Report to Strategic Priorities and Policy Committee

To: **Chair and Members**
Strategic Priorities and Policy Committee
From: **Kelly Scherr, P.Eng., MBA, FEC**
Deputy City Manager, Environment & Infrastructure
Subject: **2024 Climate Emergency Action Plan Progress Report**
Date: **July 17, 2025**

Recommendation

That, on the recommendation of the Deputy City Manager, Environment and Infrastructure, the following actions **BE TAKEN** with:

a) This report, providing a summary of progress and policy implications and opportunities pertaining to the Climate Emergency Action Plan (CEAP) as well as the appendices, **BE RECEIVED** for information;

b) The report contained in Appendix E titled Pathways to Prosperity: Climate Action and the Energy Transition in London (prepared by Sustainability Solutions Group) be forwarded to Deloitte LLP, the consultant hired to undertake the development of the City of London Economic Development Strategy; and

c) Civic Administration **BE DIRECTED** to report back on CEAP progress once per year as opposed to the current twice per year frequency now that a comprehensive public CEAP dashboard is available and can be periodically updated throughout the year as actions progress.

Executive Summary

In April 2022, Municipal Council approved the Climate Emergency Action Plan (CEAP) with the goals of reducing community-wide emissions to net-zero by 2050, improving London's resilience to climate change impacts and ensuring that everyone in London is able to participate in working to reduce emissions and adapting to change. This Strategic Priorities and Policy Committee (SPPC) report covers the period from January 2024 to June 2025 and introduces some anticipated activities both underway and expected to start in 2025. The greenhouse gas (GHG) inventory period is from January to December 2024.

The approach to reporting on progress on the CEAP used in the most recent Progress Report is mirrored in this year's report with the addition of a new CEAP Dashboard available via www.London.ca/climate, which contains the status, qualitative update and links to relevant reports for each of the 200 actions of the CEAP. The new CEAP Dashboard has been modelled after the Strategic Plan Dashboard.

CEAP progress is examined in six key outcome areas highlighted below:

1. CEAP Actions by Area of Focus

The CEAP includes 59 Categories of Actions and contains 200 individual actions, ranging from basic to complex, across the ten Areas of Focus. Some actions in the CEAP address specific deliverables or achievements that can be tied to a timeline while other actions require ongoing efforts and do not have a specific targeted end date.

Each City Director responsible for actions in their division was part of the review of action status and progress. The actions were categorized as either on-track, completed, delayed, or under review.

Of the 109 Timeline Actions, 59 (54%) are on-track, 7 (6%) are delayed, and there are 5 (5%) actions under review. As of June 2025, 38 (35%) actions have been completed (up from 15 actions having been completed by May 2024). Over the course of 2024, the combined number of timeline actions considered delayed or under review was reduced from 34 actions to 12 actions.

Of the 91 Ongoing Actions, 85 (93%) are on-track, 1 (1%) is delayed, no actions are under review, and 5 actions are deemed complete. The original intent of Ongoing Actions was that they identified a need for ongoing efforts and would not have a specific targeted end date, however the 5 Ongoing Actions deemed complete were considered to no longer require ongoing action by Civic Administration. Council approved their change in status following the presentation of the Housing and Community Growth: Climate Emergency Action Plan Action Tracker Update report to the Planning and Environment Committee in May 2025.

Indicators of Progress Towards Expected Results

The number of measures of progress expanded from 75 to 81 indicators, up six since 2023, to further track progress across the ten Areas of Focus in CEAP. Many measures now have at least three consecutive years' worth of data which is useful to examine levels of progress that city-wide climate action efforts are achieving.

Upcoming Activities in 2025

In addition to the activities detailed in this CEAP Progress Report and the progress on actions listed in the CEAP Dashboard, activities continue and numerous are upcoming in 2025.

In Summary

In summary, approximately 99 per cent of the 200 CEAP actions, both Timeline and Ongoing Actions, have been started by Civic Administration or by organizations in London. About 94 per cent of the combined Ongoing and Timeline Actions are on track (72 per cent) or completed (22 per cent), while 4 per cent are delayed and 3 per cent are under review.

2. Climate Actions by Others in the Community

Achieving the goals of the CEAP requires effort from all sectors in London and is influenced by actions of others outside London. Several recent examples in the Businesses and Institutions sectors and Households, Individuals and Community Groups are listed in this SPPC report, informed in part by an update provided by the London Environmental Network. In summary, continued activity on climate action was observed in most sectors in London throughout 2024.

3. Climate Actions by Other Levels of Government

The federal government's decision to drop the consumer-focussed carbon price fossil fuel charge on April 1, 2025, along with the associated Canada Carbon Rebate, will likely slow the pace of greenhouse gas emission reductions for the transportation and building sector. The new federal government has indicated that it will rely more on incentive-based approaches to encourage household climate action in the future. The federal government's Output-Based Pricing System for industrial emitters remains in place, with proceeds from this system being used to provide financial incentives for their Decarbonization Incentive Program projects.

The federal government has also published its finalized Clean Electricity Regulations, which set an emissions limit without prescribing specific technologies. This technology-neutral approach enables provincial governments to determine their preferred path for building out their clean electricity grid.

In the case of Ontario, the provincial government is prioritizing expanded use of nuclear power generation but has also included renewables and energy storage systems.

4. Energy Use

Corporation of the City of London

The 2024 Corporate Energy Use and Greenhouse Gas Emissions Report summarizes all significant energy consumption, emissions, and costs associated with City operations. In addition to meeting the reporting requirements of the *Electricity Act and O. Reg. 25/23*, the report includes energy data for all infrastructure and fleet fuel use to provide a complete picture of energy performance relative to the City's CEAP targets (with 2007 as baseline year), and the 2024–2028 Corporate Conservation and Demand Management (CDM) goals (with 2023 as the baseline year). Key energy use performance measures include:

Performance Measures	Overall Change from 2007	Change from 2023 (CDM Baseline Year)
Total energy use	-13%	5%
Energy use per capita	-33%	2%
Facilities energy use per capita	-32%	-0.2%
Traffic signals and streetlights use per capita	-44%	-2%
Wastewater treatment energy use per capita	-44%	0%
Water supply energy use per capita	-16%	2%
Fleet operations fuel use per capita	-7%	11%

While total energy use and energy use per capita have decreased across all areas compared to 2007, energy use per capita increased by five per cent from the previous year. This rise is mainly due to:

- City facilities returning to pre-pandemic levels of operation;
- Commissioning of a new wastewater pumping station (Dingman Creek); and
- 2024 was the first full year of compressed natural gas (CNG) use in waste management trucks as part of fuel-switching project. While CNG produces fewer emissions than diesel, it is less energy efficient, resulting in higher reported energy use.

Community

Since 2005, the baseline year for the CEAP's greenhouse gas emission milestones and targets, total energy use has essentially been decoupled from population growth. In recent years, London's population has also been growing faster than previously anticipated, with Statistics Canada estimating that the London Census Metropolitan Area's population grew by 3.8 per cent in 2023 and 3.2 per cent in 2024. The impact of this growth is being offset by overall improvements in energy and fuel efficiency.

When compared to last year, there has been decrease in energy use primarily due to warmer winter weather lowering the demand for space heating. Comparing 2024 to the 2019 (pre-pandemic levels), reductions in total energy use and energy use per capita have occurred in all sectors in London. Key community energy use performance measures include:

Performance Measures	Overall Change from 2005	Change from 2019	Change from Last Year
Total energy use	-1%	-3%	-1%
Energy use per capita	-25%	-14%	-4%
Residential energy use per capita	-33%	-21%	-7%
Industrial, commercial & institutional use per capita	-21%	-9%	-4%
Transportation fuel use per capita	-25%	-17%	-3%

5. Greenhouse Gas Emissions

Corporate Energy-Related Emissions

Current corporate energy-related emissions have been influenced by the 2024–2028 CDM Plan, as well as previous provincial actions, including the phase-out of coal-fired electricity generation in the early 2010s. However, in 2024, Ontario's electricity grid relied more heavily on natural gas power plants compared to previous years. Since electricity accounts for 57 per cent of the City's corporate energy use, changes in the provincial grid have had and will continue to have a significant impact on corporate energy-related greenhouse gas emissions.

As a result, the City's greenhouse gas emissions in 2024 are approximately 17 per cent higher than they would have been if Ontario's grid emission intensity had remained at 2018 levels.

Additionally, the commissioning of a new wastewater pumping station and an increase in natural gas consumption, combined with higher grid emission factors, contributed to an overall rise in total and per capita greenhouse gas emissions in 2024 compared to the previous year. Key performance measures include:

Performance measurement	Overall Change from 2007	Change from Last Year (CDM Baseline Year)
Total GHG emissions	-51%	4%
GHG emissions per capita	-63%	1%
Facilities GHG emissions	-46%	1%
Traffic signals & streetlights GHG emissions	-80%	-2%
Wastewater treatment GHG emissions	-73%	4%
Water supply GHG emissions	-68%	2%
Fleet operations GHG emissions	14%	9%

Community-wide Emissions

Total greenhouse gas emissions in 2024 were 3.03 million tonnes of equivalent carbon dioxide, with half of the emissions coming from personal transportation and energy use at home. This is 22 per cent lower than 2005 levels, the baseline for measuring progress. When compared to last year, there has been decrease primarily due to warmer winter weather lowering the demand for space heating.

Although the community's use of total energy has decreased slightly and per capita energy use has decreased, when comparing 2024 to the 2019 (pre-pandemic levels), total greenhouse emissions have remained relatively unchanged due to the combination of faster population growth and increased use of natural gas for electricity generation. On a per person basis though, London's greenhouse gas emissions in 2024 are at their lowest level to date at 6.5 tonnes per person, 41 per cent below 2005 levels. Key performance measures included:

Performance measurement	Overall Change from 2005	Change from 2019	Change from Last Year
Total GHG emissions	-22%	-1%	-2%
GHG emissions per capita	-41%	-13%	-5%
Residential GHG emissions per capita	-53%	-18%	-9%
IC&I GHG emissions per capita	-44%	-1%	-5%
Transportation GHG emissions per capita	-29%	-17%	-3%
Waste sector GHG emissions per capita	-54%	-30%	-8%

6. Weather Trends and Impacts

The year 2024 was the warmest year on record globally going back to 1850. According to the World Meteorological Organization (WMO), the last ten years have also been the warmest ten years on record and along with warmer air temperatures. The year 2024 also set new highs in global temperatures over the land surface, ocean temperatures, and the amount of atmospheric water vapour (which is an important driver of extreme weather events). Monthly precipitation in southwestern Ontario ranged from well above to well below normal, with the greatest departures from normal being in July (just over 200% above normal) and December (just under 200% of normal, mostly snow). These were mainly due to a small number of heavy precipitation events.

Intense thunderstorms occurred over two days in July from London to the Greater Toronto Area (GTA) with 59.3 mm of rain recorded in London for July 15 and 44.7 mm recorded for July 16. Impacts from the storm included many flooded basements, the closure of Highway 402 and rail track washouts. The Insurance Bureau of Canada estimates the total insured losses from the storm across the region to be close to $1 billion.

A massive snow squall event took place across the Great Lakes region with some areas receiving more than 150 cm over the two-day period from December 2 to 3 (London received approximately 90 cm). Another round of lake-effect snow developed on December 5, resulting in pre-emptive school closures.

7. Financial Impact/Considerations

Detailed Community Energy and Emissions Forecasting Model
Civic Administration engaged a consultant, Sustainability Solutions Group (SSG), to develop a detailed community energy and emissions forecasting model for London that included estimates of the financial costs and benefits for trying to achieve net-zero emissions for 2050. SSG evaluated four scenarios for London and projected greenhouse gas emissions for 2050:

Scenario	Total Emissions (tonnes/year)	Change in Emissions from 2005	Per Capita Emissions (tonnes/year)	Change in Per Capita Emissions
Business-as-Usual (BAU)	3,750,000	-3%	5.5	-50%
Current Measures	1,890,000	-51%	2.8	-75%
Net Zero (LC1)	450,000	-88%	0.7	-94%
Zero Carbon (LC2)	550,000	-86%	0.8	-93%

Estimates for the Current Measures scenario indicate that it achieves about half of the reductions towards the Net Zero by 2050 goal compared to the Business-as-Usual scenario. This illustrates the need for further climate actions by all levels of government, local businesses and institutions, and Londoners.

SSG estimated the cumulative net present value cost-benefit impacts of the three emission-reducing scenarios out to 2050. Note that these costs and benefits are applied across London by local businesses, institutions, and Londoners as well as all three levels of government:

	Current Measures	Net Zero	Zero Carbon
Capital Investments Made to Achieve Savings	$2.5 billion	$11.8 billion	$9.0 billion
Operation & Maintenance Savings	$1.4 billion	$1.2 billion	$1.8 billion
Energy Use Savings	$7.5 billion	$13.2 billion	$16.5 billion
Avoided Carbon Pricing[1]	$1.6 billion	$4.5 billion	$5.1 billion
Net Implementation Savings	$7.9 billion	$7.2 billion	$14.3 billion

1 - This analysis was completed prior to the Federal Government's decision to suspend the consumer carbon price on fossil fuels and will be updated as future programs are defined.

All three scenarios provide a net benefit to London, since the combined avoided energy costs and reduced operating and maintenance costs are greater than the cost of the capital investments. Net Implementation Savings include avoided carbon pricing as prescribed by the Federal Government at the time of analysis.

For context, London's annual Gross Domestic Product (GDP) in 2024 was around $29 billion. The estimated level of investment represents a small share of London's GDP. Also noted on the table are the overall abatement costs (i.e., money spent or saved per tonne emissions reduced) and job creation benefits:

	Current Measures	Net Zero	Zero Carbon
Level of Investment Represented as Share of London's Gross Domestic Product (GDP)	0.4%	2.3%	1.7%
Overall Abatement Cost[1] ($/tonne CO_2e)	$318 saved	$144 saved	$270 saved
Net Job Creation	29,000 person-years[2] (1,100 full-time equivalent jobs)	141,000 person-years (5,200 full-time equivalent jobs)	109,000 person-years (4,000 full-time equivalent jobs)

1 – The marginal abatement cost is the incremental cost (or savings) of reducing one tonne of GHG emissions. It is calculated by summing the net present value of capital costs and operating costs over the lifetime of the investment divided by the tonnes of GHGs reduced.

2 – A person-year is a unit of measurement that can be used to quantify the employment impact of a project or to estimate the labour required for a specific task and can either represent the work of one full-time employee for a year, or the equivalent work of multiple part-time employees.

In summary, this modelling exercise shows that there are net positive financial benefits to climate action for Londoners and London's businesses and institutions including the accelerated electrification and renewable energy approach for the Zero Carbon scenario. However, experience to date shows that these actions are not happening fast enough or broad enough, not just in London but in Ontario, Canada, and globally.

The main challenge for climate action will be mobilizing the capital needed to create these benefits in the face of competing priorities. For example, in businesses and industry, there may be other non-energy business or process related projects that provide a faster return-on-investment. For homeowners, improvements such as renovated kitchens and bathrooms often have a higher priority, even when these may not provide a full payback on money invested (according to Re/Max, December 9, 2024,

typically about 70 to 80 per cent of the cost is recouped on resale of the home) compared to energy retrofits such as insulation, draft-proofing, and heat pumps that more likely can provide full payback over time.

To address the need to demonstrate the possibility of achieving net-zero (or near net-zero) by 2050, the modeling exercise assumes that capital funds can be obtained where needed. This is more or less the theory behind perfect capital markets as it assumes that capital is available to all businesses and individuals and without competition. If less capital funding is obtained and used for these actions, the financial benefit (savings) would be reduced and a larger gap created with reaching net-zero by 2050.

In addition to the potential positive long-term financial benefit of implementing actions to reach net zero emissions, most implemented measures will also provide increased resilience to the impacts of climate change. More local renewable power generation, less dependence on fossil fuels, and more energy efficient and weather resistant buildings will provide much needed low-carbon resilience as the impacts from global climate change advance.

Civic Administration recommend sending the Pathways to Prosperity: Climate Action and the Energy Transition in London report to Deloitte LLP, the consultant hired to undertake the development of the City of London Economic Development Strategy.

Climate Change Reserve Fund

The Climate Change Reserve (CCR) Fund was initially approved by Council with an allocation of $1 million per year for the term of the current Multi-year Budget (2023-2027). Planned annual contributions were subsequently reduced to $192,000 in response to competing priorities.

Total allocations to the CCR Fund as of the end of 2024 amounted to $1,192,000. Each of the projects either using or planning to use capital from the CCR Fund will advance important initiatives that will contribute to emissions reduction and resilience improvements, some of which can also return generated savings and/or grant funding to the CCR Fund. The CCR Fund is a key financial instrument that enables the City to advance on its climate action commitments.

Total allocations to the CCR Fund as of the end of 2024 amounted to $1,192,000. Approximately $225,000 have been allocated to projects and the remaining $967,000 is sought after by several projects in varying degrees of planning and/or approval which total a potential requirement of $1.21 million to $1.91 million.

Linkage to the Corporate Strategic Plan

Municipal Council continues to recognize the importance of climate change mitigation, climate change adaptation, sustainable energy use, related environmental issues and the need for a more sustainable and resilient city in its 2023-2027 Strategic Plan for the City of London. Specifically, London’s efforts in both climate change mitigation and adaptation address these areas of the Strategic Plan, at one level or another:

- Reconciliation, Equity, Accessibility and Inclusion
- Housing and Homelessness
- Economic Growth, Culture, and Prosperity
- Mobility and Transportation
- Wellbeing and Safety
- Climate Action and Sustainable Growth
- Well-Run City

Analysis

1.0 Background Information

The Climate Emergency Action Plan (CEAP) is a community-wide plan that was unanimously approved by Council in April 2022 following the declaration of a climate emergency in 2019. The CEAP sets out actions to drive progress towards these goals:

- Net-zero community greenhouse gas (GHG) emissions by 2050;
- Improved resilience to climate change impacts; and
- Bring everyone along (e.g., individuals, households, businesses, neighbourhoods).

The implementation of the CEAP is guided by milestone greenhouse gas emission targets for both London as a whole and the Corporation of the City of London:

- For London as a whole (community-wide):
  - 55 per cent below 2005 levels by 2030;
  - 65 per cent below 2005 levels by 2035;
  - 75 per cent below 2005 levels by 2040; and
  - Net-zero emissions by 2050.

- For the Corporation of the City of London:
  - 65 per cent below 2007 levels by 2030;
  - 75 per cent below 2007 levels by 2035;
  - 90 per cent below 2007 levels by 2040; and
  - Net-zero emissions by 2045.

The implementation of the CEAP is intended to be a whole community effort, with actions identified for the City, the community, businesses and institutions, and leaders throughout and near London.

1.1 Previous Reports Related to this Matter

Relevant reports that can be found at www.london.ca under Council meetings include:

- May 21, 2025, Housing and Community Growth: Climate Emergency Action Plan Action Tracker Update, Report to the Planning and Environment Committee (PEC)
- January 14, 2025, 2024 Climate Emergency Action Plan Update Report, Report to the Strategic Priorities and Policy Committee (SPPC)
- August 15, 2024, 2023 Climate Emergency Action Plan Progress Report, Report to the Strategic Priorities and Policy Committee (SPPC)
- January 16, 2024, 2023 Climate Emergency Action Plan Update Report, Report to the Strategic Priorities and Policy Committee (SPPC)
- May 30, 2023, 2022 Climate Emergency Action Plan Progress Report, Report to the SPPC
- April 5, 2022, Overview of Engagement and Feedback on Draft Climate Emergency Action Plan, Report to the SPPC
- February 8, 2022, Draft Climate Emergency Action Plan Report to the SPPC

2.0 Discussion and Considerations

This SPPC report builds upon the previous 2022 and 2023 CEAP Progress Reports and covers the period from January to December 2024, with additional highlights in 2025.

New for this reporting cycle is the addition of a public CEAP Dashboard where Londoners can access the most recent details on CEAP actions' status, qualitative updates, and timelines, as well as review indicators of progress (metrics). While the approach to reporting on progress is not changing, the digital dashboard will provide easier access to information and will generally take the place of the larger CEAP Progress Reports that have been prepared for previous years.

Reporting progress on the CEAP, by measuring where possible and following the activities of other key organizations where measurements are not possible, occurs by examining six key outcome areas (Table 1).

Table 1: Reporting Progress on CEAP

Progress Reporting Outcome Area	Subset of Outcome Area
1. CEAP Actions by Area of Focus	• Actions identified in CEAP • Indicators of progress towards 2030 Expected Results
2. Climate Actions by Others in the Community (and Interested Parties)	• Business and institutional sectors • Individuals, households and community groups • Others nearby
3. Climate Actions by Other Levels of Government	• Provincial • Federal • International
4. Energy Use	• Corporate energy use • Community-wide energy use
5. Greenhouse Gas Emissions	• Corporate greenhouse gas emissions • Community-wide greenhouse gas emissions
6. Weather Trends and Impacts	• London and area • Canada • Global

The progress reporting areas on Table 1 are addressed in subsequent sections of this SPPC report, with some additional information provided in referenced appendices.

2.1 Outcome Area #1 - CEAP Actions by Areas of Focus

All CEAP actions are listed in the new public CEAP Dashboard, available via https://www.London.ca/Climate, alongside their status, timeline, links to any staff reports or other reports providing further details, and a qualitative update. This change in reporting approach is intended to make information on CEAP actions and progress more accessible to Londoners. As CEAP actions progress throughout the year, the dashboard can be updated to reflect status changes and major updates in real time. To support this increased level of transparency and dynamic reporting for Londoners, Civic Administration is requesting that formal reporting to Council on CEAP updates and progress be shifted to once per year as opposed to twice per year, as is currently the expectation.

The same approach to monitoring progress on CEAP actions is still in use, including accounting for timeline actions (those that address specific deliverables or achievements that can be tied to a timeline (e.g., Transforming Buildings and Development's Action 2.a. "Reduce or eliminate parking minimums within the Zoning by-law")) and ongoing actions (those that require ongoing efforts and do not have a specific targeted end date (e.g., Transforming Transportation and Mobility's Action 2.c. "Continue to Support the Active and Safe Routes to School Program")).

The approach to measuring progress on the CEAP's 200 actions included knowledge available in the first half of 2025, including:

- CEAP activity in City Division and Service Area;
- Adopted 2024-2027 Multi-Year Budget and any amendments;
- Council's approved 2023-2027 Strategic Plan;

- Other high priorities assigned by Council; and
- Other legislative priorities.

Each City Director responsible for actions in their division was part of the review. The actions were categorized as either complete, on-track, delayed, or under review. Considering the difference between implementing timeline and ongoing actions, each implementation status category is further defined as follows:

Implementation Status: Complete
The action has been completed as intended or deemed complete following analysis of jurisdictional boundaries and/or legal requirements. Additional details for any situation where an action is considered complete when its original intent was not met are provided.

Implementation Status: On-track
- Timeline Action: The action has started by the intended start date, is progressing as expected and is projected to be completed by the intended completion date.

- Ongoing Action: The action has started by the intended start date and has either reached the desired state (i.e., the change to business as usual or new effort is in place or underway) or is progressing towards the desired state as intended.

Implementation Status: Delayed (from existing timeframe)
- Timeline Action: Actions that have had their completion date extended during the reporting period beyond the intended completion date for a particular reason (e.g., funding, resourcing, shifting of, or competing priorities). Also, any action that has not started by its intended start date and achieving the completion of the action by the intended completion date is considered unlikely.

- Ongoing Action: Actions that were intended to have started but have not been started on time but are still going to be pursued on an adjusted schedule.

Implementation Status: Under Review (based on more current information)
- Timeline or Ongoing Action: Actions that have not been started and/or a clear plan to complete or implement the actions is not available (e.g., the action is no longer interpreted to produce beneficial outcomes or outcomes that have not been achieved already through other means or by other involved parties, legislation or regulations have changed in such a manner as to prevent the action from occurring, and/or discussion remains on responsibility for the action).

The number of Timeline Actions included in each Area of Focus and the implementation status of those actions are listed in Table 2. Of the 109 Timeline Actions, 59 (54%) are on-track, 7 (6%) are delayed, and there are 5 (5%) actions under review. As of June 2025, 38 (35%) actions have been completed (up from only 15 actions having been completed by May 2024). Over the course of 2024, the combined number of timeline actions considered delayed or under review was reduced from 34 actions to just 12 actions.

Table 2: Timeline Actions – Status of Implementation

Area of Focus	Timeline Actions	Actions On-track	Actions Delayed	Actions Under Review	Actions Complete
1. Engaging, Inspiring and Learning from People	2	2	0	0	0 (0%)
2. Taking Action Now (Household Actions)	6	4	0	0	2 (33%)
3. Transforming Buildings and Development	18	4	0	2	12 (67%)

Area of Focus	Timeline Actions	Actions On-track	Actions Delayed	Actions Under Review	Actions Complete
4. Transforming Transportation and Mobility	21	11	0	1	9 (43%)
5. Transforming Consumption and Waste as Part of the Circular Economy	18	8	3	1	6 (33%)
6. Implementing Natural and Engineered Climate Solutions and Carbon Capture	7	5	0	0	2 (29%)
7. Demonstrating Leadership in Municipal Processes and Collaborations	24	16	4	0	4 (17%)
8. Adapting and Making London More Resilient	4	3	0	0	1 (25%)
9. Advancing Knowledge, Research and Innovation	7	6	0	0	1 (13%)
10. Measuring, Monitoring and Providing Feedback	2	1	0	0	1 (50%)
Total	**109**	**59 (54%)**	**7 (6%)**	**5 (5%)**	**38 (35%)**

The number of Ongoing Actions in each Area of Focus and the implementation status of those actions are listed in Table 3. Of the 91 Ongoing Actions, 85 (93%) are on-track, 1 (1%) is delayed, no actions are under review, and 5 actions are deemed complete. The original intent of Ongoing Actions was that they identified a need for ongoing efforts and would not have a specific targeted end date, however the 5 Ongoing Actions deemed complete were considered to no longer require ongoing action by Civic Administration. Council approved their change in status following the presentation of the Housing and Community Growth: Climate Emergency Action Plan Action Tracker Update report to the Planning and Environment Committee in May 2025.

Table 3: Ongoing Actions – Status of Implementation

Area of Focus	Ongoing Actions	Actions On-track	Actions Delayed	Actions Under Review	Actions Complete
1. Engaging, Inspiring and Learning from People	7	7	0	0	N/A
2. Taking Action Now (Household Actions)	12	12	0	0	N/A
3. Transforming Buildings and Development	4	3	0	0	1
4. Transforming Transportation and Mobility	9	9	0	0	N/A
5. Transforming Consumption and Waste as Part of the Circular Economy	3	3	0	0	N/A

Area of Focus	Ongoing Actions	Actions On-track	Actions Delayed	Actions Under Review	Actions Complete
6. Implementing Natural and Engineered Climate Solutions and Carbon Capture	8	8	0	0	N/A
7. Demonstrating Leadership in Municipal Processes and Collaborations	20	17	0	0	3
8. Adapting and Making London More Resilient	5	5	0	0	N/A
9. Advancing Knowledge, Research and Innovation	2	2	0	0	N/A
10. Measuring, Monitoring and Providing Feedback	21	19	1	0	1
Total	**91**	**85 (93%)**	**1 (1%)**	**0 (0%)**	**5 (5%)**

Timeline and On-going Actions delayed and/or under review generally fall into these categories:

- Changes (or lack of changes) of policy at other levels of government or lack of data or data collection methods. Actions in Area of Focus 7 (Demonstrating Leadership in Municipal Processes and Collaborations) and Area of Focus 10 (Measuring, Monitoring and Providing Feedback) have been delayed, at least in part, because of modifications to Provincial environmental assessment processes, or the lack of technically or economically feasible data collection methods and subsequent data. Examples of delayed actions in this category include exploring the potential to achieve net-zero carbon emissions from the wastewater treatment system and potential synergies in the management of biosolids, and holistically estimating climate impacts of land use, land use change, and urban forestry.

- Funding or resource (e.g., staff) limitations. Several CEAP actions that require additional investment were not supported in the 2024-2027 MYB process. These initiatives included several items from Area of Focus 7 (Demonstrating Leadership in Municipal Processes and Collaborations), including the electrification of more City fleet vehicles and investment in associated infrastructure, and the establishment of carbon accounting and budgeting processes.

- Longer timelines needed for collaboration activities. Many CEAP actions require extensive collaboration and/or leadership from outside of the Corporation of the City of London. In several cases, these collaborative efforts are requiring more time to make progress. Examples of actions delayed or under review in this category include the formal co-creation of a partnership for knowledge, research and innovation on climate action, and some regional and public transit actions.

In summary, approximately 99 per cent of the 200 CEAP actions, both Timeline and Ongoing Actions, have been started by Civic Administration or by organizations in London. About 94 per cent of the combined Ongoing and Timeline Actions are on track (72 per cent) or completed (22 per cent), while 4 per cent are delayed and 3 per cent are under review.

The status and update details for each CEAP action is now available in the new digital CEAP Dashboard, accessible at https://www.London.ca/Climate. A selection of highlights from each Area of Focus is presented below.

Area of Focus 1 – Engaging, Inspiring and Learning from People

- The Southwestern Ontario Climate Collaborative, a network of representatives of Southwestern Ontario municipalities, First Nations, Health Units and community organizations was created through leadership from Chippewas of the Thames First Nations and ICLEI Sustainable Cities Canada, with the aim to align and enhance regional climate adaptation efforts focused on watershed sustainability.

- A diverse group of Londoners has continued participation and engagement with the Tamarack Community Climate Transitions initiative, including the formation of a citizen-led effort to develop a neighbourhood-level resilience improvement strategy using the Woodfield neighbourhood as a pilot community.

- The London Clean & Green partnership celebrated its 30th annual campaign in April. The community and business campaign includes more than 30 partners that help rally the Londoners and businesses each year to prevent litter, turn waste into resources and hold cleanups across London.

- The London Cares Curb Hunger campaign has been active for 29 years. In the last five years the focus has been on celebrating and promoting urban agriculture, rescuing food that was once headed to landfill, supporting local food, reducing the climate impacts associated with food systems, and ensuring that fresh produce is available with non-perishable food for the London Food Bank and the many agencies its serves.

- Based on City of London advisory committee restructuring processes in 2024 and 2025, the Environmental Stewardship and Action Community Advisory Committee (ESACAC) was revised and new members appointed. Its mandate includes climate change mitigation and monitoring of London's Climate Emergency Action Plan. This has remained unchanged from previous advisory committees. ESACAC reports to the Community and Protective Services Committee.

- Engaging on climate action initiatives and programs is undertaken by many organizations in London including the London Environmental Network and its members such as ReForest London and Climate Action London, London Chamber of Commerce, Green Economy London, Western University, Fanshawe College and projects such as London Community Foundation Vital Signs (Climate & Environment), Fanshawe College community engagement on advancing the impact of Sustainable Development Goals in London and the National Climate League (with local data input from Climate Action London).

- Civic Administration efforts to educate and inform Londoners on climate change, environment, and sustainability issues included engagement with over 17,000 individuals and over 70 groups at events across the city in 2024.

Area of Focus 2 – Taking Action Now

- Work to design and support a program that will include home retrofit tools and funding to help London homeowners reduce their energy bills and GHG emissions has continued in 2024. The BetterHomes London home energy retrofit financing program is progressing through administrative, financial and legal steps with the Federation of Canadian Municipalities Community Efficiency Financing program and is anticipated to be released in spring 2026.

- Thames Valley District School Board and the City of London partnered to share more than 25 videos about climate action created by students. The videos were written, filmed, and edited by the students as part of a special project at school in collaboration with the City to highlight the importance of taking local climate action. The videos share messages about climate change, how to take climate action at home, and how Londoners can work together.

- Smart Commute London, a program offering support to employers and employees in using more sustainable choices of transportation for their work commute, launched in May 2024. Program participants have access to customizable resources to encourage walking, cycling, transit, carpooling, vanpooling, and telework, as well as information that helps with understanding the choices and why these steps are important in London and area. In the first year of operation, 15 employers representing over 26,000 employees throughout London are participating in the program.

Area of Focus 3 – Transforming Buildings and Development

- On several occasions in 2024, Municipal Council approved amendments that contribute to more compact and transit-supportive land use patterns that better optimize infrastructure and public service facilities, including:

    - Requirements for short-term bicycle parking spaces at a rate of 0.1 space per unit for townhouse and cluster developments of eleven units or more (Zoning By-law amendment);

    - Pre-zoning properties within the Protected Major Transit Station Areas (PMTSA) to facilitate development of high-rise and mixed-use apartment buildings (Zoning By-law amendment);

    - Requiring a minimum of five per cent of parking spaces for new residential and mixed-use developments with more than 40 residential units to be provided as electric vehicle charging stations (Zoning By-law amendment);

    - Increasing permitted maximum heights in the Downtown, Transit Village, Rapid Transit Corridor, Urban Corridor, Shopping Area, Main Street, and Neighbourhoods Place Types (London Plan amendment); and

    - Changes to require bird-friendly standards for City facilities and to encourage a minimum number of native species for landscaping (Site Plan Control By-law amendment).

- Municipal Administration brought forward a report to Council exploring the potential to institute a maximum temperature by-law to improve resilience of multi-unit residential buildings to extreme heat. The report was received and the recommendation to return with a by-law was approved, with follow-up planned for later in 2025.

- In November 2024, Council approved the revised Site Alteration By-law, which now encompasses the entire limits of the city (with specific exceptions) and addressed limitations of the existing by-law. The proposed changes enhance the protection of natural heritage, facilitate site alteration activities earlier in the development process, and streamline the permitting process.

- Civic Administration brought forward a report to Council in June 2025 proposing a plan to create a Green Development Guidelines Framework. However, the Green Development Guidelines Framework was referred back to Civic Administration for an additional report back to the Planning and Environment Committee on scope and feasibility following a decision on provincial legislation Bill 17, Protect Ontario by Building Faster and Smarter Act, 2025.

Area of Focus 4 – Transforming Transportation and Mobility

- Mobility Master Plan (MMP) Network Map infrastructure recommendations and maps were provided and approved for Roads Projects, the Transit Priority Network, the Cycling Network, and Sidewalk Gaps on Major Roads. The maps form part of the Mobility Master Plan final report also being considered at this meeting of SPPC. The report also included an initial estimate of the magnitude of project capital costs,

recognizing that the MMP is a strategic growth plan and more detailed cost estimating will occur through subsequent budget and Growth Management Implementation Strategy (GMIS) processes.

- Significant achievements have been made for rapid transit in London with more rapid transit construction now completed compared to work still to complete:

    - Downtown Loop construction is mostly completed with LTC buses now using the bus-only lanes with the help of transit priority signals;

    - East London Link Phases 1 and 2 have been completed, Phase 3 construction continues, and Phase 4 started spring 2025. Phase 5 is anticipated to be built in 2026;

    - Wellington Gateway Phase 1 will be complete with final touches in 2025. Phases 3 and 4 are underway at the south end of Wellington Road and will wrap up in 2026. Clarks Bridge Widening is in its second year and Phase 2, which includes the S-curve and Commissioners Road intersection, is planned for construction in 2026 and 2027; and

    - New rapid transit system shelters at stops have been installed, bringing additional visibility to the progress of construction.

- Work continues on an Interim Bike Parking Plan that will build on past City-led bike parking initiatives to help guide the provision and management of bike parking across the city. This includes bike parking for short-term and for long-term purposes.

Area of Focus 5 – Transforming Consumption and Waste as Part of the Circular Economy

- The W12A Landfill's landfill gas management system underwent upgrades to install a larger capacity landfill gas flaring system, which has increased the amount of methane destroyed at the landfill site by more than 40 per cent.

- The Circular Innovation Council was engaged to launch the work of developing a Circular Economy Framework for London. Initial efforts included hosting a presentation jointly with the City of London and the Chamber of Commerce as part of a Climate Action Month in November to advance understanding and awareness of circular economy principles and potential in London.

- The production of a fertilizer product from wastewater treatment biosolids (otherwise considered a waste) was successfully implemented in 2024 at the Greenway Wastewater Treatment Plant while the incinerator was offline for repairs for a period of 6 months. The fertilizer was land applied to various farms in Southwestern Ontario without issue and contributed to climate action through the displacement of fertilizers manufactured from raw materials that would otherwise have had to be shipped to those farms.

- The Worn or Torn clothing and textile donation drive (pilot project) with Goodwill Industries, Ontario Great Lakes and Fanshawe College was launched in late June. The drive portion goes from July 2 to July 20, 2025. Byron residents can participate by donating their old textiles, regardless of their condition – such as sheets, blankets, towels, rags, pillows and stuffed animals – at the Goodwill Donation Centre located next to the City of London Oxford Street EnviroDepot during the donation period. While the pilot project is beginning with Byron residents this year, it will be measured to help determine potential growth of the donation drive in the future.

Area of Focus 6 – Implementing Natural and Engineered Climate Solutions and Carbon Capture

- Installation of permanent sample plots in City-owned woodlands started in 2024 and will continue through 2026. Soil at each of these plots is being collected and analyzed for total carbon. Tree parameters are also being collected to provide baseline measurements to enable carbon sequestration calculations. This work is advancing the understanding of actual and potential carbon sequestration within London forested areas and will be part of a forthcoming major study of the urban forest, with deliverables expected in Q1 2027.

- An estimated 5,450 trees were given away in 2024 for Londoners to plant on private property through regular give-aways at the Oxford EnviroDepot, and as part of events across the city including Hope in the Land, National Tree Day and a local real estate association event.

Area of Focus 7 – Demonstrating Leadership in Municipal Processes and Collaborations

- The City of London and the Chamber of Commerce signed a Memorandum of Understanding (MoU) to formalize collaborative efforts to take climate action and the Chamber of Commerce hosted a climate action month for business in November with several awareness-raising events.

- Community grants provided by the City of London each year enable work in the community to progress, including valuable work that includes climate action. In June 2025, Council approved grassroots, innovation, and capital allocations through the Grants Program for several organizations taking climate action including: Pollinators Pathways Project (hosted by London Environmental Network), Kensington Village Association (The Edible Neighbourhood Project hosted by Thames Region Ecological Association), London Environmental Network (Circular Economy Collaboration), and Urban Roots London.

- The City of London secured $2.3 million in funding from the Federal Government to contribute to the installation of a new refrigeration plant with a heat pump and thermal battery storage at Earl Nichols Arena. The retrofit is expected to reduce emissions from the facility by 246 tonnes and reduce energy consumption by 42 per cent.

- Council requested City of London Agencies, Boards, and Commissions to prepare climate action plans that document how each organization is aligned to CEAP objectives and moving towards lower GHG emissions and improved resilience. Work with each organization will start in mid-2025 with climate plans due to be completed by mid-2026.

- Use of the Climate Lens Framework has continued in many parts of Civic Administration, including as part of the annual budgeting process where Environmental, Social and Governance issues are being increasingly integrated into the process, in the onboarding for staff where a climate change module is mandatory during corporate orientations, and integrated into the Design Specifications and Requirements Manual (DSRM) update process.

- In June 2025, the City of London signed up for participating in the Independent Electricity System Operator (IESO)’s Strategic Energy Management (SEM) and Energy Manager (EM) programs for its linear assets (Water and Wastewater Operations) for the next two years. This participation supports the City’s CEAP by enhancing energy performance, reducing greenhouse gas emissions, and building internal capacity through training, strategic planning, and enterprise-wide collaboration.

Area of Focus 8 – Adapting and Making London More Resilient

- Key Thames River flooding resilience projects advanced in 2024 including the completion of the Harris Park riverbank and floodplain resilience project, progression to the next phase of the West London Dyke strengthening project, and initiating construction of a barrier wall and pumping station to improve flood resilience at Greenway Wastewater Treatment Plant.

- The City's Emergency Management team worked closely within Civic Administration and with community partners to share information on the hazards and risk in the city as well as personal preparedness to mitigate the impact of an event on individuals and families. Key recent activities included engaging with Londoners and distributing educational materials at community events, hosting a severe summer weather presentation by Environment and Climate Change Canada staff for Civic Administration, and collaborating with London Hydro to include emergency management information in their public communications.

- The Climate Change Adaptation Discussion Primer was released for comment in summer 2024 and several additional pieces of work were undertaken by Civic Administration relating to climate adaptation, which advanced work and community engagement contributing to the Climate Change Adaptation Framework. This work is discussed further in section 2.1.3 Progress of Major CEAP Frameworks.

A**rea of Focus 9 – Advancing Knowledge, Research and Innovation**

- Conversations continue between Civic Administration and researchers from Western University's Environment and Geography, HEALab, Engineering, Ivey School, and other departments to match research needs of the City with student research projects. Recent projects include work relating to the creation of more circular economy opportunities in London, advancing active transportation use city-wide, and the development of GHG emissions mitigation projects through Western's Carbon Solutions Consortium.

- Civic Administration continues to work with researchers from Western University on a federally funded project for improved multi-scale greenhouse gas emissions modelling from urban environments to enhance mitigation strategies. This work leverages the recently completed ScenaCommunity emissions reduction and financial model for climate actions in London (by SSG - Sustainability Solutions Consultants), including the use of this model to help London Hydro forecast future peak electricity demand associated with climate action.

- Civic Administration supported researchers from Western University and the private sector (Comcor Environmental and GHGSat) on a federally funded project for testing the effectiveness of multi-scale measurement of methane emissions from London's W12A landfill. Methane is a potent greenhouse gas with 28 times the global warming potential of carbon dioxide. This project compares the results from measurements take from ground sweeps, drones, and satellites to improve the ability to detect and measure methane emissions from the landfill.

Area of Focus 10 – Measuring, Monitoring and Providing Feedback

- New this year, CEAP reporting will include a detailed public dashboard where each of the 200 actions of the CEAP along with their status, relevant reports, and qualitative updates will be made available. Each of the measures of progress for the Areas of Focus will also be available to the public and researchers looking to explore climate data in further details.

2.1.1 Indicators of Progress Towards Expected Results

The CEAP Area of Focus Workplans reference numerous potential indicators of progress that are intended to evolve throughout the CEAP implementation process and

be used to characterize the progress towards CEAP goals. The 2023 Progress Report includes 81 indicators, an increase of 6 indicators over the 2023 Progress Report. Consistent with the 2023 Progress Report, in addition to the potential indicators included in the CEAP, measures that have been historically reported in the City's annual Community and Corporate GHG emissions reports are also reported as part of CEAP Progress Reporting. These are all available online in the CEAP Dashboard.

New progress measures include more detailed information on waste diversion, recycling and source separated organics collection (Green Bin) participation, as well as increased information on the community garden program. Many measures now have at least three consecutive years' worth of data which is useful to examine levels of progress that city-wide climate action efforts are achieving.

The broad nature of climate change mitigation and adaptation actions and the varied processes, services, infrastructure, systems and aspects of society that they impact make determining and comparing progress in each Area of Focus complex. In each Area of Focus, the identified measures of success reflect some components of progress, however there is still ample room to improve quantitative analyses and there is no standard or widely accepted holistic approach to quantitatively assessing climate change action performance at the municipal scale. The collection and publication of the identified progress measures is intended to encourage and facilitate further research on this objective.

Many of these indicators of progress have also been shared with the London Community Foundation for use on the Vital Signs Data Hub and used by other organizations to share data, compare data and provide further comments.

2.1.2 Progress on Three Major CEAP Actions

Two major CEAP frameworks are currently under development, the Climate Change Adaptation (CCA) Framework and the Circular Economy Framework. Each of these frameworks are related to actions within the CEAP and are intended to provide a foundation for further action in London to improve resilience to the impacts of climate change and create more circular business models, waste avoidance, and material sustainability, respectively.

A third major action is the completion of the Corporate Climate Change Adaptation Plan focused on actions within the control of Municipal Council. The separation of a CCA Framework geared for residents, businesses and institutions and a Corporate CCA Plan is consistent with Corporate Conservation Demand Management Plan (energy use) and a review of comments on the CCA Discussion Primer.

A review of work completed on these three projects including consultation feedback coupled with a review of existing workload has resulted in revised timelines and activities for these projects which is also presented in this section.

Climate Change Adaptation Framework
The CCA Framework is intended to raise awareness and provide the foundation for others to plan and implement climate change adaptation actions and build upon the existing and past actions taken by the City of London and others to prepare for and respond to the impacts of a changing climate. In summer 2024, a CCA Discussion Primer was released for public review and comment, which included key information supporting the development of the both the Framework and a near-term plan for the Corporation of the City of London.

Engagement on the CCA Discussion Primer on the City's Climate Change Get Involved webpage included just over 100 responses from Londoners. Over two thirds of respondents indicated that climate change has affected their lives to some extent, reflecting a sense of lived experience with climate change instead of it just being a distant or abstract idea. Generally, respondents were seeking actionable advice and local information to help them respond to climate challenges.

In addition to the preparation and release of the CCA Discussion Primer in 2024, Civic Administration engaged the Climate Risk Institute to conduct a comparative analysis of the London-focused work to date and that of Ontario's Provincial Climate Change Impact Assessment. The comparative analysis highlighted several opportunities to strengthen the evolving approach to planning for adapting to climate change in London, which warrant further exploration and assessment. More specifically, London's approach to climate change adaptation would further benefit from:

- Expanding the risk assessment beyond City operations by integrating broader regional risks and external environmental factors, similar to the provincial approach;

- Integration of spatial analysis of climate risks and cross-referencing equity-seeking group spatial data to determine areas of the city more in need of adaptation action;

- Further efforts to explore the interdependence between infrastructure systems to minimize cascading climate impacts, such as how damage to one system can trigger failures in others; and

- Analyzing the 91 adaptation best practices that the Climate Risk Institute identified in the Provincial Climate Change Impact Assessment for their relevance to London. Relevant best practices could help inform London's climate risk assessments and adaptation planning by providing a structured approach to selecting locally appropriate measures.

Addressing the recommendations of the Climate Risk Institute's comparative assessment in the developing Framework and the creation of a separate Corporate near-term adaptation plan will also inform further engagement and collaboration with residents and interested parties with key roles and responsibilities in community scale climate change adaptation. Recognizing the wide scope of efforts required to increase city-wide climate change resilience, collaboration and cooperation on this work is vitally important.

The next round of engagement on climate change adaptation and resilience with residents and key interested parties will focus on refining the components of the Framework and determining the preferred method(s) participants wish to engage with it once it is complete (e.g., digital static resource, dynamic web-based resources, printed material in strategic locations, live events, etc.). The Draft Table of Contents and a few explanatory notes are provided in Appendix A.

The anticipated timeline to advance the Draft CCA Framework to a final document, including additional engagement and determination of the preferred mean(s) of publication and access of the material is presented below:

Timeline	**Activity**
Q3 2025	Further engagement from local organizations and Londoners on what resources would be most helpful to enable their climate change adaptation planning
Q3 2025 into Q1 2026	Completing an expanded community-wide climate change risk assessment to highlight priority areas and issues
Q2 2026	Present Draft CCA Framework to Council.

Corporate Climate Change Adaptation Plan
While the CCA Framework is intended to benefit all London organizations, institutions, households and individuals by raising awareness and being a resource to support climate change adaptation planning, establishing a near-term action plan for increasing Civic Administration's climate change resilience is also planned.

Recognizing that Civic Administration have embedded climate change adaptation principles and objectives in several ways and in many Service Areas already, the exercise of preparing a near-term plan for going further with adaptation action will be an enterprise-wide collaborative effort integrating the complexities of the impacts of climate change and other competing priorities facing the Corporation. The focus of the planning process will be on identifying and evaluating the most impactful actions that can be pursued that are specific, measurable, achievable, relevant and time-bound. A timeline for the development of the Corporate CCA Plan is presented below:

Timeline	Activity
Q3 2025	Establish Corporate climate change risk assessment team to confirm risk priority and initiate draft action evaluation.
Q4 2025 into Q1 2026	Extend Corporate risk assessment and prioritization findings to key participant organizations for additional input and potential opportunities to collaborate.
Q2 2026	Present Draft Corporate CCA Plan to Council.

Circular Economy Framework
The Circular Economy (CE) Framework is intended to bring together local and regional knowledge on existing circular business models, waste avoidance, and material reuse and recycling to create a foundation for improved sustainability and to grow awareness for and use of the circular economy concepts and practices.

Civic Administration has started CE Framework development process including the facilitation of the kick-off to the City and Chamber of Commerce Business Climate Action Month in November 2024. Technical specialists from the Circular Innovation Council shared existing knowledge from projects across Canada. Additional work was recently compiled by the Ivey School.

A timetable for activities is provided below:

Timeline	Activity
Q3 2025	Complete rationale and draft outline for a CE Framework. This would include developing a connection with other economic development plans such as with Deloitte LLP, the consultant hired to undertake the development of the City of London Economic Development Strategy. As part of the City of London Community Grants Program (Innovation) recently awarded by Council to the London Environmental Network, work on knowledge sharing, education, and collaboration with partners to develop innovative solutions for advancing circularity across various sectors is planned. This will promote sustainable business models and lifestyles to address climate action and sustainable growth (ends Q3 2026).
Q4 2025	Engagement and input from local organizations and Londoners.
Q4 2025 into Q2 2026	Continue work to assess and incorporate input, evaluate opportunities and potential strategies for growing the circular economy.
Q3 2026	Present Draft CE Framework to Council.

2.1.3 Upcoming Activities in 2025

Many activities are either underway and finishing or starting later in 2025. A sample of those items include:

- At the same SPPC meeting as this report, the Final Mobility Master Plan report will be considered for approval, direction to file a Notice of Completion and post for 30-day public review and comment.

- Housing and Community Growth advancing a green development framework leading to green development guidelines, depending on outcomes of recent Provincial policy changes and legal challenges.

- Strengthening the protection provided by the Broughdale Dyke, which protects 190 properties north of downtown from Thames River flooding, will continue construction in 2025 in addition to the final stretches of the West London Dyke, each of which is supported by Federal funding from the Disaster Mitigation and Adaptation Fund (DMAF).

- Finalization of the biosolids management master plan to guide Wastewater planning for the next 10 to 20 years and capitalize on potential synergies to reduce energy use, reduce greenhouse gas emissions and co-manage landfill gas and source-separated organics management.

- Community outreach initiatives including:
  - Outdoor events at Victoria Park and several other locations across London (June to August);
  - Watt a Ride e-bike event with London Cycle Link (June);
  - PowerShift: Your Electrification Expo event featuring electric vehicles, e-bikes, heat pumps, solar panels, and other equipment with London Hydro (September); and
  - Hope and Action: Building Resilient Communities with UTRCA and many others (October).

2.2 Outcome Area #2 - Climate Actions by Others in the Community

Achieving the goals of the CEAP requires effort from all sectors in London and is influenced by actions of others outside London. A few recent examples in the sectors Businesses and Institutions and Households, Individuals and Community Groups are listed below. Assistance with the collection and compilation of information in these sections was provided by the London Environmental Network (LEN).

2.2.1 Businesses and Institutions

The London Chamber of Commerce Business Achievement Awards were held in May 2025. Notable winner and finalists included:

- Winner of the Climate Action Leadership Award - BlueStone Properties was recognized for its commitment to sustainability and environmental stewardship in property management and development. Their approach includes reinvesting in buildings, maintaining high operational standards, and creating functional, beautiful, and eco-conscious spaces.

- Finalist of the Climate Action Leadership Award – Convertus Group is a Canadian leader in organic waste processing, transforming food and yard waste into compost while advancing circular economy solutions and aiming for energy neutrality by 2035. They currently operate in five Canadian provinces. Convertus processes about 15,000 tonnes of Green Bin materials from the City of London.

Green Economy London (GEL) Program
LEN's Green Economy London (GEL) program included 37 Green Economy London members in 2024, representing accommodation and food services, professional services, arts & entertainment, retail, real estate, health care, agriculture, utilities, construction, manufacturing, administrative, and education sectors. The GEL Team provided insights on what climate action local businesses are currently taking and how they can contribute to the City's CEAP. Highlights of recent initiatives, efforts and outcomes from the GEL program include:

- Completed and provided 20 GHG inventories and sustainability reports for member organizations in 2024;

- Distributed $21,000 in Green Project Support for Green Economy London members to implement projects such as waste audits, low-flow plumbing fixtures, environmental stewardship and biodiversity projects, and energy-efficient heating, ventilation, and air conditioning (HVAC) system upgrades. Specifics include:

    - BlueStone Properties - Replaced 50 toilets at the Dufferin Corporate Centre with low-flow models;

    - Let's Talk Science - Installed a low-flow toilet and a water monitoring system to track consumption and inefficiencies;

    - Junction Climbing - Lighting retrofit to replace 65 fluorescent light fixtures with energy-efficient LED lights;

    - The Ice Box - Expanding their solar battery system for their food truck, allowing them to go further GHG emission-free and keep their products frozen in transport;

    - London Bicycle Cafe - Purchased an additional cargo e-bike for the Bike for Business program, enabling local businesses to rent it out for long term trials;

    - Dough EV - Purchased a cargo e-bike, allowing them to deliver their products throughout the city emission-free; and

    - Clayworx - Lighting retrofit to replace 62 long tube fluorescent lights with energy-efficient LED lights.

- In late 2024, GEL and its members celebrated the 4th annual Green Leader Awards, recognizing business and community leaders working to make London a greener and more resilient city for all. The following GEL members were awarded:

    - Emissions Reduction of the Year: The Ice Box;
    - Rookie of the Year: Junction Climbing;
    - Environmental Steward of the Year: MTE Consultants;
    - Circularity Award: Play Away Indoor Park; and
    - Green Project Implementation: BlueStone Properties.

- Green Economy London (GEL) partnered with the London Chamber of Commerce and the City to launch "Climate Action for Businesses Month" in November. This campaign brought together business and industry professionals for a series of events on climate change mitigation, adaptation, and environmental sustainability in the business landscape.

- Produced four case studies about past projects to showcase climate action by London businesses:

    - E-Bikes at Play: Enhancing Sustainability and Employee Well-Being at Play Away Indoor Park;
    - Blueprint for Sustainability: BlueStone Properties' Organics Program;
    - Sustainability in Action: MTE Consultants Green Team; and
    - Sustainability on the Go: How The Ice Box Transformed its Food Truck.

- In early 2025, the 5th annual Green Leader Awards recognizing and celebrating the accomplishments of the LEN network, GEL members and outstanding partners was held where the following GEL members, LEN members and community members and organizations were recognized:

    - Green Innovation: GreenTech Painting (GEL member);
    - Rookie of the Year: Clayworx & London Bike Café (GEL member);
    - Environmental Steward of the Year: Lerners LLP (GEL member);

  - Circularity Award: Heeman's (GEL member);
  - Green Project Implementation Award: Dough EV (GEL member);
  - Outstanding Member Award: Thames Talbot Land Trust (LEN Member);
  - Community Impact Award: ALUS Middlesex (LEN Member);
  - Community Choice Award: Shely K. (Community Member); and
  - Partner of the Year Award: Community Living London (Community organization).

- Green Economy London (GEL) continues to provide support for members transitioning to the new GHG accounting platform, Carbonhound. GEL has been working with members to onboard and upload their data, and work with the nationwide network Green Economy Canada to produce reports.

- In April 2025, Green Economy London organized a clean up and promoted London Clean & Green to members. Participating members included: Junction Climbing, BlueStone Properties, The Atrium, Convertus, IDS, Graphenstone, ReForest London, and MTE Consultants.

- Plans are underway to launch Sustainability Socials; a new series of networking and learning events designed to connect changemakers, inspire collaboration, and advance local sustainability efforts. Each Sustainability Social will spotlight a unique theme, offering space for idea exchange, resource sharing, and community building across sectors. Whether you're a nonprofit leader, local business, student, policymaker, or passionate resident, these events will offer insight, inspiration, and connection.

Thames Valley District School Board (TVDSB) and the City of London have partnered to share more than 25 videos about climate action created by students. The videos were written, filmed, and edited by the students as part of a special project at school in collaboration with the City of London to highlight the importance of taking local climate action. The videos share messages about climate change, how to take climate action at home, and how Londoners can work together. Students met with City staff earlier in the year to learn more about climate action and were supported by their teacher or Learning Support Teacher within their school to create their video. Further details and the videos can be found at: https://getinvolved.london.ca/tvdsb-climate-action.

Enbridge Gas continues to be an active partner with the City of London on local climate actions. Enbridge's conservation programs, such as Home Efficiency Rebate Plus, Home Winterproofing, and Savings By Design for commercial buildings, form the backbone of many climate actions undertaken by Londoners and London businesses. Participation in Enbridge's programs in London include:

- 2,502 households participating in the Home Efficiency Rebate Plus program;
- 113 households participating in the Home Weatherization and other lower-income free upgrade programs;
- 25 custom projects for lower-income multifamily rental buildings; and
- 47 commercial building and 5 industrial projects.

In total, Enbridge estimates a savings of over 8.9 million cubic metres of natural gas per year from these measures in 2024, over double the amount of gas saved from these measures in 2023. These measures result in a greenhouse gas emissions reduction of almost 17,300 tonnes per year.

The London Home Builders' Association continues to be an active partner with the City of London in the Towards Net Zero Renovations program being delivered by the Canadian Home Builders' Association. This program is helping to build local capacity for both renovators as well as energy advisors to be able to assist Londoners interested in deep home energy retrofits.

The latest development in London's West 5's neighbourhood, EVE Park, recently received BUILT GREEN® Platinum High Density certification for its first two net-zero, highly sustainable residential condominium buildings. These two buildings are two of

only 30 structures in Canada to receive the Platinum level certification in the 10 years since the High Density program through Built Green Canada was introduced. The Platinum certification required that the development meet building envelope and energy systems performance criteria, as well as address requirements related to materials and methods, indoor air quality, ventilation, waste management, water conservation, and business practices.

Drewlo Holdings, in partnership with NERVA Energy, won a Clean50 award achieved the largest multi-residential smart building conversion in North America. Involving more than 1,500 mechanical systems, this project resulted in a portfolio-wide total natural gas demand reduction of 1.3 million cubic metres per year (38%) a decrease in of 3.1 million kilowatt-hours (33%) of electricity, a 36 per cent reduction in greenhouse gas emissions, and an estimated $1.5 million in annual energy savings with a 16 per cent return-on-investment for the project.

Purolator's London terminal is one of three in Canada testing the use of medium-duty electric vehicles (vans) for deliveries.

The London Bicycle Café launched its Bikes for Business pilot program which provides e-bikes for local businesses and organizations to tryout for several weeks. The initiative is funded through the 2024 Desjardins GoodSpark Grant with support from Green Economy London and Northern Commerce. As note previously, in 2025, London Bike Café earned the Green Project Implementation Award from the London Environmental Network, recognizing its leadership in sustainability. The café was celebrated for integrating eco-conscious practices into its operations, including promoting cycling culture, reducing waste, and supporting local environmental initiatives. In addition to its award-winning green efforts, the café expanded its community outreach through workshops, advocacy for active transportation, and partnerships with local organizations.

2.2.2 Individuals, Households and Community Groups

Upper Thames River Conservation Authority
The Upper Thames River Conservation Authority, supported by 12 community organizations and the City of London, hosted two new climate change themed community engagement events in late 2024. The first event, a "Hope and Action Climate Change Festival" took place at Fanshawe Conservation Area and included several family-friendly activities and information booths. The second event, a "Hope and Action Climate Change Symposium" took place at Museum London and included several seminars and interactive learning sessions for students on the first day, with the second day open to the public. Attendance across both events totaled over 3,200 people.

Climate Action London and London Greening Health Collaborative
Climate Action London and London Greening Health Collaborative hosted an in-person gathering to participate in Engage Fest, a two-day event hosted by the Tamarack Institute to promote community engagement on climate action. In addition, the same groups, along with support from the City of London were accepted into the new adaptation project cohort to focus on neighbourhood level climate change adaptation capacity.

Climate Action London
Volunteers from Climate Action London publish a weekly e-newsletter on climate initiatives in and around London, attend numerous outreach events and lead and coordinate the annual EarthFest event in April each year.

London Environmental Network
The London Environmental Network (LEN) has continued collaborations with partners and members to engage Londoners on climate action with events like The Green Leader Awards, Green in the City and community workshops on retrofits, edible gardens, active transportation, rain garden implementation and more. LEN has

continued to build capacity in the community for environmental projects and greenhouse gas emission reductions, including:

- LEN invested a total of $219,865 in green technology and $265,368 in the local economy in 2024;

- Greener Homes London Program (GHL):
  - Distributing rebates for 23 homeowners that have implemented home retrofits such as air source heat pumps, solar PV systems, improving insulation, and rain barrels; and

  - Supporting 22 homeowners and renters with one-on-one free sustainability Home Consultation sessions. These sessions provide residents with guidance about available home retrofit incentives as well as tips and resources to make their homes more sustainable.

- Nonprofit Resiliency Project (NRP):
  - Working with 9 non-profits, and 30 nonprofit owned buildings that provide housing to equity-denied groups to implement clean energy projects in their buildings (via funding from London Community Foundation and other partners). Completed deep retrofits (rooftop solar array, Energy Star windows and doors, air sealing and insulation) at a Community Living London multi-unit residential building (MURB) bungalow, yielding a 33% emissions reduction over a 5-month period;

  - Working with First Nations partners at Chippewas of The Thames First Nation to complete near net zero retrofits for previously propane reliant homeowners reducing significant GHG emissions and saving the community energy costs; and

  - Continued sustainability walkthroughs and action planning for 9 non-profit participants through the Nonprofit Resiliency Project and completed retrofits at 4 buildings to improve energy efficiency: Energy Star windows and insulation (Community Living London), LED retrofit and Energy Star windows and doors (St. Leonard's Community Services), and insulation (Chippewas of the Thames First Nation).

  - Thriving Communities Program:
    Working with the Thames Valley District School Board (TVDSB) and ReForest London to implement mini-forests and naturalized school yards for practical and educational purposes:
    - 25 community volunteers supported planting LEN's first ever Mini Forest with ReForest London, where 300 native trees and shrubs were planted within 100 square meters at the Westminster Ponds Centre.

    - LEN partnered with TVDSB to transform underutilized asphalt into an interactive diverse native pollinator garden for an elementary school, with over 100 native plants.

  - In 2025, the Thriving Communities Program is continuing the Residential Rain Garden Program, planting another mini forest with Upper Thames River Conservation Authority (UTRCA), and planting an edible landscape with Community Living London:
    - Supporting five (5) homeowners to install a rain garden on their property through the 2025 Residential Rain Garden Program. We had 22 community members in attendance at our rain garden workshop, co-hosted with UTRCA;

    - LEN and UTRCA are planting a mini forest at the former safety village in the Fanshawe Conservation Area. This mini forest will serve as an educational site for the community, and a demonstration of what a mini forest is, their impact on biodiversity, importance of native species restoration, and provide community engagement; and

  - LEN is planting an edible landscape at Community Living London, building their staff and tenants annual raised garden beds, and planting perennial trees and shrubs. LEN is also creating seating areas throughout the landscape, which will encourage individuals to enjoy the space and reconnect to nature and the food they consume.

- Environmental Action Incubator Program for LEN Members: Distributing funds through the Environmental Action Incubator to environmental grassroots and nonprofit groups that reduce waste, reduce emissions, conserve water, enhance local biodiversity, and engage the community with sustainability (via corporate donation from Canada Life):
  - ALUS Middlesex purchased a nest box camera to passively document on-site wildlife activity. Photos will be used for community outreach and education, data analysis, and uploaded to iNaturalist to facilitate better protection of local wildlife species. This community-based monitoring program aims to create opportunities for communities to engage in environmental monitoring and gain access to their own environmental data;

  - The PATCH made enhancements to their Healing Garden. They created a pollinator habitat to enhance biodiversity, and inclusive signage including class compass, letters, and numbers to help guide those with low vision;

  - Urban Roots planted a native pollinator garden, which highlights various native species within the garden through educational signs and QR code for the visitors to learn more. They are hosting an educational workshop for the community to be involved in the planting of the garden;

  - LOLA Bees is purchasing supplies, equipment and tools to build an Environmental Education Activity Kit Library to support their new programming stream of hands-on environmental education for children; Forest Friends. These themed kits will include nature-based books, field guides, nature exploration tools and equipment, craft/activity materials and supplies and more, all centred around environmental education themes likely to emerge through the sessions (ex. trees, birds, mushrooms, creek life, navigation, forest amphibians, reptiles, native plants, etc.);

  - Pollinator Pathways Project (P3) is designing and installing 25 in-ground pollinator gardens in residences, businesses, and institutions in the Hamilton Road community. These gardens will be installed over a period of April to June of 2025. Each pollinator garden will consist of up to 100 perennial seedlings, with up to 9 varieties of plants. The seedlings will be grown by P3 volunteers, who will also assist the 25 recipients to prepare their garden and plant the seedlings; and

  - Thames Talbot Land Trust (TTLT) is hosting the Happy Habitats Festival, which is a free community event that provides an opportunity to learn about wildlife and habitats and to connect with nature in an accessible format. There will be a variety of activities and presentations on reptiles and their habitats. TTLT will engage community partners to provide activities and to connect with diverse communities. The event will be held on August 16th, 2025, and will engage the community through a free, family-friendly event hosted in London.

In 2024, LEN continued providing capacity-building support for its 47 members of environmental nonprofit groups. These efforts contribute to London’s CEAP by increasing environmental action in the community through events, volunteerism, and other engagement opportunities for London residents. LEN’s member support in 2024 included:

- LEN Member exclusive workshops on volunteer engagement and advocacy;

- Increasing volunteerism in the environmental sector by launching a volunteer bank platform. This initiative connects interested volunteers to LEN member volunteering opportunities, and had over 900 volunteer sign-ups in 2024;

- Hosting quarterly calls to facilitate networking and sharing updates;

- Offering a free item rental service for LEN members to borrow frequently used event equipment, such as tents, tables, projectors, and more; and

- Celebrated volunteers in the network through a volunteer appreciation event, co-hosted with ReForest London and Thames Talbot Land Trust.

LEN Member Updates
ReForest London (RFL) made significant contributions to London's CEAP in 2024 by focusing on the critical role of urban trees in mitigating climate change. RFL initiatives have centered on increasing tree canopy coverage across the city, improving biodiversity, and enhancing green spaces to foster climate resilience. Through strategic tree planting and community engagement, RFL has helped the City of London meet its ambitious goals for increasing canopy cover and improving air quality. RFL continues with advancing the visioning and development of the Westminster Ponds Centre for Sustainability, embracing new opportunities with the addition of the Community Tree Nursery to grow trees locally, improving supply and reducing carbon emissions.

The London Greening Health Collaborative (LGHC) has been meeting regularly and adding members from academia and the healthcare sector since May 2023. LGHC brings together knowledgeable parties with extensive experience in London's healthcare, environmental non-profit, and community health sectors. During November's Hope and Action Climate Change Symposium, a panel session was conducted with LGHC

Thames Talbot Land Trust (TTLT) completed their first ever Conservation Easement Agreements (CEAs) in Middlesex County in 2024, protecting over 40 hectares (100 acres) of land with more projects in the works. In addition, TTLT created 25 hectares of grassland habitat to support rare species in Hawk Cliff Woods.

Goodwill Industries, Ontario Great Lakes' Impact Center runs multiple sustainability initiatives. One small project that makes a large environmental and social impact is their Buy the Bag Program. This program ensures small, hard to process donated items are sorted, repurposed, and kept in circulation rather than ending up in landfills and contributing to methane emissions.

In 2023 and 2024, the program diverted 620,312 pounds of goods (equivalent to 119 fully loaded trailers), curating reusable items into low-cost, visually appealing bags (recyclable), and educating consumers on sustainable consumption. With a 77% sell-through rate, it has successfully promoted reuse, recycling, and repurposing in the community. Recently, the program expanded to include recycled textiles like cleaning rags, zippers, and unusable textile shreds, with a projected 2,000-pound monthly increase in diversion next year. This initiative extends product lifespans, reduces emissions, and creates six full-time and three spin-off green jobs.

In September 2024, LEN partnered with Heeman's for the Plastics Recycling Event, tens of thousands of plastic horticultural pots dropped off by community members and other nearby nurseries. This was a huge collaborative undertaking from the LEN and Heeman's staff, LEN board members, environmental groups such as London Middlesex Master Gardeners, Western University Masters of Environment and Sustainability students, and over 70 volunteers and 210 volunteer hours. The result was 40 skids of plastics diverted from going to landfill, sorted, and stacked to be shipped to a recycling facility.

Actions taken by individuals and households can be measured, in part, through a few aggregated statistics, including:

- 2,189 households have completed home energy retrofits in 2024 using incentives from Canada Greener Homes and/or Enbridge Gas;

- 6,004 lower-income households were provided free electricity-saving upgrades in 2024 through the Energy Affordability Program offered by the Independent Electricity System Operator (IESO);

- 16% of new vehicles registered in London in 2024 were low-emission vehicles; 11.2% were gas-electric hybrid vehicles (no plug) and 4.6% were zero emission vehicles (electric and plug-in hybrid).

2.3 Outcome Area #3 - Climate Actions by Other Levels of Government

The federal government's decision to drop the consumer-focussed carbon price fossil fuel charge on April 1, 2025, along with the associated Canada Carbon Rebate, will likely slow the pace of greenhouse gas emission reductions for the transportation and building sector. This decision reduces the financial payback for climate actions such as building energy retrofits and electric vehicles that were driven by the combination of higher fossil fuel prices and fixed-value rebates. The new federal government has indicated that it will rely more on incentive-based approaches to encourage household climate action in the future.

The federal government's Output-Based Pricing System for industrial emitters remains in place, with proceeds from this system being used to provide financial incentives for their Decarbonization Incentive Program projects.

The federal government has also published its finalized Clean Electricity Regulations, which set an emissions limit without prescribing specific technologies. This technology-neutral approach enables provincial governments to determine their preferred path for building out their clean grid.

Environment and Climate Change Canada (ECCC) announced substantial new funding for Ontario projects designed to combat risks of toxic algae from phosphorus loading in the Great Lakes. Locally, the Upper Thames River Conservation Authority, Lower Thames Valley Conservation Authority, Chippewas of the Thames First Nation, and ALUS Canada received over $30M (combined) to address phosphorus loading in the Thames River and increased agricultural inputs stewardship. This work will reduce the impacts of agriculture on the Great Lakes and improve the resilience of the Great Lakes to warming temperatures resulting from climate change.

In the case of Ontario, the provincial government is prioritizing expanded use of nuclear power generation but has also included renewables and energy storage systems. Recent climate action related to energy has included:

- starting regional electricity planning for the London Area to ensure a reliable supply of electricity and support local growth and economic development;

- entering a 20-year procurement contract with the Oneida Energy Storage Project to provide 250 megawatts of electricity storage capacity for the grid;

- advancing pre-development work for the proposed Ontario Pumped Storage Project, which could provide up to 1,000 megawatts of electricity storage;

- starting construction of the York Battery Energy Storage System (BESS) which could provide up to 120 megawatts of electricity storage;

- approving Ontario Power Generation's (OPG) plan to begin construction on the first of four small modular reactors (SMRs) at the Darlington nuclear site;

- releasing the 2025-2027 Electricity Demand Side Management Program Plan, forecasted to achieve 900 megawatts of peak demand savings and 4.6 terawatt-hours of electricity savings by 2027; and

- launching the Home Renovation Savings program in partnership with Enbridge Gas.

The Province of Ontario passed Bill 17, the *Protect Ontario by Building Faster and Smart Act*, which modifies the *Planning Act*, *Development Charges Act, Building Code Act* and the *Transit Oriented Communities Act*, with the goal of advancing the provincial target of building 1.5 million new homes by 2031. The impacts of some of the changes are not entirely clear as of June 2025, however changes that impact climate action include:

- (Planning Act change) Complete application rules are proposed to be changed to limit what can be required as part of a complete application. A proposed regulation will limit the scope of permitted studies, and proposes to exclude Sun/Shadow, Wind, Urban Design and Lighting reports;

- (Building Code Act change) This Act includes updates to prevent municipalities from passing by-laws respecting the construction or demolition of buildings. Further clarification provided by the Deputy Minister, Ministry of Municipal Affairs and Housing in mid June confirmed that municipalities cannot use provisions in the Municipal Act, City of Toronto Act, and Planning Act, including site plan control, to create and require construction or demolition standards for buildings. This includes, but is not limited to, local green building standards or green development standards as they pertain to the construction of a building, including any energy efficiency requirements for buildings. This change makes green building standards obsolete and ensures that the same standards (the Ontario Building Code) apply province wide; and

- (Planning Act change) A number of changes are included to advance the province's priorities in delivering transit-oriented communities.

The Province of Ontario passed Bill 5, *Protect Ontario by Unleashing our Economy Act*, which introduces changes to *The Electricity Act*, the *Endangered Species Act,* the *Environmental Assessment Act*, the *Environmental Protection Act*, the *Mining Act*, the *Ontario Energy Board Act*, the *Ontario Heritage Act*, *Rebuilding Ontario Place Act*, and the *Species Conservation Act*, and enacts the *Special Economic Zones Act, 2025*, all in the name of kicking the province's economy into high gear, nominally to counteract the trade war triggered by the US government's imposition of tariffs. Concerns from Ontario's environmental conservation community have been expressed over the weakened protections for endangered species through the repeal of Ontario's *Endangered Species Act* and other potential negative effects from the proposed "special economic zones" where permitting and consultation requirements are significantly reduced or eliminated.

2.4 Outcome Area #4 - Energy Use

2.4.1 Corporation of the City of London

The City manages diverse operations of buildings, including office spaces, community centres, arenas, and fire halls which use energy for interior and exterior lighting, heating and cooling of buildings, and energy associated with maintaining recreational services like pools and arenas.

The City also manages linear (e.g., pipes in the ground) and related assets such as wastewater treatment facilities, water supply and pumping facilities, traffic lights, and City fleet operations. Ninety per cent of the energy consumed by linear assets is electricity associated with running and maintaining the processes. Currently, City operations span over 480,000 square metres (5.2 million square feet) and has 249 utility meters.

Leased spaces, for which the City does not pay for utility use, make up 7.3 per cent of City-owned spaces. The energy used by these spaces is not included within the City's reported energy use but is included in community energy use.

Table 4 shows that in 2024, the City's total energy consumption reached 173 million equivalent kilowatt-hours (ekWhs). Compared to 2007, the year City energy use

tracking with EnergyCap started, there is a 13 per cent reduction. However, consumption increased by five per cent from 2023, the baseline year for the City's current Conservation and Demand Management (CDM) Plan. All energy commodities saw an increase from 2023 levels, except diesel, which declined by 14 per cent.

In 2024, electricity represented 57 per cent of all the energy used by the City. Out of this, 52 per cent is consumed by electricity-intensive operations such as water supply and wastewater treatment plants, 18 per cent is consumed by streetlights and traffic lights, and the remaining 30 per cent is consumed by building ventilation, lighting, and office equipment.

Natural gas consumption increased by two per cent in 2024, primarily due to resumed operations at the Greenway Wastewater Treatment Plant. Past reductions were linked to the incinerator shutdown for the Organic Rankine Cycle (ORC) engine project and refurbishment, which limited gas use in early 2024. With both systems now operational, gas use has risen and is expected to return to 2018 levels by 2026. Meanwhile, electricity use at the site is projected to decrease by 150,000 kWh annually starting in 2025. Natural gas remains the City's second-largest energy source, accounting for 23 per cent of total use, with 13 per cent attributed to wastewater treatment.

Table 4 – Total Energy Consumption by Commodity

Energy Consumption (ekWh)	2007	2023	2024	Change from 2007	Change from 2023
electricity	108,328,000	98,885,000	99,377,000	-8%	2.6%
natural gas	58,254,000	36,038,000	36,857,000	-37%	2.3%
steam	3,499,000	2,723,000	2,785,000	-20%	2.3%
chilled water	1,759,000	1,385,000	1,910,000	9%	37.9%
diesel fuel	20,129,000	19,694,000	16,944,000	-16%	-14.0%
gasoline	6,718,000	7,417,000	7,806,000	16%	5.2%
CNG fuel	-	1,516,000	8,057,000	n/a	431.5%
Total	198,687,000	165,658,000	173,736,000	-13%	4.9%

Steam and chilled water use also rose by two per cent, associated with downtown administrative buildings and increased cooling demands due to hotter weather. Both commodities account for a combined four per cent of total energy use and are supplied by Enwave, which operates the London District Energy System.

Fleet fuels, including diesel and gasoline, support a range of vehicles and equipment. Compressed natural gas (CNG) use rose sharply by 431 per cent as the City continued its waste collection fleet conversion to CNG and retained 9 diesel trucks in service.

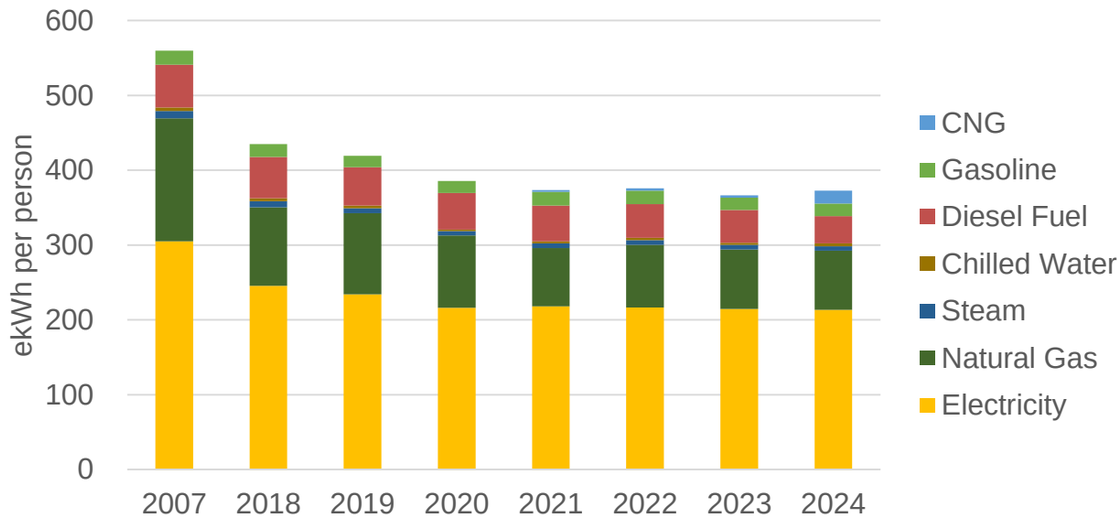
The City's energy consumption is a direct function of serving the public, businesses, and visitors of London. The trends in consumption reported is significant to the services provided to the community. London continues to grow in population and increased services are required to support that growth. It is important to capture energy usage per capita to demonstrate the City's achievements in energy reductions while continued growth occurs in London.

Figure 1 shows total energy consumption per capita by commodity which is explained as follows:

- 16 years of data show continued improvement of corporate energy use per capita with an overall reduction of 33% in 2024 compared to 2007, the first year for which the City has comprehensive energy use data; and

- In 2024, despite a three per cent increase in population, energy use per capita rose slightly by one per cent compared to 2023 (CDM baseline year), driven by a five per cent increase in overall energy consumption.

Figure 1 – Corporate Energy Use in London, Per Capita (Person) by Energy Commodity



Further details on Corporate energy use can be found in Appendix B of this SPPC report.

2.4.2 Community Energy Use

Total energy use in London in 2024 was 57,900 terajoules, one per cent below 2005 levels. It is important to note that London's population has been growing faster than previously anticipated, with Statistics Canada estimating that the London Census Metropolitan Area's population grew by 3.8 per cent in 2023 and 3.2 per cent in 2024.

A faster-growing population will generally increase local energy use and associated greenhouse gas emissions. Energy use per person in London was 124 gigajoules (GJ) per year in 2024, down 25 per cent from the 2005 baseline.

Table 5 – 2005-2024 Energy Use per Person by Sector (Gigajoules per Person)

Sector	2005 (Pop. 349,000)	2019 (Pop. 410,000)	2024 (Pop. 466,000)	Change from 2005
Transportation	58	52	43	-25%
Residential	42	35	28	-33%
Industrial, Commercial & Institutional (IC&I)	68	58	53	-21%
Total	**168**	**145**	**124**	**-25%**

NOTE: due to rounding of numbers, individual numbers may not add up to the total

In terms of weather, London experienced a warmer than normal heating season and summer. As a result, energy demand for heating was lower than normal while demand for air conditioning was higher. Natural gas is primarily used for heating while electricity is used for air conditioning.

Transportation energy use is still lower than pre-pandemic levels, with many London workplaces maintaining hybrid working arrangements after the pandemic as well as greater use of on-line meetings reducing the need for business-related vehicle trips. The increased number of hybrid and electric vehicles on the road are also making an impact. Compared to 2019:

- The average fuel used per registered vehicle was 9% lower;
- The number of vehicles registered for every 1,000 people was 11% lower; and
- The share of hybrid and electric vehicles on the road increased from 1.4% to 4.6%.

Residential (single-family home) energy efficiency has seen consistent improvement since 2005, driven by energy conservation programs such as former federal and provincial home energy audit and retrofit programs, along with utility conservation and demand management programs. New home construction in London has seen energy efficiency improvements driven by voluntary participation from many of London's home builders in energy efficiency programs such as Energy Star New Homes.

Over the last ten years, energy efficiency for London's industrial, commercial, and institutional sector has been improving. London has many examples of local employers who have acted on energy efficiency and conservation.

It is estimated that Londoners spent $1.84 billion on energy in 2024. Out of this amount, it is estimated that 14 per cent of this money stayed in London, most of which goes towards London Hydro's and Enbridge's local operations. The rest leaves London. On average, every percentage that Londoners reduce their energy use results in around $16 million staying in London every year.

The energy productivity of London's economy, on a constant dollars of Gross Domestic Product ($GDP) per unit energy used, has also increased by 33 per cent since 2007 (no GDP data available for 2005).

Further details on community energy use can be found in the report titled 2024 Community Energy Use and Greenhouse Gas Emission Inventory located on the City of London's Get Involved website.

2.5 Outcome Area #5 - Greenhouse Gas Emissions

2.5.1 Corporate Energy-Related Emissions to Date

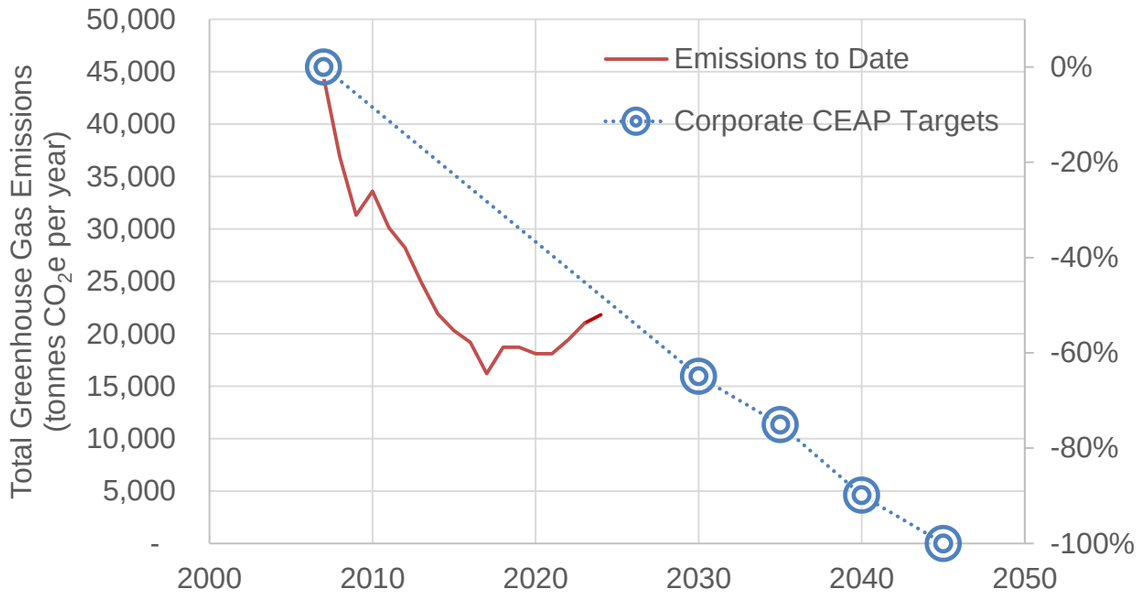
Current corporate energy-related emissions have been influenced by the existing 2024-2028 Corporate Energy Conservation and Demand Management (CDM) Plan approved in 2024.

In 2024, corporate energy-related greenhouse gas emissions were 21,800 tonnes of equivalent carbon dioxide. This is 51 per cent lower compared to 2007, the baseline year for measuring progress (Figure 2). Greenhouse gas emission reductions have been observed across the corporation since 2007, except for fleet vehicles. Most of the emission reductions since 2007 are due to a cleaner electricity grid in Ontario compared to 2007, combined with corporate energy efficiency and conservation efforts.

A summary of major trends influencing 2024 corporate greenhouse gas emissions are identified on Table 5. Similar to 2023, greenhouse gas emissions from Ontario's electricity grid increased in 2024. Given that electricity represents 57 per cent of all the energy used by the City, changes in Ontario's electricity grid will have a big impact on corporate energy-related emissions. As a result, the City's greenhouse gas emissions in 2024 are about 3,100 tonnes (17 per cent) higher than they would have been if Ontario's electricity grid emissions had not changed from 2018 levels.

From an energy commodity perspective, natural gas and diesel are London's two largest sources of energy-related emissions. Measures to electrify building heating, reduce vehicle fuel use, and to use zero emission vehicles and fuels will be priorities. However, given that greenhouse gas emissions from Ontario's electricity grid are expected to climb even further this decade, direct investment in renewable electricity generation for municipal facilities may be needed to help meet London's 2030 milestone. Even though overall year over year emissions increased by 800 tonnes, there were 600 tonnes of reductions from energy related projects across the corporation last year.

Figure 2 Corporate Energy-Related Greenhouse Gas Emissions to Date Compared to Corporate GHG Emission Reduction Milestones

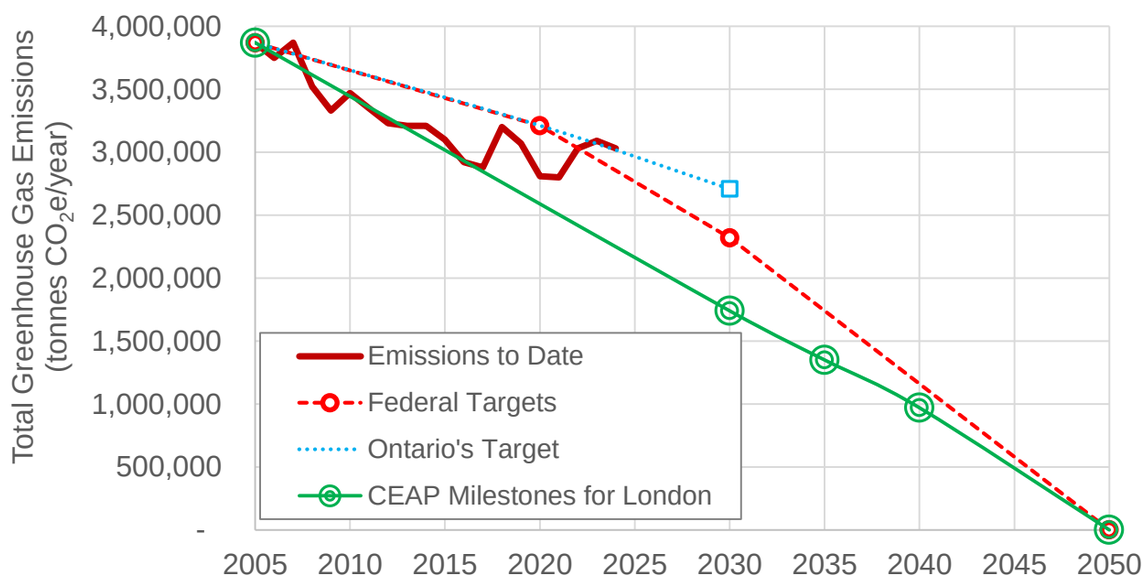


Further details on Corporate GHG emissions can be found in Appendix B of this SPPC report.

2.5.2 Community-wide Emissions

Total greenhouse gas emissions in 2024 were 3.03 million tonnes of equivalent carbon dioxide. This is 22 per cent lower than 2005 levels (Figure 3).

Figure 3 - Community Emissions to Date Compared to Milestones for London, for Ontario, and for Canada



Like corporate energy related emissions above, emission reductions since 2005 are due to a cleaner electricity grid in Ontario, combined with energy efficiency and conservation efforts in housing, commercial buildings, and local industry. However, it is important to note the extraordinary impact of the COVID pandemic had on transportation emissions in 2020 and 2021.

This downward trend has been driven by a combination of less greenhouse gas intense electricity generation and improved energy efficiency. However, since 2018, emissions have been above the trendline needed to meet London's science-based milestone

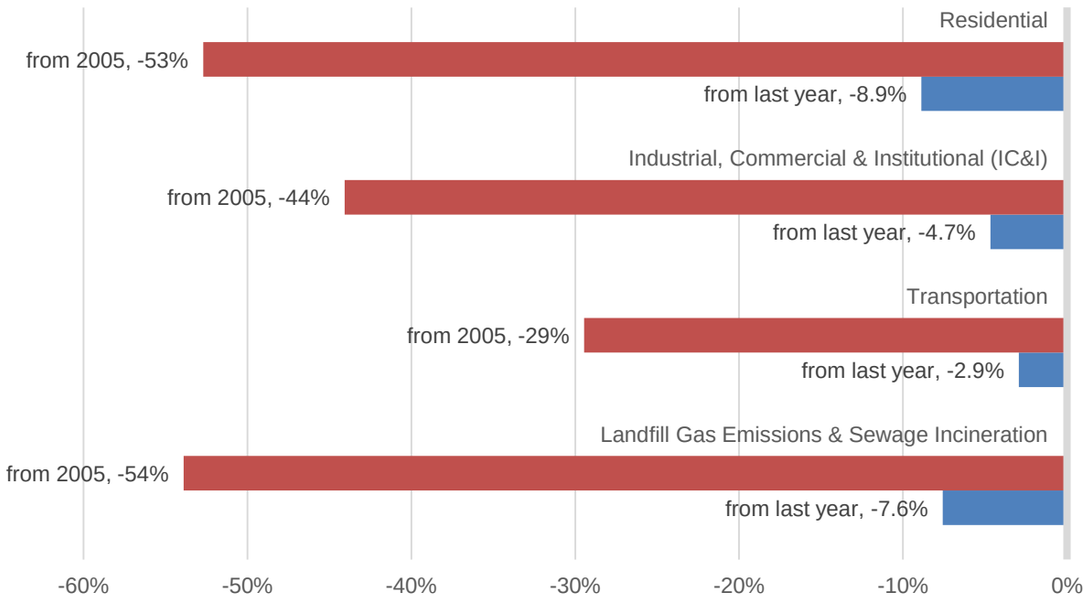
targets (i.e., what London would need to reach to do its fair share for keeping global warming within 1.5°C).

Energy use is responsible for 94 per cent of all GHG emissions from human activity in London. Not only does burning fossil fuels such as gasoline, diesel, and natural gas produce carbon dioxide – the most common GHG associated with human activity – but the use of electricity also contributes to GHG emissions. The remaining six per cent come from methane emissions from landfills and nitrous oxides from wastewater treatment.

About 84 per cent of Ontario's electricity was generated from emissions-free sources in 2024, such as nuclear and hydro-electric generating stations as well as renewable sources (wind and solar). However, Ontario still relied on fossil fuels such as natural gas to generate 16 per cent of the electricity Londoners used in 2024, a higher share than in recent years. As a result, this increase in natural gas use for power generation is responsible for an additional 120,000 tonnes of emissions from London in 2024.

As noted earlier, London has experienced significant population growth in recent years, which will increase energy use and waste-related emissions. Looking at emissions per person gives a better picture of progress being made to date (Figure 4).

Figure 4 – Change in GHG Emissions per Person in London by Sector



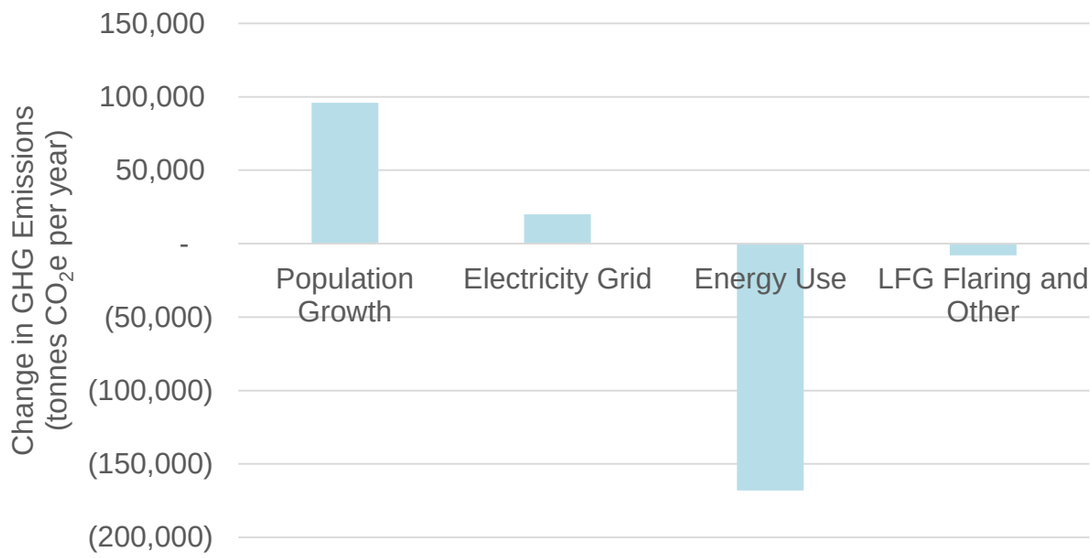
Whether emissions continue to decrease depends upon the impact of energy and fuel conservation efforts, provincial and federal climate change policies (including incentives), climate trends, economic growth, and consumer choices. Overall, the trends in Table 6 and illustrated in Figure 5 impacted community greenhouse gas emissions in 2024.

Table 6: Summary of Major Trends and Occurrences in 2024 Influencing Greenhouse Gas Emissions

Positive	Unchanged or Unsure	Negative
• Residential energy use per person is 33% lower than it was in 2005. • The number of hybrid and electric vehicles in London has increased. • Retail sales of fuel per person were 20% below pre-pandemic levels.	• There is uncertainty whether current post-pandemic "hybrid" work arrangements are permanent.	• GHG emissions intensity of Ontario's electricity grid has increased. • Market share sales of larger personal vehicles (e.g., pickups and SUVs) has increased.

Positive	Unchanged or Unsure	Negative
• Energy use per capita in the industrial, commercial, and institutional sector is 21 per cent lower than it was in 2005. • Energy productivity ($ GDP per unit energy) has increased by 33% since 2007.		• Electric vehicle adoption rate in Ontario was lower than Canada's overall rate. • Electric vehicle adoption rate in London was lower than Ontario's overall rate.

Figure 5 – Factors Driving Greenhouse Gas Emission Changes Since Last Year



Further details on community GHG emissions can be found in the report titled 2024 Community Energy Use and Greenhouse Gas Emission Inventory located attached as Appendix C as well as on the City of London's Get Involved website.

2.6 Outcome Area #6 - Weather Trends and Impacts

Civic Administration engaged Dr. David Sills, Dr. James Voogt, and Dr. Gregory Kopp of Western University to compile and provide commentary on notable severe and extreme weather-related events that occurred in 2024 in the local, provincial, national and global contexts, as well as provide commentary on the historical context and available trend information. A summary of the researchers' work is provided below and the complete report, titled "Weather, Impacts and Trends in 2024: Report for the City of London" is provided in Appendix D.

Temperature
The year 2024 was the warmest year on record globally going back to 1850. January to June of 2024 extended the period of record global warmth that began in 2023 to 15 months, due in part to an El Niño that peaked early in 2024. According to the World Meteorological Organization (WMO), the last ten years have also been the warmest ten years on record and along with warmer air temperatures, 2024 also set new highs in global temperatures over the land surface, ocean temperatures, and the amount of atmospheric water vapour (which is an important driver of extreme weather events). Canada continues to warm more than the global average with the national air temperature anomaly 3°C above the 1961-1990 average and with particular warmth in the Arctic in 2024.

London saw an unusually warm winter with only brief, short-lived cold spells, common with much of Ontario, but a mostly near-normal summer, with two intense heat waves in the first and third weeks of June. Above normal temperatures returned in the fall, with

October having two instances where London matched its record highs for the day and a three-day period near the end of the month with daytime highs over 20 °C (when normal monthly maximum temperature is only 14.7 °C). Six days met or set records of daily maximum temperature during 2024, with no record setting cold days.

Precipitation
Monthly precipitation in southwestern Ontario ranged from well above to well below normal. The greatest departures from normal were in July (just over 200% above normal) and in December (just under 200% of normal, mostly snow). These were mainly due to a small number of heavy precipitation events.

A massive snow squall event took place across the Great Lakes region with some areas receiving more than 150 cm. The London climate station recorded 41.8 mm of precipitation on December 2 and 48 cm of snow on the ground was reported on December 3. Another round of lake-effect snow developed on December 5 resulting in pre-emptive school closures.

Intense thunderstorms occurred over two days in July from London to the GTA. On July 15th, 50-60 mm of rain over a few hours caused basement and road flooding, the closure of Highway 402 west of Strathroy, and train tracks to washout in Kitchener. At the London climate station, 59.3 mm was recorded for July 15 and 44.7 mm was recorded for July 16. The Insurance Bureau of Canada estimates the total insured losses from the storm across the region to be close to $1 Bilion.

Only four days after the intense July thunderstorms, a severe thunderstorm that began in southwest of London and tracked north-northeast produced 20-40 mm hail as it intensified over the western portions of the city. There was hail damage to vehicles, gardens, backyard canopies and tree foliage, mainly in northwest London.

Damaging Wind and Tornadoes
No severe wind events (90 km/h or more) were recorded at London Airport with the highest gust being 73 km/h on April 12 during the passage of a significant spring storm system. On July 10, two low-end Enhanced Fujita 0 (EF0) tornadoes developed in the northwest part of London as the remnants of Hurricane Beryl passed through. More generally, there were roughly a dozen tornadoes in southwestern Ontario with all but one being weak (rated EF0 or EF1). An EF2 tornado that hit the Town of Ayr on August 17 was the only strong tornado to occur in any of Canada’s densely populated regions. A slightly greater number of thunderstorm-related downbursts occurred across southwestern Ontario but all damage was minor and rated at EF0.

Air Quality
There were no formal Air Quality Bulletins issued for London in the summer of 2024. The poor air quality experienced in 2023 due to high suspended particulate matter from wildfire smoke was not observed in 2024, however in June 2025, at the time of writing this report, the Ministry of the Environment, Conservation and Parks Air Quality Health Index ratings have ranged from 5 (“moderate risk”) to 9 (“high risk”) for London. The increased AQHI was due to wildfire smoke from fires burning in Northern Ontario, Manitoba and Saskatchewan creating an orange haze in the sky over London.

State of Global Climate
The World Meteorological Organization (WMO) released it’s “State of the Global Climate 2024” report on March 19, 2025, presenting key messages and insights related to Earth’s climate in 2024. The report is prefaced with the statement that 2024 was the warmest year in the 175-year observational record and, globally, there were massive economic and social upheavals from extreme weather and the long-term impacts of record ocean heat and sea-level rise. Key messages from the report can be summarized as follows:

- In 2023, the atmospheric concentration of carbon dioxide, as well as those of methane and nitrous oxide, reached the highest levels in the last 800 000 years. Real-time data from specific locations show that levels of these three main greenhouse gases continued to increase in 2024;

- Although long-term warming (averaged over decades) remains below 1.5°C, for global mean temperature, each of the past ten years, 2015–2024, were individually the ten warmest years on record;

- In 2024, ocean heat content reached the highest level in the 65-year observational record, exceeding the previous record high set in 2023 and the rate of ocean warming over the past two decades, 2005-2024, is more than twice that observed over the period 1960-2005;

- Sea-level rise and ocean warming are irreversible for hundreds of years; and

- Early warnings and climate services are vital to protect communities and economies.

3.0 Financial Impact/Considerations

3.1 Municipal Climate Modeling in Ontario and Canadian Municipalities

Civic Administration engaged the Clean Air Partnership to prepare a report to summarize how municipalities in Canada have conducted and communicated cost-benefit analysis for their community climate and energy plans.

Their report found that these plans have outlined the level of investment required to implement climate actions that will achieve community greenhouse gas emission reduction targets. They also outline the return on investment, and include benefits such as GHG reductions, operational savings, job creation, and local economic development resulting from climate action implementation. A total of 30 municipalities were studied, many of which have conducted financial modelling in some capacity to estimate the financial investments needed to achieve their net-zero and/or low carbon pathways. The following municipalities were included in the study:

Aurora, ON	Halton Hills, ON	Ottawa, ON
Barrie, ON	Hamilton, ON	Richmond Hill, ON
Brampton, ON	Kingston, ON	Stratford, ON
Burlington, ON	Markham, ON	Thunder Bay, ON
Caledon, ON	Mississauga, ON	Toronto, ON
Calgary, AB	Montreal, QC	Vancouver, BC
Canmore, AB	Newmarket, ON	Vaughan, ON
Durham Region, ON	North Cowichan, BC	Waterloo Region, ON
Greater Sudbury, ON	Oakville, ON	Whitby, ON
Halifax, NS	Oshawa, ON	Windsor, ON

The report also looked at whether non-monetary benefits (co-benefits) were included, and identified the leading practices associated with how these topics are communicated by municipalities within their plans and accompanying staff reports.

Key findings include:

- The majority of municipalities included in the study engaged with Sustainability Solutions Group (SSG) to develop their plans and complete modelling using the CityInSight model;

- Energy costs and savings are the most frequently included value within financial modelling, included by 23 out of 30 municipalities;

- In general, financial net zero emission investment scenarios show a positive financial investment based on lifecycle costs. This is because operational savings from efficiency and electrification tend to provide more revenue than the increase in up front capital costs to secure those operational savings;

- To address the human bias associated with assuming the status quo costs nothing and climate action only creates costs, municipalities are bringing in financial and economic data to create transparency related to the cost of climate inaction on their community;

- Messaging related to economic development, household savings, and job creation, whether qualitative or quantitative, is prominent across plans and staff reports; and

- A primary theme when communicating cost-benefit analysis, in both plans and staff reports, is the idea of shared responsibility. Municipalities are emphasizing that to achieve net-zero emission targets, collaboration across all community stakeholders is required, and ensuring that one party does not bear the financial burden of investments is required.

3.2 Detailed Cost and Benefit Analysis of Options for Achieving Net Zero Emissions in London

Civic Administration engaged a consultant, Sustainability Solutions Group (SSG), to develop a detailed community energy and emissions forecasting model for London that included estimates of the financial costs and benefits for trying to achieve net-zero emissions for 2050. The report, titled *City of London - Pathways to Prosperity: Climate Action and the Energy Transition in London*, can be found in Appendix E. SSG also provided Civic Administration with its Scena Community Dashboard as a tool for additional analysis.

SSG evaluated four scenarios for London, as described in Table 7 below:

Table 7 – Scenarios for Community-Wide Emission Forecasts out to 2050

Scenario	Description
Business-as-Usual	A reference scenario that illustrates the impact of population growth without additional effort or investment into climate action.
Current Measures	A reference scenario that extrapolates current demographic patterns into the future while considering existing and approved Federal, Provincial and municipal plans, legislation, and targets that would affect energy use and emissions. It assumes no additional climate action interventions.
Net Zero	A low carbon scenario that selects and models actions to decrease GHG emissions and improve energy efficiency across all sectors, with a target of achieving net-zero emissions by 2050. In this scenario, there are additional actions towards transitioning to electrification and renewables, while carbon capture is used by industry to offset emissions from residual fossil fuel use.
Zero Carbon	A low carbon scenario that selects and models actions to dramatically decrease GHG emissions and improve energy efficiency across all sectors, with a target of achieving net-zero emissions by 2050. In this scenario, there is a stronger and faster than expected transition to electrification and renewables, limiting the future use of fossil fuel. This scenario assumes industry makes more efforts switching from fossil fuels to electrification and increasing efficiency. This scenario also assumes increased tree planting for carbon capture.

Greenhouse Gas Emission Forecasts

Table 8 summarizes the projected greenhouse gas emissions for 2050 for the four scenarios.

Table 8 – Community-Wide Greenhouse Gas Emission Forecasts for 2050

From 2021				
Scenario	**Total Emissions (tonnes/year)**	**Change in Emissions from 2021**	**Per Capita Emissions (tonnes/year)**	**Change in Per Capita Emissions**
Business-as-Usual	3,750,000	24%	5.5	-13%
Current Measures	1,890,000	-38%	2.8	-56%
Net Zero	450,000	-85%	0.7	-87%
Zero Carbon	550,000	-82%	0.8	-89%
From 2005				
Scenario	**Total Emissions (tonnes/year)**	**Change in Emissions from 2005**	**Per Capita Emissions (tonnes/year)**	**Change in Per Capita Emissions**
Business-as-Usual	3,750,000	-3%	5.5	-50%
Current Measures	1,890,000	-51%	2.8	-75%
Net Zero	450,000	-88%	0.7	-94%
Zero Carbon	550,000	-86%	0.8	-93%

As shown in Table 8, the Current Measures scenario achieves about half the emission reductions required for the Net Zero goal by 2050 compared to the Business-as-Usual scenario. This illustrates the need for further climate actions by all levels of government, local businesses and institutions, and Londoners.

Both the Net Zero and Zero Carbon scenarios show residual emissions of around 500,000 tonnes per year remaining in 2050. These are associated with non-energy emission sources such as methane from active and closed landfills, as well as hard-to-electrify industrial energy use and heavy-duty transportation. Closing this gap to reach net zero emissions would require the use of purchased carbon offsets or the use of future technologies not evaluated in these scenarios by industrial emitters and/or governments.

As shown in Figure 6 below, there are no modelled scenarios that meet the CEAP's 2030 milestone target. This is due primarily to the expected increased use of natural gas for electricity generation in Ontario until around 2035 when the Federal Clean Electricity Regulations come into effect. The Net Zero scenario can meet the CEAP's 2040 milestone target if carbon capture and storage is available to be used. The Zero Carbon scenario can meet the CEAP's 2035 and 2040 milestone targets.

Financial Cost-Benefit Forecasts

Table 9 summarizes the estimated net present value cost-benefit impacts of the three emission-reducing scenarios. Note that these costs and benefits are applied across London by local businesses, institutions, and Londoners as well as all three levels of government.

Figure 6 - Community-Wide GHG Emission Forecasts by Scenario (Source: SSG)

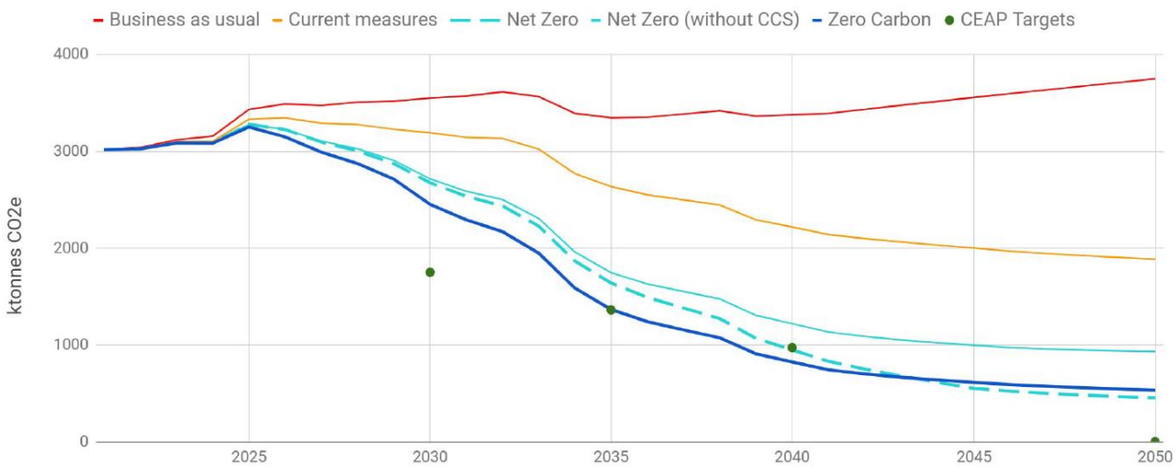


Table 9 – Net Present Value Cost-Benefit out to 2050 by Scenario

	Current Measures	Net Zero	Zero Carbon
Capital Investments Made	$2.5 billion	$11.8 billion	$9.0 billion
Operation & Maintenance Savings	$1.4 billion	$1.2 billion	$1.8 billion
Energy Use Savings	$7.5 billion	$13.2 billion	$16.5 billion
Avoided Carbon Pricing[1]	$1.6 billion	$4.5 billion	$5.1 billion
Net Implementation Savings	$7.9 billion	$7.2 billion	$14.3 billion

1 - This analysis was completed prior to the Federal Government's decision to suspend the consumer carbon price on fossil fuels

As shown in Table 9, all three scenarios provide a net benefit to London primarily from avoided energy expenditures out to 2050, since the combined avoided energy costs and reduced operating and maintenance costs are greater than the cost of the capital investments. Net Implementation Savings include avoided carbon pricing as prescribed by the Federal Government at the time of analysis.

Figure 7 illustrates how the savings associated with the Zero Carbon scenario could accumulate over time and provide a financial payback for these actions.

For context, London's annual Gross Domestic Product (GDP) in 2024 was around $29 billion. Table 10 outlines the estimated level of investment represented as share of London's GDP, along with overall abatement costs (i.e., money spent or saved per tonne emissions reduced) and job creation benefits.

The Net Zero scenario has the highest job creation benefits primarily because the building and operation of carbon capture and storage technologies and systems will create more new jobs. Compared to the Zero Carbon scenario, the Net Zero scenario also has a lower level of electrification of the transportation sector, which coincides with slightly more job creation.

Figure 7 - Annual Investments and Savings from the Zero Carbon Scenario (Source: SSG)

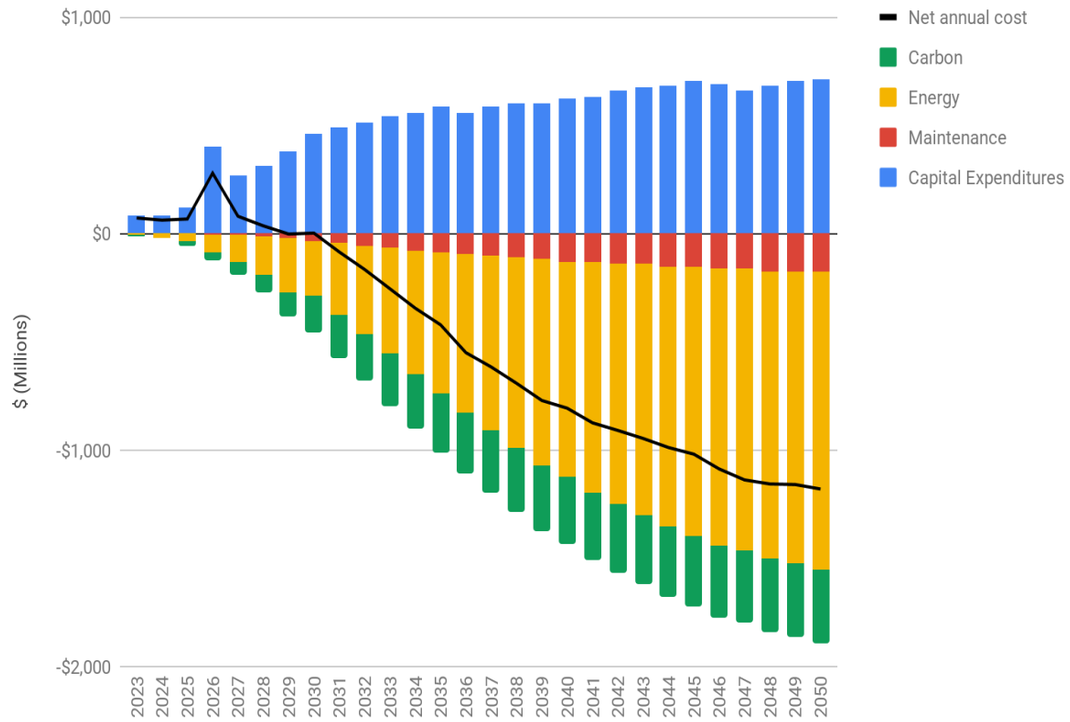


Table 10 – Other Economic Aspects out to 2050 by Scenario

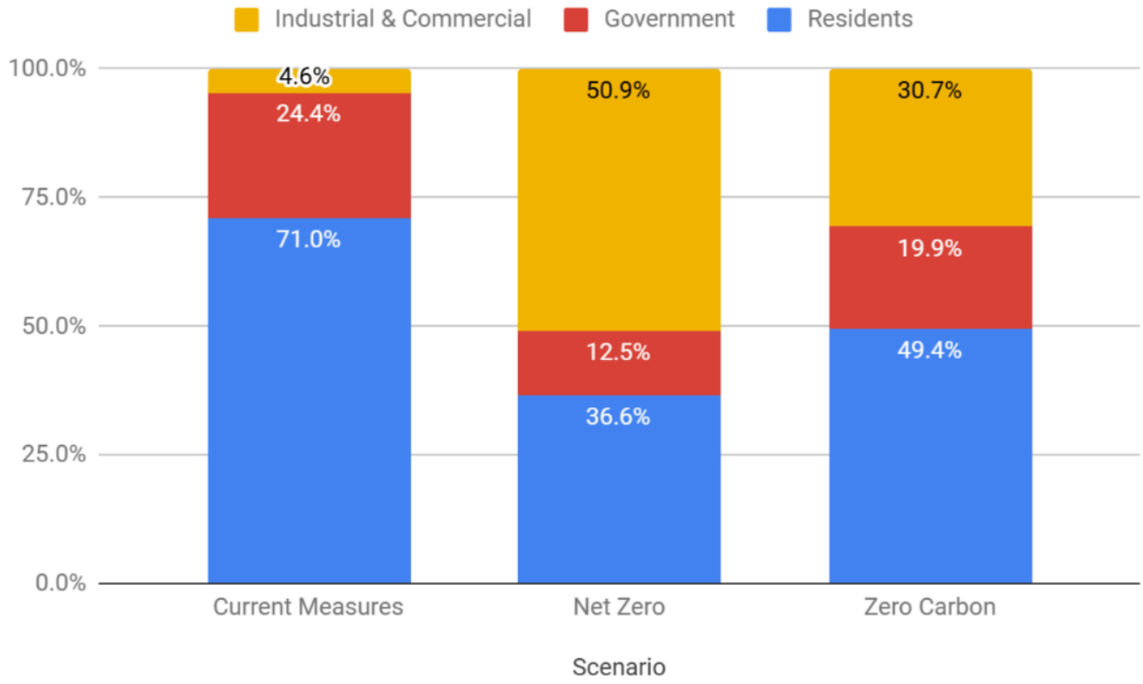
	Current Measures	Net Zero	Zero Carbon
Level of Investment Represented as Share of London's Gross Domestic Product (GDP)	0.4%	2.3%	1.7%
Overall Abatement Cost[1] ($/tonne CO_2e)	$318 saved	$144 saved	$270 saved
Net Job Creation	29,000 person-years[2] (1,100 full-time equivalent jobs)	141,000 person-years (5,200 full-time equivalent jobs)	109,000 person-years (4,000 full-time equivalent jobs)

1 – The marginal abatement cost is the incremental cost (or savings) of reducing one tonne of GHG emissions. It is calculated by summing the net present value of capital costs and operating costs over the lifetime of the investment divided by the tonnes of GHGs reduced.

2 – A person-year is a unit of measurement that can be used to quantify the employment impact of a project or to estimate the labour required for a specific task and can either represent the work of one full-time employee for a year, or the equivalent work of multiple part-time employees.

Figure 8 shows the breakdown of investments across the various stakeholder that would be taking the actions. Most of the investments in the Current Measures scenario are made by residents and then all three levels of governments (through incentives such as rebate programs). In the Net Zero scenario, there is a much higher share of investment in the industrial and commercial sector, mainly driven by high investment costs for carbon capture and storage. The Zero Carbon scenario has a more balanced distribution of investment costs, since it relies more on electrification, which occurs in both the residential and industrial sectors.

Figure 8 - Share in Investments Made for Each Scenario by Stakeholder (Source: SSG)



As noted earlier, the Current Measures scenario enables London to reach about half-way towards the CEAP's 2050 goal of net zero community wide GHG emissions. The Net Zero scenario has the highest capital investments since this scenario assumes that carbon capture and storage is used to abate fossil fuel use by local large emitters. In comparison, the Zero Carbon scenario provides a better overall outcome, with lower capital investments required as well as higher avoided energy expenditures.

Note that some sectoral actions, such as residential building envelope improvements (insulation, draft-proofing, windows), will have net costs if done in isolation. However, these can be bundled with measures that do have net benefits, such as solar panels, so that the overall net cost to retrofit residential homes is lower.

In summary, this modelling exercise shows that there are net positive financial benefits to climate action for Londoners and London's businesses and institutions including the accelerated electrification and renewable energy approach for the Zero Carbon scenario. However, experience to date shows that these actions are not happening fast enough or broad enough, not just in London but in Ontario, Canada, and globally.

The main challenge for climate action will be mobilizing the capital needed to create these benefits in the face of competing priorities. For example, in businesses and industry, there may be other non-energy business or process related projects that provide a faster return-on-investment. For homeowners, improvements such as renovated kitchens and bathrooms often have a higher priority, even when these do not provide a full payback on money invested (according to Re/Max, December 9, 2024, typically about 70 to 80 per cent of the renovation cost on resale of the home) compared to energy retrofits such as insulation, draft-proofing, and heat pumps that can provide full payback over time.

To address the need to demonstrate the possibility of achieving net-zero (or near net-zero) by 2050, the modeling exercise assumes that capital funds can be obtained where needed. This is more or less the theory behind perfect capital markets as it assumes that capital is available to all businesses and individuals and without competition. If less capital funding is obtained and used, the financial benefit (savings) would be reduced and a larger gap created with net-zero by 2050.

In addition to the potential positive long-term financial benefit of implementing actions to reach net zero emissions, most implemented measures will also provide increased resilience to the impacts of climate change. More local renewable power generation, less dependence on fossil fuels, and more energy efficient and weather resistant

buildings will provide much needed low-carbon resilience as the impacts from global climate change advance.

3.3 Climate Change Reserve Fund Projects

The Climate Change Reserve (CCR) Fund was initially approved by Council with an allocation of $1 million per year for the term of the current Multi-year Budget (2023-2027). Planned annual contributions were subsequently reduced to $192,000 in response to competing priorities. Total allocations to the CCR Fund as of the end of 2024 amounted to $1,192,000. The CCR Fund is a key financial instrument that enables the City to advance on its climate action commitments. More specifically, the CCR Fund:

- demonstrates to potential government funders that we have multiple support systems for financing climate action;

- allows quick access to funds that can be matched with other funding opportunities following Council policy (e.g., FCM's Green Municipal Fund streams require some upfront capital to access grants);

- allows top up to projects to cover any premium prices required to realize better climate outcomes (e.g., fuel switching for building heat); and

- allows greater ability to add climate funding should Council wish to allocate additional funds in the future as priorities shift.

Approximately $225,000 have been allocated to projects and the remaining $967,000 is sought after by several projects in varying degrees of planning and/or approval which total a potential requirement of $1.21 million to $1.91 million. Each of the projects either using or planning to use funds from the CCR Fund will advance important initiatives that will contribute to emissions reduction and resilience improvements, some of which also can return generated savings or grant funding secured to the CCR Fund. Those projects include:

Projects with approved CCR Fund allocations:

- Completing a city-wide assessment of community energy system opportunities. Under the Green Municipal Fund's Accelerating Community Energy Systems funding stream, a proposal has been submitted that will leverage the recently completed ScenaCommunity (formerly CityInSight) detailed community energy and emissions model for London to identify opportunity areas within the Primary Transit Area and Industrial Place Types for low-carbon community energy systems (including renewable and district energy systems) and develop mechanisms to support implementation (CCR Fund allocation of $100,000, with 50% reimbursement to the CCR Fund from a Green Municipal Fund grant).

- Supporting the creation of a Green Development Framework, including an engagement program, a review of the City's climate change policies and initiatives, and an analysis of green development best practices that will lead to the creation of Green Development Guidelines for private development in London and an associated implementation strategy ($125,000).

Projects seeking CCR Fund support, or more:

- A fleet electrification feasibility study, with funding available from the Green Municipal Fund, is required to determine and assess the full extent of operational and infrastructure requirements to electrify the City of London fleet of vehicles (estimated total cost of $200,000, with 50% reimbursement to the CCR Fund from a Green Municipal Fund grant).

- In order to upgrade six corporate fleet SUVs that have reached end-of-life, purchase small electric handheld equipment for trial testing, and associated infrastructure upgrades to accommodate training and operation of the handheld equipment, Fleet Services requires additional funding from the CCR Fund (approximately $110,000).

- Wastewater Operations requires additional capital support following completion of feasibility assessments for changing Magna Drives over to Variable Frequency Drives (VFDs) at the Southeast Reservoir Pumping Station. If these changes are made, electricity consumption can be reduced and efficiency increased significantly ($200,000, with energy savings of approximately $95,000 per year from the project replenishing the CCR Fund).

- The recently constructed, all-electric Dingman Creek Wastewater Pumping Station stands to gain significant energy efficiency improvements through the installation of either a geothermal energy system or a solar photovoltaic array and heat pump energy system (estimated cost of $700,000 to $1.4 million, with energy savings from the project replenishing the CCR Fund).

In addition to the listed projects potentially seeking funding from the CCR Fund, work to assess the feasibility of a pilot project for solar net-metering or behind-the-meter solar installation to provide power to one wastewater treatment plant is underway as part of planning to achieve the Corporate net-zero emissions by 2045 target. The solar installation will potentially require more funding than the CCR Fund currently has on the order of approximately $5 to $10 million. Civic Administration is regularly watching potential funding sources to support this work, recognizing that the CCR Fund will likely be significantly oversubscribed.

4.0 Key Issues and Considerations

Much like the previous annual update provided in 2024, with the realization of only modest reductions in community GHG emissions over the past 12 months, and now only four and a half years left before 2030, it is clear that the CEAP emissions milestone of 55 per cent below the 2005 baseline level will be difficult to meet compared to when the milestone was set in 2022. Like the majority of municipalities, the slow pace of emissions reductions puts added pressure on the remaining years leading to 2050 if London hopes to maintain the science-based “fair share” milestones which consider the total amount of emissions each year from 2022 to 2050.

The latest annual assessment of 10 key indicators of global climate change completed by a team of over 60 international scientists, shows all indicators are heading in the wrong direction. The summary paper, published in the academic journal Earth System Science Data on June 19, 2025, concludes that human induced warming is increasing at the unprecedented rate of over 0.2°C per decade, primarily the result of GHG emissions being at an all-time high over the last decade. According to the assessment, at the current global GHG emission rate, there are only two more years left before society falls below a 50 per cent chance of keeping global average temperatures below 1.5 °C above the pre-industrial levels, and only nine years before society exceeds the same threshold for keeping temperatures below 2 °C (i.e., achieving the overarching goal of the Paris Accord).

It is expected that international, national, provincial, and even local events and decisions may continue to occur that will draw attention and priority away from some elements of addressing climate change. Since the declaration of a climate emergency in 2019, the emergence of the global COVID-19 pandemic and several other issues have risen in priority and often displaced climate change as a top priority. Delay in some CEAP actions and re-allocation of funding and resources are a function of Council priorities, budget challenges and other governments’ actions.

One significant example impacting the perceived urgency of climate action is the international relations agenda of the recently elected US Administration which, through tariffs, has put new pressures on the livelihoods of Canadians and Canada’s economy

in general. These shifting and newly introduced priorities and pressures change the ability to plan to meet the 2030 GHG emissions reduction milestone. Reaching the 2050 GHG emissions milestones will rely on more significant gains in future years when priority shifts back to action on climate change.

The key to making incremental gains in emissions reduction and resilience improvements in the immediate and near future will be to recognize and consider, wherever possible, the impact of climate change on other high priority issues (i.e., housing, affordability). This approach will be required to understand any inter-relatedness between these other issues and climate change, and to identify and pursue solutions and actions that can simultaneously address multiple priorities. Furthermore, when approaching long-term planning at the corporate and community levels, it will be paramount to employ a holistic approach that accounts for all issues that can impact London's future, including climate change.

Conclusion

This 2024 CEAP Progress Report is the third progress report on the Climate Emergency Action Plan approved in April 2022. A CEAP Update Report has been provided in January of each year, however with the addition of a publicly accessible CEAP actions dashboard, it is recommended that formal reporting to Council be reduced to one annual progress report.

CEAP progress in 2024 and early 2025 has a modest reduction in annual GHG emissions, approximately 99 per cent of the 200 CEAP actions now underway by City staff or by organizations in London, and approximately 94 per cent of actions either on track (72 per cent) or completed (22 per cent). Work continues across the corporation to embed climate change considerations into service delivery and progress continues on key frameworks to advance climate action.

Continued climate action within the Corporation of the City of London and community-wide will be required to move further toward the goals of the CEAP. All feasible avenues of support should be explored and leveraged to expand efforts and encourage others in London to do so as well.

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Appendix A Draft Climate Change Adaptation Framework (with a few explanatory notes)
Appendix B City of London Corporate Energy Use and GHG Emissions
Appendix C Community Energy Use and GHG Emissions
Appendix D Weather, Impacts and Trends in 2024: Report for the City of London
Appendix E City of London - Pathways to Prosperity: Climate Action and the Energy Transition in London

Appendix A
Draft Climate Change Adaptation Framework (with a few explanatory notes)

1.0 Introduction

Introducing the need for climate change adaptation and a brief description of previous climate change adaptation work leading to the Framework

2.0 Why a Framework has been Created

Why a framework has been created and how it differs from a plan or strategy

3.0 Our Changing Climate

3.1 Observed Climate Change in London

Describing the impacts observed in London that are attributable to climate change and how they compare to historical climate normal.

3.2 Climate Change Projections for London

Describing what recent climate change models predict for temperature and precipitation trends in London in the coming years under the most likely global GHG emissions scenario(s), including details pertaining to hot days, freeze-thaw impacts, seasonal and extreme precipitation.

4.0 Priority Impacts and Issues for London

Community-wide climate change risk assessment informed priority impacts for Londoners. Impacts typically have varying severity based on many factors, but the intention here is to highlight the most wide-spread and significant impacts affecting the majority of Londoners, while also identifying those impacts that will disproportionately affect vulnerable populations.

5.0 Themes and Objectives

Identifying and organizing adaptation objectives (specific improvements to strive for) within themes is intended to help simplify what may otherwise seem like an overwhelming challenge.

5.1 Built Environment

Addressing London's buildings and other physical infrastructure.

5.2 Natural Environment

Addressing natural space and natural systems within London that provide critical ecosystem services.

5.3 People

Addressing the impacts of climate change on human health and wellbeing.

5.4 Economy and Business

Addressing the impacts of climate change on the economy and business in London, including cascading effects from global climate change impacts

6.0 Roles and Responsibilities in Climate Change Adaptation

Understanding the responsibilities, priorities and reach of various participants in London and beyond can be helpful to better understand how to take action, or who/where to look for help taking action.

7.0 Taking Action

7.1 Education and Outreach Opportunities

Information on opportunities for Londoners and organizations to continue to learn and provide input into climate change adaptation priorities and actions and to build connections to advance action planning and implementation

7.2 Tools, Resources and Information from Others

Identification and links to ready-to-use existing resources available from organizations like the Institute for Catastrophic Loss Prevention, the Intact Centre on Climate Adaptation and others. High value resources will be compiled and identified by their relevance to climate change adaptation action planning for homeowners, neighbourhoods, Indigenous Communities, children and schools, as well as businesses and institutions.

Appendix B
City of London Corporate Energy Use and GHG Emissions

Appendix C
Community Energy Use and GHG Emissions

Appendix D
Weather, Impacts and Trends in 2024: Report for the City of London

Appendix E
City of London - Pathways to Prosperity: Climate Action and the Energy Transition in London