

HAMILTON'S CLIMATE ACTION STRATEGY IMPLEMENTATION UPDATE 2025

The following table represents the update on 2024 Calendar Year Progress with the implementation of actions found within Hamilton's Climate Action Strategy. Where information has been provided, the table also includes '2025 Accomplishments & Outlook' for each action. The table 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 2024 Calendar Year Progress

Enabling Actions within Hamilton's Climate Action Strategy			
HCAS Actions & Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
<i>(Enabling Action i)</i> Investigate and Design a Carbon Accounting Framework <i>Office of Climate Change Initiatives, Planning & Economic Development</i>	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 'fair share' carbon budget complete. Beta-test of GHG calculator as proof of concept delayed ~6 months due to getting access to Microsoft excel add-in. Initial Staff training and introduction to GHG calculator tool completed in November 2024. Draft Vision and Objectives completed, and initial Focus Groups with Finance and Senior Leaders also completed	Important ongoing work on Carbon Budget and Accounting Framework will continue into 2025 including: <ul style="list-style-type: none"> • Pre-Engagement activities with community partners completed to inform Engagement Strategy • Research and draft of Carbon Offset Policy • Testing GHG Calculator Proof of Concept. Expected new timeline for interim report to GIC is Q4 2025
<i>(Enabling Action ii)</i> Corporate Energy Reserve (revolving fund)	Committed Funds by type for 2023:	Statistics on 2024 Energy Reserve will be provided in	IN PROGRESS for 2024/2025 – Office of Energy Initiatives completing a gap

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expansion) <i>Corporate Facilities & Energy Management, Public Works</i>	<ul style="list-style-type: none"> Renewable: Construction \$370K, Payback \$200K, Transfer Back \$2.0M Energy/Cost Saving: Payback \$1.8M <p>*Note - Payback and Transfer back are funds that are committed but not actively in construction.</p>	the Annual Corporate Energy Report expected in Q3 2025	analysis on current Reserve revenue tracking, funding requirements and creating a revised Reserve Funding Project Criteria process. Targeted completion date is Q3 2025.
(Enabling Action iii) Municipal and Community Green Bond Assessment <i>Financial Planning, Administration & Policy, Corporate Services</i>	Initial investigation on framework development and a draft work plan was 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. The project is currently planned to launch in 2025.	Project reported as being on hold during 2024, with a launch planned in 2025.	Indicators to be established once framework development is completed (e.g. ESG accreditation/reporting outcomes)
(Enabling Action iv) Climate Change Reserve <i>Office of Climate Change Initiatives,</i>	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	2025 review and update of internal CCR application template completed, with input from Climate Change Initiatives Steering Committee and community Climate Change Advisory Committee.

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<i>Planning & Economic Development</i>		Climate Change Initiatives Steering Committee. In December 2024, a list of 13 City-led projects was approved By Council to receive funding. CLICK HERE to access details regarding these funded projects.	Review included identifying strategic priority focus areas for funding, corresponding to identified needs, gaps in action. Application intake opened in late May, with aim to report back to GIC with list of city-led projects recommended to receive funding by September 2025

Low-Carbon Transformation #1: Innovating Our Industry			
HCAS Actions & Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
<p>CEEP Action 1.0: Establish a net-zero Industrial Working Group</p> <p>2022 Onward</p> <p><i>Joint collaboration between: City Manager's Office – Director of Digital and Innovation; Office of Climate Change Initiative and Economic Development Division,</i></p>	<p>In May 2023 City Council approved \$240K over 4 years to support the creation of a 'first-of-its-kind' Hamilton Regional Decarbonization Hub.</p> <p>Total 4-year budget estimated for the initiative is \$3.2 M with the additional required funding being sought from federal government and private stakeholders</p> <p>INDICATOR – Number of</p>	<p>In late 2024, City staff learned that efforts to secure funding for the Hub from the Federal Economic Development Agency of Southern Ontario were unsuccessful. This has led to an effort on the City side to regroup and determine a viable pathway forward. A Council Communication Update was circulated on December 16th that outlines the situation and proposed next steps.</p> <p>INDICATOR – Number of</p>	<p>Preliminary discussions have started between staff from Economic Development and the Office of Climate Change Initiatives. There have been delays because of City focus on responding to the US tariff situation.</p>

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<i>Planning and Economic Development.</i>	<p>facilities 50,000ft² or larger facilities in Hamilton that are compliant with Ontario's Energy & Water Reporting Benchmark initiative:</p> <p>Total buildings reporting in 2021 = 70 Total buildings reporting in 2022 = 136</p> <p>*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.</p> <p>INDICATOR – Total number of local industries on federal Greenhouse Gas Reporting Program (GHGRP) Large Emitter list:</p> <p>Tracking of greenhouse gas emission trends for large emitters has been completed for the 5-year period 2017 – 2022. A total of 19 Hamilton</p>	<p>facilities 50,000ft² or larger facilities in Hamilton that are compliant with Ontario's Energy & Water Reporting Benchmark initiative:</p> <p>Total buildings reporting in 2021 = 70 2022 = 136 2023 = 124</p> <p>Source: data.ontario.ca/dataset/energy-and-water-usage-of-large-buildings-in-ontario</p> <p>2023 is the most current reporting year available. Drop in numbers from 2022 to 2023 appears to be due to 30+ reporting locations not reporting in 2023 and 20+ new locations reporting in 2023.</p> <p>INDICATOR – Total number of local industries on federal Greenhouse Gas Reporting Program (GHGRP) Large Emitter list:</p> <p>Data for the 2023 reporting year has been incorporated into the trend analysis completed last year. In 2023, a total of 19 facilities</p>	

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	industries are on the 'large emitters' list as they exceed the 10 kt CO ₂ e threshold reporting requirement set out by the GHGRP.	submitted reports, with 5 of those facilities emitting LESS THAN the 10,000 tCO ₂ e threshold for reporting to the federal program. Overall emissions from reporting facilities increased from 2022 to 2023 by 185,566 tCO ₂ e: <ul style="list-style-type: none"> • 2022 - 5.26 MtCO₂e • 2023 – 5.45 MtCO₂e The observed increase was due, almost wholly, to increased emissions from local steel producers.	
CEEP Action 1a: Development and deployment of a zero-emissions industry program 2022-2024 <i>Office of Climate Change Initiatives, Planning & Economic Development (coordinating role)</i>	FUTURE INDICATOR - Number of industrial partners with corporate sustainability plans that are harmonized with the community-wide net-zero target	INDICATOR - Number of industrial partners with corporate sustainability plans that are harmonized with the community-wide net-zero target Work was initiated in 2024 to gather information regarding status of climate planning for local large industrial emitters reporting to the federal Greenhouse Gas Reporting Program. The following has been	Staff are currently developing work plans to convene community business and industry partners who expressed past interest in the Hamilton Decarbonization Hub concept to determine revised vision and objectives including programs related to Action 1a.

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		<p>confirmed via reviews of information available on company websites for 2024 for the 19 large industrial emitters reporting in 2023 to the federal Greenhouse Gas Reporting Program:</p> <ul style="list-style-type: none"> • 3 companies with locally relevant pathway to net zero strategies. • 14 companies with corporate (global) level pathway to net zero strategies. • 2 companies with no stated commitment to climate action or net zero pathway. 	
<p>CEEP Action 2.0: Establish a cleantech accelerator</p> <p>2022-2026 <i>Joint collaboration between: City Manager's Office – Director of Digital and Innovation; Office of Climate Change Initiatives and</i></p>	<p>INDICATOR – City support for/influence over the establishment of cleantech businesses/industries in Hamilton.</p> <ul style="list-style-type: none"> • Work is underway to identify companies /partners who are focused on Decarbonization Technologies - a key subsector of strength 	<p>In late 2024, the Transition Accelerator, with support from the Province of Ontario (via the IESO) completed a report that 'examines the potential pathways for adopting and integrating hydrogen into Ontario's electricity system'. The study included a specific assessment of Hamilton as a hydrogen hub, given the presence of steel</p>	<p>During 2025, the City's Economic Development Division will be undertaking an RFP related to assessing the potential for clean technology companies in the area. Economic Development staff plan to convene local industry partners to update and continue to explore future efforts around a cleantech accelerator. The Office of</p>

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<i>Economic Development Division, Planning and Economic Development.</i> Development	<p>identified in the City's Economic Development Division Manufacturing Strategy</p> <ul style="list-style-type: none"> 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. 	manufacturing and the long-term plans to utilize hydrogen to transition to clean steel production.	Climate Change Initiatives will play a supporting role.
CEEP Action 3.0: Expand local industrial energy management training programs (incl. subsidized opportunities for marginalized populations)	<p>INDICATOR - Number of trained/retrained industrial energy management professionals (including numbers from equity-owned populations if available)</p> <ul style="list-style-type: none"> Canadian Colleges for a Resilient Recovery (C2R2) partners with 15 institutions across 	<p>INDICATOR - Number of trained/retrained industrial energy management professionals (including numbers from equity-owned populations if available)</p> <p>At the end of 2024 the Canadian Colleges for a Resilient Recovery (C2R2) provided the following stats</p>	In 2025, C2R2 is offering 6 courses Canada-wide on industrial energy management.

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<p>2022-onwards</p> <p><i>Office of Climate Change Initiatives (Coordinating Role), Planning & Economic Development</i></p>	<p>Canada – including Hamilton’s Mohawk College - to offer online synchronous and asynchronous ‘rapid cycle training’.</p> <ul style="list-style-type: none"> • All training through C2R2 or Mohawk College was offered at no cost through the ESDC SWSP Quick Train program. • C2R2 offered six (6) courses related to industrial energy management, with a total enrolment of 213 in 2023 across Canada. It is unclear how many Hamilton residents participated. <p>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</p>	<p>related to the course offerings and enrolments associated with Industrial Energy Management and Business Prep for a Low Carbon Economy:</p> <ul style="list-style-type: none"> • Total number of course offerings Canada-wide = 39 • Total number of learners enrolled Canada-wide = 4,033 • Total number of courses offered at Mohawk College = 2 • Total number of learners enrolled at Mohawk College = 2 <p>INDICATOR – Number of bursaries/ subsidized training opportunities provided. Further work is required to better understand the fulsome program offerings across Hamilton’s academic institutions and additional information pertaining to bursaries or other subsidies</p>	

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	member of an equity-deserving group.	offered.	

Low-Carbon Transformation #2: Transforming Our Buildings			
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CEEP Action 4.0 Develop and integrate City-wide new green development standards 2022-2023 <i>Planning Division, Building Division, Planning & Economic Development</i>	INDICATOR – Development & Integration of City-wide Green Development Standards 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 INDICATOR - Energy and emissions intensity of new buildings (per sq./ft or m2) The Ontario Building Code is Provincial legislation, with minimum prescriptive requirements which guide building construction. The Building Division does not	INDICATOR – Development & Integration of City-wide Green Development Standards Green Building Standards endorsed by City Council in Q4 2024. The City's Climate Change Advisory Committee requested an opportunity to provide input on the building performance measures in GBSs and a commitment was made to provide enhanced consultation for this purpose.	A final set of Green Building Standards was taken to the City's Planning Committee on April 29, 2025, where it was approved, but was ultimately referred back to staff at the Council meeting that followed. An Implementation Strategy for GBSs was taken to the City's General Issues Committee on April 30, 2025, and was referred back to staff to further investigate questions raised by delegations around both short-term costs and long-term benefits associated with achieving the GBS. Staff were directed to report back by the end of 2025.

Low-Carbon Transformation #2: Transforming Our Buildings			
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	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		This is expected to delay the implementation of the GBS into early 2026.
<p>CEEP Action 5.0: Install solar PV on new and existing buildings.</p> <p>2022-onwards</p> <p><i>Building Division, Planning and Economic Development; Corporate Facilities and Energy Management, Public Works</i></p>	<p>INDICATOR – Megawatts of solar photovoltaics (PV) installed on new and existing buildings.</p> <ul style="list-style-type: none"> 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) <p>Building Division data regarding the number of</p>	<p>Hamilton Water has initiated a Solar Renewable Energy and Battery Energy Storage System feasibility study for its site.</p> <p>The City's Office of Energy Initiatives is working on technical and financial business cases for the incorporation of a solar system on the roof of the new transit storage facility (located on Brant Street in lower Hamilton) for the generation of an estimated 2 MW in generation capacity.</p> <p>Other future projects identified as a part of the Office of Energy Initiatives Net Zero</p>	<p>The Energy Office currently has 1 project ready for tender and is working on securing funding or alternative partnerships to proceed with this proposed project implementation. At this time, multiple solar PV projects are on hold due to lack of approved funding. Project: Harry Howell Arena- 250kW solar project (located at 27 Highway #5) estimated at 1.1M in 2023 dollars.</p> <p>PROPOSED FUTURE INDICATOR - ESA Electrical Permits for Solar: The Electrical Safety Authority has been recommended by the Building</p>

Low-Carbon Transformation #2: Transforming Our Buildings																	
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	<p>solar permits issued for 2019-2024 is provided below. No data is available through City regarding MW energy/permit issued.</p> <table><tr><th>Year</th><th># Permits Issued</th></tr><tr><td>2019</td><td>9</td></tr><tr><td>2020</td><td>12</td></tr><tr><td>2021</td><td>34</td></tr><tr><td>2022</td><td>52</td></tr><tr><td>2023</td><td>72</td></tr><tr><td>2024</td><td>13</td></tr></table> <p>INDICATOR – MW of solar PV installed on/at new and existing City facilities (including any ground mount solar).</p> <ul style="list-style-type: none">The City’s Office of Energy Initiatives currently has 1 project ready for tender and is working to secure funding alternative partnerships to proceed with implementation of this project. At this time,	Year	# Permits Issued	2019	9	2020	12	2021	34	2022	52	2023	72	2024	13	<p>study include:</p> <p>Solar PV system for entire building: Fire Station #5 complex (150 kw system),Morgan Firestone Arena (265 kw system), Traffic Operations (375kw system), Mountain Transit Centre (370kw system), 330 Wentworth (1000kw system), Dundas Town Hall (20kw system), Bennetto Recreation (20kw system), Stoney Creek Recreation (20kw system), Kanetskare Recreation (60kw system)</p> <p>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</p>	<p>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 required.</p>
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2019	9																
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	<p>multiple municipal solar PV projects are ON HOLD due to lack of approved funding.</p> <ul style="list-style-type: none"> Project: Harry Howell Arena – 250-kW solar project (located at 27 Highway #5), estimated at \$1.1M in 2023 dollars. 	<p>INDICATOR – Megawatts of solar photovoltaics (PV) installed on new and existing buildings.</p> <p>The City’s Building Division was unable to provide a full year of 2024 data for this indicator.</p>	
<p>CEEP Action 6.0: Design and plan for a mass deep energy retrofit program (may include retrofit delivery centre)</p> <p>2022-2023</p> <p><i>Office of Climate Change Initiatives, Planning and Economic Development</i></p>	<p>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.</p> <p>Future proposed INDICATORS to assess pilot impact include:</p> <ul style="list-style-type: none"> Energy use and emissions reductions achieved through program. Number of homes participating within neighbourhoods 	<p>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.</p> <p>50 successful applicants were notified about their acceptance into the program in 2024 and permitted to proceed with getting contractor quotes.</p> <p>Moving forward the 50-home pilot will be used to inform future efforts to scale up the Better Homes Hamilton program.</p>	<p>21 participants are currently either actively implementing their retrofits or finalizing their funding requests through the Better Homes Hamilton portal. Any remaining spots in the program will be filled via the waitlist.</p> <p>Initial research on funding and administrative models for scale-up is underway. Staff to report back to GIC by Q4 2025 on results of pilot and future expansion of program.</p>

Low-Carbon Transformation #2: Transforming Our Buildings			
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	<p>identified as having high energy poverty burden.</p> <ul style="list-style-type: none"> Number of building retrofits (number of properties, by type etc.) completed through City program. 		
<p>CEEP Action 6a: Training and retraining programs</p> <p>2022-onwards</p> <p><i>Office of Climate Change Initiatives (co-ordinating role), Planning and Economic Development</i></p>	<p>INDICATOR - Tracking skilled graduates and workforce trends.</p> <ul style="list-style-type: none"> The Canadian Colleges for a Resilient Recovery (C2R2) offered a total of 13 micro-credential courses related to trades and building retrofits. As a partner in C2R2 Mohawk College offered 3 of the 13 micro-credential courses and saw a total of 123 learners enrolled in 2023. <p>INDICATOR - Number of low-income, marginalized/</p>	<p>INDICATOR - Tracking skilled graduates and workforce trends.</p> <p>At the end of 2024 the Canadian Colleges for a Resilient Recovery (C2R2) provided the following stats related to the course offerings and enrolments associated with trades and building retrofits:</p> <ul style="list-style-type: none"> Total number of course offerings Canada-Wide = 17 Total number of learners enrolled Canada-Wide = 1,137 Total number of courses offered at Mohawk College = 2 	<p>In 2025 C2R2 is offering 5 courses related to trades and building retrofits Canada-wide.</p>

Low-Carbon Transformation #2: Transforming Our Buildings			
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	<p>equity-owed applicants participating in these training programs.</p> <ul style="list-style-type: none"> C2R2 through voluntary self-identification reported that 57% of its students across Canada identified as being a member of an equity-deserving group. 	<ul style="list-style-type: none"> Total number of learners enrolled at Mohawk College = 252 <p>INDICATOR - Number of low-income, marginalized/ equity-owed applicants participating in these training programs.</p> <ul style="list-style-type: none"> No data available for 2024. 	
<p>CEEP Action 6b: Launch a small-scale neighbourhood deep energy and emissions retrofit project in the residential sector</p> <p>2022-2023</p> <p><i>Office of Climate Change Initiatives, Planning and Economic Development</i></p>	<p>The Better Homes Hamilton Pilot Project (described above in Action 6.0) is targeting 50 low rise residential properties. However, this 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.</p> <p>This approach is modelled after the Energiesprong</p>	<p>No progress was made in 2024 with any further exploration of the potential to apply this approach to home energy retrofit efforts in a neighbourhood of private homes in the City.</p>	<p>In March 2025, CityHousing Hamilton received \$10Million in funding from the Natural Resources Canada Greener Neighbourhoods Pilot Project Fund to undertake deep energy retrofits to 123 of its townhouse units using an Energiesprong approach.</p>

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	method developed and implemented in the Netherlands, designed to tap into economies of scale and peer-motivated action. The federal government is supporting this approach via NRCan's 'Greener Neighbourhoods Pilot Program'.		
<p>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</p> <p>2023-onwards</p> <p><i>Office of Climate Change Initiatives, Planning and Economic Development</i></p>	<p>Future proposed INDICATORS to assess a mass deep energy building retrofit program include:</p> <ul style="list-style-type: none"> • Number of building retrofits completed. • Trends in energy use and emissions intensity over subsequent years by sector (residential, institutional, commercial, industrial) • Number of homes participating within neighbourhoods identified as having high energy burden. 	<p>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.</p>	<p>Initial research on funding and administrative models for scale-up of residential program is underway. Staff to report back to GIC by Q4 2025 on results of pilot and future expansion of program.</p>

Low-Carbon Transformation #3: Changing How We Move			
HCAS Actions & Timelines	2023 Progress Update and Supporting Information	2024 Progress Update & Supporting Information	2025 Accomplishments & Outlook
<p>CEEP Action 7.0: Expand and connect active transportation networks</p> <p>2022-onwards</p> <p><i>Transportation Operations, Public Works</i></p>	<p>INDICATOR - Kilometers of total cycling infrastructure and breakdown of type (new, upgraded, separated, multi-use trail)</p> <ul style="list-style-type: none"> 10.4 lane km of bike lanes were added in 2023. Total of 11 cycling infrastructure projects were delivered in 2023 via a joint effort between Transportation Planning and Parking (PED), and Transportation Division, and Engineering Services Division in Public Works. \$1.393 M was invested in cycling infrastructure in 2023. <p><i>*NOTE - City Council approved acceleration of the Cycling Master Plan in 2023.</i></p>	<p>INDICATOR - Kilometers of total cycling infrastructure and breakdown of type (new, upgraded, separated, multi-use trail)</p> <ul style="list-style-type: none"> 13.6 lane km of bike lanes were added in 2024. Cycling infrastructure is now reported via the categories of separated, dedicated, and shared: <ul style="list-style-type: none"> -Separated: 4.1 km -Dedicated: 3.2 km -Shared: 6.3 km Total of 10 cycling infrastructure projects were delivered in 2024. \$3.1 M was invested in cycling infrastructure in 2024. <p>INDICATOR - Kilometres of connected active transportation networks.</p> <ul style="list-style-type: none"> There are ~590 km of active transportation networks installed, or ~60% of the planned 	<p>Active Transportation Infrastructure planned for 2025:</p> <ul style="list-style-type: none"> Separated: 7 km Dedicated: 6 km Shared: 16 km

Low-Carbon Transformation #3: Changing How We Move			
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	<p>Future potential INDICATORS for tracking progress with the expansion and connectivity of Hamilton's active transportation networks include:</p> <ul style="list-style-type: none"> • Kilometers of connected active transportation networks. • Data regarding vulnerable roadway users - pedestrians, cyclists, high collision locations/intersections (Annual collision report - via Vision Zero initiative - provides this information) 	<p>network, which totals 970 km.</p> <p>INDICATOR - Data regarding vulnerable roadway users - pedestrians, cyclists, high collision locations/intersections</p> <ul style="list-style-type: none"> • Annual collision reports for 2024 from both City and Hamilton Police Services not available as of May 2025. 	
<p>CEEP Action 8.0: Decarbonize the bus fleet</p> <p>2022-onwards</p> <p><i>Transit Services, Public Works</i></p>	<p>INDICATOR – Track percentage/ number of decarbonized vs. fossil-fuel powered buses (including ‘fuel type’ breakdown - diesel, CNG, RNG, etc.)</p>	<p>INDICATOR – Track percentage/ number of decarbonized vs. fossil-fuel powered buses (including ‘fuel type’ breakdown - diesel, CNG, RNG, etc.)</p> <ul style="list-style-type: none"> • By the end of 2024, 85% of HSR fleet was 	<p>The City's Transit Division is on schedule to decommission all diesel buses by 2026, completing the full transition over to a CNG fleet.</p>

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	<ul style="list-style-type: none"> By the end of 2023, 77.4% of HSR fleet was fuelled by compressed natural gas (CNG), an increase from 64% in 2023. The goal is to fully decommission all diesel buses by 2026. <p>INDICATOR – Track number of decarbonized buses in operation.</p> <ul style="list-style-type: none"> In 2023, there was one decarbonized bus in operation – an articulated bus powered by renewable natural gas (RNG). 	<p>fuelled by compressed natural gas (CNG), an increase from 77.4% in 2023.</p> <ul style="list-style-type: none"> HSR is on track to fully decommission all diesel buses by the end of 2026. <p>INDICATOR – Track number of decarbonized buses in operation.</p> <ul style="list-style-type: none"> In 2024 there were no decarbonized buses in operation as part of the HSR fleet. Exploration of fleet decarbonization not expected to start prior to 2026. HSR runs 42 buses utilizing biodiesel fuel and introduced 1 EV to its operations vehicles (non-buses) fleet in 2024. <p>INDICATOR - Completion of technical analysis of bus charging and/or fuelling</p>	

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HCAS Actions & Timelines	2023 Progress Update and Supporting Information	2024 Progress Update & Supporting Information	2025 Accomplishments & Outlook
	INDICATOR - Completion of technical analysis of bus charging and/or fuelling infrastructure required for fleet decarbonization. <ul style="list-style-type: none"> No update available for 2023 	infrastructure required for fleet decarbonization. <ul style="list-style-type: none"> Exploration of any charging and/or fuelling requirements will be included in future in overall analysis of transit fleet decarbonization undertaken by HSR. 	
CEEP Action 9.0: Plan for and develop expanded urban and rural transit service and e-mobility services 2022-onwards <i>Transit Services, Public Works; Transportation Planning and Parking, Planning and Economic Development</i>	INDICATOR – Track user statistics as e-mobility services are established. <ul style="list-style-type: none"> For April 3 – November 20, 2023 (first year of shared e-scooter system in Hamilton) 450 e-scooters were available within the same service area as the bike share system, plus an additional area east to Kenilworth Avenue. 119,283 trips were taken for a total of 269,614km travelled. 	INDICATOR – Track user statistics as e-mobility services are established. <ul style="list-style-type: none"> 2024 brought expansions for both the Hamilton Bike Share System and Bird e-scooter system with new McMaster University financial agreements providing student access to both systems. 600 e-scooters were available in Wards 1, 2, 3, 4, 5 and 13. 155,043 trips were taken for a total of 317,302 kms travelled. 	E-scooters expansion to Wards 6,7,8 and 14 is planned for 2025, with approximately 300 e-scooters to be made available in the expanded service area.

Low-Carbon Transformation #3: Changing How We Move			
HCAS Actions & Timelines	2023 Progress Update and Supporting Information	2024 Progress Update & Supporting Information	2025 Accomplishments & Outlook
	<ul style="list-style-type: none"> 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. <p>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.</p> <ul style="list-style-type: none"> In 2023 there were a total of 2,462 trips that started or ended in these geographic zones. Bird increased promotion of the discount in October 	<ul style="list-style-type: none"> During the same period the bike share system had up to 900 bikes operating in the service area and saw 508,997 trips totalling 949,927 kms travelled. avoiding/reducing carbon emissions by 236,095kg CO2e. Active BikeShare members: 31,965 <p>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:</p> <ul style="list-style-type: none"> In 2024 there were a total of 7,760 trips that started or ended in these geographic zones Bird increased promotion of all their ride passes but focused attention on the equity 	

Low-Carbon Transformation #3: Changing How We Move			
HCAS Actions & Timelines	2023 Progress Update and Supporting Information	2024 Progress Update & Supporting Information	2025 Accomplishments & Outlook
	<p>2023 and saw a large increase in rides as a result.</p> <p>INDICATOR – Track e-scooter and bikeshare trips per capita in priority neighbourhoods</p> <ul style="list-style-type: none"> Hamilton Bike Share's 'Everyone Rides Initiative' (ERI) was able to offer 200 additional subsidized ERI passes in 2023 for a total of 300 (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 	<p>pass for users in specific zones.</p> <ul style="list-style-type: none"> As forecasted, there was a sizeable increase in users of the equity pass and rides starting and ending in these geographic zones <p>INDICATOR – Track e-scooter and bikeshare trips per capita in priority neighbourhoods</p> <ul style="list-style-type: none"> Hamilton Bike Share's ERI program was able to offer 426 subsidized passes in 2024 (42% increase from 2023) Bird's subsidized rides tripled from 2023 to 2024 to 7,760 trips. In 2025 the e-scooter fleet will be increasing by 300 vehicles so the Equity fee will increase providing additional funding to the ERI program. The number of ERI passes are expected to increase 	

Low-Carbon Transformation #3: Changing How We Move			
HCAS Actions & Timelines	2023 Progress Update and Supporting Information	2024 Progress Update & Supporting Information	2025 Accomplishments & Outlook
	<p>priority zones in 2023.</p> <p>INDICATOR - Track ttransit ridership and modal split trends over time</p> <p>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.</p> <ul style="list-style-type: none"> • 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. 	<p>alongside the e-scooter fee.</p> <p>INDICATOR - Track ttransit ridership and modal split trends over time</p> <ul style="list-style-type: none"> • HSR ridership increased during 2024, with levels reaching 21.84 million riders, representing a 14.5% increase over 2023 and surpassing pre-pandemic ridership levels. 	

Low-Carbon Transformation #3: Changing How We Move			
HCAS Actions & Timelines	2023 Progress Update and Supporting Information	2024 Progress Update & Supporting Information	2025 Accomplishments & Outlook
<p>CEEP Action 10.0: Establish then implement a city-wide EV Strategy (residential, commercial, and municipal)</p> <p>2022-2025</p> <p><i>Transportation Planning and Parking, Planning and Economic Development</i></p>	<p>Terms of Reference for a city-wide Electric Vehicle (EV) strategy were developed and an internal Steering Committee established in 2023.</p> <p>Future proposed INDICATORS to track effectiveness of EV Strategy implementation over time include:</p> <ul style="list-style-type: none"> • Number of charging stations per km² • Kwh/day/month/yr at each station • Number of networked charging stations <p>42 parking spaces (heads) located in 12 municipal parking lots/stations. Excludes privately owned stations.</p> <ul style="list-style-type: none"> • Number of EVs Registered within Hamilton • Number of public e-bike parking/ 	<p>A competitive Request for Proposal (RFP) for a consultant to develop the Strategy was expected to be released in Q4 2024 but has been delayed to Q2 2025.</p> <p>Additionally, as part of Parking Standards Review, new zoning requirements were developed to ensure new residential developments are EV ready.</p> <p>The list of future proposed indicators set out in 2023 will be re-assessed once the EV Strategy is complete and being implemented.</p> <p>Corporate Fleet Breakdown for Electric Vehicles (EV) between 2021-2024:</p> <ul style="list-style-type: none"> • 2021 = 2 • 2022 = 0 • 2023 = 13 • 2024 = 73 • Current Total (at end of 2024) = 88 	<p>The EV Strategy RFP was finalized in late April 2025 and is to be released in Q2 of 2025.</p>

Low-Carbon Transformation #3: Changing How We Move			
HCAS Actions & Timelines	2023 Progress Update and Supporting Information	2024 Progress Update & Supporting Information	2025 Accomplishments & Outlook
	charging facilities	Corporate Public Works Operational EV Infrastructure Breakdown as of 2024: <ul style="list-style-type: none"> 12 City facility locations have EV Charging Infrastructure. Total of 36 pedestals across these locations. Total of 68 level 2 chargers across these locations. 	Corporate Public Works EV Infrastructure Outlook for 2025: <ul style="list-style-type: none"> 330 Wentworth Ave = 11 Pedestals, 20 Level 2 Chargers will be operational in Q3 2025
CEEP Action 11.0: Commercial Fleet Decarbonization Work Group 2022-onwards <i>Office of Climate Change Initiatives (co-ordinating role), Planning and Economic Development</i>	Work on this action was not initiated in 2023. Future proposed INDICATORS 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.	No confirmed plans in place on this action for 2025. However, plans to convene local partners to explore, update a pathway forward to collaboration on a Hamilton Regional Decarbonization Hub could include this action moving forward.
CEEP Action 12.0: EV mechanic training and retraining program 2022-onwards	INDICATOR - Number of trained/retrained low-carbon transportation mechanics. <ul style="list-style-type: none"> Mohawk College partnered with the 	INDICATOR - Number of trained/retrained low-carbon transportation mechanics. At the end of 2024 the Canadian Colleges for a Resilient Recovery (C2R2)	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	2023 Progress Update and Supporting Information	2024 Progress Update & Supporting Information	2025 Accomplishments & Outlook
Office of Climate Change Initiatives (community co-ordinating role), Planning and Economic Development; Fleet Services, Corporate Asset Management, Public Works	Canadian Colleges for a Resilient Recovery (C2R2) offered a total of 8 micro-credential courses related to electric vehicle training. Mohawk College offered 1 of those 8 micro-credentials and had a total of 44 learners enrolled in 2023.	provided the following stats related to the course offerings and enrolments associated with Electric Vehicles: <ul style="list-style-type: none"> • Total number of course offerings Canada-Wide = 10 • Total number of learners enrolled Canada-Wide = 601 • Total number of courses offered at Mohawk College = 1 • Total number of learners enrolled at Mohawk College = 45 	
CEEP Action 13.0: Limit parking in the downtown core and promote EV parking 2022-2025 Transportation Planning and Parking, Planning and Economic Development	Since 2018 a total of 502 parking spaces in the Downtown have been repurposed for development. This represents 15% of the public parking supply. The installation of 40 EV chargers in public lots was completed in early 2023. The Parking Master Plan has been adopted, with	Public information meetings were held in January 2024, and the New City-Wide Parking Standards were presented at the City's Planning Committee in February 2024. The new standards were approved by Committee and Council but have been appealed to the Ontario Land Tribunal.	The outcome of the Ontario Land Tribunal appeal is still pending as of May 2025.

Low-Carbon Transformation #3: Changing How We Move			
HCAS Actions & Timelines	2023 Progress Update and Supporting Information	2024 Progress Update & Supporting Information	2025 Accomplishments & Outlook
	<p>emphasis on integrating parking supply with new development and supporting expansion of EV parking infrastructure.</p> <p>Draft updated parking standards, including eliminating parking minimums in some areas of the City and establishing zoning requirements for EV parking, were approved for consultation in August 2023.</p>		

Low-Carbon Transformation #4: Revolutionizing Renewables			
HCAS Actions & Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
<p>CEEP Action 14.0: Develop a next generation electrical grid</p> <p>2022-onwards</p> <p><i>Office of Climate Change Initiatives (co-ordinating role for community), Planning</i></p>	<p>During 2023, City staff participated in Independent Energy Service Operator (IESO) southwestern regional planning processes that have also engaged our applicable Local Utilities. City staff also participate in organizations (e.g. Clean Air Partnership, Bay Area Climate Chance Council) that advocate to the IESO</p>	<p>During 2024, staff continued to participate in IESO regional planning efforts and met, along with other staff from Planning & Economic Development, with local utility Alectra to discuss system needs and constraints.</p> <p>In Q4 of 2024, Departmental direction was given to establish an internal Director-</p>	<p>The Office of Climate Change Initiatives is currently working with a team of graduate students from the McMaster W.Booth School of Engineering's Masters of Engineering and Public Policy program, to explore current policy opportunities and challenges both municipally and provincially, when it</p>

		Low-Carbon Transformation #4: Revolutionizing Renewables																		
HCAS Actions & Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook																	
<i>and Economic Development</i>	and other provincial agencies on the importance of a next generation grid.	level ‘Energy Transformation Roundtable’ to facilitate corporate-wide efforts around facilitating 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.	comes to transitioning to a ‘next generation’ electricity grid, and supporting distributed energy resources, including renewable energy and energy storage systems.																	
	INDICATOR - Monitor trends with Ontario Electricity Emissions Factors:	There is also still 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.	The regional Bay Area Climate Change Council is currently working to convene community partners and interested community members around the need to support electrical grid transitions required to realize net zero in Hamilton and Burlington. BACCC is organizing its 2025 Annual Forum around this topic, including consideration of energy justice.																	
	<table><tr><th>Year</th><th>*Annual Average Emissions Factor</th></tr><tr><td>2023</td><td>67</td></tr><tr><td>2022</td><td>51</td></tr><tr><td>2021</td><td>44</td></tr><tr><td>2020</td><td>36</td></tr><tr><td>2019</td><td>29</td></tr><tr><td>2018</td><td>29</td></tr><tr><td>2017</td><td>18</td></tr></table>	Year	*Annual Average Emissions Factor	2023	67	2022	51	2021	44	2020	36	2019	29	2018	29	2017	18	INDICATOR - Monitor trends with Ontario Electricity Emissions Factors:		
	Year	*Annual Average Emissions Factor																		
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Low-Carbon Transformation #4: Revolutionizing Renewables															
HCAS Actions & Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook												
	<p>Emissions Factor is a measure of the average amount of carbon emissions produced per kilowatt-hour (kWh) of electricity consumed in Ontario. As more natural/methane gas is added to power the grid, the AEF or carbon intensity of the grid increases.</p> <p>INDICATOR - Track system investments by Alectra, Hydro One, IESO, and/or the Province:</p> <ul style="list-style-type: none">No data gathered for 2023.	<table><tr><td>2022</td><td>51</td></tr><tr><td>2021</td><td>44</td></tr><tr><td>2020</td><td>36</td></tr><tr><td>2019</td><td>29</td></tr><tr><td>2018</td><td>29</td></tr><tr><td>2017</td><td>18</td></tr></table> <p><i>*Source – The Atmospheric Fund</i></p> <p>INDICATOR - Track system investments by Alectra, Hydro One, IESO, and/or the Province:</p> <ul style="list-style-type: none">No data gathered for 2024.	2022	51	2021	44	2020	36	2019	29	2018	29	2017	18	
2022	51														
2021	44														
2020	36														
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2017	18														
<p>CEEP Action 15.0: Encourage development of local renewable energy cooperatives</p> <p>2022-onwards</p> <p><i>Office of Climate Change Initiatives (co-ordinating role for community), Planning</i></p>	<p>No efforts were initiated in 2023 to encourage the development of local renewable energy cooperatives.</p> <p>Future potential INDICATORS include:</p> <ul style="list-style-type: none">Number of cooperatives established.	<p>No efforts were initiated in 2024 to encourage the development of local renewable energy cooperatives. An on-going challenge has been the elimination of incentives like feed in tariffs to encourage establishment of community-based cooperatives.</p>													

		Low-Carbon Transformation #4: Revolutionizing Renewables		
HCAS Actions & Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook	
<i>and Economic Development</i>	<ul style="list-style-type: none"> MW of renewable energy generation systems installed by cooperatives (existing coops, and total MW existing in Hamilton) 			
<p>CEEP Action 16.0: Implement strategic renewable solar energy installations</p> <p>2022-2025</p> <p><i>Office of Climate Change Initiatives (co-ordinating role for community), Planning and Economic Development</i></p> <p>Corporate Facilities and Energy Management, Public Works</p>	<p>Future potential INDICATORS include:</p> <ul style="list-style-type: none"> kWh of renewable energy supplied corporately (City of Hamilton). MW of renewable energy capacity installed community-wide Local outcomes via provincial 'requests for proposals' for renewable energy projects. 	<p>There is currently work underway through the City's Corporate Net Zero Roadmap for both deep energy retrofits and strategic solar renewable energy installations:</p> <ul style="list-style-type: none"> Tender-ready Harry Howell Arena project—250-kW solar project estimated at \$1.1M in 2023 dollars <p>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.</p>		
CEEP Action 17.0: Technical feasibility study of expanded	The City's Central Composting Facility (CCF) currently has a processing	The RFP for Phase 2 – to identify a solution for the future of organics processing -	The Request for Proposals for Phase 2 was released mid-February and closed	

		Low-Carbon Transformation #4: Revolutionizing Renewables	
HCAS Actions & Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
<p>anaerobic digestion facilities</p> <p>2023-2025</p> <p><i>Hamilton Water and Waste Management Division, Public Works</i></p>	<p>cap of 20,000 tonnes annually.</p> <p>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.</p>	<p>was not released by procurement by the end of the year. We are anticipating a Q1 2025 release of the RFP and reporting by the end of 2025.</p> <p>Funding was provided in 2024 from the City's Climate Change Reserve to support this feasibility study (\$250k)</p> <p>Expanding anaerobic digestion facilities: Hamilton Water's Woodward Wastewater Capital program includes an assessment of the digester complex and what digestion capacity is needed to service and expand the WWTP. By nature, expanding anaerobic digestion capacity to accommodate increased wastewater flows will increase the production of sludge and biogas. Increased biogas production will be used to generate increased volumes of renewable natural gas or increased green electricity. The renewable energy</p>	<p>March 7th, 2025.</p> <p>The Phase 1 organics opportunities report is complete. The study focused on the organics facility and recommended further investigation into the option of wet anaerobic digestion, as it yielded the highest potential of RNG capture.</p>

		Low-Carbon Transformation #4: Revolutionizing Renewables	
HCAS Actions & Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
		portfolio is guided by the Corporate Energy Office.	
<p>CEEP Action 18.0: Technical analysis of green hydrogen potential, costs, as well as actions to increase green hydrogen deployment in the City through the creation of a hydrogen hub. (Part of CEEP Actions #1-3)</p> <p>2024-2025</p> <p><i>Joint collaboration between: Chief Digital and Innovation, City Manager's Office; Office of Climate Change Initiatives and Economic Development Division, Planning and Economic Development</i></p>	See update on Action 1.0 above. Hamilton Regional Decarbonization Hub mandate, although not 100% confirmed, will include feasibility assessments of clean technology (e.g. green hydrogen) to begin accelerating pilot initiatives and study the potential for scaling up.	In late 2024, the Transition Accelerator, with support from the Province of Ontario (via the IESO) completed a report that 'examines the potential pathways for adopting and integrating hydrogen into Ontario's electricity system'. The study included a specific assessment of Hamilton as a hydrogen hub, given the presence of steel manufacturing and the long-term plans to utilize hydrogen to transition to clean steel production.	City staff, led by the Economic Development Division and supported by the Office of Climate Change Initiatives, will continue with efforts to explore the potential for a hydrogen hub in Hamilton, including review of the work of Transition Accelerator, as a pathway forward is determined.
CEEP Action 19.0: Decarbonize and expand HCE downtown district energy system	During 2023 City staff participated on the Hamilton Community Enterprises (HCE) technical steering committee for the Energy	Progress has continued during 2024 with efforts to advance HCE's Energy Harvesting Feasibility Study, including next steps for	HCE is leading the Steelport Energy Advantage initiative, leveraging both public and private sector investment to decarbonize Hamilton's

		Low-Carbon Transformation #4: Revolutionizing Renewables		
HCAS Actions & Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook	
2023-2025 <i>Office of Climate Change Initiatives (co-ordinating role for the City), Planning and Economic Development</i>	<p>Harvesting Feasibility Study with a goal of developing a scalable model for low-carbon building heating using residual waste heat from industry.</p> <p>Future potential INDICATORS to track successful decarbonization and expansion of HCE's downtown district energy system:</p> <ul style="list-style-type: none"> • Private sector uptake of district energy municipal incentive programs for buildings. • Gigajoules of residual heat harnessed through the future energy harvesting system 	<p>making the proposed project reality, including a business case for the initiative.</p> <p>INDICATOR - Private sector uptake of district energy municipal incentive:</p> <ul style="list-style-type: none"> • One development applied to the City's incentive program to become district energy ready. The project is located downtown and consists of an 8- and a 9-storey building with a total of 126 residential units and 450 m2 of at-grade commercial space. 	<p>portlands while also driving economic prosperity. The initiative is expected to generate \$3.8 billion in economic value and create 23,000 jobs across the Greater Toronto and Hamilton Area.</p> <p>HCE is currently working with Steelport's Project Partners to develop an Integrated Energy Strategy that will reduce peak energy demand, enhance power resiliency, decarbonize operations, and increase energy affordability. The initial results of both projects are expected in late 2025.</p>	
CEEP Action 20.0: Technical + financial analysis for expanded organics collection and diversion	See waste management updates provided in Action 17.0 above.	See waste management updates provided in Action 17.0 above.		

Low-Carbon Transformation #4: Revolutionizing Renewables			
HCAS Actions & Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
2022-onwards <i>Waste Management Division, Public Works</i>	Future proposed INDICATOR. <ul style="list-style-type: none"> • Tonnes of organics diverted from landfill. 		

Low-Carbon Transformation #5: Growing Green			
HCAS Actions & Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
CEEP Action 21.0 Review & update Official Plan to address climate change and energy policies 2022 – onwards <i>Planning Division, Planning and Economic Development</i>	Phase 2 of the City Planning Division's Municipal Comprehensive Review (MCR) work – which will include addressing the elements of Action 21 - was delayed as a result of changing provincial planning policy causing planning staff to adjust work plans. INDICATOR – Terms of Reference within Official Plan related to climate change and climate equity 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	Phase 2 of the MCR work will be ongoing in 2024. INDICATOR – Terms of Reference within Official Plan related to climate change and climate equity The Terms of Reference work will be ongoing in 2024. This work was delayed because of changing provincial planning policy in 2024 causing planning staff to adjust work plans INDICATOR - Percentage of new residential units within walking access to transit, active transportation routes, green space. The tracking of this data will	Phase 2 is anticipated to restart in 2025 subject to work plans and changing priorities. Targeting Q4 2025 for completion of all Terms of Reference.

Low-Carbon Transformation #5: Growing Green			
HCAS Actions & Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
	<p>pivot with work plans</p> <p>FUTURE INDICATORS INDICATOR - Percentage of new residential units within walking access to transit, active transportation routes, green space.</p>	<p>be established in 2025 by GIS staff. Reporting on 2025 will be reported on in 2026.</p>	
<p>CEEP Action 22.0: Integrate community energy/climate action policy directions into Secondary Plans</p> <p>2022 – onwards</p> <p><i>Planning Division, Planning and Economic Development</i></p>	<p>Completion of an Official Plan review related to secondary plan requirements has yet to be completed.</p> <p>INDICATOR - Number of secondary plans integrating energy/ climate action policy direction:</p> <ul style="list-style-type: none"> Work has been slowed due to changing provincial policy requiring planning staff to adjust work plans. 	<p>The review of the secondary plans was delayed because of changing provincial planning policy in 2024 causing planning staff to adjust work plans.</p>	<p>These processes will continue over the next several years. A Terms of Reference for an Energy and Environmental Assessment will be completed.</p>
<p>CEEP Action 23.0: Set a target of 50,000 trees planted per year within City boundaries</p> <p>2022 – onwards</p>	<p>INDICATOR - Number of trees planted annually through City's Forestry & Horticulture Division.</p> <p>Total number of trees added to Hamilton's Tree Canopy</p>	<p>INDICATOR - Number of trees planted annually through City's Forestry & Horticulture Division.</p> <p>Total number of trees added to Hamilton's Tree Canopy by</p>	<p>The Forestry and Horticulture Division's tree planting target for 2025 is 20,000 trees.</p> <p>The Office of Climate</p>

Low-Carbon Transformation #5: Growing Green			
HCAS Actions & Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
<p><i>Office of Climate Change Initiatives, Planning & Economic Development (co-ordinating role for community)</i></p> <p><i>Environmental Services Division, Public Works</i></p>	<p>by Forestry was 15,256 for 2023 surpassing the goal of 12,000.</p> <p>Of this 15,256 total:</p> <ul style="list-style-type: none"> • 3,536 were provided to residents through the 2023 Free Tree Giveaways • 1000 were given to students at the Hamilton Children's Water Festival, • 3,927 were planted on City land via community volunteer planting events. • 6,779 were planted through the Forestry Operations Group in parks, cemeteries, streets, and public golf courses. <p>INDICATOR - Number of trees planted annually through the efforts of community partners including conservation authorities, Royal</p>	<p>Forestry was 19,659 for 2024 surpassing 2023 by 4,403 trees.</p> <p>Of this 19,659 total:</p> <ul style="list-style-type: none"> • 5,003 were provided to residents to plant on their private property through the 2024 Free Tree Giveaways • 6,775 were planted on City land via community volunteer planting events. • 6,500 were planted through the Forestry operations group in parks, cemeteries, streets, and city facilities. • 1,381 were planted through naturalized tree planting. <p>INDICATOR - Number of trees planted annually through the efforts of community partners including conservation authorities, Royal Botanical</p>	<p>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.</p> <p>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.</p>

Low-Carbon Transformation #5: Growing Green			
HCAS Actions & Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
	<p>Botanical Gardens, environmental organizations. Community partners planted a total of 32,578 trees on public and private land as follows:</p> <ul style="list-style-type: none"> • Area Conservation Authorities – 28,083 • Environmental Not-For-Profits – 1,651 • Royal Botanical Gardens – 2,238 • McMaster/Mohawk – 626 <p>TOTAL Trees planted by City and community partners in 2023 = 47,834 *This total does not include trees purchased and planted by residents, businesses, industry, and other private property owners. It is reasonable to conclude that the 50,000-tree target has likely been met and surpassed in 2023.</p>	<p>Gardens, environmental organizations. Community partners planted a total of 35,823 trees and 315 shrubs on public and private land as follows:</p> <ul style="list-style-type: none"> • Area Conservation Authorities – 32,290 trees and 295 shrubs. • Environmental Not-For-Profits – 1,704 trees and 20 shrubs. • Royal Botanical Gardens – 821 trees. • McMaster/Mohawk – 1,008 trees. <p>TOTAL Trees planted by City and community partners in 2024 = 55,482.</p>	

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

Enabling Actions within Hamilton's Climate Action Strategy			
HCAS Actions & Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
<p>E.1 - Establish a Climate Change Office with staff dedicated to implementing and tracking the Climate Change Impact Adaptation Plan.</p> <p><i>Planning & Economic Development</i></p>	<p>The Office of Climate Change Initiatives was established in November 2022. A Senior Project Manager was transferred into the Office in November 2022, a Director was hired in December 2022, and a new Senior Project Manager and Project manager were funded in the 2023 Municipal Budget and hired during the summer of 2023.</p> <p>During 2023 staff in the OCCI facilitated and tracked progress with implementation of the CCIAP.</p>	<p>An additional Project Manager was formally transferred to the OCCI from Healthy & Safe Communities Department in 2024, bringing the staff complement up to five full-time positions.</p> <p>OCCI staff continued, during 2024, to determine how to support CCIAP implementation.</p>	
<p>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.).</p> <p><i>Office of Climate</i></p>	<p>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</p>	<p>In keeping with the commitment to continue to refine and improve indicators utilized to track progress with implementation, an opportunity was provided again in 2024 for City staff and for members of the Climate Change Advisory Committee to provide feedback on priority indicators</p>	

Enabling Actions within Hamilton's Climate Action Strategy			
HCAS Actions & Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
<i>Change Initiatives, Planning & Economic Development (in collaboration with internal Climate Change Initiatives Steering Committee)</i>	Committee. Input was also sought from community members serving on the City's Climate Change Advisory Committee.	being used. This practice will continue, in recognition of the reality that establishing and applying indicators needs to be an iterative process that is responsive to emerging issues and lessons learned as implementation efforts proceed.	

Resilient Theme #1: Built Environment			
HCAS Actions and Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
<p>CCIAP Action 1.1: Develop 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.</p> <p>Long-term (>5 years)</p> <p><i>Growth Management,</i></p>	<p>During 2023 work progressed with the development of both low impact development guidelines – referred to as Green Standards and Guidelines for Site Servicing (Stormwater Management) and Green Building Standards for the City of Hamilton.</p> <p>Future proposed INDICATORS to track progress with implementation of these new guidelines:</p>	<p>Green Standards and Guidelines for Site Servicing were approved by the City's Planning Committee, along with proposed Green Building Standards, on October 1, 2024.</p> <ul style="list-style-type: none"> • Green Standards & Guidelines for Site Servicing in effect Jan 1, 2025, at which time tracking of volume will take place. • Back-tracking of past voluntary volume diversions will take place in 2025 	<p>The City's new Green Standards and Guidelines for Site Servicing came into force January 1, 2025.</p> <p>The following INDICATORS will be used to track progress with implementation of these new guidelines (originally proposed indicators have been further refined based on feedback from staff responsible for tracking):</p> <ul style="list-style-type: none"> • Volume of stormwater diverted from the municipal system.

Resilient Theme #1: Built Environment			
HCAS Actions and Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
<i>Planning and Economic Development</i>	<ul style="list-style-type: none"> • 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.) 	<p>following implementation of the LID tracking project.</p> <ul style="list-style-type: none"> • Developed framework for the tracking of LIDs including critical elements (volume, release rate, Water Quality Retention Target, etc.). • Back-tracking of voluntary volume diversions will take place in 2025 following implementation of the LID tracking project. 	<ul style="list-style-type: none"> • Number of ground-based LID features implemented and the impact of these features where stormwater control/diversion is concerned. • Number of building-based LID features implemented and the impact of these features where stormwater control/diversion is concerned. • Geographic locations of LID features mapped in approved site plans using GIS data sets.
CCIAP Action 1.2: Develop guidelines and incentives for homeowners and landlords to improve the resilience of residential buildings to climate-related risks through upgrades and/or	Efforts were accelerated during 2023 to develop a stormwater fee including exploration of incentives/credits to support on-property stormwater management measures as an integral part of the fee framework.	<p>The incentives program that accompanies the Stormwater Rate Structure was presented to the City's General Issues Committee on June 5th, 2024.</p> <p>INDICATOR – Annual uptake in City's Protective Plumbing Program:</p>	<p>The City's new stormwater fee will be implemented in April 2026.</p> <p>The fee framework includes two programs for property owners:</p> <p>Rain Ready Rebate:</p>

Resilient Theme #1: Built Environment			
HCAS Actions and Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
<p>retrofits.</p> <p>Short-term (<2 years)</p> <p><i>Hamilton Water (lead for stormwater fee development), Public Works</i></p> <p><i>Office of Climate Change Initiatives (lead for Better Homes Hamilton Pilot), Planning and Economic Development</i></p>	<p>Future proposed INDICATORS to track the impact of the stormwater fee incentive/ credit programs may include:</p> <ul style="list-style-type: none"> • Number and type of on-site stormwater management enhancements accessed by residential homeowners through incentive program. • Number and type of benefits resulting through the stormwater management credit program proposed for Industrial, Commercial & Institutional properties. <p>INDICATOR – Annual uptake in City’s Protective Plumbing Program:</p> <ul style="list-style-type: none"> • A total of 349 backwater valves were 	<ul style="list-style-type: none"> • A total of 216 backwater valves were installed through the program in 2024 (4 sump pumps in conjunction with a backwater valve). • 57 downspouts were disconnected at properties through the program in 2024. 	<ul style="list-style-type: none"> • Launched April 2025 • Partnership with Green Venture • For residential properties with <7 units. • As much as \$5,000 in funding for low impact development including rain gardens, green roofs, permeable paving. <p>Stormwater Management Infrastructure Credit:</p> <ul style="list-style-type: none"> • Up to 50% reduction in stormwater fee when measures put in place to reduce runoff or improve water quality. • For residential properties >7 units, and commercial properties. • Credit program is now open, and credits will be applied when the fee is implemented in 2026.

Resilient Theme #1: Built Environment			
HCAS Actions and Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
	<p>installed through the program in 2023.</p> <ul style="list-style-type: none"> 31 downspouts were disconnected at properties through the program in 2023. <p>See CEEP Action 6 above for a list of future INDICATORS that will be used to track progress with building retrofits, including the Better Homes Hamilton initiative.</p>		<p>Methods will continue to be refined for tracking uptake of building upgrades/ retrofits, including exploring the possibility of tracking relevant building permit data.</p>
<p>CCIAP Action 1.3: Conduct more studies or reviews to determine flooding and other risks throughout the City & develop plans (e.g. relocating sites where appropriate) to improve the resilience of infrastructure (i.e. buildings, roads, water/wastewater infrastructure, etc.) to climate-related risks from extreme weather and temperatures.</p>	<p>Flooding and Drainage Improvement Framework – Environmental Assessments - first one to be initiated Q4 2023, with more EAs to be completed in future years in other parts of the combined sewer shed. Ultimately these EAs will likely point to infrastructure solutions such as green infrastructure and sewer separation.</p> <p>Future potential INDICATORS to track progress with studies and</p>	<p>Efforts have continued into 2024 to address stretches of trail, shoreline and other City amenities impacted by extreme weather events:</p> <ul style="list-style-type: none"> The Mountain Brow Rail Trail - from Mohawk Sports Park to Corktown Park – has been changed by storms and studies are ongoing to assess the impacts to this landscape. Stormwater management issues 	<p>In March 2025, Council approved a 4-year extension of funding for the Niagara Escarpment Project – a collaborative study with experts from McMaster University that is focused on assessing challenges with wind and water erosion along the Niagara Escarpment. The goal is to develop a ‘comprehensive erosion risk map’ for Hamilton which will ‘inform short and long-term remediation strategies and future budget planning to</p>

Resilient Theme #1: Built Environment			
HCAS Actions and Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
<p>Medium-term (2-5 years)</p> <p><i>Hamilton Water, Public Works</i></p>	<p>reviews to determine flooding and other climate impact related risks from extreme weather and temperatures:</p> <ul style="list-style-type: none"> Percentage of the City that has been studied (geographic metric) as part of Flooding and Drainage Improvement Framework Number/ size of impacted sites along the waterfront and Escarpment face that require mitigation due to climate-related weather impacts (roadway infrastructure, trail infrastructure) <p>INDICATOR - Number of flood-related calls and geographic distribution of those calls</p> <ul style="list-style-type: none"> 2023 numbers broken down by municipal ward: 	<p>have been identified at Hamilton Cemetery</p> <ul style="list-style-type: none"> Geotechnical studies have been undertaken at Sam Lawrence Park for escarpment pathways. Confederation Beach & Hamilton Beach Shoreline Management Master Plan initiated in 2024 in response to fact that shorelines of Hamilton Beach, Confederation Beach, and the adjacent Breezeway Trail have been impacted by erosion and flooding due to increased extreme high-water levels and more frequent intense storm events. <p>INDICATOR - Number of flood-related calls and geographic distribution of those calls</p>	<p>support erosion mitigation on the escarpment'. See Report PW25004.</p>

Resilient Theme #1: Built Environment					
HCAS Actions and Timelines	2023 Progress Update and Supporting Information			2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
		Ward Number	Number of calls	The City's access to data on flood-related calls was impacted by the cyber incident. The data available is not representative of the full year's worth of incidents and is, therefore, not being reported for 2024.	
		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 nature of these flooding incidents are as follows:				
		Number of Events	Nature of Flooding		
		47	Roads (catch basin, sidewalk, ditch, roadway)		
		20	Property flooded by ground or stormwater		

Resilient Theme #1: Built Environment				
HCAS Actions and Timelines	2023 Progress Update and Supporting Information		2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
	21	Sewer backup on sewer main		
	820	Sewer lateral backup in basement		
<p>CCIAP Action 2.1: Improve winter travel conditions through further expanding sidewalk clearing.</p> <p>Short-term (<2 years)</p> <p><i>Roads Operations, Public Works</i></p>	<p>INDICATOR – Number of kilometers of sidewalks cleared.</p> <ul style="list-style-type: none"> Starting in November 2022, Transportation increased kilometers of sidewalks maintained during the winter from 397km to 866km. Transportation now clears all sidewalks along Priority 1 & 2A roadways where transit services operate. <p>On December 3, 2023, the Transportation Division presented Information Report PW23077 to Council. The report outlined various options to enhance the levels of service for sidewalk snow clearing. However, no approval was given to expand the service at this time.</p>		<p>INDICATOR – Number of kilometers of sidewalks cleared.</p> <ul style="list-style-type: none"> Starting in November 2022, Transportation increased kilometers of sidewalks maintained during the winter from 397km to 866km. Transportation now clears all sidewalks along Priority 1 & 2A roadways where transit services operate. <p>INDICATOR - Number of resident requests to City's Snow Angels program for help with snow clearing:</p> <ul style="list-style-type: none"> 2023 – 24 Winter Season – 67 households applied for the new 'snow clearing subsidy' launched in 	<p>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.</p>

Resilient Theme #1: Built Environment			
HCAS Actions and Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
	<p>INDICATOR - Number of resident requests to City's Snow Angels program for help with snow clearing:</p> <ul style="list-style-type: none"> 2022 – 23 Winter Season – 62 households or 73% of applicants were matched with a snow clearing volunteer. 	<p>2023 and 44 of those households were approved. Requests for support were lower due to lack of snow.</p> <ul style="list-style-type: none"> Two other programs provided support for snow clearing in Winter 2023-2024: <ul style="list-style-type: none"> Flamborough Connects – supported 8 households with 6 volunteers but had 3 households on a wait list. Stoney Creek Outreach Services supported 105 seniors with 12 volunteers but had 60 residents on a wait list 	
CCIAP Action 2.2: Encourage and promote safer travel practices, choices, and alternatives through	In 2023, the City of Hamilton and its partners offered several programs providing equitable access to sustainable transportation	<p>INDICATOR – Annual number of registered Smart Commute users</p> <ul style="list-style-type: none"> In 2024 there were 1300 registered users 	For future reporting, Hamilton commuter data available through the annual Transportation Tomorrow Survey will be utilized as it

Resilient Theme #1: Built Environment			
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<p>considering all users of Hamilton's transportation network and by working with local groups to create a communications campaign around the benefits of work-from-home</p> <p>Medium-term (2-5 years)</p> <p><i>Sustainable Transportation Division, Planning and Economic Development</i></p>	<p>options including: Hamilton Bike Share's 'Everyone Rides Initiative' subsidized bike share memberships, reduced e-scooter fees in priority neighbourhoods, and subsidized and/or free HSR transit fare programs.</p> <p>INDICATOR – Annual number of registered Smart Commute users</p> <ul style="list-style-type: none"> In 2023 there were 1139 registered users on the City's Smart Commute tool and 913 residents completed Smart Commute surveys. <p>INDICATOR – Responses regarding how commuters travel most frequently based on 2024 Smart Commute survey results:</p> <ul style="list-style-type: none"> 55% drive alone. 16% use public transit. 8% bicycle 6% carpool 6% walk 	<p>on the City's Smart Commute tool and 669 residents completed Smart Commute surveys.</p> <p>INDICATOR – Responses regarding how commuters travel most frequently based on 2024 Smart Commute survey results:</p> <ul style="list-style-type: none"> 48% drive alone. 18% use public transit. 12% bicycle 9% walk 5% carpool/dropped off/picked up. 1% work remotely <p>INDICATOR - Number of Everyone Rides Initiative subsidized bike share memberships provided each year. Hamilton Bike Share's ERI program was able to offer 426 subsidized passes in 2024 (42% increase from 2023)</p> <p>INDICATOR - Number of</p>	<p>provides a more statistically rigorous assessment of any modal shift trends. TTS occurs every 5 years – 2022 data was just released in 2024.</p> <p>See: transportationtomorrow.on.ca</p>

Resilient Theme #1: Built Environment			
HCAS Actions and Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
	<ul style="list-style-type: none"> 5% are dropped off/picked up. 3% work remotely <p>INDICATOR - Number of Everyone Rides Initiative subsidized bike share memberships provided each year.</p> <ul style="list-style-type: none"> 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. <p>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)</p> <ul style="list-style-type: none"> In 2023 Hamilton Police report that there 	<p>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)</p> <p>-The 2024 City of Hamilton Annual Collision Report is not yet available as of May 2025</p> <p>-The 2024 Year End Hamilton Police Collisions Report is not yet available as of May 2025</p> <p>INDICATOR - Number of participants in subsidized HSR programs</p> <p>HSR revamped its fare subsidy programming in 2024, launching a new 'Fare Assist' program for eligible community members.</p> <ul style="list-style-type: none"> 5,889 people were approved for the Fare Assist program in 2024, which offers a 30% discount on HSR fares. 	

Resilient Theme #1: Built Environment			
HCAS Actions and Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
	<p>were 3 pedestrian fatalities and 1 cyclist fatality as a result of collisions with motor vehicles.</p> <ul style="list-style-type: none"> The 2023 City of Hamilton Annual Collision report was not available at time of report preparation. <p>Future potential INDICATORS to assess alternative transportation uses and equitable access:</p> <ul style="list-style-type: none"> Number of participants in subsidized HSR programs 		

Resilient Theme #2: People and Health			
HCAS Actions and Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
CCIAP Action 3.1: Develop and implement a response program for vulnerable populations to protect residents	During 2023 a Heat Response Strategy was developed with input from community partners from the Extreme Heat Working	The staff presentation of the Heat Response Strategy to the Public Health Committee in Q1 2024 led to additional enhancements to 2024 heat	

Resilient Theme #2: People and Health			
HCAS Actions and Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
<p>from climate-related risks (i.e. extreme cold, extreme heat, etc.)</p> <p>Medium-term (2-5 years)</p> <p><i>Public Health Services, Healthy and Safe Communities</i></p>	<p>Group. The Strategy was presented to the City's Public Health Committee in April 2024.</p> <p>The city also has a Heat Response Plan that 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.</p> <p>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.</p> <p>INDICATOR - Number of annual weather-related (heat, cold, air quality related) emergency room</p>	<p>response efforts supported by Climate Change Reserve funding:</p> <ul style="list-style-type: none"> Council approved the Expansion of \$350 Subsidy for Air-Conditioning to Low Income Households resulting in 140 AC subsidy benefits being issued to eligible households (133 Social Assistance Households and 7 Low Income Households). 2000 bus tickets purchased for distribution – with 682 distributed at City Rec Centres and 830 provided with 'Cool Kits' distributed by staff in the City's Healthy Environments Division. <p>Public Health staff-initiated efforts to track heat-related illness and deaths in Hamiltonians in 2024 from May</p>	

Resilient Theme #2: People and Health			
HCAS Actions and Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
	<p>visits for residents of Hamilton.</p> <ul style="list-style-type: none"> No data available for 2023 - this indicator began reporting in 2024 <p>INDICATOR - Number of annual weather-related (heat, cold, air quality related) deaths for residents of Hamilton.</p> <ul style="list-style-type: none"> This indicator has a data lag period of approximately 5 - 6 years and is provided by the Ontario Ministry of Health's IntelliHealth system. Most recent data available is from 2018 (BOH24005). <p>INDICATOR - Number of weather-related (heat, cold, air quality related) paramedic calls for residents of Hamilton.</p> <ul style="list-style-type: none"> No data available for 2023 - this indicator 	<p>through September using existing data sources and staffing resources with the following two components:</p> <ul style="list-style-type: none"> Surveillance of emergency department complaints; and, Annual assessments of heat-related emergency department visits, hospitalization visits and deaths. <p>This information will be used to inform the service levels, planning and evaluation in the Health Hazards Program with respect to extreme heat response. Reporting on the health-related impacts of heat will be provided by Public Health.</p>	

Resilient Theme #2: People and Health			
HCAS Actions and Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
	<p>began reporting in 2024.</p> <p>INDICATOR - Air quality and health impacts tenant complaints.</p> <ul style="list-style-type: none"> No 2023 data available due to database access issues <p>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:</p> <ul style="list-style-type: none"> 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. 		
CCIAP Action 3.2: Consolidate existing	During 2023 no progress was reported regarding efforts to	No changes to report in 2024.	

Resilient Theme #2: People and Health			
HCAS Actions and Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
<p>vulnerable persons' contact lists and update/expand them to guide emergency response and/or other assistance programs. Medium-term (2-5 years)</p> <p><i>Public Health Services, Hamilton Paramedics, Healthy and Safe Communities</i></p>	<p>consolidate existing vulnerable persons contact lists.</p> <p>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.</p> <p>Hamilton Paramedics currently maintains a database of clients who are part of its Mobile Integrated Health (MIH) program.</p> <p>Future potential INDICATOR designed to assess effectiveness of a consolidated vulnerable persons registry:</p> <ul style="list-style-type: none"> • Number of vulnerable persons reached/ supported during an 		

Resilient Theme #2: People and Health			
HCAS Actions and Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
	extreme weather event/ climate-related emergency.		
<p>CCIAP Action 3.3: Coordinate local efforts to address excessive indoor temperatures in rental housing</p> <p>Medium-term (2-5 years)</p> <p><i>Joint effort between Municipal Law Enforcement, Planning and Economic Development; and Public Health Services, Healthy and Safe Communities.</i></p>	<p>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.</p> <p>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.</p> <p>INDICATOR - Number of health promotion sessions delivered including number of session attendees, whether attendees are from vulnerable groups, and number of resources</p>	<p>A staff recommendation report from Municipal Law enforcement, entitled 'Amending the Property Standards By-Law Respecting Air Conditioning Appliances' was originally to have been presented to the Planning Committee in Q4 2024. The report was not presented to the Committee in 2024.</p> <p>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.</p> <ul style="list-style-type: none"> 16 heat-related education and awareness sessions offered in 2024. 	<p>No 2025 date has been confirmed for when this report is scheduled to be presented to the City's Planning Committee.</p>

Resilient Theme #2: People and Health			
HCAS Actions and Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
	<p>provided for heat-related responses.</p> <ul style="list-style-type: none"> 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. <p>INDICATOR - Number of media releases on heat-related topics</p>	<ul style="list-style-type: none"> 148 promotional bags distributed to session attendees. <p>INDICATOR - Number of media releases on heat-related topics</p> <ul style="list-style-type: none"> Eight media releases were issued to alert the public to the four heat warnings that were issued during 2024. <p>INDICATOR - Social media (number of posts, engagements, etc.)</p> <ul style="list-style-type: none"> 7674 Views, 38,410 Impressions for heat-related information. 	

Resilient Theme #2: People and Health			
HCAS Actions and Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
	<ul style="list-style-type: none"> Four media releases were issued to alert the public to the four heat warnings that were issued during 2023. <p>INDICATOR - Social media (number of posts, engagements, etc.)</p> <ul style="list-style-type: none"> 30 social media posts on various heat-related topics during 2023 (heat & extended heat warnings, cancellation of warnings, 'Heat Wave Hero' landlord messaging) 		
<p>CCIAP Action 3.4: Align ongoing efforts within the City to continue expanding affordable housing to protect vulnerable populations to reduce climate-related impacts from extreme weather and temperatures</p> <p>Long-term (>5 years)</p> <p><i>Housing Secretariat,</i></p>	<p>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</p>	<p>Efforts continue into 2024 through CityHousing Hamilton and the Housing Secretariat to promote climate resilient features in new affordable housing.</p> <p>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.</p>	

Resilient Theme #2: People and Health					
HCAS Actions and Timelines	2023 Progress Update and Supporting Information		2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook	
Healthy and Safe Communities	support this transition to greener building		INDICATOR - Number of high-performance units (e.g. Passive House, CaGBC etc.) in affordable housing complexes. Projects allocated municipal funding for 2024: - 315 units targeting Passive House Standard or equivalent. - 175 units targeting PHIUS certification. - 124 units targeting LEED Gold certification. - 261 units targeting a 40% improvement on 2015 NECB. INDICATOR - Average house price in Hamilton: The Housing Needs Assessment shows, from 2015 to 2024, single detached houses, row houses, and apartments all experienced increases: - Single detached houses: Increase of 125.8%. From \$395,408 to \$892,940.		
	The City’s Housing Secretariat has also been actively working to encourage and support climate resilient features in the new housing projects it is working to facilitate.				
	INDICATOR - Number of affordable housing units				
	Year	# New Rent Geared to Income (RGI) Units			# New Affordable Market Units
	2021	114			32
	2022	15	n/a		
	2023	73	30		
	INDICATOR - Number of high-performance units (e.g. Passive House, CaGBC etc.) in affordable housing complexes.				

Resilient Theme #2: People and Health			
HCAS Actions and Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
	<ul style="list-style-type: none"> The 73 RGI units with a 2023 occupancy date were built to National Energy Code/Ontario Building Code standards. <p>INDICATOR - Shelter expansion and number of individuals served through expansion.</p> <ul style="list-style-type: none"> Housing Services Division reported no net new shelter beds created in 2023 <p>INDICATOR - Number of social housing units with cooling interventions (fans, AC, awnings, etc.)</p> <ul style="list-style-type: none"> Information about number of units with cooling interventions is currently not available to the City's Housing Secretariat or to the Housing Services Division. 	<ul style="list-style-type: none"> - Row houses: Increase of 131.3%. From \$305,495 to \$706,747. - Apartments: Increase of 118.9%. From \$221,288 to \$484,346. <p>INDICATOR – Diversification of housing options (e.g. co-ops, co-housing/co-ownerships):</p> <p>The Housing Needs Assessment found that there is a need for the following housing options:</p> <ul style="list-style-type: none"> - Increased primary rental units, including affordable rental units, to meet growing demand. From 2021 to 2023, the primary rental universe declined by 526 units (-1.4%) to a total of 36,594 units, despite recent growth in demand. - For greater diversity in housing sizes, particularly smaller ownership dwellings and larger family-sized rental options. In 2021, the most common dwelling type during 	

Resilient Theme #2: People and Health			
HCAS Actions and Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
	<p>INDICATOR – Average rental costs in the city.</p> <ul style="list-style-type: none"> • Average rent for all two-bedroom units rose to \$1,335 in Oct 2022, up 5% from \$1,271 in Oct 2021. • Rents for vacant (available to rent) two-bedroom units in Hamilton jumped 12% between June 2022 and June 2023 to an average cost of \$2,298. • Over the past decade, Hamilton rents for all units have risen 55% - more than double the 22% cost of living increase. <p>INDICATOR – Average house price in Hamilton</p> <ul style="list-style-type: none"> • Hamilton's average house price in June 2023 was \$831,540, down 3.6% from the June 2022 average of 	<p>this period was single-detached dwellings (56.2%). In 2021, the purpose-built rental market supply is skewed differently, with only 2,544 units (7.3%) with 3+ bedrooms, and a large household (3+ people) proportion of 40%.</p> <p>- For housing to support an aging population, including affordable aging-in-place and supportive housing. Older adults (65+ years) were the second fastest growing population (+12.2%) between 2016 and 2021.</p>	

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	<p>\$863,016 but still substantially above the winter 2020 pre-pandemic value of \$607,939.</p> <p>INDICATOR – Diversification of housing options (e.g. co-ops, co-housing/co-ownerships)</p> <ul style="list-style-type: none"> These details will be provided in the Oct 2024 Housing Needs Assessment. 		
<p>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.)</p> <p>Short-term (<2 years)</p> <p><i>Office of Climate Change Initiatives,</i></p>	<p>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.</p> <p>INDICATOR - Tracking public engagement including number of public events attended, number of</p>	<p>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.</p> <p>INDICATOR - Tracking public engagement including number of public events attended, number of presentations,</p>	<p>In 2025, the Office of Climate Change Initiatives is continuing to enhance its outreach efforts, both internally and across the community. Internal ‘Learning Sessions’ are being hosted in the first half of 2025, to provide staff across various divisions with an opportunity to learn about Hamilton’s Climate Action Strategy and how certain actions within the Strategy relate to their work at the City.</p>

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<i>Planning and Economic Development</i>	<p>presentations, and audience size, diversity of audiences etc.</p> <ul style="list-style-type: none"> 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. <p>INDICATOR - City website and social media posts analytics (e.g. number of visits, material downloads, etc.)</p> <ul style="list-style-type: none"> Social media data unavailable 	<p>and audience size, diversity of audiences etc.</p> <ul style="list-style-type: none"> 2,000+ residents reached via 27 community presentations, events. Tabled at various community events including Open Streets x 2, HamOnt Youth Summit. <p>INDICATOR - City website and social media posts analytics (e.g. number of visits, material downloads, etc.)</p> <ul style="list-style-type: none"> Social media posts = 33 Impressions = 96,250 Engagements = 10,500 	<p>Plans are underway for the latter half of 2025 to hold community information and engagement sessions at locations like Hamilton Public Library branches so people can learn more about our community-wide Climate Action Strategy and what they can do to help.</p>

Resilient Theme #2: People and Health			
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<p>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)</p> <p>Medium-term (2-5 years)</p> <p><i>Office of Climate Change Initiatives, Planning and Economic Development; Office of Emergency Management, Hamilton Fire.</i></p>	<p>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.</p> <p>Future potential INDICATORS to track progress with raising awareness about and ensuring residents have emergency preparedness kits:</p> <ul style="list-style-type: none"> • Number of workshops/ presentations on how to build and maintain a personal emergency preparedness kit and 	<p>In 2024, staff from the Office of Climate Change Initiatives and Emergency Management staff from Hamilton Fire Department, began 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 build their own emergency preparedness kits.</p> <p>The first workshop was held at the Villages of Glancaster in December 2024, with an audience of 50+ people. Participants left with a copy of the City's Emergency Preparedness Guide which provides residents with step-by-step instructions on how to prepare for emergencies, including how to build a kit. CLICK HERE to access the on-line guide.</p> <p>Number of workshops/ presentations on how to build and maintain a</p>	<p>The plan for 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.</p>

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	<p>associated emergency plan – including number of participants.</p> <ul style="list-style-type: none"> • Number of emergency preparedness kits provided through City efforts. • Number of other programs/ organizations raising awareness about and delivering emergency preparedness kits 	<p>personal emergency preparedness kit and associated emergency plan – including number of participants.</p> <ul style="list-style-type: none"> • One workshop held in 2024. 	
<p>CCIAP Action 4.3: Establish buddy systems/help-your-neighbour programs to implement during extreme weather events</p> <p>Short-term (<2 years)</p> <p><i>Public Health Services, Healthy and Safe Communities; Office of Climate Change Initiatives, Planning and Economic Development</i></p>	<p>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.</p> <p>This action is also recognized</p>	<p>The Climate Action Strategy/ Emergency Preparedness Kits pilot workshops initiative described in CCIAP Action 4.2 above will also be used to encourage and support residents to establish and/or expand neighbourhood networks of caring.</p>	

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	in the 2024 Heat Response Strategy as something the City will continue to facilitate and support.		
<p>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.)</p> <p>Long-term (>5 years)</p> <p><i>Public Health Services, Healthy and Safe Communities</i></p>	<p>City staff reported in 2023 that work with local partners to ensure vulnerable groups are aware of vector-borne diseases would begin in 2024.</p> <p>INDICATOR - Number of cases of vector-borne disease related illnesses:</p> <ul style="list-style-type: none"> West Nile Virus - 5 human cases in 2023 Lyme disease - 81 human cases in 2023 <p>INDICATOR - City website and social media analytics (i.e. number of views/downloads, number of posts, post engagement, etc.)</p> <ul style="list-style-type: none"> City created and posted Instagram reels focused on tick prevention (to avoid tick exposure and risk 	<p>INDICATOR - Number of cases of vector-borne disease related illnesses:</p> <ul style="list-style-type: none"> West Nile Virus - 2 human cases in 2024 Lyme disease – 74 human cases in 2024 <p>INDICATOR - City website and social media analytics (i.e. number of views/downloads, number of posts, post engagement, etc.)</p> <ul style="list-style-type: none"> Number of impressions = 23,966 	

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	<p>of Lyme Disease) and 'tick dragging' – the method used to sample the tick population.</p> <ul style="list-style-type: none"> • Tick Dragging reel had +70k Plays (second highest in Corporate channel's history) and +2K interactions - +11K plays - +200 interactions. • Tick Prevention Reel had +11k plays and +200 interactions 		
<p>CCIAP Action 5.2: In 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</p>	<p>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</p>	<p>In June 2024, Hamilton's Biodiversity Action Plan and the city-led actions found within it, were endorsed by the City's Planning Committee.</p> <p>INDICATOR - Number of ticks submitted to Public Health for identification each year.</p> <ul style="list-style-type: none"> • 64 ticks submitted to PHS for identification in 2024. 	

Resilient Theme #2: People and Health			
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<p>rabies, Lyme disease, to human populations)</p> <p>Long-term (>5 years)</p> <p><i>Environmental Services, Public Works; Public Health Services, Healthy and Safe Communities</i></p>	<p>overhanging plants.</p> <p>At the same time, focusing on biodiversity (species diversity, healthy native habitats for native animals and plants) is a key strategy for increasing ecosystem resilience to invasive pests and disease.</p> <p>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.</p> <p>INDICATOR - Number of ticks submitted to Public Health for identification each year.</p> <ul style="list-style-type: none"> 182 ticks submitted to PHS for identification in 2023. 	<p>INDICATOR - Number of complaints about standing water.</p> <ul style="list-style-type: none"> 73 complaints were received about standing water in 2024 (not just in naturalized areas of the city) 	

Resilient Theme #2: People and Health			
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	INDICATOR - Number of complaints about standing water. <ul style="list-style-type: none"> 32 complaints were received about standing water in 2023 (not just in naturalized areas of the city) 		
<p>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</p> <p>Medium-term (2-5 years)</p> <p><i>Human Resources, Corporate Services</i></p>	<p>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.</p> <p>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.</p>	<p>In 2024, the City's Human Resources Division released three updated occupational health and safety bulletins:</p> <ul style="list-style-type: none"> Managing Heat Stress Sun Safety Outdoor Air Quality and Your Health 	<p>In 2025, the City's Human Resources Division informed staff of the availability of a number of resources to support outdoor workers during hot weather including:</p> <ul style="list-style-type: none"> Heat Stress Sun Safety Outdoor Air Quality & Your Health Response to Air Quality Health Index Thresholds Tick & Lyme Disease.

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	<p>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.</p>		
<p>CCIAP Action 6.2: Explore opportunities to expand current cooling & warming centre programming and interventions.</p> <p>Short-term (<2 years)</p> <p><i>Public Health Services, Healthy and Safe Communities</i></p>	<p>This action is addressed in the Heat Response Strategy presented to the Public Health Committee in Q1 of 2024 and the potential to increase the number of cooling centres is regularly discussed in meeting of the Extreme Heat Working Group.</p> <p>This action has also been addressed through City efforts to develop and implement a 'Winter Response Strategy' starting in January 2023. In its first</p>	<p>In 2024, Public Health Services, through the Healthy Environments Division, developed and implemented a 'Cool Kit' initiative designed to get simple resources designed to help residents without in-residence cooling to stay cool in the summer heat.</p> <ul style="list-style-type: none"> A total of 748 Cool Kits were handed out to those in need in 2024 	<p>The Healthy Environments Division plans to continue to distribute Cool Kits during 2025 and to provide free bus tickets to help Hamiltonians travel to cooling centres during heat events.</p>

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	season, the Strategy was in place until March 31 st and offered supports including additional daytime and overnight warming spaces for residents needing these supports. See CCIAP Action 3.1 above for more details on enhancements made to this program for the Winter of 2023/24.		
<p>CCIAP Action 6.3: Improve monitoring, data collection, and notification surrounding flooding & extreme weather/temperatures</p> <p>Long-term (>5 years)</p> <p><i>Public Health Services, Healthy and Safe Communities</i></p>	<p>This action is addressed in the Heat Response Strategy that was presented to the Public Health Committee in Q1 of 2024.</p> <p>Public Health Services uses epidemiological data along with heat mapping vulnerability data to determine highest risk areas to target for heat initiatives.</p> <p>INDICATOR - Number of heat alerts</p> <ul style="list-style-type: none"> In 2023 there were 4 heat warning and extended heat warning events combined 	<p>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.</p> <p>INDICATOR - Number of heat alerts</p> <ul style="list-style-type: none"> In 2024 there were 4 heat warning and extended heat warning events combined lasting a total of 19 days: 	

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	<p>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)</p> <p>INDICATOR - Number of users of splash pads, parks, community centres, etc.</p> <ul style="list-style-type: none"> 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. 	<p>June 17 – 22 (6 days) July 8 – 10 (3 days) July 14 -15 (2 days) Jul 31–Aug 2 (3 days)</p> <p>INDICATOR - Number of users of splash pads, parks, community centres, etc. during heat alerts:</p> <p>Recreation staff provided data for use of splash pads, and indoor & outdoor pools during heat alerts and extreme heat alert days. The general trends shown by the data indicate the following:</p> <ul style="list-style-type: none"> Indoor & Outdoor Open Swims - average user number data shows increase in users during heat events at both indoor and outdoor City pools, with outdoor pools showing higher average user numbers than indoor pools. Outdoor Wading Pools showed the highest increase in average user numbers 	

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		<p>during heat events, when compared to the typical average user numbers (range of 77 to 94 users vs the typical average of 54 users)</p> <p>NEW INDICATOR – Number of cold weather alerts</p> <ul style="list-style-type: none"> In 2024 there were 4 cold alert events, with a total of 7 days of cold alert status. 	

Resilient Theme #3: Natural Environment, Agriculture and Water			
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<p>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.</p> <p>Medium-term (2-5 years)</p>	<p>Work continued in 2023 on a number of on-going 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.</p> <p>Also in 2023, a bioswale was</p>	<p>INDICATOR - Enhancement of natural areas identified in plan: Future projects anticipated at: William Connell Park (invasive species removal & naturalization), Confederation Beach Park - natural shoreline erosion mitigation through native plantings.</p> <p>INDICATOR – Track acquisition of space to</p>	<p>Additional staff positions approved to support the City's Biodiversity Action Plan through the 2025 Municipal Budget will enable this work to start. Hiring is to be started in Q2 2025, with work to be scoped by end of year.</p>

Resilient Theme #3: Natural Environment, Agriculture and Water			
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<i>Environmental Services, Public Works</i>	<p>installed at Florence Parker Sports Park.</p> <p>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, 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.</p> <p>INDICATOR – Track acquisition of space to convert into natural areas to</p>	<p>convert into natural areas to enhance core areas and linkages.</p> <p>There is no mandate or specific direction yet on this action. Staff need to develop a natural lands acquisition strategy with funding identified and this will be completed with pending Biodiversity Action Plan additional full-time staff.</p>	

Resilient Theme #3: Natural Environment, Agriculture and Water			
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	enhance core areas and linkages. <ul style="list-style-type: none"> No update provided for 2023. 		
<p>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.</p> <p>Medium-term (2-5 years)</p> <p><i>Forestry and Horticulture Division, Public Works; Office of Climate Change Initiatives, Planning and Economic Development</i></p>	<p>Expansion of Forestry's Community Tree Planting Program facilitated surpassing the 2023 target of 1,800 trees and planting 3,927 trees.</p> <p>Forestry staff have engaged CityLab to complete a literature review related to municipal woodlot management.</p> <p>Forestry staff engaged in Air Quality Day with Green Venture & participated in National Indigenous Peoples Day Gathering event on June 21st.</p> <p>INDICATOR – Number of trees planted by Forestry Division each year:</p> <ul style="list-style-type: none"> 3,927 – via Forestry hosted community tree planting events 	<p>2024 Tree Giveaway distributed 5003 trees in 2024. Forestry partnered with local not-for-profit Hamilton Naturalists' Club to deliver the 2024 program.</p> <p>2024 target for total number of trees planted and/or provided by Forestry is 20,000.</p> <p>INDICATOR - Number of community tree planting events hosted by City's Forestry & Horticulture Division</p> <ul style="list-style-type: none"> -17 Community Tree Planting events in 2024 -563 community volunteers planted 6775 native trees. --- 15 of the 17 events were returning groups who have participated before. -72% increase in # of trees planted, 52% increase in number of volunteers and 4 x 	<p>The Forestry Division continued its partnership with Hamilton Naturalists' Club for the Tree Giveaway Program.</p>

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	<ul style="list-style-type: none"> 6,779 – via Forestry plantings in parks, cemeteries, along streets, in public golf courses <p>INDICATOR – Number of trees distributed by Forestry to community for planting on private property:</p> <ul style="list-style-type: none"> 3,536 – via Forestry’s annual Tree Giveaway to residents, schools and not-for-profit organizations. 1,000 – via the annual Children’s Water Festival <p>INDICATOR – Total number of trees planted or provided by City’s Forestry Division annually:</p> <ul style="list-style-type: none"> 2023 total = 15,256 trees 	<p>the amount of returning groups compared to 2023.</p> <p>INDICATOR – Number of trees distributed by Forestry to community for planting on private property:</p> <ul style="list-style-type: none"> 5,003 via Forestry’s annual Tree Giveaway to residents, schools and not-for-profit organizations. 1,000 - via the annual Children’s Water Festival <p>INDICATOR – Total number of trees planted or provided by City’s Forestry Division annually:</p> <ul style="list-style-type: none"> 2024 total = 19,659 trees (not including the 1,000 seedlings distributed to kids attending the City’s Annual Water Festival). 	
CCIAP Action 8.2: Implement the Urban	The Urban Forest Strategy (UFS) was approved by	Additional resources were approved as part of the 2024	In 2025, the first State of the Urban Forest report will be

Resilient Theme #3: Natural Environment, Agriculture and Water			
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<p>Forest Strategy (UFS) and consider additional measures to support it or expand its impact.</p> <p>Medium-term (2-5 years)</p> <p><i>Environmental Services, Public Works</i></p>	<p>Council on June 21st, 2023.</p> <p>Associated recommendations supported by Council included:</p> <ul style="list-style-type: none"> Adoption of a 40% urban canopy cover target <p>Initiation of the development of a City-wide tree protection by-law on private property within the urban area.</p> <p>Future proposed INDICATORS to track implementation of the UFS and the key adaptation feature of equitable distribution of the 40% urban canopy cover:</p> <ul style="list-style-type: none"> Percentage canopy cover across Hamilton wards & neighbourhoods through Urban utilizing LiDAR data acquired as part of Urban Forest Strategy implementation. 	<p>municipal budget to support the implementation of Hamilton's Urban Forest Strategy including:</p> <ul style="list-style-type: none"> 1 full-time employee in Forestry to monitor, report on, and facilitate the implementation of the UFS, including prioritizing those areas with greatest need for urban canopy cover. 1 full-time employee in Forestry to support an increase in the annual City-led tree planting target to 20,000 trees. Funding to purchase LiDAR (Laser Imaging Detection and Ranging) data to establish accurate percentage canopy cover measurements. 	<p>prepared by Forestry Division staff and presented to Council.</p>

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<p>CCIAP Action 9.1: Educate and encourage community to participate in growing food locally (e.g. lot level or urban farms/gardens).</p> <p>Short-term (<2 years)</p> <p><i>Healthy and Safe Communities; Office of Climate Change Initiatives, Planning and Economic Development</i></p>	<p>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.</p> <p>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.</p> <p>Community food gardens both on and off City property are supported by the Hamilton Community Garden Network, which is coordinated by Neighbour to Neighbour. See: www.n2ncentre.com/hamilton-community-food-centre/community-garden-networking-program/</p>	<p>In 2024, staff coordination of the City's network of community gardens was transferred, along with a full-time Project Manager, to the Office of Climate Change Initiatives.</p> <p>In 2024 a new 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.</p> <p>Area rating funding was approved in November 2024 for the expansion of Ward 5's Riverdale Community Garden (aka the 'Salad Bowl').</p>	<p>Expansion efforts at the Riverdale Community Garden will be implemented in 2025.</p> <p>Additional expansion requests have been received for other garden locations, along with requests for the establishment of at least one new garden location.</p>
<p>CCIAP Action 9.2: Expand rainwater capture (i.e. rain barrels, cisterns, etc.)</p>	<p>In 2023, the City's stormwater funding fee review was completed, and Council approved the fee structure.</p>	<p>Implementation of the stormwater fee framework will begin in April 2026. The rebate and credit programs</p>	<p>The City's new stormwater fee will be implemented in April 2026.</p>

Resilient Theme #3: Natural Environment, Agriculture and Water			
HCAS Actions and Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
<p>as an irrigation source for more localized food production (i.e. backyard farming, urban gardens, soft landscapes, etc.)</p> <p>Medium-term (2-5 years)</p> <p><i>Hamilton Water, Public Works</i></p>	<p>Finance Staff, in consultation with the initiative's internal Steering Committee and Working Groups, launched a communications and engagement plan across the City in October 2023 to consult on developing financial incentives for property owners to capture rainfall and retain it on their property.</p>	<p>include support for tools to facilitate rainwater capture and use on properties in the future.</p>	<p>The fee framework includes two programs for property owners including the Rain Ready Rebate which was launched in April 2025, and includes support for downspout disconnection and rain barrel installation.</p>
<p>CCIAP Action 9.3: Engage with local agricultural leaders to understand existing resources for farmers in addressing climate adaptation, and how the City can support or expand on those efforts.</p> <p>Medium-term (2-5 years)</p> <p><i>Office of Climate Change Initiatives, Economic Development, Planning</i></p>	<p>No City progress to report during 2023.</p>	<p>The municipality's stormwater fee includes a credit program approved in 2024 and designed to facilitate the installation and/or enhancement of on-property stormwater management measures, including on agricultural properties.</p>	

Resilient Theme #3: Natural Environment, Agriculture and Water			
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<i>and Economic Development; and Healthy and Safe Communities</i>			
<p>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.</p> <p>Medium-term (2-5 years)</p> <p><i>Waste Management, Public Works; Healthy and Safe Communities</i></p>	<p>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.</p> <p>Addressing food waste is also highlighted as an action within the Food Strategy that may be incorporated into future work.</p> <p>No other progress was made in 2023 on this action.</p>	No progress was made in 2024 on this action.	

Resilient Theme #4: Energy and Economy			
HCAS Actions and Timelines	2023 Progress Update and Supporting Information	2024 Progress Update and Supporting Information	2025 Accomplishments & Outlook
<p>CCIAP Action 10.1: 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)</p> <p>Long-term (>5 years)</p> <p><i>Economic Development, Planning and Economic Development</i></p>	<p>The City's Economic Development Division offers several programs designed to help local businesses pursue climate resilience and sustainability. These include:</p> <ul style="list-style-type: none"> • Various cost-sharing and tax increment-based grants through the Environmental Remediation and Site Enhancement (ERASE) Community Improvement Plan • Grants to support Leadership in Energy and Environmental Design (LEED) certification through the LEEDing the Way Community Improvement Plan. <p>INDICATOR – Uptake in programs being offered to promote climate resilience/ sustainability.</p> <ul style="list-style-type: none"> • In 2023 there were no applications made to the City's LEEDing the 	<p>In 2024, the City's Economic Development Division initiated a formal public review of the 'LEEDing the Way' Community 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.</p> <p>Indicators will be updated in future to reflect the outcome of the review and update of the LEEDing the Way program.</p> <p>INDICATOR – Uptake in programs being offered to promote climate resilience/ sustainability.</p> <ul style="list-style-type: none"> • In 2024 there were no applications made to the City's LEEDing the 	<p>The revamped 'LEEDing the Way' Community Improvement Plan, now referred to as the 'Growing a Resilient & Environmentally Sustainable Hamilton' Community Improvement Plan, was presented to GIC on April 30th, 2025, as Report PED25105. The report was referred back to staff along with the Green Building Standards Enhanced Engagement and Recommendations Report PED24114(a) and Green Building Standards Implementation Plan Report PED25117 for a deeper assessment of the developer costs associated with implementing these initiatives and the on-going costs to residents of these units.</p>

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	<p>Way initiative. Between 2014 and 2023 a total of two applications have been made to this program.</p> <ul style="list-style-type: none"> 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. <p>Future potential INDICATORS for tracking progress with building local business climate resilience:</p> <ul style="list-style-type: none"> Number of local businesses incorporating District Energy systems to reduce climate impacts. Number of businesses using sustainable/ low carbon options for moving cargo – i.e. 	<p>Way initiative. Between 2014 and 2023 a total of two applications have been made to this program.</p> <ul style="list-style-type: none"> In 2024, there were 3 applications for ERASE Study grants, 3 applications for ERASE Redevelopment grants, and 1 application for the new ERASE Affordable Housing grant. 	

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	<p>container services and increased rail and intermodal operations.</p> <ul style="list-style-type: none"> Number of local businesses with comprehensive climate action plans – including considerations of business-related climate adaptation measures. 		
<p>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).</p>	<p>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.</p> <p>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</p>	<p>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.</p> <p>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.</p>	

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<p>Medium-term (2-5 years)</p> <p><i>Corporate Facilities and Energy Management, Public Works</i></p>	<p>around this topic.</p> <p>INDICATOR - Local energy produced (private and public capacity of renewables within City)</p>	<p>INDICATOR - Local energy produced (private and public capacity of renewables within City) Information not available at this time. To be determined for the future.</p>	
<p>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 no-carbon emergency energy supplies such as batteries or energy storage for residents and businesses.</p> <p>Long-term (>5 years)</p> <p><i>Corporate Facilities and Energy Management, Public Works</i></p>	<p>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.</p> <p>INDICATOR - Number of zero and/or low carbon back-up retrofits</p> <ul style="list-style-type: none"> A lack of funding has delayed the implementation of proposed transitions to low carbon fuels. <p>The Energy Management Section also continued with</p>	<p>INDICATOR - Number of zero and/or low carbon back-up retrofits 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.</p> <p>INDICATOR - Annual Greenhouse gas emissions estimates from (municipal) generators. This is not tracked separately at this time. This is included in our emissions through diesel numbers. OPS would need to track all diesel inputs (litres) and outputs (hours</p>	

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	<p>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.</p> <p>INDICATOR - Annual Greenhouse gas emissions estimates from (municipal) generators.</p> <p>No data provided.</p>	<p>generators run x DL/hour run then convert to emissions. The cost to report outweighs the value add.</p>	