



Office of the Auditor General
City of Ottawa

Bureau de la vérificatrice générale
Ville d'Ottawa

Audit of the Climate Change Master Plan

June 2024





Table of Contents

Acknowledgement 1

Introduction 2

Background and Context..... 2

Audit Objective and Scope 6

Conclusion 7

Audit Findings and Recommendations..... 9

 Strategic Direction..... 9

 Governance 13

 Performance Management and Reporting 17

Appendix 1 – About the Audit..... 20

Acknowledgement

The team responsible for this audit was comprised of Rhea Khanna, Anna Koldewey and Moriah Gibbs from the Office of the Auditor General and independent climate change subject matter experts from PwC (external consultants), under the supervision of Joanne Gorenstein, Deputy Auditor General and my direction. My colleagues and I would like to thank those individuals who contributed to this project.

Respectfully,



Nathalie Gougeon, CPA, CA, CIA, CRMA, B.Comm

Auditor General

Introduction

The Audit of the Climate Change Master Plan was included in the 2022-2023 Audit Work Plan of the Office of the Auditor General (OAG), approved by City Council on December 8, 2021.

Background and Context

Climate Emergency Declaration

Climate scientists and professionals worldwide have acknowledged that rapidly increasing temperatures have created a worldwide climate crisis. Global treaties/agreements (e.g., 2016 Paris Agreement) have been established and reports have been published to provide institutions guiding principles and goals to reduce greenhouse gas emissions and adapt to the impacts of climate change. In 2018, the Intergovernmental Panel on Climate Change released its Special Report on Global Warming of 1.5°C, which provides scientific evidence for the need to limit global warming to 1.5°C.



As local authorities with powers handed down by the Province, Ontario municipalities are responsible for taking actions and making meaningful changes to support the principles and goals of climate change. On April 24, 2019, City Council declared a “climate emergency” for the purposes of deepening the City of Ottawa’s (the City) commitment to protecting the economy, eco systems, and community from climate change. This declaration directed staff to determine mitigation and adaptation priorities for the City going forward.

Climate Change Master Plan

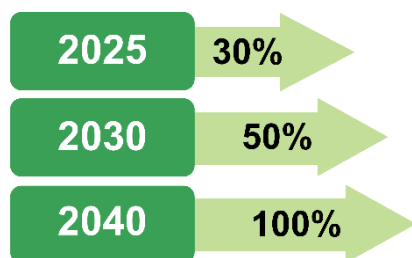
The City’s efforts with respect to climate change fall within two areas: **mitigation** and **adaptation**. Mitigation refers to reducing or preventing greenhouse gas emissions that lead to global warming. Adaptation refers to preparing and responding to the impacts of climate change and becoming more resilient for the future. The Climate Change Master Plan (herein referred to as the Plan; approved in January 2020 and amended in December 2020) is the City’s overarching framework for how it will mitigate and respond to the current and future effects of climate change. Furthermore, the Plan outlines how it will achieve its long-term goals of net zero by 2050. This aligns with the greenhouse gas emission reductions committed to by the Government of Canada.



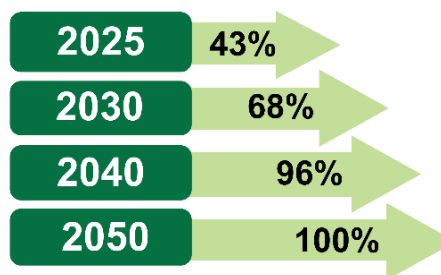
Roughly 95% of Ottawa’s greenhouse gas emissions are not within the City’s direct control; they require community action and commitment to achieve the established targets.

To align with the Intergovernmental Panel on Climate Change, and based on the commitments made by the federal and provincial levels of government, the City has committed to short, mid and long-term targets to reduce corporate and community greenhouse gas as follows:

City Greenhouse Gas Reduction Targets



Community Greenhouse Gas Reduction Targets



The Plan identified a total of eight (8) priority actions to be undertaken from 2020-2025:

1	Implement Energy Evolution: Ottawa’s Community Energy Transition Strategy
2	Undertake a climate vulnerability assessment and develop a Climate Resiliency Strategy
3	Apply a climate lens to the new Official Plan and its supporting documents
4	Apply a climate lens to asset management and capital projects
5	Establish a carbon budget and accounting framework and explore the feasibility of including embodied carbon
6	Explore carbon sequestration methods and the role of green infrastructure
7	Encourage private action through education, direct and indirect incentives, municipal support, and advocacy for support of individuals and private organizations by senior levels of government
8	Develop a governance framework to build corporate and community capacity, align priorities, and share accountability in tackling climate change





Energy Evolution and Climate Resiliency Strategy

In parallel to the development of the Plan, the City created the Energy Evolution: Ottawa's Community Energy Transition Strategy (Priority One of the Plan). Energy Evolution sets the framework for what it will take for Ottawa to meet the Council approved long-term targets to reduce community greenhouse gas emissions by 100 per cent by 2050 and corporate greenhouse gas emissions by 100 per cent by 2040.



Twenty projects (20) were identified within Energy Evolution for 2020-2025 to accelerate action and investment towards achieving the greenhouse gas emission reduction targets (herein referred to as “the targets”). These include projects across five (5) sectors: land use projects, buildings, transportation, waste and renewable natural gas and electricity. These projects are in various stages (not yet started, in development or in implementation). Most of these have been identified by management as being off track in terms of their timelines.

With respect to resiliency/adaptation, the City is currently in the process of developing its Climate Resiliency Strategy that focuses on getting Ottawa ready for a changing climate. This strategy builds on the Climate Projections Study (conducted in partnership with the National Capital Commission and Environment and Climate Change Canada) and a Climate Vulnerability and Risk Assessment that identified the top climate risks/changing climate conditions facing Ottawa. The City assessed 150 potential climate impacts on the City and the community, including impacts on health, community well-being, infrastructure, natural environment and the economy. Of these potential climate impacts, 40 priority risks were identified that require action in the next one to three years. These include risks related to global climate change such as:

			
Higher temperature	Increased precipitation	More extreme weather (e.g., flooding & tornadoes)	Changing seasons



Funding

It is acknowledged that significant funding is required to accelerate both mitigation and adaptation actions and leverage further investment to support the achievement of the City's corporate and community reduction targets.

Historically while investments have been made to advance climate change mitigation and resiliency, a climate change lens (i.e., embedding climate change considerations) has not been applied to annual budgets. During the years of 2020-2022, Climate Change Master Plan priorities for Energy Evolution and the Climate Resiliency Strategy were funded primarily through static operational budgets and the Hydro Ottawa Dividend Surplus, in years where a surplus existed.

As part of Budget 2023, Council approved \$5 million for annual funding (herein referred to as the Climate Change Master Plan Capital Fund) to advance the Climate Change Master Plan.

Staff, for the first time, applied a climate lens to capital budgets in 2023. The City has reported that it invested more than \$52 million in 2023 and is expected to invest \$278 million in 2024 for various capital initiatives to support the reduction of emissions and building resiliency (e.g. Zero-Emission Bus program, ROPEC Electrical Reliability Project, and infrastructure rehabilitation projects).

For mitigation actions alone, Energy Evolution's financial assessment estimated that to meet the 100% emission reduction scenario, an annual corporate investment of \$687 million and a cumulative community-wide investment totalling \$57.4 billion (in 2020 dollars) would be required from 2020 to 2050.

Reporting

The Plan outlines the reporting expectations for the climate change portfolio. In addition to individual project reports, the City has committed to providing an annual status update on the climate change framework that includes:

- annual greenhouse gas community and corporate inventories;
- an assessment of how Ottawa is tracking towards community and corporate targets;
- an update on Plan priorities (including an update on Energy Evolution projects);
- recommendations, as required, to advance the priorities outlined in the Plan; and,
- new budget pressures, if required.

The City has issued a Climate Change Master Plan status update for 2021 and 2022, and a progress report for 2023.

In addition, a new section was added to the City's 2022 Annual Report, the Task Force for Climate-Related Financial Disclosures (TCFD). The TCFD is a voluntary disclosure framework that summarizes the City's climate related actions, strategies, and financial impacts to help stakeholders and decision makers understand how the City is responding to climate related risks and opportunities.

Roles and Responsibilities

Led by a Strategic Projects Manager, the Climate Change & Resiliency team within the Planning, Real Estate and Economic Development Department (PRED) is responsible for leading and/or supporting the planning and execution of strategic and tactical activities related to the Plan. They are also responsible for:

- coordinating and collaborating with departments, and internal and external stakeholders, on climate change initiatives and projects;
- providing subject matter expertise to departments, Senior Leadership and Council and Committees;
- supporting the identification and pursuit of funding and resources from senior levels of government and external stakeholders; and,
- reporting on the progress towards the targets and the eight priority actions within the Plan.

Departments are responsible for identifying opportunities for mitigation and resiliency within their own operational contexts, implementing policy directives, and taking actions to support the achievement of the priority actions outlined in the Plan. Departments take a lead role in managing and implementing climate change related projects/initiatives (e.g., Zero Emission Buses is being led by the Transit Services Department) and in developing relevant master plans (e.g., Solid Waste Master Plan is being led by the Public Works Department).

Audit Objective and Scope

The objective of this audit was to provide reasonable assurance that the City has the appropriate plans, strategies, and tools in place to support the achievement of the targets and priority actions outlined in the Plan.

The audit focused on the activities related to the Plan for the period from January 2020 (i.e., when the Plan was approved) to February 2024. More specifically, the audit examined the strategies, plans and tools in place to support the climate change portfolio,

including the areas of: governance; stakeholder management; resource management; performance management and reporting.

Please note the scope of this audit did not include the following:

- An assessment of the selection of each of the eight priorities outlined in the Plan.
- An assessment of the effectiveness of the individual initiatives and projects supporting the Plan.
- An assessment of greenhouse gas emissions measurement and/or calculation techniques.
- Activities outside of the control of the municipality, although the City's role in catalyzing actions of external stakeholders was included in our scope.

Refer to [Appendix 1](#) for additional details on the objective, criteria, and approach to the audit. This audit was conducted in conformance with the Institute of Internal Auditors International Standards for the Professional Practice of Internal Auditing¹.

Conclusion

Climate change is a City-wide portfolio that requires efforts across the organization and community to achieve the priorities and targets outlined in the Plan. It is well-acknowledged that the priorities and targets outlined in the Plan are ambitious, and that the City cannot achieve these on its own. In addition to municipal tools, the City requires funding and policy changes from federal and provincial levels of government, and action from external industry partners and the broader community to achieve its long-term goals of net zero by 2050.



The audit noted that there is meaningful work ongoing across the City to advance the City's climate change goals. Projects are ongoing within the Climate Change & Resiliency team and departments to support emission reduction and early adaptation activities. Staff are passionate and believe that this portfolio needs to be a priority. We understand that the City is currently updating its asset management plans, various master plans and the associated Long-Range Financial Plans (LRFPs) which will have climate considerations embedded and have impacts on how the City continues to progress its climate change portfolio.

¹ <https://www.theiia.org/globalassets/site/standards/mandatory-guidance/ippf/2017/ippf-standards-2017-english.pdf>

Notwithstanding, it is well known that the City is behind on its climate change priorities and targets. The Plan identified eight priority areas to be undertaken from 2020 to 2025 and the City is off track on the majority of them (as reported in the April 2023 Climate Change Master Plan Progress Report). Management has indicated that they believe they are currently on track for their 2025 corporate emission reduction targets but “given the current level of action and investment to date [...] it is not expected that Ottawa will achieve its short-term target to reduce community emissions by 43 per cent by 2025”².

The audit found that the City has reached a “crossroads” whereby decisions have to be made that will impact the direction, priorities and resources related to this portfolio. More specifically, the audit noted that there is a need for realignment of the Climate Change Master Plan priorities with the current strategic direction³ to maximize the limited resources available. Furthermore, with a resiliency strategy about to be released, a realistic prioritization for both mitigation and resiliency efforts is required to support the City in meeting its climate change goals, balanced with other City priorities. This includes defining how they will each be resourced and funded.

The audit found that accountabilities across the organization have not been formalized for the climate change outcomes committed to by the City. Additionally, the City cannot measure progress in a meaningful way as many performance indicators and metrics have not yet been established, and sufficient data and/or systems to measure progress, in some cases, are not yet available.

Value of Audit: This audit made recommendations to ensure alignment of activities and spending with the strategic direction of the City related to climate change. More specifically, the recommendations are intended to help the City consider structural improvements to ensure the portfolio is set up for success and can demonstrate value for money.

² <https://pub-ottawa.escrimeetings.com/filestream.ashx?DocumentId=156294> (page 18).

³ For this report, strategic direction refers to the priorities and areas of most significance to City Council and senior leadership as articulated through the “2023-2026 Term of Council Priorities” and key decisions made relative to climate change.

Audit Findings and Recommendations

Strategic Direction

1.1 There is misalignment between the Climate Change Master Plan and the current strategic direction on climate change.

Although 95% of City-wide emissions are not under the direct control of the corporation, the Plan (and supporting documents such as the Energy Evolution Strategy, the Official Plan, etc.) makes reference to the City taking a leadership role relative to community action.

“The City needs to take a lead role to ensure an integrated and comprehensive approach across the corporation and the community” – Guiding principle of the Plan

This is further supported by priority #7 of the Plan which is to “encourage private action through education, direct and indirect incentives, municipal support, and advocacy for support of individuals and private organizations by senior levels of government”.

Capital funding has been used to advance the City’s leadership role in community action and leverage external funds. For example, approximately \$1.6 million of the \$5 million Climate Change Master Plan Capital Fund was allocated to community facing projects in 2023 (e.g., waste energy transfer projects, electric vehicle charging infrastructure, portal to support residential retrofits). Furthermore, the City has been successful in securing an additional \$2.1 million in grants from external funders to support community facing activities. These activities require coordination and support from City staff.

The audit noted that there appears to be a shift in direction with respect to the City’s role in relation to community action. While stakeholders indicated that there was general agreement that the City should focus on resiliency so Ottawa can handle weather events and emergencies, there were different opinions on what the role of the City should be in mitigating community greenhouse gas emissions and influencing resident behaviour changes. Some stakeholders felt that the Plan is too aspirational and given the limited funds available, the City should solely focus on its own assets and operations (as it has the most direct control over them), indicating that to effect change on the broader community would require other levels of government. Others felt the City needs to use its influence and the tools available to a municipality to, lead, advocate for and encourage change as much as possible.

To demonstrate continued commitment, the 2023-2026 Term of Council Priorities includes a priority related to climate change – specifically, “A city that is green and resilient”; with the long-term goal that “residents benefit from a sustainable and equitable built environment that supports our efforts to address climate change”. The audit noted, however, that there is no reference to community emission reductions and limited community related actions. Further, a Council decision from December 2023 ([Motion No.2023 - 28-17](#)) directed the 2024 Climate Change Master Plan Capital Fund prioritization framework to “emphasize projects that will directly impact corporate emissions, be aligned with actions a municipality can take, and advance the term of Council priorities”. This could impact the ability of the City to advance its leadership role in catalyzing community action, and ultimately achieving their community emission reduction targets.

The City of Toronto accelerated the implementation dates for greenhouse gas emission limits within the Toronto Green Standards, in support of having new private and city-owned developments be designed and built to be near zero greenhouse gas emissions by 2030.

We understand that there are tools that only a municipality has access to that would support community emission reduction (e.g., tax levies, policy changes, standards). These tools have been leveraged by municipalities who have prioritized community emission reduction.

An example of such a tool is the High-Performance Development Standards, for which the implementation has been deferred pending additional direction from the Province of Ontario. These new standards would raise the performance of new building projects to achieve sustainable and resilient design. Similar standards have proven to be an effective tool in

other municipalities building capacity within the industry to advance the sustainability and resiliency in new developments.

Without clear and defined direction, the City will face the risk of inefficient use of finite funds and resources and further delays which will impact the City’s ability to meet its targets and public commitments.

1.2 With a resiliency strategy about to be released, a realistic prioritization and allocation of resources for both mitigation and resiliency efforts is required to support the City’s climate change goals.

As outlined earlier, Energy Evolution is the action plan for how Ottawa will meet its corporate and community greenhouse gas emission reduction targets. The audit noted

that there was no dedicated or sustainable funding identified when the Energy Evolution strategy was introduced. To date, the associated projects have been funded from a variety of sources, including (but not limited to) the Hydro Ottawa Dividend surplus; grants/loans from other levels of government and other stakeholders; funding from existing departmental programs and projects; and/or using the \$5 million Climate Change Master Plan Capital Fund, where possible. We understand that departments are allocating resources where they can in order to support the implementation of these projects, but it has been challenging due to their own resource constraints.

Given that Energy Evolution is further along in its maturity, it is reasonable that much of the City's efforts have been, in recent years, on mitigation. However, given how rapidly and intensely the City is feeling the effects of climate change, there is a need to also prioritize adaptation activities. The City has, to date, been focused on early actions with respect to adaptation such as developing climate projections, developing the Climate Vulnerability Risk Assessment and Climate Resiliency Strategy, integration of climate resiliency in plans such as the Official Plan, and updating flood mapping.

With an intended implementation plan to address the 40 short-term priority risks stemming from the Climate Resiliency Strategy, resources will need to be allocated to address these risks. We understand that in the short-term, there is no plan to establish an overarching prioritized listing of actions that incorporates both major climate change strategies – Energy Evolution and the Climate Resiliency Strategy.

With no holistic funding strategy for Energy Evolution, the City may be unable to effectively advance work on both the mitigation and adaptation sides and obtain value for money at the portfolio level. Once the Climate Resiliency Strategy is released, there will be two streams of work with their own priorities, commitments and actions – likely competing for the same resources and funding. We further appreciate that the commitments relative to climate change compete for resources across many City priorities. This could put the achievement of the City's short-term climate change efforts at risk.

RECOMMENDATION 1 – CLARIFY THE ROLE OF THE CITY FOR COMMUNITY ACTION

The General Manager of PRED should work with Council, the City Manager and the senior leadership team to clarify the role of the City in catalyzing community action to ensure there is alignment between Council's strategic direction and the priorities of the City.

MANAGEMENT RESPONSE 1

Management agrees with this recommendation. On April 17, 2024, a new Strategic Initiatives Department was created to bring together expertise in key areas with single points of accountability to deliver on Council’s highest priorities, including climate change and resiliency.

The GM of Strategic Initiatives, and the Director of Climate Change and Resiliency, will work with Council, the City Manager and the senior leadership team to clarify the role of the City in catalyzing community action. This will be undertaken in conjunction with the prioritization effort recommended as part of Recommendation No. 2. This recommendation will be completed by the end of Q2 2025.

RECOMMENDATION 2 – PRIORITIZATION OF KEY PROJECTS AND ACTIVITIES

Once the strategic direction/role of the City has been clarified, in collaboration with the City Manager and senior leadership team, the General Manager of PRED should establish a holistic and realistic list of priority projects to address both mitigation and adaptation concurrently to achieve the City’s climate change goals.

This should:

- align with the City’s strategic direction;
- be based on the most significant risks to the City;
- have buy-in across the organization;
- reference, as applicable, the extent to which priorities will be addressed by plans that are currently in development (e.g., Asset Management Plans, Master Plans, Long Range Financial Plans); and
- clearly articulate funding and resourcing strategies, including where external partnerships/funding can be leveraged (considering the other priorities of the City).

MANAGEMENT RESPONSE 2

Management agrees with this recommendation. The GM of Strategic Initiatives, and the Director of Climate Change and Resiliency, will work with the City Manager and the senior leadership team to refresh the priority actions, and associated projects, outlined in the Climate Change Master Plan to ensure they address both mitigation and adaptation concurrently, are realistic, and align with the factors identified in the Audit recommendation. This will be completed by the end of Q2 2025.

Governance

2.1 Accountabilities, roles and responsibilities have not been fully formalized for the climate change outcomes committed to by the City.

Climate change is a cross-cutting portfolio that requires a clear, coordinated, and integrated approach. This includes having shared accountability, and clearly defined roles and responsibilities, to advance the Plan.

Despite it being recognized that climate change needs to be embedded in all City departments, the audit noted that accountabilities have not been fully formalized for the climate change outcomes committed to by the City. Lead and supporting departments are outlined for each priority in the Plan and Energy Evolution project; however, departments have not been formally assigned specific targets/metrics or outcomes.

Although there is collaboration between the Climate Change & Resiliency team and departments, our audit identified that there is a lack of clarity of roles and responsibilities. The Climate Change & Resiliency team is widely viewed as the planning and policy arm of the portfolio (including monitoring and reporting), while departments are intended to take a lead role in managing and implementing climate change related projects/initiatives as they have the technical expertise. However, these roles have not been formalized. We understand that there have been some challenges between the Climate Change & Resiliency team and departments in the absence of these formalized roles and responsibilities. This has caused some instances of inefficiencies, delays, duplication of work, additional costs and some tension between teams.

In the absence of formal accountability structures and mechanisms to support coordination, and given the limited capacity within departments, there has been heavy reliance on relationships established by the Climate Change & Resiliency team with departmental representatives to support the Plan. We understand that progress has advanced primarily on the “side of people’s desks” based on the goodwill or passion of departmental representatives rather than through formal roles/responsibilities.



Notwithstanding, the audit did see evidence of efforts to establish roles and responsibilities through project charters on a project basis. Further, working groups are, or are anticipated to be, created to support the development and implementation of strategies and policies (e.g., Climate Resiliency Strategy, High Performance Development Standards, Electric Vehicle Policy) and pilot projects (e.g., Solar Rooftop).

Without formalized accountabilities at all levels, the City has limited ability to hold departments responsible in achieving climate change targets and outcomes. Furthermore, a lack of clear roles and responsibilities could result in a lack of progress towards committed outcomes, missed opportunities, inefficiencies, additional costs and/or duplication of work. We understand that, where possible, departments and the Climate Change & Resiliency team are leveraging existing governance structures within the City to coordinate activities.

2.2 The Tiger Team is not operating in a manner to best support the climate change portfolio.

The Climate Change Tiger Team was created to champion and support implementation of the Plan. This team consists of all General Managers across the City, the Chief Medical Officer and representatives from City Manager's Office and PRED/Climate Change & Resiliency team.

As outlined in the Terms of Reference for this group, the Climate Change Tiger Team is responsible for:

- championing policies, programs, and projects related to climate change;
- discussing climate change policies, programs and projects that have a corporate-wide mandate and departmental and cross-departmental opportunities; and
- providing advice (e.g., on how climate change issues will intersect with priorities, how climate considerations will be incorporated and prioritized in the annual budget process and the Long-Range Financial Plan).

Given the profile of the Tiger Team, the audit expected their role to be one that provided strategic direction and decision making. Through interviews and document review, the audit found that the Tiger Team has been primarily operating as an information receiving body. It has not generally been acting as a decision-making body nor as an entity that provides strategic direction to advance the climate change portfolio. While management indicated that direction is sought at the director level (e.g., as a project sponsor during the development of a project charter for a particular initiative), we expected to see the Tiger Team provide direction on the overarching climate change portfolio. This would have included reviewing and approving prioritization of projects/initiatives, making decisions on resource allocation and acting as an escalation mechanism. However, this has not been the case. For example, we understand that the 2023 Climate Change Master Plan Capital Fund spend plan was never circulated to the Tiger Team, nor was input sought from them on projects/initiatives.

Without the strategic direction and decision making of senior leadership, there is the risk City-wide perspectives are not obtained, which could have implications on funding, resource allocation and alignment with operational activities.

2.3 The temporary nature of the Climate Change & Resiliency team creates challenges in supporting the City towards achievement of priorities and targets.

As noted above, the Climate Change & Resiliency team is widely viewed as the planning and policy team for the climate change portfolio. Currently, the team is made up of 24 staff positions, 15 of which are temporary. The team is responsible for developing and coordinating strategic policies, programs, and plans to reduce greenhouse gas emissions and build climate change resiliency. As the City’s centre of expertise for climate change, the team also provides technical expertise on corporate projects and supports community initiatives. In support of this role, the Climate Change & Resiliency team oversees the \$5 million Climate Change Master Plan Capital Fund which was approved to advance the Plan and supporting priorities.

The Climate Change & Resiliency team has a limited operating budget (\$1M and \$1.4M⁴ in the 2023 and 2024 Budget, respectively) and as a result, over 50% of the \$5 million Climate Change Master Plan Capital Fund is used for salaries of staff members, most of which are temporary (both within the Climate Change & Resiliency team and other departments to support climate change initiatives). This leaves only 50% of the capital budget available for capital investments.

The audit noted that the temporary nature of many of the positions on the Climate Change & Resiliency team can present challenges. As 63% of the positions within the team are not permanent, this uncertainty presents a risk of losing both corporate knowledge and in-house climate change expertise, as well as potentially not achieving their targets if the funding is not secured for future years.

RECOMMENDATION 3 – ACCOUNTABILITY FRAMEWORK

The General Manager of PRED, in collaboration with the City Manager and senior leadership team, should develop an accountability framework for the climate change portfolio with formalized roles and responsibilities across the organization, for the climate change outcomes committed to by the City.

⁴ The increase from 2023 to 2024 was a result of a re-allocation from the \$5M Climate Change Master Plan capital fund.

MANAGEMENT RESPONSE 3

Management agrees with this recommendation. On April 17, 2024, a new Climate Change and Resiliency Service Area was established within the new Strategic Initiatives Department as the single point of accountability for the climate change portfolio.

The GM of Strategic Initiatives, and the Director of Climate Change and Resiliency will work with the City Manager and the senior leadership team to establish a governance framework, including roles and responsibilities, for the climate change portfolio. This recommendation will be completed by Q4 2024.

RECOMMENDATION 4 – ROLE OF THE CLIMATE CHANGE & RESILIENCY TEAM

As part of the formalization of the accountability framework and in conjunction with the clarification of the strategic direction for the portfolio, the General Manager of PRED should define the role of the Climate Change & Resiliency team relative to the climate change portfolio.

MANAGEMENT RESPONSE 4

Management agrees with this recommendation. On April 17, 2024, a new Climate Change and Resiliency Service Area was established within the new Strategic Initiatives Department as the single point of accountability for the climate change portfolio. The role of the Climate Change and Resiliency Service Area will be defined as part of the governance framework to be developed in response to Recommendation No. 4. This recommendation will be completed by the end of Q4 2024.

RECOMMENDATION 5 – ROLE OF TIGER TEAM

The General Manager of PRED should revisit the purpose/role of the Tiger Team to ensure there is strategic advice and decision making provided in a timely manner relative to the climate change portfolio.

MANAGEMENT RESPONSE 5

Management agrees with this recommendation. The GM of Strategic Initiatives, and the Director of Climate Change and Resiliency will define the purpose/role of the Tiger Team as part of the governance framework to be developed in response to Recommendation No. 4. This recommendation will be completed by the end of Q4 2024.

RECOMMENDATION 6 – RESOURCING AND FUNDING STRATEGY FOR THE CLIMATE CHANGE & RESILIENCY TEAM

Once the role of the Climate Change and Resiliency team is established, the General Manager of PRED, in consultation with the General Manager, Finance and Corporate Services and Chief Financial Officer, should explore a permanent resourcing and funding strategy that aligns with the role and structure of the Climate Change & Resiliency team going forward.

MANAGEMENT RESPONSE 6

Management agrees with this recommendation. The GM of Strategic Initiatives, in consultation with the General Manager, Finance and Corporate Services and Chief Financial Officer, will explore establishing a sustainable funding and resourcing strategy for the Climate Change and Resiliency Service Area that aligns with the role and structure of the team as part of the annual City budget process. This will be completed by Q4 2025.

Performance Management and Reporting

3.1 Metrics have not been established to demonstrate how the City is making progress towards its climate change priorities and targets.

The City has publicly committed to short, medium and long-term targets to reduce corporate and community greenhouse gas emissions and to providing annual greenhouse gas community and corporate inventories⁵ and an assessment of how Ottawa is tracking towards community and corporate targets.

At the time of the audit, the City had not reported on corporate or community greenhouse gas inventories since 2020; which is a key tool in assessing emission reductions and progress towards its targets. Management indicated that the City is currently on track for its 2025 corporate emission targets and behind on the 2025 community emission targets; however, the audit could not verify this as the greenhouse gas inventories were still under third party review at the time of the audit.

The audit found that there are limited quantifiable metrics or indicators developed to provide insights on the progress towards the City’s climate change priorities. We understand that this is a result of the maturity of some of the initiatives/projects. Further, some climate change projects only have an objective of establishing a strategy and as result, it is too early to consider metrics. Finally, there are challenges with the

⁵ A greenhouse gas (GHG) inventory is a list of emission sources and the associated emissions quantified using standardized methods.

availability/lag time of data to measure progress; however, we understand that the City is working with other levels of government and external stakeholders to obtain relevant data.

While Energy Evolution outlines metrics for the 20 projects to be undertaken in the short term, management has indicated that these provide a model for how the City can potentially achieve the greenhouse gas reduction targets but are not metrics the City actively tracks and reports on. For example, the Net Zero Municipal Buildings Project outlined the following metric within Energy Evolution: “ramping towards having 27% of municipal buildings net zero by 2030”⁶. Management indicated that there is no current tracking against this metric. While there have been some indicators contemplated in the project charter for this initiative (e.g., \$ per kg carbon dioxide equivalent (CO₂e) saved, number of projects per year, and projected kg/carbon dioxide equivalent (CO₂e) saved per year), no specific metrics/targets have been developed in association with these indicators and no reporting on these indicators was provided in the 2023 Climate Change Master Plan Progress Report.

Given the limited metrics and indicators, the audit noted that current reporting provides limited insights on how the City has made progress towards its climate change priorities and outcomes. The annual progress report indicates whether a priority is on track/off track based on whether it is proceeding according to specific milestones.

Without clear metrics or indicators to support measurement and reporting, the City has limited ability to: measure and demonstrate progress; assess value for money; and, effectively make decisions to support the priorities of the Plan.

RECOMMENDATION 7 – METRICS AND REPORTING

Based on the strategic direction and prioritization established, the General Manager of PRED should define specific, quantitative metrics that will be assessed, outside of the established greenhouse gas reduction targets, to demonstrate progress across the portfolio. These metrics should:

- be based on available data or data that can be obtained (e.g., the City should continue to work with other levels of government and external stakeholders to obtain relevant data);
- be assigned to departments responsible for achieving and monitoring them, in alignment with the established accountability framework (as outlined in Recommendation 3); and,
- provide insights on progress through reporting to support transparency and timeliness.

⁶ https://documents.ottawa.ca/sites/documents/files/energy_evolution_appendix_g_en.pdf (page 5)



MANAGEMENT RESPONSE 7

Management agrees with this recommendation. The GM of Strategic Initiatives, and the Director of Climate Change and Resiliency will review and establish new performance indicators based upon available data to highlight the City's progress towards its climate change goals. This will align with the governance framework addressed in Recommendation 3. This recommendation will be completed by Q2 2025.

Appendix 1 – About the Audit

Audit Objectives and Criteria

The objective of this audit was to provide reasonable assurance that the City has the appropriate plans, strategies, and tools in place to support the achievement of its Climate Change Master Plan targets and priority actions.

Criteria listed below have been developed from our assessment of key risks related to the City’s progress in achieving its climate change priorities, applicable climate change frameworks and standards, and in consultation with subject matter experts.

1) Policies, Strategy, and Long-term Plans	
1.1	City-wide policies and long-term plans are aligned to support the achievement of targets and priorities outlined in the Plan.
1.2	Strategies, programs and tools have been developed to achieve targets and priorities.
1.3	Climate change risks and opportunities are identified and assessed on an ongoing basis over multiple time horizons (short, medium and long term) to inform strategic and operational decisions.
2) Governance	
2.1	Strategic direction has been provided to enable staff to prioritize and allocate resources towards climate change targets and priorities.
2.2	An effective governance structure has been established to oversee and support the climate change agenda, including formalized roles, responsibilities and expectations of all stakeholders.
3) Stakeholder Management	
3.1	The City has engaged with and leveraged senior levels of government and partners to support the achievement of its targets and priorities.
3.2	The City has established and clearly articulated its role in catalyzing action in the community towards the achievement of its targets and priority actions.
4) Resource Management	
4.1	The City has identified internal and external sources of funds towards achieving the short-term targets and priorities outlined in the Plan.
4.2	The City has the resourcing/capacity required across the organization to advance climate change initiatives towards targets and support the long-term sustainability of the portfolio.
4.3	The capital budget process effectively considers the impact of climate change and the initiatives outlined in the Plan.

4.4	Climate change related projects are selected and prioritized based on their impact on reaching targets and priorities and considering limited resources.
5) Performance Management and Reporting	
5.1	The City has developed appropriate key performance indicators and metrics, to measure the progress towards its targets and priorities.
5.2	The City has established mechanisms to measure and report the progress made towards targets and priorities to support decision making and transparency.

Audit Approach and Methodology

Audit staff performed the following procedures to complete this audit:

- Reviewed relevant documents (e.g., Climate Change Master Plan, Energy Evolution Strategy, etc);
- Conducted interviews with key City personnel;
- Utilized subject matter expertise in the area of municipal action towards climate change mitigation and adaptation;
- Performed benchmarking with other Canadian municipalities, where relevant; and
- Performed other analyses, as deemed necessary.

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