

# City of Hamilton GENERAL ISSUES COMMITTEE ADDENDUM

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

#### 5. COMMUNICATIONS

\*5.2 Correspondence from Richard Koroscil, and Jesse Elders, Bay Area Climate Change Council respecting Item 8.1 - Hamilton's Climate Action Strategy 2024 Annual Update (PED24166)

Recommendation: Be received and referred to consideration of Item 8.1.

#### 6. DELEGATION REQUESTS

\*6.1 Katie Stiel, Hamilton Chamber of Commerce, respecting Hamilton Day. An award winning city wide celebration of our community and local businesses taking place November 1st - 3rd, 2024 (In-Person) (For a future meeting)

#### 8. STAFF PRESENTATIONS

\*8.1 Hamilton's Climate Action Strategy 2024 Annual Update (PED24166) (City Wide) (Outstanding Business List Item) (REVISED Presentation)

#### 10. DISCUSSION ITEMS

\*10.2 Reducing Homelessness and Managing Encampments (HSC24027(c)) (City Wide)

#### 12. NOTICES OF MOTION

\*12.1 Distance Separation from Concentration of Temporary Shelter Beds

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

#### 14. PRIVATE AND CONFIDENTIAL

\*14.3 Ontario Land Tribunal Appeal - 405 James Street North (PED22155(a) / LS23012(c)) (Ward 2)

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



Bay Area Climate Change Council bayareaclimate.ca info@bayareaclimate.ca

October 15, 2024

Mayor and Members General Issues Committee City of Hamilton

#### Support for Hamilton's Climate Action Strategy 2024 Annual Update (PED24166)

On behalf of the Bay Area Climate Change Council, we would like to commend the significant efforts behind the Climate Action Strategy Annual Update and the actions outlined to address the climate crisis. The hard work and collective dedication of this Council and staff are clear, and we should all be proud of the progress made within our city and community so far.

From progress on the carbon budget to the launch of the Better Homes Hamilton project and the expansion of sustainable transportation infrastructure, these actions are concrete steps forward. We acknowledge the city's commitment to community engagement and collaboration with diverse stakeholders, and the development of a climate justice framework — essential steps to ensure an equitable response to the climate crisis.

At the same time, we must also recognize that significant work and investment remains. The climate crisis is a growing challenge that requires us to be even more ambitious in our goals and innovative in our responses. Our emissions haven risen despite our efforts to date, and we require a rapid and immediate acceleration of climate action. As we look ahead, we encourage this Council to be bold in its empowerment of staff, investment in climate action, and advocacy at all levels of government.

To that end, staff's recommendation to explore the acceleration of our city's net zero target demonstrates strong climate leadership. Toronto recently advanced its net zero goal from 2050 to 2040, supported by a strategy to accelerate its climate action. Toronto assessed that acceleration was not only necessary, but also would result in greater community-wide net savings. As our city explores a similar acceleration, BACCC is here to support in the assessment of the corresponding co-benefits and requirements. We look forward to further discussion on this issue.



Bay Area Climate Change Council bayareaclimate.ca info@bayareaclimate.ca

Thank you for the opportunity to contribute to this important discussion, and congratulations again on the efforts made to date.

**Richard Koroscil** 

**Chair, Bay Area Climate Change Council** 

Jesse Elders

Manager, Bay Area Climate Change Council

Submitted on Fri, 10/11/2024 - 16:05

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
Katie Stiel
Hamilton Chamber of Commerce
120 King Street West, Plaza Level
Hamilton, Ontario. L8P 4V2
k.stiel@hamiltonchamber.ca

Preferred Pronoun she/her

Reason(s) for delegation request

Presentation respecting Hamilton Day. An award winning city wide celebration of our community and local businesses taking place November 1st - 3rd. 2024.

Will you be requesting funds from the City? No

Will you be submitting a formal presentation? Yes



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

TO:	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)

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#### **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

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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

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 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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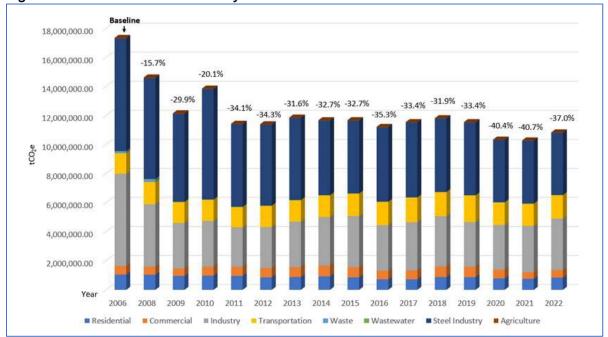


Figure 1.0 Hamilton's Community-Wide GHG Emissions 2006-2022

Hamilton's community-wide emissions in 2022 were estimated at 10,928,239 tonnes of carbon dioxide equivalent (tCO2<sub>e</sub>). This represents an approximate 37.0% decrease based on Hamilton's 2006 baseline of 17,349,813 tCO2<sub>e</sub>. 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 1<sup>st</sup> (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 30<sup>th</sup>. 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.

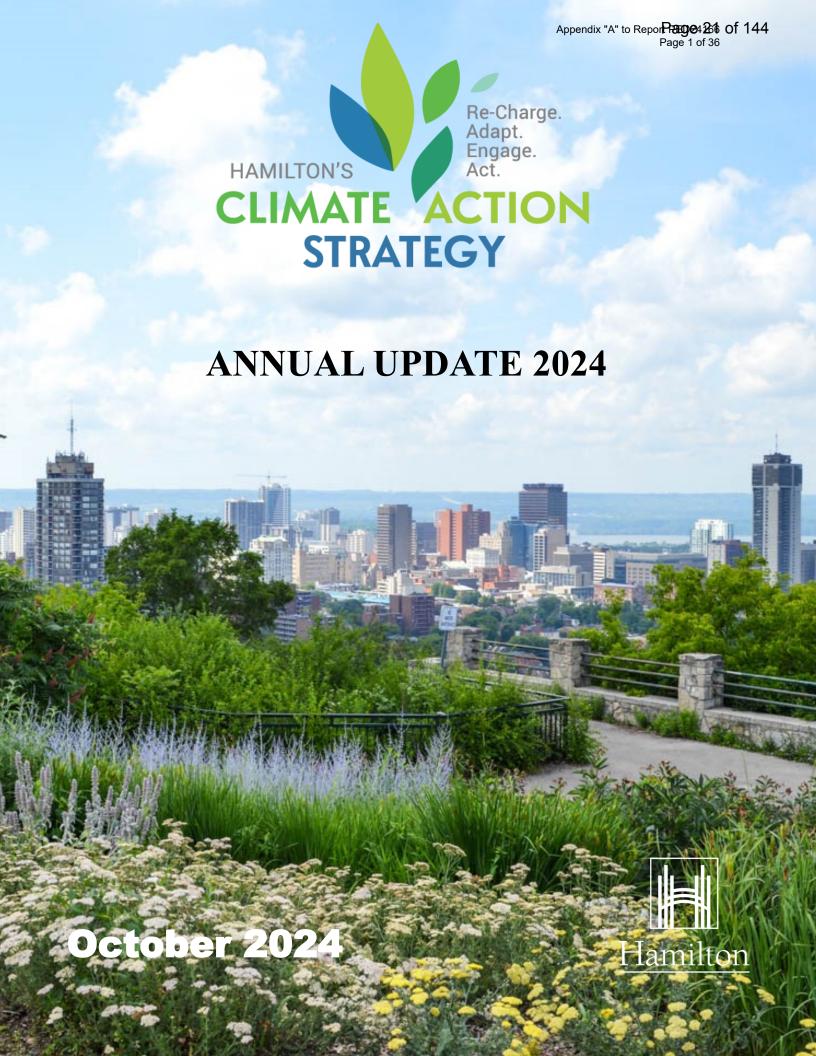
Council could choose not to give direction to staff to explore the implications of accelerating the 2050 timeline for reaching net zero. This could have implications regarding the future costs to address climate impacts, the local impacts from climate change if opportunities to front end key efforts 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.

<sup>&</sup>lt;sup>1</sup>See 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: <a href="climatechange@hamilton.ca">climatechange@hamilton.ca</a>. You can also reach out directly to members of the OCCI staff team:

Name & Title	Telephone	Email
Beatrice Ekoko Project Manager	(905) 546-2424 x6885	Beatrice.Ekoko@hamilton.ca
Trevor Imhoff Senior Project Manager	(905) 546-2424 x1308	Trevor.lmhoff@hamilton.ca
<b>Lynda Lukasik</b> Director	(905) 546-2424 x3169	Lynda.Lukasik@hamilton.ca
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	<b>DELAYED</b> - 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.

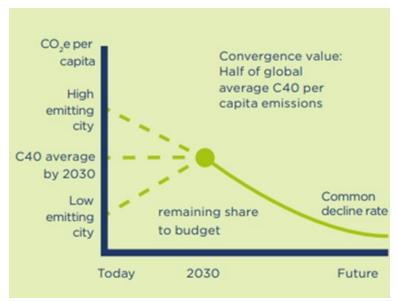


Figure 1.0 Emissions reduction trajectories using C40 Cities Convergence and Contraction Method

#### **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;

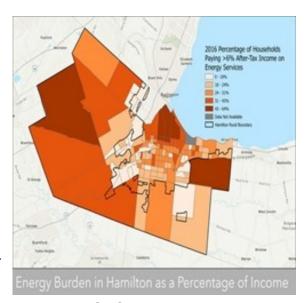


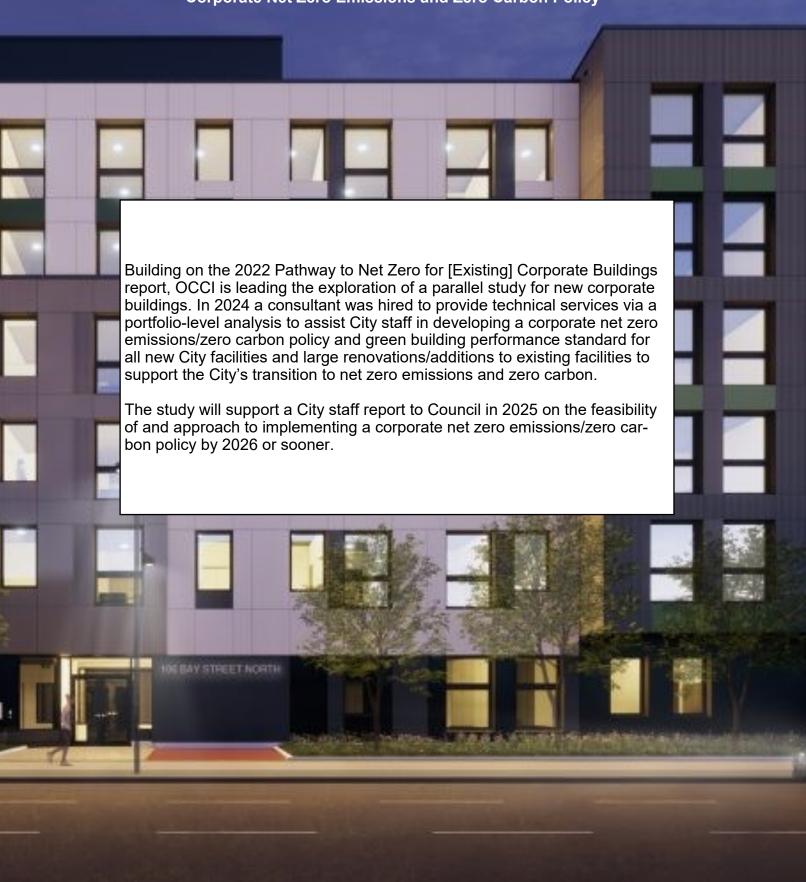
Figure 2.0 CUSP Energy Poverty Mapping Tool

- 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** 



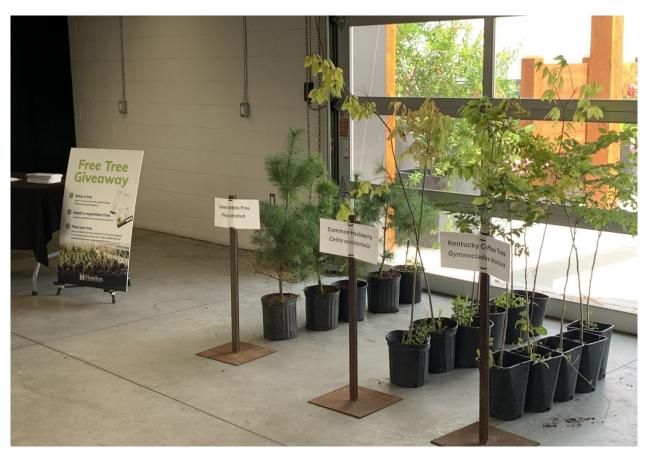
### OCCI PRIORITY: Urban Greening

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

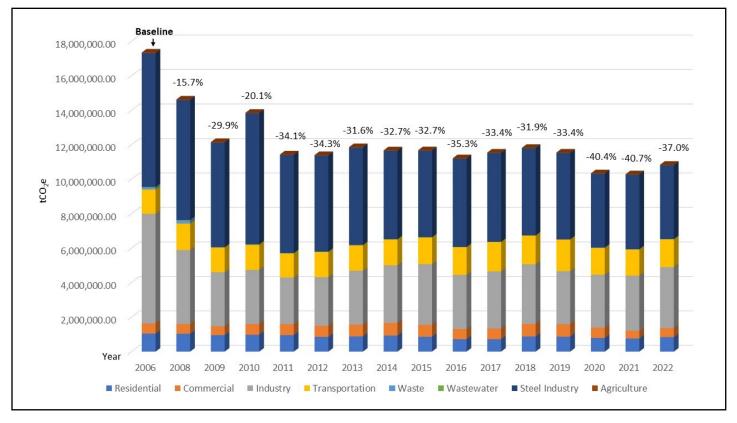
- Clean Air Hamilton
- Clean Air Partnerships Green Development Standard Community of Practice
- Efficiency Canada's Mandatory Building Performance Network
- Buildings Ontario Transformation Hub
- Advisor on McMaster's MacChangers
- Annual Environment, Social, Governance (ESG) Reporting for Finance Standard 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<sub>e</sub> in 2022 compared to 17,349,813 tCO2<sub>e</sub> 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 (tCO<sub>2</sub>e) 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.

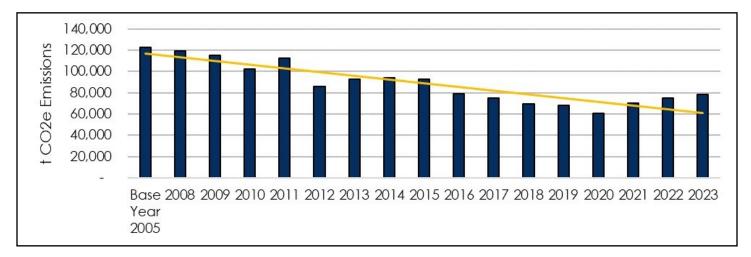


Figure 4.0 Hamilton's Corporate Greenhouse Gas Emissions 2005-2023

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.

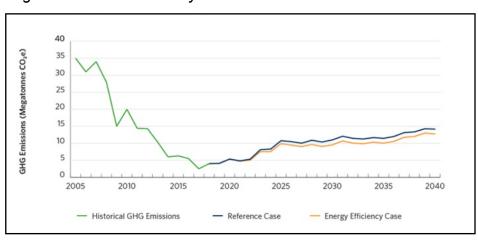


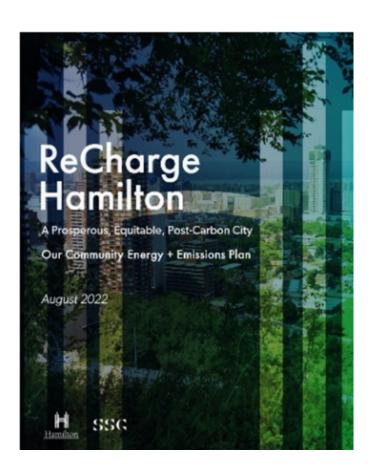
Figure 5.0 IESO Electricity Emissions Forecast

(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.

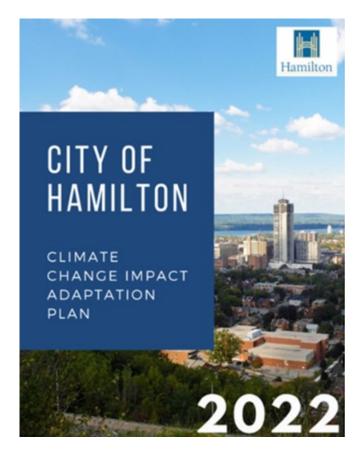




"ReCharge Hamilton – Our Community Energy and Emissions Plan"

#### 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:

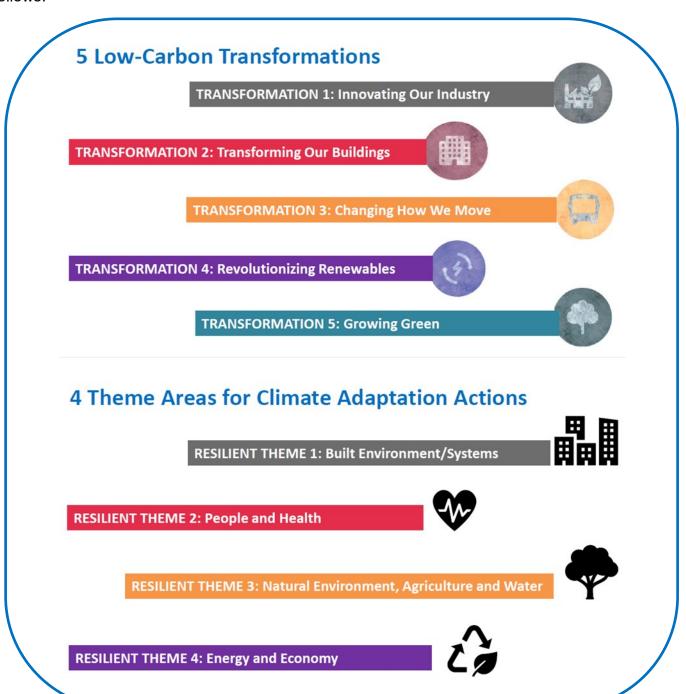
"The City of Hamilton will be a national leader on climate adaptation: a healthy, equitable, vibrant, and sustainable community that responds to the needs of residents, businesses and institutions, and is resilient in the face of a changing climate"

#### **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

<sup>\*</sup>For reference, 1 tCO2e represents the greenhouse gases emitted from driving an average internal combustion engine vehicle 2,500 miles or 4,023 kms.

<sup>\*\*</sup>Bartek Ingredients Plant #2 started reporting to GHGRP in 2019 – increase is since 2019.

<sup>\*\*\*</sup>Bimbo/Canada Bread plant opened in 2011 and started reporting to GHGRP in 2020, decrease reported is since 2020.

<sup>\*\*\*\*</sup> 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.

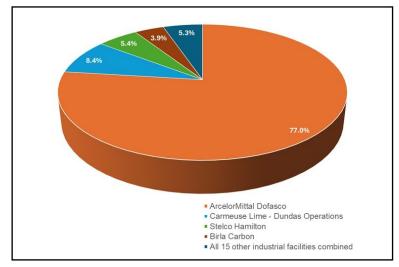


Figure 6.0 Facility Contributions GHGRP Reporting, 2022

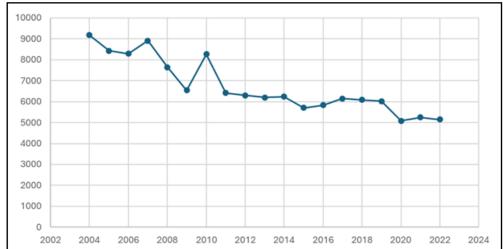


Figure 7.0 Hamilton Facilities Reporting to GHGRP 2004-2022 (kt CO<sub>2</sub>e)

#### **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 <sub>2</sub> 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 <a href="mailto:ryan.rogers@hce.net">ryan.rogers@hce.net</a> 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

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

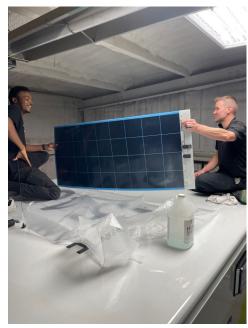
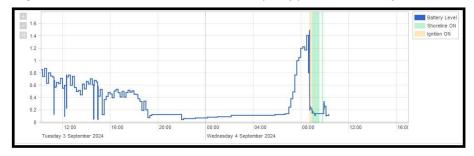


Figure 8.0 Paramedic Solar Power (Amp) Detailed Report



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 awardwinning, purpose-driven technology company owned by the City of Hamilton — is helping local residents, businesses and institutions benefit from low-carbon, highefficiency 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 2017-2023<sup>1</sup>

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.

<sup>&</sup>lt;sup>1</sup>Source – 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

746

#### **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: <a href="https://www.hamilton.ca/home-neighbourhood/house-home/home-water-services/water-rates/stormwater-funding-review">https://www.hamilton.ca/home-neighbourhood/house-home/home-water-services/water-rates/stormwater-funding-review</a>

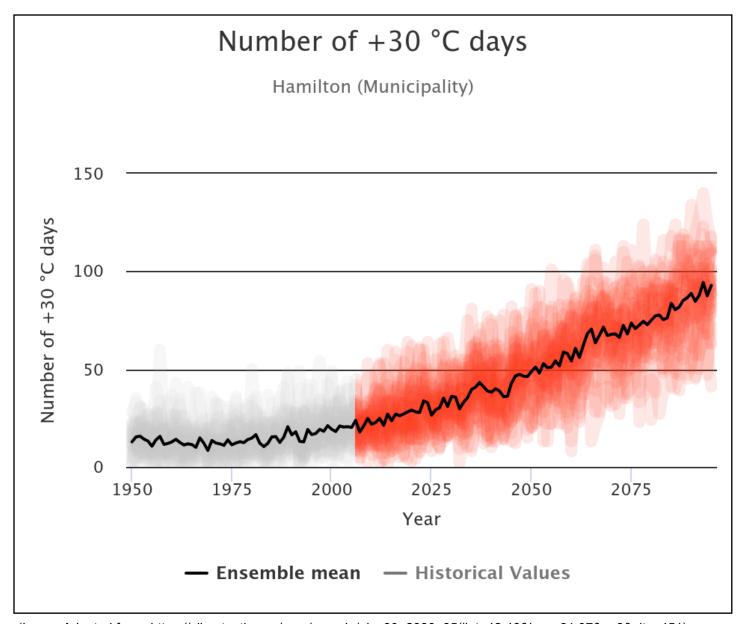
#### Resilient Theme #2: People and Health

#### **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



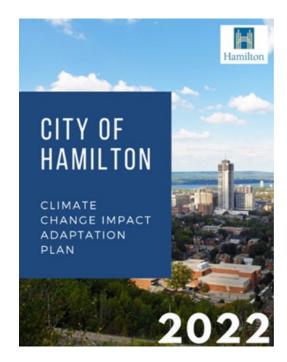
(Image Adapted from: https://climateatlas.ca/map/canada/plus30\_2030\_85#lat=42.46&lng=-81.07&z=8&city=451)

#### 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 stickets and subsidy dollars for air conditioners

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 engagehamilton.ca/leedcipreview 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	<ul> <li>Committed Funds by type for 2023:         <ul> <li>Renewable: Construction \$370K,</li> <li>Payback \$200K, Transfer Back \$2.0M</li> <li>Energy/Cost Saving: Payback \$1.8M</li> </ul> </li> <li>*Note - Payback and Transfer back are funds that are committed but not actively in construction.</li> </ul>	
(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.

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	<ul> <li>INDICATOR – City support for/influence over the establishment of cleantech businesses/industries in Hamilton.</li> <li>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</li> <li>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.</li> </ul>	
industrial energy management training programs (incl. subsidized opportunities for marginalized populations)  2022-onwards  Office of Climate Change Initiatives (Coordinating Role),	<ul> <li>INDICATOR - Number of trained/retrained industrial energy management professionals (including numbers from equity-owed populations if available)</li> <li>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'.</li> </ul>	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	<ul> <li>All training through C2R2 or Mohawk College was offered at no cost through the ESDC SWSP Quick Train program.</li> <li>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.</li> </ul>	
	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 integrate City-wide new green development standards  2022-2023  Planning Division, Building Division, Planning & Economic Development	<ul> <li>INDICATOR – Development &amp; Integration of City-wide Green Development Standards</li> <li>Green Building Standards final report will be brought forward to Council in Q4 2024, followed by the development of a detailed implementation strategy including incentives which will be brought forward to Council in 2025</li> </ul>	Green Building Standards implementation strategy will be brought forward for approval in 2025.

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
	<ul> <li>INDICATOR - Energy and emissions intensity of new buildings (per sq/ft or m2)</li> <li>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</li> </ul>	
CEEP Action 5.0: Install solar PV on new and existing buildings.  2022-onwards  Building Division, Planning and Economic Development; Corporate Facilities and Energy Management, Public Works	<ul> <li>INDICATOR – Megawatts of solar photovoltaics (PV) installed on new and existing buildings.</li> <li>The Building Division reviews Solar PV installations through a lens of structural and installation requirements. The 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)</li> </ul>	Future proposed INDICATOR - ESA Electrical Permits for Solar: The Electrical Safety Authority has been recommended by the Building Division as a better 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)		late and Supporting itative Information	2024 Accomplishments & Outlook
	regarding MW energy/p	ermit 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	
	2023	72	•
	2024	13	
	currently has 1 per 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	technical and financial business cases for the incorporation of a solar system on the roof of the 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),

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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	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
	<ul> <li>Number of homes participating within neighbourhoods identified as having high energy poverty burden.</li> <li>Number of building retrofits (number of properties, by type etc.) completed through City program.</li> </ul>	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	<ul> <li>INDICATOR - Tracking skilled graduates and workforce trends.</li> <li>The Canadian Colleges for a Resilient Recovery (C2R2) offered a total of 13 micro-credential courses related to trades and building retrofits.</li> <li>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.</li> <li>INDICATOR - Number of low-income, marginalized/ equity-owed applicants participating in these training programs.</li> <li>C2R2 through voluntary self-identification reported that 57% of its students across Canada identified as being a member of an equity-deserving group.</li> </ul>	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	<ul> <li>Future proposed INDICATORS to assess a mass deep energy building retrofit program include:         <ul> <li>Number of building retrofits completed.</li> <li>Trends in energy use and emissions intensity over subsequent years by sector (residential, institutional, commercial, industrial)</li> <li>Number of homes participating within neighbourhoods identified as having high energy burden.</li> </ul> </li> </ul>	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	<ul> <li>INDICATOR - Kilometers of total cycling infrastructure and breakdown of type (new, upgraded, separated, multi-use trail)</li> <li>10.4 lane km of bike lanes were added in 2023.</li> <li>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.</li> <li>\$1.393 M was invested in cycling infrastructure in 2023.</li> <li>*NOTE - City Council approved acceleration of the Cycling Master Plan in 2023.</li> <li>Future potential INDICATORS for tracking progress with the expansion and connectivity of Hamilton's active transportation networks include:</li> <li>Kilometers of connected active transportation networks.</li> <li>Data regarding vulnerable roadway users - pedestrians, cyclists, high collision locations/intersections (Annual collision report - via Vision Zero initiative - provides this</li> </ul>	

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	<ul> <li>INDICATOR – Track percentage/ number of decarbonized vs. fossil-fuel powered buses (including 'fuel type' breakdown - diesel, CNG, RNG, etc)</li> <li>By the end of 2023, 77.4% of HSR fleet was fuelled by compressed natural gas (CNG), an increase from 64% in 2023.</li> <li>The goal is to fully decommission all diesel buses by 2026.</li> <li>INDICATOR – Track number of decarbonized buses in operation.</li> <li>In 2023, there was one decarbonized bus in operation – an articulated bus powered by renewable natural gas (RNG).</li> </ul>	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.
	INDICATOR - Completion of technical analysis of bus charging and/or fuelling infrastructure required for fleet decarbonization.  • No update available for 2023	The HSR reported that, starting in 2024, it eliminated its initiative to fuel one of the HSR fleet's 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	<ul> <li>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.</li> <li>119,283 trips were taken for a total of 269,614km travelled.</li> <li>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.</li> <li>INDICATOR - Track e-Scooter use in geographic areas identified as priority neighbourhoods where the private operator provides subsidized rates to users to facilitate access/ support mobility justice.</li> <li>In 2023 there were a total of 2,462 trips that started or ended in these geographic zones.</li> <li>Bird increased promotion of the discount in October 2023 and saw a large increase in rides as a result.</li> <li>INDICATOR - Track e-scooter and bikeshare</li> </ul>	system with new McMaster University financial agreements providing student access to both systems.
	<ul> <li>trips per capita in priority neighbourhoods</li> <li>Hamilton Bike Share's 'Everyone Rides Initiative' (ERI) was able to offer 200</li> </ul>	

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.

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.	
in the downtown core and promote EV parking	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	Public information meetings were held in January 2024, and the New City-Wide Parking Standards were presented at
2022-2025	chargers in public lots was completed in early 2023.	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		
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

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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	No efforts were initiated in 2023 to encourage the development of local renewable energy cooperatives.  Future potential INDICATORS include:	
Office of Climate Change Initiatives (co-ordinating role for community), Planning and Economic Development	<ul> <li>Number of cooperatives established.</li> <li>MW of renewable energy generation systems installed by cooperatives (existing coops, and total MW existing in Hamilton)</li> </ul>	
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	<ul> <li>kWh of renewable energy supplied corporately (City of Hamilton).</li> <li>MW of renewable energy capacity installed community-wide</li> <li>Local outcomes via provincial 'requests for proposals' for renewable energy projects.</li> </ul>	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.
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		
<b>CEEP Action 19.0:</b> Decarbonize and expand HCE downtown	During 2023 City staff participated on the Hamilton Community Enterprises (HCE)	Progress has continued during 2024 with efforts to advance
district energy system	technical steering committee for the Energy Harvesting Feasibility Study with a goal of	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	
Economic Development	HCE's downtown district energy system:	
	<ul> <li>*Private sector uptake of district</li> </ul>	
	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
	<ul> <li>Gigajoules of residual heat harnessed through the future energy harvesting system</li> </ul>	
	*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	See waste management updates provided in Action 17.0 above.  Future proposed INDICATOR.  • Tonnes of organics diverted from	See waste management updates provided in Action 17.0 above.
Waste Management Division, Public Works	landfill.	

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	<ul> <li>– which will include addressing the elements of</li> </ul>	
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	<ul> <li>Work has been slowed due to changing provincial policy requiring planning staff to adjust work plans.</li> </ul>	
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)	<ul> <li>INDICATOR - Number of trees planted annually through City's Forestry &amp; Horticulture Division.</li> <li>Total number of trees added to Hamilton's Tree Canopy by Forestry was15,256 for 2023 surpassing the goal of 12,000.</li> <li>Of this 15,256 total:         <ul> <li>3,536 were provided to residents through the 2023 Free Tree Giveaways</li> <li>1000 were given to students at the Hamilton Children's Weter</li> </ul> </li> </ul>	The Forestry and Horticulture Division's tree planting target for 2024 is 20,000 trees.
Environmental Services Division, Public Works	Hamilton Children's Water 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
	<ul> <li>3,927 were planted on City land via community volunteer planting events</li> <li>6,779 were planted through the Forestry Operations Group in parks, cemeteries, streets, and public golf courses.</li> <li>INDICATOR - Number of trees planted annually through the efforts of community partners including conservation authorities, Royal Botanical Gardens, environmental organizations.</li> <li>Community partners planted a total of 32,578 trees on public and private land as follows:         <ul> <li>Area Conservation Authorities – 28,083</li> <li>Environmental Not-For-Profits – 1,651</li> <li>Royal Botanical Gardens – 2,238</li> <li>McMaster/Mohawk – 626</li> </ul> </li> <li>TOTAL Trees planted by City and community partners in 2023 = 47,834     <ul> <li>*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</li> </ul> </li> </ul>	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

familion's Chinate Change impact Adaptation Plan Opdate 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.	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	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.
Planning & Economic Development	During 2023 staff in the OCCI facilitated and tracked progress with implementation of the CCIAP.	OCCI staff continued, during 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	<ul> <li>incentive program.</li> <li>Number and type of benefits         resulting through the stormwater         management credit program         proposed for IC&amp;I properties.</li> </ul>		
	<ul> <li>INDICATOR – Annual uptake in City's Protective Plumbing Program:         <ul> <li>A total of 349 backwater valves were installed through the program in 2023.</li> <li>31 downspouts were disconnected at properties through the program in 2023.</li> </ul> </li> </ul>		
	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	
CCIAP Action 1.3: Conduct more studies or reviews to	INDICATORS that will be used to track progress with building retrofits, including the Better Homes Hamilton initiative.  Flooding and Drainage Improvement Framework – Environmental Assessments -	Efforts have continued into 2024 to address stretches of trail.	
determine flooding and other risks throughout the City & develop plans (e.g. relocating sites where appropriate) to	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	shoreline and other City amenities impacted by extreme weather events:  • The Mountain Brow Rail	
improve the resilience of infrastructure (i.e. buildings, roads, water/wastewater	solutions such as green infrastructure and sewer separation.	Trail - from Mohawk Sports Park to Corktown Park – has been changed by	
infrastructure, etc.) to climate- related risks from extreme weather and temperatures.	Future potential INDICATORS to track progress with studies and reviews to determine flooding and other climate impact related risks from extreme weather and	storms and studies are ongoing to assess the impacts to this landscape.  Stormwater management	
Medium-term (2-5 years)  Hamilton Water, Public Works	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	issues have been identified at Hamilton Cemetery  • Geotechnical studies have been undertaken at Sam Lawrence Park for escarpment pathways.	
	the waterfront and Escarpment face that require mitigation due to climate-related weather impacts (roadway infrastructure, trail	<ul> <li>Confederation Beach &amp; Hamilton Beach Shoreline Management Master Plan initiated in 2024 in</li> </ul>	
	infrastructure)	response to fact that shorelines of Hamilton Beach, Confederation	

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	ivesilient intelle #	: Built Environment	
HCAS Actions and Timelines (Responsible City Department/Division noted where applicable)		ate and Supporting itative Information	2024 Accomplishments & Outlook
	INDICATOR - Number and geographic distri  • 2023 numbers b municipal ward:	bution of those calls	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  47		
		roadway)	

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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
	21 820	Property flooded by ground or stormwater Sewer backup on sewer main Sewer lateral backup in basement	
CCIAP Action 2.1: Improve winter travel conditions through further expanding sidewalk clearing.  Short-term (<2 years)  Roads Operations, Public Works	sidewalks main from 397km to Transportation along Priority 1 transit services  On December 3, 2023 Division presented Inf PW23077 to Council. various options to enh service for sidewalk sino approval was giver at this time.	ember 2022, increased kilometers of itained during the winter 866km. now clears all sidewalks & 2A roadways where operate.  B, the Transportation ormation Report The report outlined	On September 21, 2023, the City 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	
	<ul> <li>to City's Snow Angels program for help with snow clearing:         <ul> <li>2022 – 23 Winter Season – 62 households or 73% of applicants were matched with a snow clearing volunteer.</li> <li>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.</li> </ul> </li> <li>Two other programs provided support for snow clearing in Winter 2023-2024:         <ul> <li>Flamborough Connects – supported 8 households with 6 volunteers but had 3 households on a wait list.</li> <li>Stoney Creek Outreach Services supported 105 seniors with 12 volunteers but had 60 residents on a wait list.</li> </ul> </li> </ul>		
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	
	<ul> <li>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)</li> <li>In 2023 Hamilton Police report that there were 3 pedestrian fatalities and 1 cyclist fatality as a result of collisions with motor vehicles.</li> <li>The 2023 City of Hamilton Annual Collision report was not available at time of report preparation.</li> <li>Future potential INDICATORS to assess alternative transportation uses and equitable access:</li> <li>Number of participants in subsidized HSR programs</li> </ul>		

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 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	
	<ul> <li>INDICATOR - Number of annual weather-related (heat, cold, air quality related) deaths for residents of Hamilton.</li> <li>This indicator has a data lag period of approximately 5 - 6 years and is provided by the Ontario Ministry of</li> </ul>	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 (Responsible City Department/Division noted where applicable)	2023 Progress Update and Supporting Quantitative/Qualitative Information	2024 Accomplishments and Outlook	
CCIAP Action 3.2: Consolidate	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.	
existing vulnerable persons'	During 2023 no progress was reported regarding efforts to consolidate existing		

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/ climaterelated 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	<ul> <li>Four media releases were issued to alert the public to the four heat warnings that were issued during 2023.</li> <li>INDICATOR - Social media (number of posts, engagements, etc)</li> <li>30 social media posts on various heatrelated topics during 2023 (heat &amp; extended heat warnings, cancellation of warnings, 'Heat Wave Hero' landlord messaging)</li> <li>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</li> <li>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.</li> <li>INDICATOR - Number of affordable housing units</li> </ul>	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 T	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 2023	15 73	n/a 30	
	affordable hou  The 73 I occupan Energy standard  INDICATOR - 3 number of ind expansion. Housing net new  INDICATOR - I units with cod awnings, etc.) Informat cooling i available	Shelter expansitividuals served as Services Division shelter beds created and the servention about number of social to the City's Horizat or to the Hours	es. 2023 wilt to National wilding Code  ion and I through  on reported no eated in 2023  al housing ons (fans, AC, er of units with currently not ousing	

	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			
	<ul> <li>INDICATOR – Average rental costs in the city.</li> <li>Average rent for all two-bedroom units rose to \$1,335 in Oct 2022, up 5% from \$1,271 in Oct 2021.</li> <li>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.</li> <li>Over the past decade, Hamilton rents for all units have risen 55% - more than double the 22% cost of living increase.</li> <li>INDICATOR – Average house price in Hamilton</li> <li>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.</li> <li>INDICATOR – Diversification of housing options (e.g. co-ops, co-housing/co-</li> </ul>				
	<ul> <li>ownerships)</li> <li>These details will be provided in the Oct 2024 Housing Needs Assessment.</li> </ul>				

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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	
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)  Medium-term (2-5 years)  Office of Climate Change Initiatives, Planning and Economic Development; Office	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 forward. The report was shared with staff in the Office of Emergency Management.  Future potential INDICATORS to track progress with raising awareness about and	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 Hamilton's Climate Action Strategy and to help residents prepare their own emergency preparedness kit.	
of Emergency Management, Hamilton Fire.	<ul> <li>ensuring residents have emergency preparedness kits:         <ul> <li>Number of workshops/ presentations on how to build and maintain a personal emergency preparedness kit and associated emergency plan – including number of participants.</li> <li>Number of emergency preparedness kits provided through City efforts.</li> </ul> </li> </ul>	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		
	<ul> <li>Number of other programs/ organizations raising awareness about and delivering emergency preparedness kits</li> </ul>			
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		
	<ul> <li>INDICATOR - City website and social media analytics (i.e. number of views/downloads, number of posts, post engagement, etc.)</li> <li>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.</li> <li>Tick Dragging reel had +70k Plays (second highest in Corporate channel's history) and +2K interactions - +11K plays - +200 interactions</li> <li>Tick Prevention Reel had +11k plays and +200 interactions</li> </ul>			
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 Services	In 2023, a new guideline was planned to provide guidance on reducing staff health risk by using the national Air Quality Health Index and corresponding health messages to provide recommendations for the workplace.	Outdoor Air Quality and Your Health	
	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 <sup>st</sup> and offered supports including additional daytime and overnight warming spaces for residents needing these supports. See <b>CCIAP Action 3.1</b> 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	
	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	
	<ul> <li>INDICATOR - Number of users of splash pads, parks, community centres, etc.</li> <li>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.</li> </ul>		

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	Florence Parker Sports Park.  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.

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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
	<ul> <li>3,927 – via Forestry hosted community tree planting events</li> <li>6,779 – via Forestry plantings in parks, cemeteries, along streets, in public golf courses</li> </ul>	
	<ul> <li>INDICATOR – Number of trees distributed by Forestry to community for planting on private property:         <ul> <li>3,536 – via Forestry's annual Free Tree Giveaway to residents, schools and not-for-profit organizations.</li> <li>1,000 – via the annual Children's Water Festival</li> </ul> </li> </ul>	
	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.	The Urban Forest Strategy (UFS) was approved by Council on June 21 <sup>st</sup> , 2023.  Associated recommendations supported by Council included:  • Adoption of a 40% urban canopy cover	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
Medium-term (2-5 years)	target Initiation of the development of a City-wide tree protection by-law on private property	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	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.	<ul> <li>including prioritizing those areas with greatest need for urban canopy cover.</li> <li>1 full-time employee in Forestry to support an increase in the annual Cityled tree planting target to 20,000 trees.</li> <li>Funding to purchase LiDAR (Laser Imaging Detection and Ranging) data to establish accurate percentage canopy cover measurements.</li> </ul>
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
M II ( (0.5 )	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
Hamilton Water, Public Works	financial incentives for property owners to capture rainfall and retain it on their property.	to facilitate rainwater capture and 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	Two oity progress to report during 2025.	funding fee includes an
understand existing resources		incentive/credit program approved
for farmers in addressing climate		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	<ul> <li>Various cost-sharing and tax increment-based grants through the Environmental Remediation and Site Enhancement (ERASE) Community Improvement Plan</li> <li>Grants to support Leadership in Energy and Environmental Design (LEED) certification through the LEEDing the Way Community Improvement Plan.</li> <li>INDICATOR – Uptake in programs being offered to promote climate resilience/ sustainability.</li> <li>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.</li> <li>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.</li> <li>Future potential INDICATORS for tracking progress with building local business climate resilience:</li> </ul>	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
	<ul> <li>Number of local businesses incorporating District Energy systems to reduce climate impacts.</li> <li>Number of businesses using sustainable/ low carbon options for moving cargo – ie container services and increased rail and intermodal operations.</li> <li>Number of local businesses with comprehensive climate action plans – including considerations of business-related climate adaptation measures.</li> </ul>	
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	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.
wiedidiii-leiiii (2-3 yeais)	(private and public capacity of renewables	

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	

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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
	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

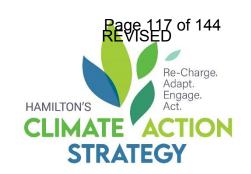




<sup>\*</sup>NB - OCCI priorities are in addition to the various climate change related initiatives already contained within workplans of multiple divisions across the City of Hamilton.

# **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.

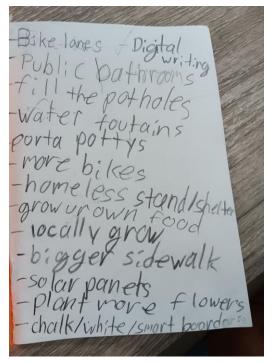
- 20 voting and 6 non-voting members from diverse backgrounds and representing both professional and lived experience with climate and social issues.
- Committee has created 6 working groups including: Transportation, Nature-Based Solutions, Buildings, Climate Governance & Technical, and Community Engagement.



## **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**

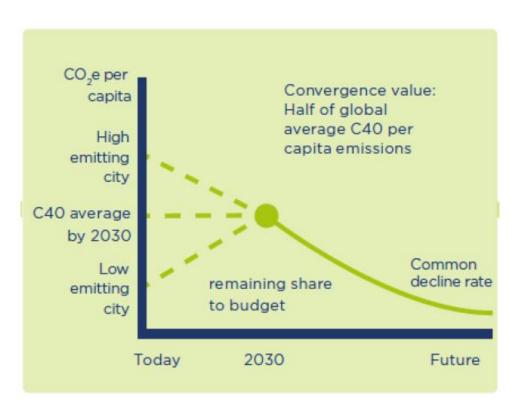
- Development of Climate
   Communications & Engagement
   Strategies, implementation underway.
- Climate Action Strategy webpage overhaul and enhancement underway.
- Community outreach efforts continue, including use of 'pop-up' events to raise public awareness about Hamilton's Climate Action Strategy.





# **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
<b>Phase 5:</b> 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**

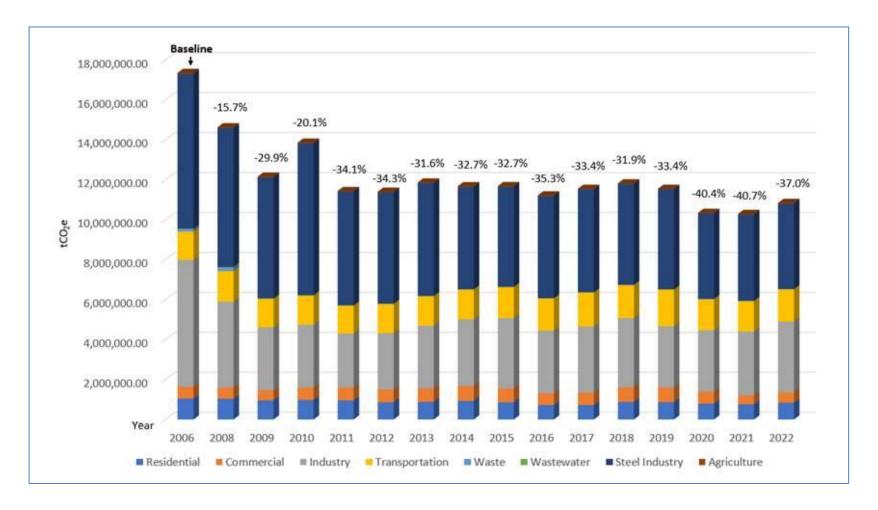
- Support for urban greening efforts including connecting City staff with community partners, administering funding for community depave projects, convening City staff to explore innovative green infrastructure projects.
- Development of a preliminary framework for tracking tree planting across Hamilton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





# Hamilton's GHG Emissions Inventory Update

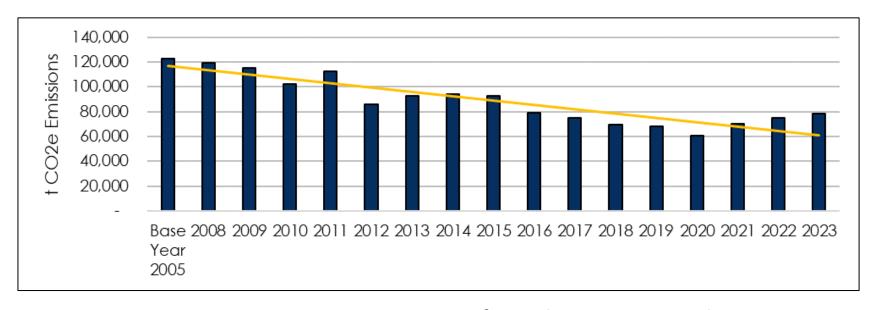
### **Community-Wide GHG Emissions 2006-2022**





# Hamilton's GHG Emissions Inventory Update

### **Corporate GHG Emissions 2005-2023**



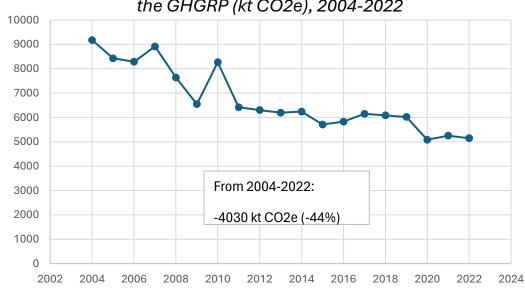
Source – City of Hamilton 2023 Annual Energy Report



### **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 1<sup>st</sup> 2024 for approval.

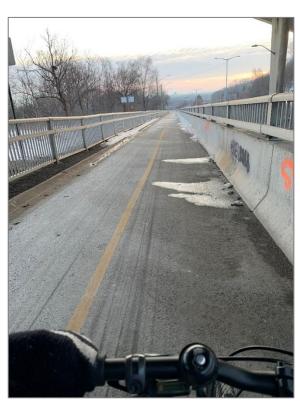
# GREEN BUILDING STANDARDS





### **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 6<sup>th</sup> 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 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.



# 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.

https://welovecities.org/city/hamilton/









# **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:	Reducing Homelessness and Managing Encampments (HSC24027(c)) (City Wide)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	Rob Mastroianni (905) 546-2424 ext. 8035 Danielle Blake (905) 546-2424 ext. 3731
SUBMITTED BY:	Al Fletcher Acting Director, Housing Services Division Healthy and Safe Communities Department
SIGNATURE:	

#### INFORMATION

#### **Mayor's Directive**

"6) To explore the development of and/or identify a centralized system to coordinate supportive services similar to those being provided at encampments;"

#### **Council Direction**

"Report back on the one (1) km setback from Outdoor and indoor temporary shelter beds"

#### **Co-ordinated Support Services**

To end homelessness a coordinated systems approach is required. This needs to include coordination of the services provided to meet the needs of clients served, ongoing monitoring and performance evaluation to ensure appropriate services are meeting targets established, coordinated entry into the system, provision of a broad range of services and the use and collection of data across the service. The temporary outdoor shelter will be operated in a way to ensure each of these pieces is in place and coordinated.

# SUBJECT: Reducing Homelessness and Managing Encampments (HSC24027(c)) (City Wide) Page 2 of 3

Many of the services required by clients will be provided by the operator of the Temporary Outdoor Shelter, however, negotiations with the provider continue at this

time so more certain details aren't yet confirmed. A contract will be established with the provider. Included within that contract will be a detailed Schedule "A" which provides for the operational expectations. Through the operations plan, the operator will hire the necessary staff to provide the support on site as well as the operator will then work to co-ordinate the community services available brought to the site to support the needs of the clients that are accommodated. Housing Services Division staff will work with the operator on how to best support the residents on an ongoing basis through the full suite of services.

#### **Encampment Distance Separation**

Through Reducing Homelessness and Managing Encampments Report HSC24027(b)/FSC24028/PED4162), ratified by Council on September 25, 2024, council approved to expand capacity in the emergency shelter system by creating 192 temporary shelter beds and 80 temporary outdoor shelter beds. As part of this, staff recommended prohibiting encampments within a 1-kilometer radius of this temporary outdoor shelter site to prevent the further concentration and intensification of encampments near this fully supported location. Staff recognize that the temporary outdoor shelter is a unique undertaking, requires substantial effort to implement, will have unique operational considerations and through the distance separation will minimize impacts on and from the surrounding area. The parks impacted by this separation include Bayfront Park, Pier 4 Park and Central Park as permitted locations under the encampment protocol.

At the September 26, 2024, Council there was direction received regarding a review of the distance separation from the facilities which will house the 192 temporary shelter beds and existing protocol permitted encampments. The 192 new temporary shelter beds will be located within existing facilities that currently operate shelter and transitional housing programs. No new facilities will be created. However, the majority of emergency shelter beds are within Wards 2 and 3 in the City and this means these temporary beds will be within this area too. This further intensifies the impact of housing services within these wards.

If a one (1) km distance separation was to be used to minimize impacts around existing shelters housing the new temporary beds, there would be impact on service. If such distancing separation was considered for the facilities housing the new temporary shelter beds the impact on parks compliant with the protocol would be substantial. If such a restriction was in place, prohibiting encampments within one (1) km of the new

# SUBJECT: Reducing Homelessness and Managing Encampments (HSC24027(c)) (City Wide) Page 3 of 3

beds the area affected by the distance separation would generally be bounded by the following:

East – Lottridge Street/Sherman Avenue North North – Burlington Street East/ Cannon Street East West – Hess Street South - Escarpment

This would result in 66 currently compliant parks and spaces would becoming non-compliant. The other unintended consequence could be moving people away from services as many housing support services are within this geographic area. The implementation of the distance separation could push unhoused individuals into areas of the city where they may become isolated from vital services and supports.

#### APPENDICES AND SCHEDULES ATTACHED

N/A

### **CITY OF HAMILTON**

### **NOTICE OF MOTION**

General Issues Committee: October 16, 2024

MOVED BY COUNCILLOR N. NANN .....

#### **Distance Separation from Concentration of Temporary Shelter Beds**

WHEREAS, on September 25, 2024, Council approved Reducing Homelessness and Managing Encampments Report HSC24027(b)/FCS24028/PED24162 which approved and funded 192 Temporary Shelter Beds within existing facilities;

WHEREAS, Report HSC24027(b)/FCS24028/PED24162 approved a radial distance separation of 1 km from the temporary outdoor shelter at the Barton/Tiffany Lands to reduce intensification:

WHEREAS, 123 of the 192 temporary beds are located within existing facilities within a four-block area in Ward 3; and,

WHEREAS, Council supports reducing the impact and intensification of the temporary shelter beds on the surrounding community;

THEREFORE, BE IT RESOLVED:

That the following parks and green spaces be removed from the Encampment Protocol as compliant sites once the 192 temporary shelter beds are operational:

- (a) J.C. Beemer Park/Tweedsmuir Park;
- (b) Bishop's Park;
- (c) Claremont Access Parkettes;
- (d) 298 Hunter Street East (green space west of Claremont Access);
- (e) Carter Park;
- (f) Myrtle Park; and,
- (g) Rail Trail between extension of Wellington Street South and Sherman Avenue South