Agenda – Executive Policy Committee – June 17, 2025

Report – Standing Policy Committee on Water, Waste and Environment – June 9, 2025

Item No. 2 Winnipeg Climate Action Plan – 2024 Annual Report

STANDING COMMITTEE RECOMMENDATION:

On June 9, 2025, the Standing Policy Committee on Water, Waste and Environment concurred in the recommendation of the Winnipeg Public Service and submitted the following to Council:

1. That this report be received as information.

Agenda – Executive Policy Committee – June 17, 2025

Report – Standing Policy Committee on Water, Waste and Environment – June 9, 2025

DECISION MAKING HISTORY:

STANDING COMMITTEE RECOMMENDATION:

On June 9, 2025, the Standing Policy Committee on Water, Waste and Environment concurred in the recommendation of the Winnipeg Public Service and submitted the matter to the Executive Policy Committee and Council.

COUNCIL DECISION:

On July 13, 2023, Council concurred in the recommendation of the Standing Policy Committee on Water, Waste and Environment and adopted the following:

1. That the Winnipeg Climate Action Plan – Annual Report be received each year in June to allow for the data gathering and analysis required for the annual Corporate GHG inventory.

On September 20, 2018, Council concurred in the recommendation of the Standing Policy Committee on Water and Waste, Riverbank Management and the Environment that the Winnipeg Public Service report back annually to Council on the Winnipeg Climate Action Plan beginning in 2019.

ADMINISTRATIVE REPORT

Title: Winnipeg Climate Action Plan – 2024 Annual Report

Critical Path: Standing Policy Committee on Water, Waste and Environment – Executive Policy Committee – Council

AUTHORIZATION

Author	Department Head	CFO	CAO
B. Raddatz, RPP, MCIP Manager, Office of Sustainability	T. W. Shanks, M. Eng., P. Eng. Director, Water and Waste	T. Graham	M. Dryburgh, Acting Interim CAO

EXECUTIVE SUMMARY

This report provides an outline of climate action and policy development in 2024. This was the second year of putting OurWinnipeg 2045 and the Community Energy Investment Roadmap (CEIR) into action. In line with federal and international goals, OurWinnipeg 2045 targets net zero emissions by 2050. CEIR is a technical plan based on evidence to achieve the City's climate action target. It updates both corporate and community greenhouse gas (GHG) inventories. Council directed the Public Service to implement CEIR in July 2022.

Emissions from City operations in 2024 were 319,811 tonnes of CO_2e. This reflects an increase of 12,034 tonnes of CO_2e from 2023. The single greatest contributing factor to this was an increase in landfilled waste. There was also more total wastewater treated, which was mostly balanced out by fewer emissions in the buildings sector. Both of these trends were caused by weather conditions, including more precipitation.

RECOMMENDATIONS

That this report be received as information.

REASON FOR THE REPORT

On July 13, 2023, Council concurred in the recommendation of the Standing Policy Committee on Water, Waste and Environment and adopted the following:

1. That the Winnipeg Climate Action Plan – Annual Report be received each year in June to allow for the data gathering and analysis required for the annual Corporate GHG inventory.

On September 20, 2018, Council concurred in the recommendation of the Standing Policy Committee on Water and Waste, Riverbank Management and the Environment that the Winnipeg Public Service report back annually to Council on the Winnipeg Climate Action Plan beginning in 2019.

IMPLICATIONS OF THE RECOMMENDATIONS

There are no implications associated with the recommendations of this report.

HISTORY/DISCUSSION

A summary of the City's climate action and policy development in 2024 is outlined in this report. This was the second full year of implementation for OurWinnipeg 2045 and the Community Energy Investment Roadmap (CEIR). OurWinnipeg 2045 is Winnipeg's guiding climate policy with the climate action target of net zero emissions by 2050. The CEIR identifies City and community-wide systems level actions and investments to achieve net zero emissions. Through the Corporate Greenhouse Gas Inventory process, the City tracks progress towards our climate action targets.

The CEIR identifies five key areas that need to make "big moves" when it comes to emissions reduction: buildings, transportation, local renewable energy, water and waste. In 2024, significant progress was made to prepare, plan and build capacity to support big moves in those areas. While this foundational work may not be immediately reflected in the Corporate GHG Inventory, it is essential in enabling the City and community to implement actions that reduce energy consumption, maximize energy efficiency improvements and transition to low-carbon energy sources to meet remaining energy demand. Substantively addressing climate change is more relevant than ever – investments made now will lock in emissions for decades to come.

Corporate Greenhouse Gas (GHG) Inventory

The Corporate GHG Inventory relies on departmental reporting of emissions-related data. This data is used by the departments to meet their own reporting requirements. It includes energy use and emissions from buildings, vehicles, equipment, water and waste infrastructure, and streetlights to measure the energy used and CO_2e emitted in providing the services and infrastructure for Winnipeg. This section provides a summary of the City of Winnipeg's 2024 Corporate GHG Inventory. In 2024, the City emitted almost 320,000 tonnes of CO_2e and used over 2.6 million gigajoules of energy. This energy use is comprised of 234.8 million kWh of electricity, 18.2 million cubic meters of natural gas, 6.6 million litres of diesel fuel, and 22.5 million litres of gasoline. More detailed accounting, including sector definitions, and in-depth analysis can be found in the appendix.

Emissions increased by 3.9 percent in 2024, with energy use decreasing by -0.6 percent. The increase in emissions was driven by higher levels of landfilled waste. This waste, which includes all material taken to the Brady Road Resource Management Facility, has a significant impact on reported emissions percentages for buildings and transportation. Small changes in landfilled waste can mask real shifts in emissions from buildings and transportation, two sectors where the City has more direct control. The increase of 12,233 tonnes CO2e from landfilled waste was only partly offset by decreased emissions from natural gas (-359 tonnes CO_2e), aviation fuel (-87 tonnes CO_2e), and electricity (-3 tonnes CO_2e). Gasoline use and diesel use increased

slightly (49 tonnes CO_2e and 25 tonnes CO_2e, respectively). The decrease in energy use comes from a modest decrease in consumption of electricity (-1.1 percent) and natural gas (-1.0 percent), and a significant decrease in aviation fuel (-28.9 percent). This was partly offset by an increase in gasoline use (0.4 percent). Diesel use stayed effectively constant, increasing by just 0.04 percent.

	2024 Energy		2024 CO_2e		
	Total Energy (GJ)	**Change from 2023 (%)**	**Total CO_2e (tonnes)**	**Change from 2023 (%)**	**Change from 2023 (tonnes CO_2e)**
Buildings	835,714	-7.1%	24,391	-10.0%	-2,700
Transportation	1,086,415	0.0%	72,922	0.2%	162
Streetlights	110,042	0.0%	37	0.0%	0
Water and Wastewater	600,422	8.6%	10,467	28.8%	2,339
Corporate Waste	-	-	211,995	6.1%	12,233
Total	**2,632,593**	**-0.6%**	**319,811**	**3.9%**	**12,034**

**Table: Corporate Energy Use and GHG Emissions*

The largest areas of emissions change were due to:

- Total amount of waste landfilled at the Brady Road Resource Management Facility was up from 2023, with emissions up by 6.1 percent (12,233 CO_2e).
- Total wastewater treated was up by 15.4 percent due to increased precipitation in 2024.
- Increase in Transit fuel use emissions of 0.6 percent (an additional 269 tonnes CO_2e compared to 2023).

A Whole City Approach

Our climate action goals require climate considerations for all policy and spending decisions. The City of Winnipeg can show climate action leadership by leveraging its physical, financial and human assets to support full implementation of the CEIR.

In 2024, the City continued to advance efforts on embedding climate action into internal decision-making processes through committee work and policy implementation. The Senior Management Team Climate Steering Committee (SMTCSC) created three action teams, focused on energy planning, electric vehicles and environmental benefits. Additionally, an interdepartmental core working group was created to provide strategic advice and support the update of the Winnipeg Climate Action Plan. In its first year, the Climate Action and Resilience Committee initiated two projects: one focused on identifying tools and mechanisms to align action with climate targets and another on public opinion research regarding climate action in Winnipeg – with both projects actively underway.

The Sustainable Procurement Action Plan marked its second year of implementation, piloting the Environmental Procurement Questionnaire through formal request processes (including bids, information, proposals, quotations and tenders). Environmental clauses and specifications from the Social Value Menu were also piloted to track the impact of the environmental

questionnaires and how business practices contribute to environmental goals and outcomes of the City and community.

The City also continued its administration of the Housing Accelerator Fund (HAF) agreement with the Canada Mortgage and Housing Corporation. Through the HAF Capital Grant Incentive, $25 million was awarded in the first round of funding to support affordable housing projects and projects in Downtown Winnipeg. All approved projects were located near frequent transit and were evaluated for energy efficiency, aligning with HAF's objective to support the development of low-carbon and climate resilient communities.

CentrePlan 2050, a secondary plan by-law, was adopted by Council in September 2024. It serves as a policy and roadmap for action in Downtown Winnipeg, including initiatives to reduce greenhouse gas emissions by developing dense mixed-use neighborhoods, implementing the rapid transit network, adaptively reusing existing buildings, connecting to rivers and riverbank ecosystems, enhancing the pedestrian environment and installing green infrastructure.

Council also approved amendments to both the Winnipeg Zoning By-law (200/2006) and Downtown Zoning By-law (100/2004). These revisions promote sustainable development through higher-density, multi-unit housing and infill projects, particularly along underutilized commercial corridors and shopping mall sites, making more efficient use of existing infrastructure and public services.

Green Buildings

Buildings are the second largest source of GHG emissions in Winnipeg, accounting for an estimated 41.7 percent of community-wide emissions in 2024. City facilities accounted for 31.7 percent of overall energy use and 7.6 percent of emissions at the corporate level. The use of natural gas for heating purposes is the most significant driver of building emissions.

In the last year, corporate green building efforts focused on policy development to lay the foundation for net zero City buildings. These efforts include continued work on updating the Green Building Policy for New-City Owned Buildings and Major Additions and the development of a Building Emissions Reduction Strategy for existing buildings, both expected for Council approval in 2025.

The City also continues to apply actions from the CEIR to new and existing buildings. This includes energy efficiency targets and carbon reduction requirements for new buildings and seeking financial support for energy efficient upgrades to existing buildings through Efficiency Manitoba programs. These energy efficiency targets, and carbon reduction requirements continue to be monitored as the City advances design for three new capital projects, including the South Winnipeg Recreation Campus (SWRC), Winnipeg North Transit Garage (WNTG) and East of the Red Recplex (ERRP). SWRC and WNTG have been funded for construction, whereas ERRP has not been at this time. For existing City buildings, a total of $148,000 was received in financial support from Efficiency Manitoba programs in 2024, with the majority for energy efficient lighting upgrades.

Zero-Emissions Transportation

Transportation is the largest source of GHG emissions in Winnipeg, accounting for an estimated 49.9 percent of community-wide emissions. It includes personal vehicle use, commercial operations, transit, heavy transportation and off-road vehicle use. Fuel use for City operations,

including fleet, equipment and waste hauling contractors accounted for 41.3 percent of overall energy use and 22.8 percent of total emissions.

In 2024, the City completed zero emissions transportation initiatives centered around transit electrification and the electrification of vehicle transportation (personal, commercial, City fleet). These initiatives included facility modifications at the Fort Rouge Garage to service and repair battery electric and hydrogen fuel cell buses and a study of the City's infrastructure compatibility for electric vehicles. The study will inform future decisions on charging equipment installation and purchase of municipal fleet. The City also continued the Flexible Workplace Program for a second year, resulting in 22,803 trips saved per month for commuting, with a total of 1,153 tonnes CO_2e avoided.

The EV Public Charger Pilot Program concluded in 2024, which resulted in the implementation of a pricing policy to encourage turnover and allowing more access to chargers. The final year of the pilot saw a 47.8 percent increase in usage from the year prior. During the pilot, there were 10,376 charging sessions, 90.5 megawatt-hours of electricity dispensed and 94 tonnes of CO_2e avoided.

Local Renewable Energy

CEIR identifies that, after reducing the need for energy and increasing energy efficiency, electrification of heating and transportation is key to reaching net zero emissions. Hydroelectricity can be supplemented by local production, including solar generation which can reduce the need to build new grid-scale generating capacity.

Over the past year, clean energy actions concentrated on removing barriers for local production in the community and increasing solar energy generation in new and existing City buildings. As part of these efforts, Council approved zoning by-law amendments, including an exemption from the development permit process for solar photovoltaic (PV) systems mounted on buildings a minimum of eight feet above grade or ground mounted installations. Winnipeg Transit also received a draft report detailing the preliminary design and Class 3 cost estimate for a proposed grid-tied microgrid at the Brandon Garage. The microgrid is expected to consist of energy generation from a rooftop solar PV installation and an existing diesel genset, supported by an integrated battery storage system and microgrid controller.

Sustainable Waste Management

Community GHG emissions from waste come from both City-owned and private landfills. Organic matter in landfills decays over time and can continue to release GHGs long after it is buried. Waste accounted for an estimated 7.6 percent of community-wide emissions, and 66.6 percent of corporate emissions in 2024.

The City carried forward several sustainable waste management initiatives in 2024. These included sustained financial support through the Compost Support Program and the approval of an annual operating grant to support food waste drop-off stations, in partnership with Compost Winnipeg. As a result, 15 stations were launched across the city to help divert residential food waste from the landfill. This program is expected to remain in place until a city-wide green cart program is implemented.

Work on the development of the green cart program also progressed, with efforts focused on the procurement of organic waste processing services through consultant support and issuing a

Request for Qualifications. The City also completed its review of the Comprehensive Integrated Waste Management Strategy (CIWMS). The final report, anticipated in 2025, will outline recommended options to guide planning for the next five to ten years.
To support the implementation of the Multi-Family Waste Diversion and Management Strategy, one full-time equivalent (FTE) position, a Waste Diversion Specialist, was added. Promotional and educational programming was delivered to inform residents of multi-family properties about waste minimization opportunities and available waste diversion programs through collaboration with Winnipeg Public Libraries and community groups.

For the fourth consecutive year, 100 percent of biosolids were beneficially used through soil fabrication and land application. In total, 62,366 tonnes were diverted from the landfill, equivalent to 14,432 tonnes of CO_2e avoided, a 4 percent increase from 2023.

Resilience

Resilience refers to actions taken to address the impacts of climate change and to respond to the local impacts of climate change. Projected climate impacts include extreme heat days, intense summer precipitation events, drought, and increased freeze-thaw events. Overall, the climate will continue to become more unstable as more carbon pollution is released into the atmosphere.

In 2024, the City continued to take action to increase climate resilience through policy and community-based initiatives. The Winnipeg Comprehensive Urban Forestry Strategy completed its first year of implementation, with focused efforts on working towards meeting accelerated public tree replacement and pruning cycle targets, while development of the Greenspace and Natural Corridors Plan Bylaw (Greenspace Plan) and Biodiversity Policy continued to progress. The Poverty Reduction Strategy also completed the first year of implementation under its new plan (2024-2027). Eight hydration stations were installed to increase access to clean drinking water for at-risk and unsheltered residents during the summer season and reduce heat-related illnesses (action 4.4.1). A water fountain was installed at Giizhigooweyaabikwe Park to ensure park infrastructure incorporates climate change adaptation (action 4.4.2).

Community engagement for the Winnipeg Clean Air Spaces project continued, including a clean air exercise at Sergeant Tommy Prince Place, and a key stakeholder workshop. The key stakeholder workshop focused on risk perception and development of a communication strategy to increase awareness during poor air quality events. Ready Winnipeg sessions reached over 500 individuals in the community, building public awareness on hazards, personal preparedness and resiliency.

The City contributed $455,000 towards various community-based initiatives through the Home Grown Winnipeg Tree Planting Program, Land Dedication Reserve Fund and the Winnipeg Food Council’s Urban Agriculture and Community Gardens Small Grants Program. These initiatives support climate resilience through nature-based solutions and strategic land use.

FINANCIAL IMPACT

Financial Impact Statement **Date:** May 8, 2025

Project Name:

Winnipeg Climate Action Plan – 2024 Annual Report

COMMENTS:

There is no financial impact associated with the recommendations of this report

Lucy Szkwarek, FCPA, FCGA

Lucy Szkwarek, FCPA, FCGA
Manager of Finance and Administration

CONSULTATION

This Report has been prepared in consultation with:

- Assets and Project Management
- Planning Property and Development
- Public Works
- Purchasing
- Transit
- Winnipeg Fire Paramedic Services
- Deputy Chief Administrative Office

OURWINNIPEG POLICY ALIGNMENT

OurWinnipeg Goal: Leadership and Good Governance
Objective 1. Establish and implement priority actions through evidence-informed decision-making processes.

Evidence-informed actions require transparent and accountable decision-making to determine the long-term public interest and the appropriate trade-offs in levels of service, taxation, and budget priorities.

OurWinnipeg Goal: Environmental Resilience
Objective 1. Prioritize the transition to a resilient, low-carbon future through demonstrated organizational and community leadership, and collaborative actions that mitigate and adapt to a changing climate.

Recognize that climate changes will have significant impacts on community assets and services, and include consequences for human health, social welfare, the natural and built environments and ecosystems, the economy, and urban infrastructure. Adapt government regulation, policy, resource allocation, organizational culture and leadership, partnerships, and resident behaviors and awareness, to empower the community to realize the many benefits that emerge when mitigating greenhouse gas emissions, preparing for and reducing risks to lessen the shocks, stresses and other negative impacts of climate change.

WINNIPEG CLIMATE ACTION PLAN ALIGNMENT

Strategic Opportunity #1: Corporate Leadership
Key Direction #1.1 Cultivate a Corporate Culture That Values Climate Action

Strategic Opportunity #7 Community Climate Resiliency
Key Direction #7.1 Implement Opportunities to Improve Winnipeg's Resilience and Adaptability to the Effects of a Changing Climate

WINNIPEG POVERTY REDUCTION STRATEGY ALIGNMENT

The Winnipeg Climate Action Plan aligns with the Winnipeg Poverty Reduction Strategy as both place focus on building a more resilient, sustainable, and equitable city for all residents. The Plan and the Winnipeg Poverty Reduction Strategy both represent the intention for increased resiliency of our communities, municipalities, and the city as a whole, while also placing emphasis on providing increased support to residents experiencing poverty related to the effects of climate change.

SUBMITTED BY

Department: Water and Waste Department
Division: Office of Sustainability
Prepared by: Janelle Harper, Green Buildings Specialist
Date: May 12, 2025
File No: O-005

Attachments:

Appendix A: City of Winnipeg Corporate Greenhouse Gas Emissions 2024