each year.
- T1 for 540 GJ/d (as of May 1, 2023) For Hamilton Water biosolids production operation. The contract runs from May 1 to April 30 each year.

Each DPA has its own specific delivery requirements, at different points along the variety of pipelines within North America and are reviewed and renewed annually. DPAs may also be amended throughout the year or adjusted to meet specific parameters.

FUEL RISK MANAGEMENT

The City of Hamilton purchases diesel and gasoline fuel for its fleet of vehicles including buses, waste collection vehicles, snow removal trucks, street sweepers, forestry and parks vehicles, as well as Fire and Emergency Services vehicles. In addition, the City purchases fuel for Hamilton Police Services. In 2023, the City's fuel procurement strategy was using a bulk supply agreement with Suncor Energy Products Partnership. Fuel contracts are reviewed annually and based on pricing, deliverability and fuel types, the strategy can be adjusted accordingly.





[¢] per Litre (Pump) Diesel Price 150 City of Hamilton 100 Average Diesel Price 50 APR SEP DEC Ϋ́ FEB MΑΥ \leq OCT NOV ₫

¹¹ Monthly average retail prices for diesel and gasoline are reported for the Hamilton area.

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The pricing for diesel and gasoline for 2023 was the daily "rack" price of each required fuel type from Hamilton terminal with negotiated discounts, delivery charges and taxes. Paying daily rack pricing for fuel assures the City is getting the lowest available price on the market for that day. Suncor Energy Products Partnership has a credit rating that is compliant with the Corporate Energy and Sustainability Policy.

PART 3: CORPORATE GREENHOUSE GAS (GHG) INVENTORY REPORT

GHG emissions related to corporate operations have been inventoried and reported annually since the adoption of the Corporate Air Quality and Climate Change Strategic Plan (PED06336(a)) in 2008 and the Board of Health Climate Change Actions 2012 report (BOH13024). The original targets were a 50% reduction by 2030 and an 80% reduction in GHG emissions by 2050 from the base year 2005. With the update to the Corporate Energy and Sustainability Policy, the long-term target was updated to net zero emissions by 2050 when compared to the base year 2005.

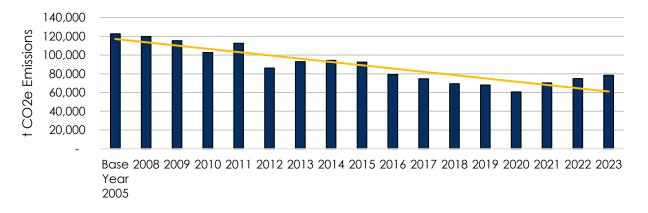
In past reports, the GHG reporting was a year behind the energy reporting, and the data presented in last year's annual energy report was for the 2021 annual inventory. This was in line with other required reporting timelines. However, as of the 2023 reporting period, the data has been updated to include both 2022 and 2023 results. This aligns with a change in Ontario Regulation 25/23 that required public entities to submit their energy usage data for facilities for 2022 and 2023 years by July 2024.



2023 INVENTORY RESULTS

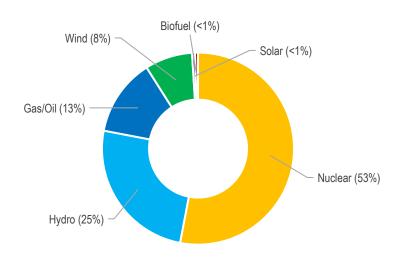
In 2023, the GHG corporate emissions inventory was 78,487 tonnes of CO2e (carbon dioxide equivalent). This represents a -36% reduction from the 2005 base year (122,699 tonnes CO2e) and 5% increase compared to 2022. Entertainment facilities have been removed from the corporate inventory. The inventory does not include HRPI operations.

Chart 12: City of Hamilton Corporate GHG Emissions Year Trends 2005-2023



The inventoried emissions have risen over the past three years due to several contributing factors. The resumption of normal City operations after the pandemic has resulted in steady increases in emissions from the low reached in 2020.

Chart 13: 2023 Ontario Energy Output by Fuel Type¹²



The refurbishment of Ontario's nuclear fleet has resulted in increased natural gas generation and higher electricity-related emissions since over the past two years. Ontario's reported electricity emissions intensity increased by 40% from 2021 to 2023. Emissions may continue to rise as Ontario's electricity grid is forecast to increasingly rely on natural gas generation through the next five years but is expected to stay below baseline because of the earlier removal of coalfired generation as part of the generation supply mix.

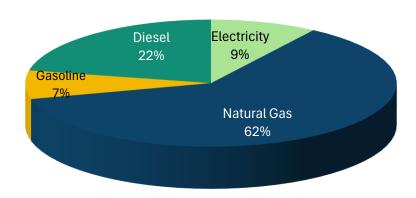
¹² Generation data published by the IESO at: https://ieso.ca/en/Power-Data/Supply-Overview/Transmission-Connected-Generation

Chart 14 depicts the energy output by fuel type for 2023. This is reported by the Independent Electricity System Operator (IESO) for transmission-connected generation. It does not include embedded generation but shows what makes up the supply mix which can vary year to year depending on availability. The provincial emissions factors are impacted by changes to the generation mix.

In addition to electricity emission factors, other impacts to the City's inventory include completion of energy efficiency projects, reductions in usage from operational improvements and fuel switching, such as Transit's ongoing conversion from diesel buses to CNG-powered buses. Future developments around this area, particularly the utilization of renewable natural gas and electric-power transportation for City's fleet and transit vehicles should significantly impact GHG emissions for the City.

The City extended its carbon-negative bus fueled by renewable gas pilot project through 2022 and 2023. The goal of the pilot was to demonstrate reduced emissions from the City's public transit operations.

Chart 14: 2023 Percent of tCO2e Emissions by Fuel Source



Corporately, the generation mix for the City's inventoried emissions is as follows: electricity, natural gas, diesel and gasoline. Ideally, renewable energy sources would be used to offset the higher emissions fuel sources such as diesel, gasoline and natural gas. Of note, the natural gas is used in both buildings and to power 65% of the City's bus fleet.

The emissions from all related fuel sources by sector; buildings, vehicles and processes are shown in

Chart 15 and Table 17 below. Of the reported sectors, vehicle fleet remains the largest emitter with 50% of corporate emissions for 2023. Corporate buildings represent 27% and Water and Sewage operations with 20% round out the top 3. The other sectors account for the remaining 3% of emissions in 2021.

Chart 15: 2023 Percent of tCO2e Emissions by Reporting Sector

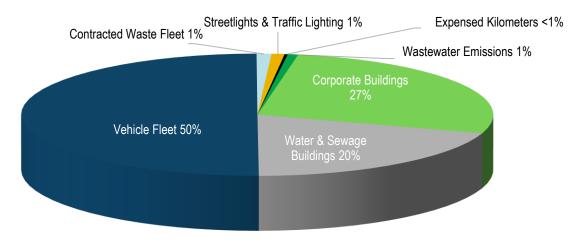


Table 17: 2023 Breakdown of tCO2e by Sector

Sector	2022 Total CO2e	2023 Total CO2e	2023 vs 2005	2023 vs 2022
Corporate Buildings	21,503	21,314	-54%	-1%
Vehicle Fleet	37,821	39,273	9%	4%
Water & Sewage Buildings	13,231	15,674	-38%	18%
Contracted Waste Fleet	698	697	-92%	0%
Streetlights & Traffic Lighting	792	800	-85%	1%
Expensed Kilometers	168	168	-66%	0%
Wastewater Emissions	622	561	7%	-10%
City Wide Total	74,835	78,487	-36%	5%

Corporate buildings show a significant reduction in emissions of 54% compared to 2005. The reductions here are mainly attributed to lower usage from energy efficiency work and lower Ontario emissions factors from changes in the province's energy supply mix relative to baseline. Vehicle fleet includes emissions from diesel, gasoline and natural gas. The 2023 emissions show an increase when compared to the 2005 base year. While fuel switching from diesel buses to CNG fueled buses has lowered emissions comparatively, Transit has increased its fleet size by 15% over the past two years, resulting in an absolute increase in emissions. However, the emissions were positively impacted by an RNG-fueled bus which utilized RNG that was carbon negative and reduced the emissions by ~222 tCO2e in 2022 and 2023.

The 2023 emissions from Water and Sewage buildings has increased compared to 2022, with the continued expansion of the natural-gas fueled biosolids processing operation at the Woodward site. However, this sector still shows a reduction of 38% when compared to 2005 base year. As the City moves forward to achieve net-zero corporate emissions, a combination of energy efficiency and an increase in renewable fuel sources will be required to meet ambitious targets.

2023 ANNUAL REPORT FINAL COMMENTS

By 2023, City operations had completed their return to pre-pandemic levels. Public services and sites were open for business, and transit operations were running full schedules.

One of Hamilton's long-term goals is to reduce its energy intensity by 45% by 2030. Despite increased operational load, the data for 2023 showed a decrease in energy intensity compared to 2022, continuing the trend downward. Energy efficient project activity did continue to deliver some energy usage reductions and GHG reductions. At 2023's energy intensity reduction rate of 2%, the City is on track to fall just short of its 2030 intensity target. The City has developed strategies to further reduce energy intensity and achieve its target by implementing existing Pathway to Net Zero plans, developing new plans and projects for additional facilities, and continuing to make operational improvements.

Environmentally, the City has set a goal to reduce absolute emissions by 50% by 2030 and to become a net-zero city by 2050. Both of those goals are ambitious and will require all City departments to implement actionable plans and policies to actively reduce energy usage and GHG emissions. Many divisions have begun to address the targets by:

- Improving operational efficiencies with equipment and lifecycle replacements;
- Creating green policies for procurement of new equipment;
- Creating resiliency policies around climate change;
- Forming and implementing Pathway to Net Zero plans; and
- Utilizing low or carbon neutral fuels;

Implementing new technology, investing in renewable energy generation and carbon-reducing/carbon-neutral projects and prioritizing climate action is imperative across the City if we hope to meet the 2050 targets.

As always, continued measurement and reporting on results help to identify where the City falls in line with its goals and allows for more targeted decision-making as we move through the ever-changing energy landscape. Additional details on specific reporting items can be found in the Appendix A.

The City of Hamilton's commitment to energy conservation and environmental sustainability plays an important role in supporting the City's Strategic Plan by contributing to a prosperous and healthy community; providing valued and sustainable services; and demonstrating innovation and leadership. Ongoing success of the energy program requires engagement of all Five Values of Our Culture - Collective Ownership; Steadfast Integrity; Sensational Service; Engaged, Empowered Employees; and Courageous Change.

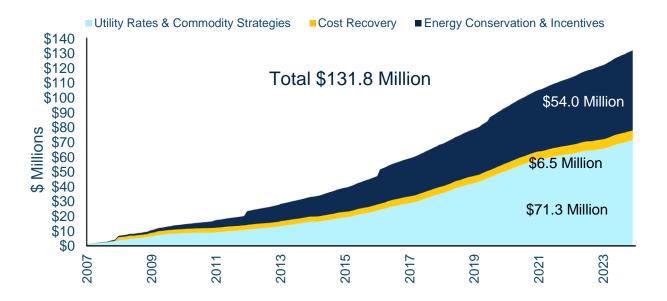
APPENDIX

A. CHARTS

This appendix provides additional information, charts, and graphs for more specific details on KPI results and impacts to various KPIs for 2023 as presented in the report.

ENERGY STRATEGIES AND PROGRAMS

A-1: Cumulative Savings and Avoided Costs 2005-2023



A-2: Three-Year Comparison of Energy Programs and Strategies

	2021	2022	2023	2006-2023 Cumulative
RPP/Interval Change	\$0	\$0	\$0	\$5,759,814
Global Adjustment	\$3,636,653	\$3,557,985	\$5,208,191	\$55,542,116
Natural Gas Hedging	\$226,143	-\$127,514	\$854,427	\$9,954,872
Energy Conservation	\$3,853,812	\$4,353,341	\$4,243,615	\$41,861,978
Incentives	\$73,292	\$215,504	\$98,438	\$12,134,774
Cash Recovery	\$518,976	\$507,055	\$145,167	\$6,523,185
Totals	\$8,308,876	\$8,506,370	\$10,549,838	\$131,776,738

A-3: 2023 and Cumulative Class A Global Adjustment Results

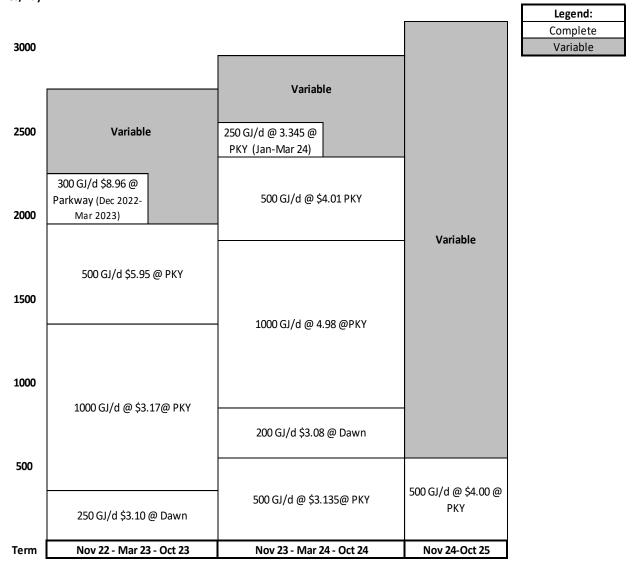
2023	Standard Global	Actual Global Adjustment	Cost Benefit	Year	Annual Benefit
	Adjustment	Charge			
	Charge	3			
Jan	\$496,367	\$191,897	\$304,470	2011	\$1,061,230
Feb	\$697,992	\$273,224	\$424,768	2012	\$1,511,939
Mar	\$782,683	\$274,704	\$507,980	2013	\$2,598,221
Apr	\$905,923	\$290,111	\$615,812	2014	\$2,348,577
May	\$933,404	\$295,626	\$637,778	2015	\$3,911,299
Jun	\$763,470	\$261,191	\$502,279	2016	\$4,682,209
Jul	\$461,611	\$192,350	\$269,261	2017	\$5,976,102
Aug	\$702,163	\$251,961	\$450,202	2018	\$6,404,572
Sep	\$437,968	\$177,974	\$259,993	2019	\$7,248,037
Oct	\$738,091	\$255,519	\$482,572	2020	\$7,397,100
Nov	\$611,314	\$227,035	\$384,278	2021	\$3,636,653
Dec	\$603,993	\$235,194	\$368,800	2022	\$3,557,985
Total	\$8,134,978	\$2,926,787	\$5,208,191	2023	\$5,208,191
				CUMULATIVE	\$55,542,116

A-4: Top 10 Ontario Verified Peak Demand Days (May 1, 2023-April 30, 2024)

Date	Hour Ending (EST)	ICI Ontario Demand (MWh)
Tuesday, September 5, 2023	17	23,713
Wednesday, September 6, 2023	17	22,966
Wednesday, July 5, 2023	18	22,686
Thursday, July 6, 2023	12	21,882
Monday, September 4, 2023	18	21,725
Tuesday, July 4, 2023	17	21,690
Thursday, July 27, 2023	18	21,558
Friday, July 28, 2023	17	21,551
Friday, June 2, 2023	17	21,463
Thursday, August 3, 2023	17	21,364

A-5: 2023 Natural Gas Hedge Profile as of Jan 1, 2024

GJ/Day

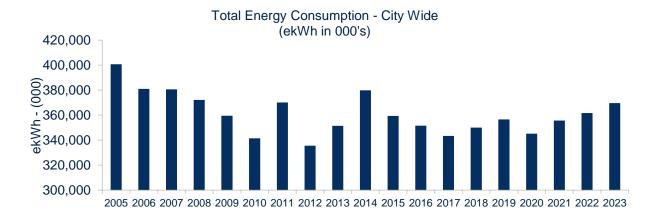


Notes on A-5:

- GJ/Day = Gigajoule per day
- PKY = Parkway Ontario delivery point
- Dawn = Dawn Ontario delivery point

ENERGY CONSUMPTION AND COSTS

A-6: Total Annual Consumption Electricity & Natural Gas (Facilities)



A-7: Electricity Consumption Comparison by Portfolio Category (in 000's of kWhs)

	2005	2022	2023
City/Town Halls	4,736	4,042	3,907
Corporate Facilities	4,669	5,097	5,186
Street Lighting	33,603	17,465	17,510
Traffic Lighting	5,688	1,216	1,218
Other City Operations	5,248	4,206	4,061
Hamilton Water	106,561	104,684	107,243
Yards	11,982	9,170	8,672
Arenas	17,834	12,534	15,333
Community/Senior Centers	1,258	1,329	1,442
Rec Centres/Pools	4,124	7,575	7,777
Tim Horton's Field	n/a	6,046	5,462
Rec Parks/Stadiums/Golf	3,885	2,912	3,075
Lodges (Macassa, Wentworth)	4,673	5,276	5,177
Culture	2,254	1,957	1,909
Fire/ EMS	3,766	4,677	4,528
Hamilton Public Libraries	7,314	7,212	7,029
First Ontario Centre	6,578	n/a	n/a
First Ontario Concert Hall	3,552	n/a	n/a
Hamilton Convention Centre	3,026	n/a	n/a
Hamilton Police Services	5,613	5,899	5,688
City Wide Total	236,362	201,298	205,217

A-8: Natural Gas Consumption Comparison by Portfolio Category (in 000's of m3)

2005	2022	2023
	-	

City/Town Halls	847	446	354
Corporate Facilities	1,173	564	551
Street Lighting	0	0	0
Traffic Lighting	0	0	0
Other City Operations	35	7	0
Hamilton Water	1,357	5622	6228
Yards	2,587	1811	1538
Arenas	2,068	1586	1777
Community/Senior Centers	241	221	202
Rec Centres/Pools	2,124	2169	2108
Tim Horton's Field	n/a	274	267
Rec Parks/Stadiums/Golf	417	230	210
Lodges (Macassa, Wentworth)	1,899	813	935
Culture	293	195	174
Fire/ EMS	650	724	679
Hamilton Public Libraries	190	303	248
First Ontario Centre	332	n/a	n/a
First Ontario Concert Hall	179	n/a	n/a
Hamilton Convention Centre	153	n/a	n/a
Hamilton Police Services	857	515	598
City Wide Total	15,404	15,480	15,869

A-9: Combined Energy Consumption Comparison by Portfolio Category (in 000's of ekWh)

	2005	2022	2023
City/Town Halls	13,775	8,662	7,570
Corporate Facilities	17,188	10,936	10,900
Street Lighting	33,602	17,465	17,510
Traffic Lighting	5,688	1,216	1,218
Other City Operations	5,618	4,276	4,061
Hamilton Water	121,040	162,930	171,765
Yards	39,589	27,935	24,601
Arenas	39,904	28,967	33,743
Community/Senior Centers	3,834	3,622	3,536
Rec Centres/Pools	26,789	30,043	29,621
Tim Horton's Field	n/a	8,885	8,223
Rec Parks/Stadiums/Golf	8,332	5,296	5,250
Lodges (Macassa, Wentworth)	24,938	13,699	14,861
Culture	5,383	3,975	3,715
Fire/ EMS	10,698	12,181	11,565
Hamilton Public Libraries	9,343	10,351	9,595
First Ontario Centre	10,122	n/a	n/a

First Ontario Concert Hall	5,466	n/a	n/a
Hamilton Convention Centre	4,656	n/a	n/a
Hamilton Police Services	14,757	11,238	11,884
City Wide Total	400,722	361,676	369,618

A-10: Total Annual Reported Costs Electricity & Natural Gas (Facilities)

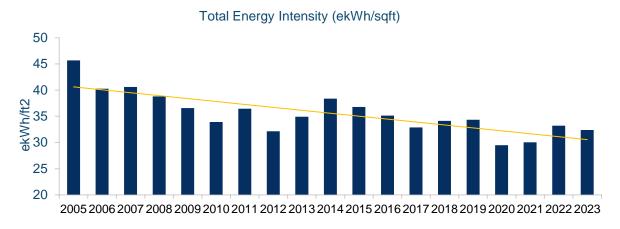


A-11: Total Reported Cost Comparison by Portfolio Category

	2005	2022	2023	2023 vs 2005	2023 vs 2022
City/Town Halls	\$860	\$826	\$846	-2%	2%
Corporate Facilities	\$866	\$851	\$933	8%	10%
Street Lighting	\$2,895	\$3,266	\$3,679	27%	13%
Traffic Lighting	\$462	\$206	\$220	-52%	7%
Other City Operations	\$534	\$552	\$571	7%	4%
Hamilton Water	\$9,590	\$12,245	\$12,916	35%	5%
Yards	\$2,205	\$1,798	\$1,803	-18%	0%
Arenas	\$2,455	\$2,205	\$2,825	15%	28%
Community/Senior Centers	\$224	\$270	\$296	32%	9%
Rec Centres/Pools	\$1,192	\$1,673	\$1,854	56%	11%
Tim Horton's Field	n/a	\$836	\$853	n/a	2%
Rec Parks/Stadiums/Golf	\$564	\$495	\$561	-1%	13%
Lodges (Macassa, Wentworth)	\$1,087	\$800	\$934	-14%	17%
Culture	\$338	\$283	\$306	-9%	8%
Fire/ EMS	\$614	\$827	\$864	41%	5%
Hamilton Public Libraries	\$827	\$873	\$922	11%	6%
First Ontario Centre	\$840	n/a	n/a	n/a	n/a
First Ontario Concert Hall	\$454	n/a	n/a	n/a	n/a
Hamilton Convention Centre	\$387	n/a	n/a	n/a	n/a
Hamilton Police Services	\$783	\$1,163	\$1,241	59%	7%
City Wide Total	\$27,177	\$29,169	\$31,625	16%	8%

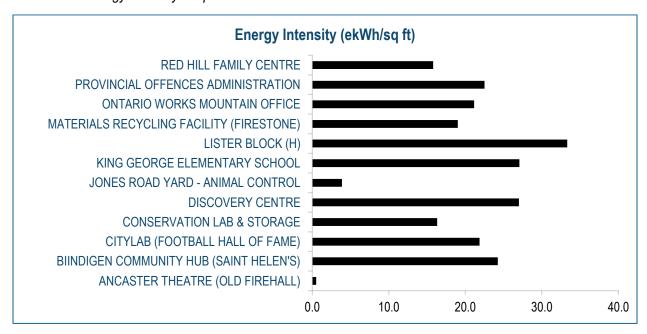
ENERGY INTENSITY

A-12: Total Annual Energy Intensity City-wide (ekWh/sqft)

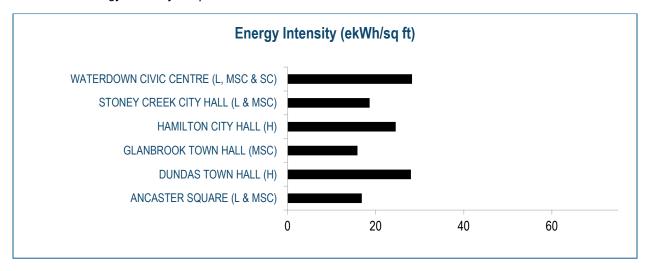


The following series of graphs represent the energy intensity results per site for 2023 within the specific portfolio categories. Sites that did not have square footage were removed but were included in the overall consumption and costs data sets. Sites were only included if there were full data sets for the year. There is no energy intensity data for Hamilton Water and Operational (O&M) sites. Also note that the energy intensity axis value may be adjusted depending on grouping.

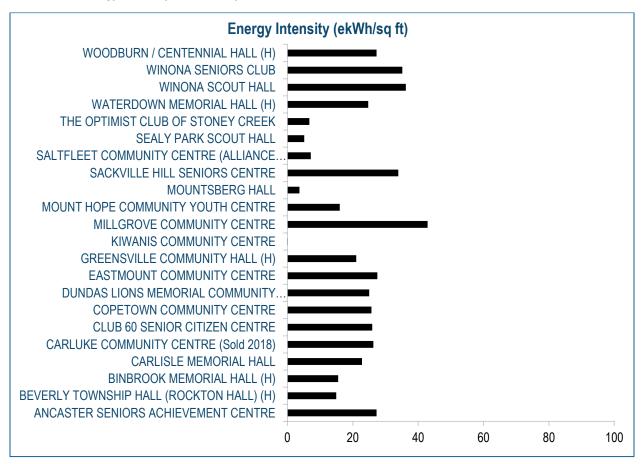
A-13: 2023 Energy Intensity Corporate Facilities



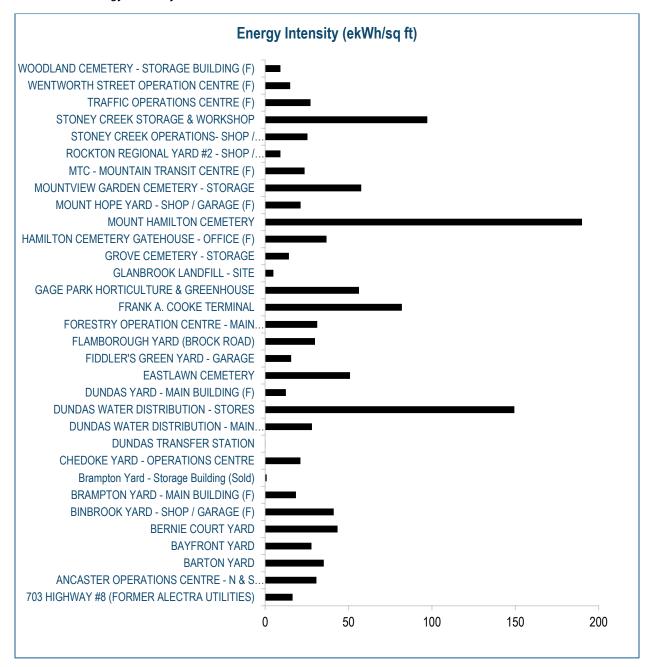
A-14: 2023 Energy Intensity Corporate Facilities



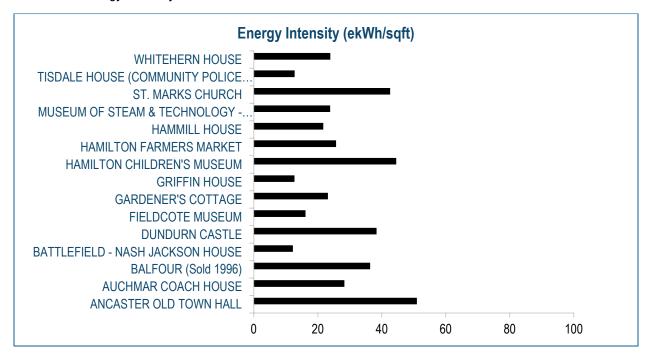
A-15: 2023 Energy Intensity Community Centres



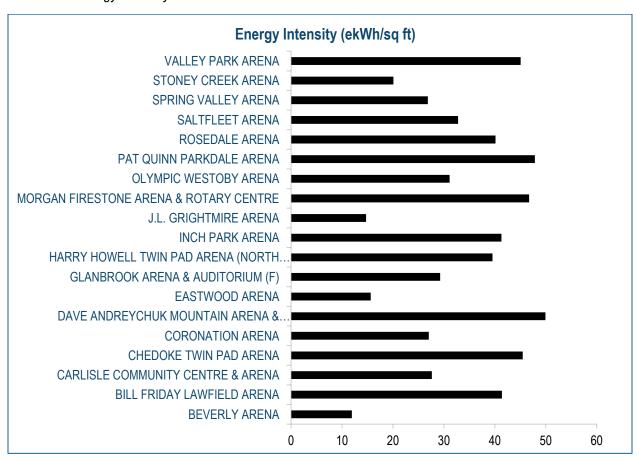
A-16: 2023 Energy Intensity Yards



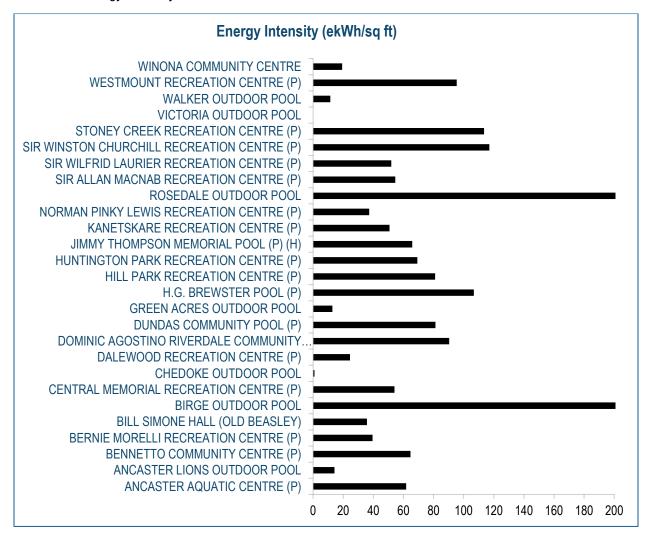
A-17: 2023 Energy Intensity Culture and Museums



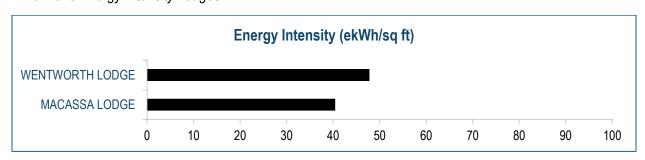
A-18: 2023 Energy Intensity Arenas



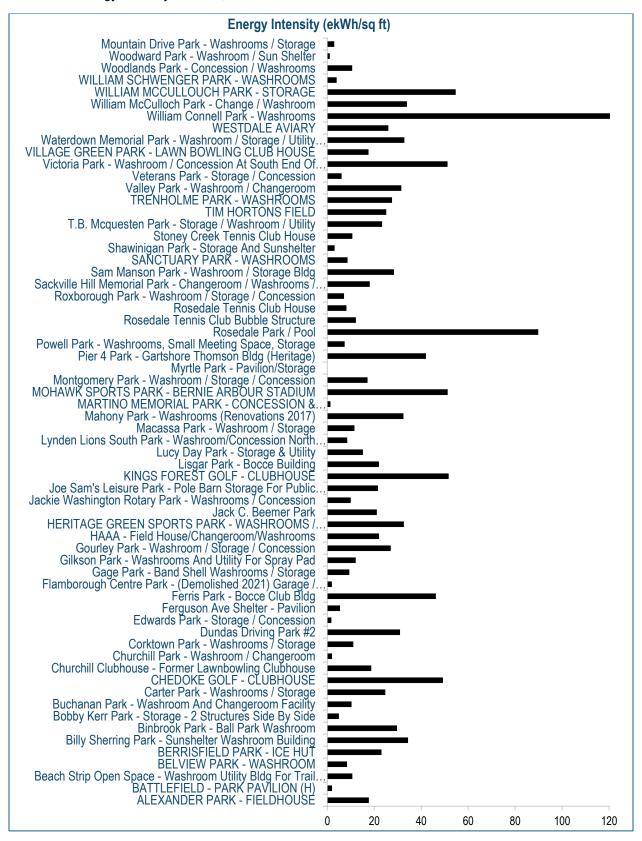
A-19: 2023 Energy Intensity Recreation Centres and Pools



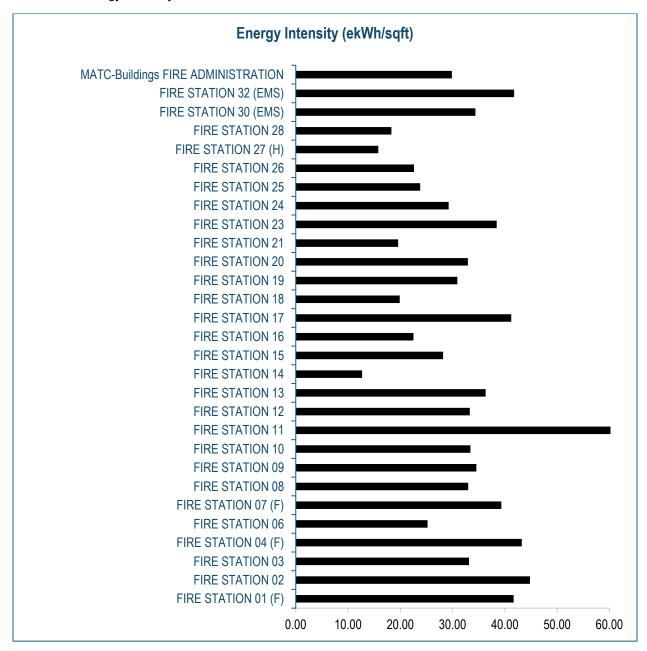
A-20: 2023 Energy Intensity Lodges



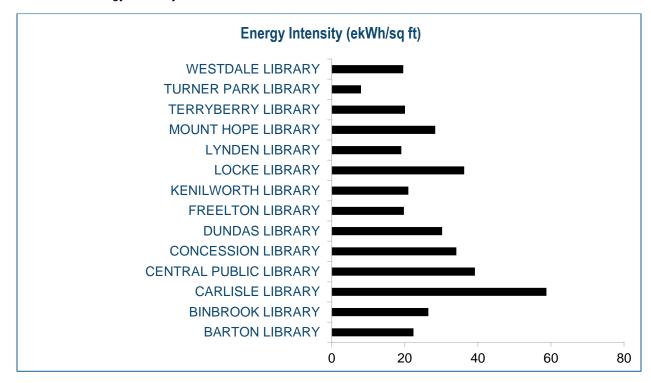
A-21: 2023 Energy Intensity Stadium, Golf Course Facilities and Recreation Parks Facilities



A-22: 2023 Energy Intensity Fire and EMS Facilities



A-23: 2023 Energy Intensity Libraries



FUELS

The following chart breaks down the fuel usage by user group category. For further clarification:

- Transit includes Transit Operations, Route Planning and Transit Yard Support;
- Operations includes Waste Management (non-contracted), Landfill, Roads, and Support Services; and;
- "Other" includes Public Health, Recreation, Tourism, Library, Bi-Law Services, Clerks, Information Services and Fire and EMS.

A-24: 2023 Fuel Usage by User Group

	Diesel (L)	Unleaded (L)	CNG DLE	Total (DLE)
Corporate Asset Management	3,582	10,688		14,270
Corporate Facilities and Energy	4,554	74,230		78,784
Engineering Services	0	30,961		30,961
Environmental Services	358,591	358,527		717,118
Waste Management	631,730	38,731		670,461
Hamilton Water	120,812	223,885		344,697
Operations	897,704	455,182		1,352,886
Transportation	88,677	32,259		120,936
Other	376,884	1,250,668		1,627,552
Transit	3,755,078	58,119	9,502,086	13,315,283
Total	6,237,613	2,533,250	9,502,086	18,272,949

WEATHER DATA

Weather and temperatures can impact energy consumption for electricity, natural gas and fuel. Reviewing cooling degree days (CDD) and heating degree days (HDD) can help identify one reason why consumption could be higher or lower year over year. CDD is a measure of how much (in degrees) and for how long, the outside air temperature was higher than a specific base temperature. HDD is a measure of how much and for how long the outside temperature was lower than a specific base temperature. The base temperature for this reporting is 18 degrees Celsius and is sourced from Environment Canada. According data for Hamilton weather station YHM, the annual Total cooling degree days in 2023 was 212. The total heating degree days in 2023 was 3,110. Details are in the charts below.

A-25: Weather Data for Hamilton (Environment Canada – Station YHM)

Month	Mean Temp (∘C)	HDD	CDD	2023 vs 2022	2023 vs 2022
				HDD	CDD
Jan-23	-1.2	557	0	-33%	
Feb-23	-0.4	440	0	-31%	
Mar-23	0.5	474	0	-8%	
Apr-23	8.2	287	2	-21%	
May-23	12.6	164	6	51%	-75%
Jun-23	18.0	32	33	-13%	-31%
Jul-23	20.8	1	86	800%	-8%
Aug-23	18.8	21	43	4040%	-57%
Sep-23	17.2	50	29	-32%	32%
Oct-23	11.8	198	12	-26%	
Nov-23	3.3	426	0	13%	-100%
Dec-23	2.6	461	0	-12%	
2023 Annual Total		3110	212	-17%	-27%

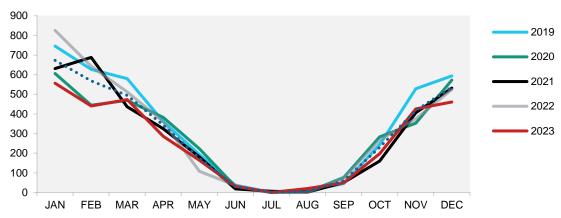
A-26: Weather Data for Hamilton (Environment Canada – Station YHM)

		HDD	CD	D
Month	5 YR AVG	2023 vs 5 Yr Average	CDD 5 YR AVG	2023 vs 5 Yr Average
JAN	673	-17%	0	
FEB	569	-23%	0	
MAR	494	-4%	0	
APR	344	-17%	0	
MAY	174	-6%	17	-63%
JUN	31	3%	52	-37%
JUL	2	-42%	108	-20%
AUG	7	200%	84	-48%
SEP	59	-16%	20	48%
OCT	230	-14%	4	186%

NOV	418	2%	0	-100%
DEC	537	-14%	0	
Average	3538	-12%	127	67%

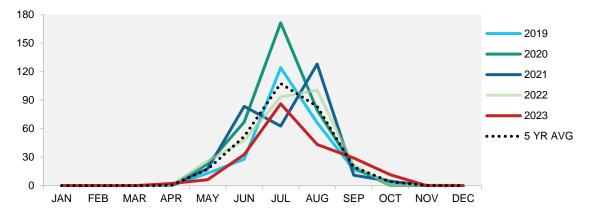
A-27: Heating Degree Days (HDD)

5 Year Heating Degree Days



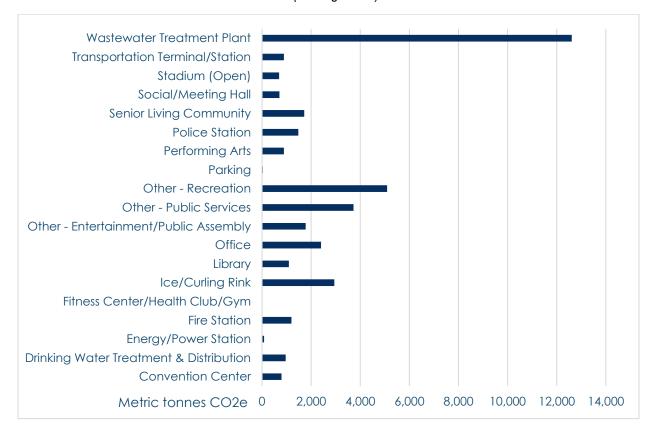
A-28: Cooling Degree Days (CDD)

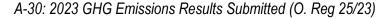
5 Year Cooling Degree Days

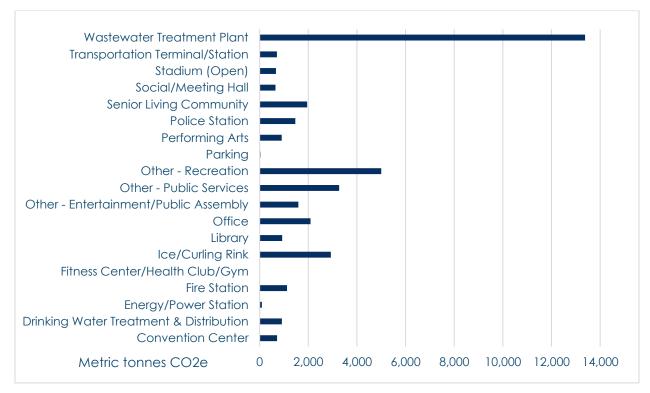


O.REG 25/23: BROADER PUBLIC SECTOR REPORTING

A-29: 2022 GHG Emissions Results Submitted (O. Reg 25/23)







B. GLOSSARY

COMMON ACRONYMNS THROUGHOUT THE REPORT

BPS = Broader Public Sector

CAFE = Corporate Average Fuel Economy

CDD = Cooling Degree Days

CDM - Conservation and Demand Management

CEP = Corporate Energy Policy

CNG = Compressed Natural Gas

CO₂ = Carbon Dioxide

CO₂e = Carbon Dioxide equivalent

DLE = Diesel Litre Equivalent

ekWh = equivalent kilowatt hours

GA = Global Adjustment

GHG = Greenhouse Gas

GJ = Gigajoule

HDD = Heating Degree Days

HOEP = Hourly Ontario Electricity Price

HRPI = Hamilton Renewable Power Inc.

ICI = Industrial Conservation Initiative

IESO = Independent Electricity System Operator

KPI = Key Performance Indicator

kW = Kilowatt

kWh = Kilowatt-hour

LED = Light Emitting Diode

m³ = Cubic Metres

OEB = Ontario Energy Board

tCO2e = Tonnes Carbon Dioxide equivalent

DEFINITIONS: COMMON TERMS USED THROUGHOUT THE REPORT

<u>Avoided Cost/Cost Avoidance</u> refers to the costs not incurred as a result of some action taken which is outside of status quo.

<u>Commodity Hedging</u> is the process of fixing prices for specific terms for natural gas, fuels or electricity (commodities).

<u>Corporate Energy & Sustainability Policy</u> is the revised and renamed corporate policy (previously the Corporate Energy Policy) governing energy-related decisions for corporately run assets.

<u>Cost Recovery</u> is the value collected by identifying billing errors, billing anomalies or rates corrections that result in a financial adjustment to costs.

<u>Demand Reduction</u> referenced in the report is action taken to reduce electrical demand during forecasted provincial peak events (high demand period) for optimizing Class A customers.

<u>Energy Conservation</u> is the collection of energy efficient measures, equipment or processes that lead to lower consumption.

<u>Energy Intensity</u> is the measurement of energy used per square foot of facility space.

<u>Energy Performance</u> is the collection of performance measurements including consumption, cost and energy intensity as compared against baseline and year over year.

Appendix "A" to Report PW21049(c)/FCS24050 Page **53** of **53**

<u>Incentives</u> are monies received from a recognized program including from utility providers, the IESO, Federal or Provincial grant programs where incentives are tied to energy conservation measures.

<u>Net Zero</u> means achieving overall, zero greenhouse gas emissions by balancing any emissions from energy use with carbon removal via a combination of reducing usage, changing to low or zero energy sources (i.e. renewable energy sources) changing processes and carbon offsetting.

Rate Optimization refers to ensuring that utility accounts are assigned to the appropriate rate class to result in best cost benefit.

<u>Unit Cost</u> is the total price of variable and fixed costs per unit. In this report it refers to unit costs of electricity, natural gas and fuels.

<u>Utility Rates</u> refers to the rate classes identified by local utility providers.



CITY OF HAMILTON

CORPORATE SERVICES DEPARTMENT Information Technology Division

and

HEALTHY AND SAFE COMMUNITIES DEPARTMENT Hamilton Fire Department

то:	Chair and Members General Issues Committee
COMMITTEE DATE:	October 16, 2024
SUBJECT/REPORT NO:	Next Generation 9-1-1 Service Delivery - Authority Agreements (FCS20082(f) / HSC20045(f)) (City Wide)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	Alex Panicker (905) 546-2424 Ext. 6723 Mike Rember (905) 546-2424 Ext. 3376
SUBMITTED BY:	Mike Zegarac General Manager, Finance and Corporate Services Corporate Services Department
SIGNATURE:	Jale Je en
SUBMITTED BY:	Angela Burden General Manager, Healthy and Safe Communities Healthy and Safe Communities Department
SIGNATURE:	a. Burden

RECOMMENDATION

That the General Manager, Finance and Corporate Services, the Fire Chief, the Chief Information Officer or designates thereof be authorized to negotiate, enter into and execute on behalf of the City of Hamilton, contracts, renewals, extensions, amendments, any ancillary documents, and any new agreement(s) presently or subsequently required to establish and maintain Next Generation 9-1-1 services for the City of Hamilton, in a form satisfactory to the City Solicitor.

EXECUTIVE SUMMARY

This report builds on two previous reports: March 22, 2023, Next Generation 9-1-1 Service Delivery (FCS20082(b)/HSC20045(b)), and September 19, 2024, Hamilton Fire Department Next Generation 9-1-1 Public Safety Answering Point Contingency Routing

SUBJECT: Next Generation 911 Service Delivery - 2023-2024 Provincial Funding (FCS20082(f)/HSC20045(f)) (City Wide) - Page 2 of 4

Agreement (HSC24034) (City Wide). These reports granted authority to the General Manager, Finance and Corporate Services to sign documents and accept funding to support the transition to NG9-1-1, and to the Fire Chief to negotiate, enter into and execute contracts or any new agreements required to establish and maintain NG9-1-1 partner agency contingency service for the Hamilton Fire Department, respectively.

In August of 2022, the General Manager, Finance and Corporate Services signed a Next Generation 9-1-1 Authority Service Agreement with Bell Canada. To complete the transition to NG9-1-1, the Bell agreement stipulates criteria that must be met in order for the City of Hamilton to qualify to receive Next Generation 9-1-1 service. Some of these criteria necessitate additional agreements. A current example includes the "Bell Ng9-1-1 PSAP Credentialing Agency Public Key Infrastructure Local Registration Authority Agreement", which is required to digitally protect the City of Hamilton Next Generation 9-1-1 connections and infrastructure that will be used by the Hamilton Fire Department and the Hamilton Police Service.

The purpose of this report is to seek Council authorization for the General Manager, Finance and Corporate Services, the Fire Chief of the Hamilton Fire Department, the Chief Information Officer or their designates to negotiate, enter into and execute on behalf of the City of Hamilton any contracts and agreement(s) that are required or that subsequently become required to establish, enable, transition to, and maintain Next Generation 9-1-1 services.

FINANCIAL - STAFFING - LEGAL IMPLICATIONS

Financial: Not Applicable

Staffing: Not applicable

Legal: Legal Services assisted in the review of the existing Bell agreement and the

content of this report. They will be consulted on any additional criteria or agreements necessary to satisfy mandatory requirements specified by the

Bell Canada Authority Service Agreement.

HISTORICAL BACKGROUND

On June 1, 2017, the Canadian Radio-television and Telecommunications Commission (CRTC) mandated that all telephone companies update their networks to provide Next Generation 9-1-1 service capability (NG9-1-1). The deadline for transition to Next Generation 9-1-1 is March 4, 2025. At that point, the existing Enhanced 911 (E911) is expected to be decommissioned. The City of Hamilton's Next Generation 9-1-1 project was initiated in 2020 by the Hamilton Fire Department and Hamilton Police Service.

SUBJECT: Next Generation 911 Service Delivery - 2023-2024 Provincial Funding (FCS20082(f)/HSC20045(f)) (City Wide) - Page 3 of 4

In August of 2022, the General Manager, Finance and Corporate Services signed a Next Generation 9-1-1 Authority Service Agreement with Bell Canada. The Agreement included a list of mandatory requirements that the City would need to meet before being allowed to connect to the Next Generation 9-1-1 network.

To satisfy these mandatory requirements, and to ensure Next Generation 9-1-1 service functionality for the Hamilton Fire Department and the Hamilton Police Service, the City of Hamilton must comply with all requirements set out in the Bell Authority Service Agreement, including executing and entering into contracts and agreements as required. For any agreements or contracts requiring new or unbudgeted financial commitments, staff will notify Council and seek funding approval per applicable City policies.

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

The migration to Next Generation 9-1-1 is mandated and legislated by the Canadian Radio-television and Telecommunications Commission (CRTC) Telecom Regulatory Policy: CRTC 2017-182.

Failure to meet the Canadian Radio-television and Telecommunications Commission platform migration to NG9-1-1 by March 4, 2025, will result in disruption (failure) of 9-1-1 services provided by the City of Hamilton.

RELEVANT CONSULTATION

Consultation for this report took place as follows:

- Chief Information Officer
- General Manager, Corporate Services
- General Manager, Community Services
- Information Technology Services
- Hamilton Fire Department
- Hamilton Police Service

ANALYSIS AND RATIONALE FOR RECOMMENDATION

The transition to Next Generation 9-1-1 is a multiyear endeavour. The City has already committed significant resources and budget expenditures to the Next Generation 9-1-1 Project including the acquisition of hardware and software technologies, modifications and additions to infrastructure, and renovations to facilities. The change over to new technologies to enable critical Next Generation 9-1-1 service requires that supporting contracts and agreements are executed commensurately.

SUBJECT: Next Generation 911 Service Delivery - 2023-2024 Provincial Funding (FCS20082(f)/HSC20045(f)) (City Wide) - Page 4 of 4

As of August 30, 2024, the overall project was over 85% complete. The Next Generation 9-1-1 cutover or "go-live" date is projected for October 2024 – well ahead of the Canadian Radio-television and Telecommunications Commission deadline of March 4, 2025. However, Bell Canada will not authorize the City of Hamilton to access Bell's Next Generation 9-1-1 Service until it has complied with the mandatory requirements contained in the Bell Authority Service Agreement.

ALTERNATIVES FOR CONSIDERATION

None



BUSINESS IMPROVEMENT AREA SUB-COMMITTEE REPORT 24-007

10:30 a.m. Tuesday, October 8, 2024

> Council Chambers Hamilton City Hall 71 Main Street West

Present: S. Pennie (Chair) – Waterdown BIA

Councillor T. Hwang Councillor E. Pauls Councillor M. Wilson

S. Braithwaite – International Village BIA T. MacKinnon – Westdale

Village BIA and Stoney Creek BIA

H. Peter – Ancaster BIA

D. Sanchez - Concession Street BIA

N. Ubl – Barton Village BIA

E. Walsh - Downtown Hamilton BIA

S. Weiler – Ottawa Street BIA

Absent with

Regrets: K. Nydam – Dundas BIA

B. Schormann - Locke Street BIA

THE BUSINESS IMPROVEMENT AREA SUB-COMMITTEE PRESENTS REPORT 24-007 AND RESPECTFULLY RECOMMENDS:

1. Concession Street Business Improvement Area Expenditure Requests (Item 11.1)

That the expenditure request from the Concession Street Business Improvement Area, in the amount of \$14,271.77 be spent on two new benches on Concession Street; tear drop banners; planters and plants maintenance; monthly sidewalk clean up; and proper storage units for all Concession Street Business Improvement Area special events equipment and peripherals, to be funded from the 2024 Parking Revenue Sharing Program (Parking Revenue Account 815010-52505), be approved.

2. Downtown Hamilton Business Improvement Area Expenditure Requests (Item 11.2)

That the expenditure request from the Downtown Hamilton Business Improvement Area, in the amount of \$4,969.27 be spent on the purchase of new holiday decor and maintenance of existing holiday decorations, to be funded from the 2024 Contribution to Operating Budget Program for the Business Improvement Areas (BIA Payments Account 815010-56905), be approved.

3. Ancaster Business Improvement Area Expenditure Requests (Item 11.3)

- (a) That the expenditure request from the Ancaster Business Improvement Area, in the amount of \$\$5,572.98 be spent on beautification initiatives and holiday décor to be funded from the 2024 Contribution to Operating Budget Program for the Business Improvement Areas (BIA Payments Account 815010-56905), be approved; and
- (b) That the expenditure request from the Ancaster Business Improvement Area, in the amount of \$5,283.45 be spent on beautification initiatives and holiday décor to be funded from the 2023 Parking Revenue Sharing Program (Parking Revenue Account 815010-52505), be approved.

4. Barton Village Business Improvement Area Expenditure Requests (Item 11.4)

- (a) That the expenditure request from the Barton Village Business Improvement Area, in the amount of \$7,522.39 be spent on special events to be funded from the 2024 Contribution to Operating Budget Program for the Business Improvement Areas (BIA Payments Account 815010-56905), be approved; and
- (b) That the expenditure request from the Barton Village Business Improvement Area, in the amount of \$10,192.27 be spent on holiday decor and maintenance to be funded from the 2024 Parking Revenue Sharing Program (Parking Revenue Account 815010-52505), be approved.

FOR INFORMATION:

(a) CHANGES TO THE AGENDA (Item 2)

The Committee Clerk advised there were no changes to the agenda.

The agenda for the October 8, 2024 Business Improvement Area Sub-Committee meeting was approved, as presented.

(b) DECLARATIONS OF INTEREST (Item 3)

There were no declarations of interest.

(c) APPROVAL OF MINUTES OF PREVIOUS MEETING (Item 4)

(i) September 10, 2024 (Item 4.1)

The September 10, 2024 Minutes of the Business Improvement Area Sub-Committee were approved, as presented.

(d) PRESENTATIONS (Item 8)

(i) Business Improvement Area Waste Collection Services (Item 8.1)

Joel McCormick, Manager, Waste Management, addressed Committee respecting the Business Improvement Area Waste Collection Services, with the aid of a presentation.

The presentation from Joel McCormick, Manager, Waste Management, respecting the Business Improvement Area Waste Collection Services, was received.

(e) GENERAL INFORMATION/OTHER BUSINESS (Item 13)

(i) Updates from Business Development Office (Item 13.1)

Cristina Geissler, Business Development and Business Improvement Area (BIA) Officer, addressed the Committee respecting Updates from the Business Development Office.

The verbal update from Cristina Geissler, Business Development and Business Improvement Area (BIA) Officer, respecting Updates from the Business Development Office, was received.

(ii) Statements by Members (Item 13.2)

BIA Members used this opportunity to discuss matters of general interest.

The updates from Committee Members, were received.

(f) ADJOURNMENT (Item 15)

There being no further business, the Business Improvement Area Sub-Committee was adjourned at 11:42 a.m.

Business Improvement Area Sub-Committee Report 24-007

October 8, 2024 Page 4 of 4

Respectfully submitted,

Susie Braithwaite Chair, Business Improvement Area Sub-Committee

Tamara Bates Legislative Coordinator Office of the City Clerk



CITY OF HAMILTON PUBLIC WORKS DEPARTMENT Environmental Services Division

то:	Chair and Members General Issues Committee
COMMITTEE DATE:	October 16, 2024
SUBJECT/REPORT NO:	Public Access to Hamilton Piers (PW24061) (Ward 5) (Outstanding Business List Item)
WARD(S) AFFECTED:	Ward 5
PREPARED BY:	Kara Bunn (905) 546-2424 Ext. 4334 Cynthia Graham (905) 546-2424 Ext. 2337
SUBMITTED BY: SIGNATURE:	Cynthia Graham Director, Environmental Services Public Works Department C. Salam

Discussion of Confidential Appendix "A" to Report PW24061 is subject to the following requirement(s) of the City of Hamilton's Procedural By-law and the Ontario Municipal Act, 2001:

- Litigation or potential litigation, including matters before administrative tribunals, affecting the City or a local board; and
- Advice that is subject to solicitor-client privilege, including communications necessary for that purpose.

RATIONALE FOR CONFIDENTIALITY

Appendix "A" to Report PW24061 is being considered in Closed Session as it contains information provided to the City in confidence.

RATIONALE FOR MAINTAINING CONFIDENTIALITY

Appendix "A" to Report PW24061 is to remain confidential as it was provided to the City in confidence.

SUBJECT: Public Access to the Hamilton Piers (PW24061) (Ward 5) - Page 2 of 8

RECOMMENDATION

- (a) That the General Manager, Public Works or designate be authorized to enter into a public use license agreement, including any ancillary agreements or amendments, with the land stewards acting on behalf of the Crown, to permit public access to the Lake Ontario side of the Hamilton portion of the Federally owned piers ("the Hamilton Piers"), consistent with the parameters outlined in Report PW24061;
- (b) That staff be authorized to spend \$50,000 to implement minor improvements to the walking surface to access the Lake Ontario side of the Hamilton Piers, as well as the surface of the Hamilton Piers itself as may be needed to improve public access, to be funded from the Unallocated Capital Levy Reserve 108020;
- (c) That staff be authorized to spend \$350,000 to install railings on both sides of the Lake Ontario side of the Hamilton Piers for public health and safety, to be funded \$250,000 from Hamilton Beach Lift Bridge Pier project ID 4402356127 and \$100,000 from the Unallocated Capital Levy Reserve 108020; and
- (d) That the Environmental Services Division, Parks Section's annual operating budget be increased by \$20,000 to fund the ongoing operations and maintenance to support public access to the Lake Ontario side of the Hamilton Piers, starting in 2025.

EXECUTIVE SUMMARY

In 2022, Report PED21064(a)/PW22075 directed staff to enter into negotiations with the Hamilton-Oshawa Port Authority to establish an agreement to have the City of Hamilton operate and maintain public access to the Lake Ontario and Hamilton Harbour Piers (The Piers) at the Lift Bridge. The Piers are under the control and stewardship of the Hamilton-Oshawa Port Authority, and Public Services and Procurement Canada, a ministry under the Government of Canada. An agreement would establish the City's roles and responsibilities for public access and would be a three-party agreement with both federal entities.

Staff have met regularly with a working team including representatives from the Hamilton-Oshawa Port Authority and City of Burlington since that time, to determine conditions and requirements for an agreement.

At this time, staff have enough information to come back to Council for authority to finalize the agreement terms and conditions, with a few outstanding issues to resolve. One outstanding issue involves mapping the lands to delineate property title ownership between the two federal bodies, the Ministry of Transportation of Ontario, and the utility

SUBJECT: Public Access to the Hamilton Piers (PW24061) (Ward 5) - Page 3 of 8

easements running across the area, which is a challenge due to incomplete and inconsistent records.

Staff recommend the installation of appropriate railing at the Hamilton Pier to suit the new use. The Hamilton-Oshawa Port Authority has advised that they will not fund the railings proposed by the City. Instead, they have committed to either install a bullnose rail (ankle height) or contribute the funds they would have spent on that bullnose rail towards the City staff recommended full-height safety railing.

Staff recommend the installation of appropriate railings prior to allowing public access. Particulars regarding the City's proposed railing are included in the Risk Management report prepared by City of Hamilton staff in Confidential Appendix "A" of Report PW24061.

One last clarification is required to finalize the agreement, and that is the extent of the area to become the operational responsibility of the City. The original report identified the full length of the Piers, both into Lake Ontario, and into Hamilton Harbour, as well as the pier span between the two for public access. The recommendation of Report PW24061 provides direction to staff to ratify the agreement for the lands for public access to the Lake Ontario portion only of the Hamilton Piers, in order to move forward with the public access to the Lake Ontario portion in a timely way while negotiation for the remaining portions continue.

The recommendations of Report PW24061 give staff the direction to proceed with finalizing the agreement and preparing the Hamilton Piers for public use, with the intention to have the Piers open for use for the 2025 season.

Appendix "B" of Report PW24061 outlines the draft operating terms and conditions recommended by City staff, and agreed in principle with the Hamilton-Oshawa Port Authority, the parameters of which include locks and gates to restrict access, specifically between October and May (winter season), and during extreme storms between May and October (summer season). These terms and conditions would be finalized and ratified as part of the agreement. Through approval of Report PW24061, staff understand that minor adjustments can be made to these terms and conditions through the negotiations to finalize the agreement.

Appendix "C" of Report PW24061 illustrates the lands to be used for access to the Hamilton Pier covered by the agreement, including ownership, and which lands will be the responsibility of the City. The area adjacent to the bridge will have permanent fencing to protect the area under Federal control, and therefore the access to the Hamilton Harbour portion of the Hamilton Piers is restricted as well.

Appendix "D" of Report PW24061 illustrates the design of the Hamilton Pier with railing and concrete barrier conditions, as well as public access to the area.

SUBJECT: Public Access to the Hamilton Piers (PW24061) (Ward 5) - Page 4 of 8

The City of Burlington staff that are part of the working group intend to bring a similar report to their Council for direction.

Alternatives for Consideration – See Page 6

FINANCIAL - STAFFING - LEGAL IMPLICATIONS

Financial: There is an existing capital project ID 4402356127 with a balance of \$250,000. The project ID was set up in anticipation of costs required to prepare the Hamilton Piers for public use, and would be above and beyond the costs covered by the Hamilton-Oshawa Port Authority. The amount to be contributed by the Hamilton-Oshawa Port Authority is still being confirmed.

The costs for railing installation is anticipated to be \$350,000 for both the full extent of the channel side of the Lake Ontario portion of the Hamilton Pier, and the part of the beach side that does not currently have the concrete barrier. These costs will be funded \$250,000 from capital project 4402356127 Hamilton Beach Lift Bridge Pier and \$100,000 from the Unallocated Capital Levy Reserve 108020.

The costs to implement minor improvements to the walking surface to access the Lake Ontario side of the Hamilton Piers, as well as the surface of the Hamilton Piers itself, is anticipated to be \$50,000. These costs will be funded from the Unallocated Capital Levy Reserve 108020.

The City Parks section annual base operating budget is required to be increased by \$20,000, starting in 2025. This will include minor repairs for tripping hazards and railing, opening and closing the gates, garbage collection at the trail head, and work that arises from regular inspections of the Hamilton Pier for hazards. Larger repairs, for example from storm damage or major vandalism to the railing, would require a capital project to complete and would be requested as needed.

Staffing: There are no staffing implications.

Legal: Legal Services staff are working to finalize the agreement as outlined in

Report PW24061.

HISTORICAL BACKGROUND

Report PED21064(a)/PW22075 was approved at General Issues Committee on September 21, 2022, and directed staff to enter into negotiations with the Hamilton-Oshawa Port Authority in order to establish an agreement to have the City manage public access at the Hamilton and Burlington Piers ("the Pier(s)").

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Prior to 2021, the gates at the Piers were unlocked and the public had access to walk the length of the Piers. On the Hamilton side, that included the pier that extends into Lake Ontario, as well as the pier that extends into Hamilton Harbour. The public used the Piers for fishing, recreation (walking), and to enjoy being out on the Piers for the views.

Gates were installed by Transport Canada in 2021 to restrict the public access. In June of 2022, the responsibility for the Piers was transferred from Transport Canada to the Hamilton-Oshawa Port Authority. At that time, the Hamilton-Oshawa Port Authority indicated that there was a willingness to lease the Piers to the municipalities (Hamilton and Burlington) to permit public access for recreational purposes.

In 2023, the Hamilton-Oshawa Port Authority made some improvements to the Piers, including walking surface repairs, installation of safety ladders and equipment, and weed removal.

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

There are no policy implications or legislated requirements related to the recommendations in this Report.

RELEVANT CONSULTATION

Risk Management staff prepared the Risk Analysis report Confidential Appendix "A" to Report PW24061 to advise on primary risk and legal concerns and to provide recommendations for mitigation. Risk Management staff are in agreement with the recommendations of Report PW24061.

City of Burlington staff have been part of the working group to prepare the agreements, as a consistent approach for the Piers is desired for both municipalities. The agreement for Hamilton's side will not include the City of Burlington, however it was desirable to coordinate the work.

Hamilton-Oshawa Port Authority staff have been part of the working group to prepare the agreements for the City of Hamilton, to facilitate public access to the Hamilton Piers.

Public Service and Procurement Canada staff have been part of the working group to prepare the agreements required to allow public access to the Hamilton Piers, as that ministry oversees lands in the area, including the lift bridge and lighthouse. The public will need to cross lands under the control of this entity to access the Piers.

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ANALYSIS AND RATIONALE FOR RECOMMENDATION

The recommendations of Report PW24061 will give staff the authority and direction to complete the agreement required to permit public access to the Lake Ontario side of the Hamilton Piers. is the recommendations of Report PW24061 are reflective of the discussions with the working group, reflects concerns raised about access to areas of the Piers by Risk Management, and Public Service and Procurement Canada, and is consistent with the direction given to City staff through Report PED21064(a)/PW22075. The recommendations also outline the costs associated with permitting public use of the Lake Ontario side of the Hamilton Piers.

The recommendations do not include any additional public realm improvements (such as seating or garbage containers). Instead, a waste container could be added at the head of the trail on City parkland property. Staff understand that public realm improvements are a desire, however, through the negotiations with Hamilton-Oshawa Port Authority staff, it was determined that within the next 10 years, the structure of the Piers will require major restoration works, requiring the closure and removal of significant sections of the Piers. Any improvements or investments in the Piers may be compromised, and best coordinated with that upcoming structural repair. Additionally, public consultation to inform a master plan for the Piers design has not taken place, and is a best practice, understanding how the public might use or benefit from public realm improvements, which can be part of a future effort and investment. Additional considerations for security along the Hamilton Piers is also required, as this is a major shipping route. Designs will need to be reviewed with safety in mind, for considerations such as climb-ability, objects that could end up in the shipping channel, or objects that could hide explosive devices. Lastly, staff understands that the priority is to open up access for the public and do not want to delay the ratification of an agreement that would achieve this goal.

Appendix "B" of Report PW24061 outlines the work that will be undertaken by City staff, and the conditions under which the Lake Ontario portion of the Hamilton Pier would be opened or closed. It should be noted that in general, events would not be permitted, but that photography, including wedding photography, would be permitted with an application and adherence to conditions for number of people and safety. Additionally, the areas for public access would not be considered a compliant site under the City's Encampment Protocol.

ALTERNATIVES FOR CONSIDERATION

Alternative 1

An alternative to the recommendations of Report PW24061 is to proceed with the agreement to take over the operations of the Lake Ontario side of the Hamilton Piers,

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but to not install the railings. The Hamilton-Oshawa Port Authority will install bullnose (ankle height) railings at their cost. Staff do not recommend this alternative.

Financial: Costs for this alternative are reduced to reflect less work and expenses

anticipated to maintain because there is no railing. The capital costs for minor walking surface improvements to be funded from the existing project ID 4402356127, and ongoing maintenance of the Hamilton Pier are required, and the increase to the City Parks Section operating and maintenance base budget is required of \$15,000. The remaining capital funds in project ID 4402356127 can be used for future improvements or returned to source.

Staffing: No staffing implications with this alternative.

Legal: This alternative poses significant potential health and safety risks to the

public.

Alternative 2

A second alternative to the recommendations of Report PW24061 is to direct staff to continue to pursue an agreement that covers the full extent of the Hamilton Piers, including public access to the area under the lift bridge, and the Hamilton Harbour portion of the Hamilton Piers. Discussions with land stewards (Public Service and Procurement Canada, and Hamilton-Oshawa Port Authority, with the ownership sitting with the Crown) indicate that there are significant challenges and considerations with this option, and ratification of an agreement for these lands is not guaranteed. As this option would delay the ratification of the agreement to allow public access to the Lake Ontario portion of the Hamilton Piers, which is more straightforward and is the area most sought after for recreation, staff do not recommend this alternative.

Financial: Costs would increase for this alternative, as the City would take on the full extent of the pier, increasing the length of maintained pier from 440 linear metres to 830 linear metres. Railing costs would increase from \$350,000 to \$580,000 and ongoing annual maintenance costs would increase from \$20,000 to \$22,000.

Staffing: No staffing implications with this alternative.

Legal: This alternative poses additional health and safety risks to the public.

APPENDICES AND SCHEDULES ATTACHED

Confidential Appendix "A" to Report PW24061 – Burlington Harbour and Fisherman's Piers Risk Analysis Report

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Appendix "B" to Report PW24061 – Hamilton Pier recommended operating terms and conditions

Appendix "C" to Report PW24061 – Hamilton Piers land ownership map

Appendix "D" to Report PW24061 – Plan showing railing and trail access to the Hamilton Pier

Pier Management Plan

Draft – requires review by HOPA and PSPC

Closures

Temporary Trail/Pier Closure

Public access Hours – Dusk until Dawn Daily from May 1-October 31. Signage will be in place identifying hours and gates will be locked for the winter. Gate remain open during the Spring/Summer/Fall.

There may be times that require the trail/pier to be closed for public use. Responsibility for the closures will be that of the licensee but may on occasion be requested by the Licensor. The Notice period for non-emergency closures requested by the Licensor to be 6 months minimum.

The pier access may be closed to public use for short periods of time to ensure user safety. The most common instances that warrant temporary closures, but are not limited to, are:

1. Pier Maintenance, Construction or other activities:

When upgrades or improvements such as pier re-surfacing, lighting repair or other impactful construction is being conducted, or if there are damages that make the area unsafe, the pier must be closed to the public. Using appropriate signage and barriers, the section undergoing maintenance or construction must be cordoned off and an alternative by-pass (if the trail access is impacted), when possible, must be indicated to public users.

A by-pass route or pier closure may also be implemented in case of emergency or construction activities.

2. High Wind, High Water, Flooding or Other Climate Events:

Permanent Wind, Wave and water level Conditions Interpretive Signage must be posted at all primary and applicable secondary access points.

High wave action is associated with the High wind and water level events and as such if the event is predicted any unsecured items such as waste in bins should be removed if safe to do so.

Areas must be inspected thoroughly before fully re-opening or partially re-opening.

Only the Superintendents, and/or Manager of Parks will be authorized to permit reopening of the pier after a closure event. No access will be allowed at any time during a wind/wave/high water event unless required for Emergency Services.

The Pier or trail may need to be temporarily closed due to flooding or erosion caused by heavy periods of rain, wave events or ice events. In these cases, signage indicating the trail closure must be posted clearly at the entrance and gates locked.

3. <u>Seasonal – winter snow and ice:</u>

The Pier will be closed for the winter months and when there are no staff present available daily on the Beach and when there is risk of snow and ice.

The Pier will be open May 1-October 31 from Dawn until Dusk. Signage will indicate the seasonal closure and, in the fall, additional signage that shows that the pier is closed to access for the season will be installed.

In addition to barriers where applicable and signage where applicable, trail and pier closures are communicated on the City of Hamilton Website or by means of other communication notices. The Licensee will immediately notify the Licensor of any emergency closures.



Pier Management Plan Draft – requires review by HOPA and PSPC

Maintenance Schedule

Items of Responsibility	Winter November 1 st to March 31 st	Spring/Summer/Fall May 1 st to October 31 st
Trail Connection (City)	Inspect 1x month no winter maintenance on trail connection, signage and gate inspections	Inspection 1x month Spring/Fall, 1x week Summer, surfaces and signage, gates. Sweeping – as required Repairs – as required
HOPA		
Pier Tread Surface (City)	n/a no winter maintenance	Inspection 1x month Spring/Fall, 1x week Summer Sweeping – as required Repairs – as required
НОРА	n/a- underground structure only	n/a - underground structure only
Fencing and railing (City)s	n/a -reactive only if ice event occurs and when safe to do so	Inspection 1x month Spring/Fall, 1x week Summer Repairs – as required
HOPA	n/a	n/a
Signage (City)	Inspect 1x month and ensure no winter maintenance signs and closure signs are in place	Inspection 1x month Spring/Fall, 1x week Summer Repairs and graffiti removal – as required
HOPA	Navigational signage	Navigational signage
Gates, Barriers and Bollards (City)	Inspect 1x month and ensure barriers in place and secure	Inspect 1x month and ensure barriers in place and secure
НОРА	Responsible for fence outside of the area of licence	Responsible for fence outside of the area of licence
Navigation items (City)	Identify for HOPA any visual damage if observed (aesthetic only as staff are not trained to know if the item is functional)	Identify for HOPA any visual damage if observed (aesthetic only as staff are not trained to know if the item is functional)
HOPA	Full responsibility	Full responsibility
Lighting (City)	TBC	Pedestrian lighting Inspection 1x month Spring/Fall, 1x week Summer Repairs and graffiti removal – as required
НОРА	Navigational lights only Payment of Hydro - TBC	Navigational lights only Payment of Hydro – TBC
Structure of pier	Identify for HOPA any visual damage if observed	Identify for HOPA any visual damage if observed

(City)		
НОРА	Repairs as required, full responsibility	Inspection, Repair, Replace full responsibility – in 10year Capital plan
Safety devices, trail waste can (City)	Remove for winter closure Safety devices TBC	Waste can 3x per week Repairs and graffiti removal – as required TBC
НОРА	Ladders – inspect and repair as required	Ladders – inspect and repair as required
Vegetation management (e.g. trees, shrubs, grasses, invasive species) (City)	n/a	Trim, cut, remove as required
HOPA	n/a	n/a

Attributes and components defined:

- 1. Trail connection means the designated path connection to the pier to be a clear zone kept free of obstructions and free of trip hazards
- 2. Tread surface means the surface material of the trail tread designated for pedestrians which may range from an asphalt surface to an unsurfaced natural environment.
- 3. Fencing, gates and barriers as shown on conceptual plan
- 4. Signage (wayfinding, instructional or rules and hazard identification) –includes wayfinding signage to assist users in understanding what uses are permitted on the pier, what warnings they need to heed, proper pier etiquette to be followed, emergency contact information, closure and maintenance information.
- 5. Pier structure
 - The deck material concrete
 - The superstructure that supports the deck, including the abutments, if any
 - Railings on the pier
 - Lighting and electrical components
 - Navigational items
- Amenities –benches, waste cans- to be bolted in place and removable for the winter, waste cans to be mental mesh and bags used clear. On trail entrance only not on the pier, location to be with approval from licensor and at staff discretion. TBC
- 7. Safety devices, ladders type, number and spacing TBC

Inspection

<u>Maintenance inspections – Licensee</u> Inspection to be maintained as an electronic record and stored for 7 years. Inspections are to be carried out by the Licensee's qualified person. Records to be shared yearly with the Licensor and any incidents or items of concerns to be flagged immediately for the Licensor.

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<u>Capital and structural inspections – Licensor</u> Inspection records to be shared with the Licensee as completed, all future capital work timelines to be shared at minimum 6 months in advance with the Licensee.

Qualified Person

All staff or contractors who perform inspections, closures, maintenance to be familiar with this agreement and the City of Hamilton inspection Standard Operating Procedure.

Signage for Prohibited activities

The City of Hamilton Parks ByLaw 01-219 outlines terms of use. In addition there will be specific signs outlining prohibited activities such as no swimming, diving, fishing, events or photography bookings, skateboarding, vehicles of any kind (unless approved by HOPA for emergency/maintenance).



Hamilton Piers Land Ownership Map



