

COMMITTEE OF THE WHOLE (1) – MARCH 5, 2024

STAFF COMMUNICATIONS

Distributed March 1, 2024

SC 1 Memorandum from the Deputy City Manager,
Planning and Growth Management, dated
February 28, 2024.

Subject

Annual Climate Emergency
Declaration 2023 Actions Update.

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**STAFF COMMUNICATION
FOR INFORMATION ONLY**

SC 1

Staff Communication

CW(1) - March 5, 2024

DATE: February 28, 2024

TO: Mayor and Members of Council

FROM: Haiqing Xu, Deputy City Manager, Planning & Growth Management

RE: **STAFF COMMUNICATION**
Committee of the Whole (1) March 5, 2024 –
Annual Climate Emergency Declaration 2023 Actions Update

1. Purpose

To update Mayor and Members of Council on the status and progress of the City's Climate Emergency Declaration issued in 2019.

2. Analysis

On June 4, 2019, after a deputation by students from Thornhill Woods Public School, Mayor and Members of Council unanimously passed a Members' Resolution to declare a climate emergency in the City of Vaughan. The school's EcoCommittee members delivered a presentation about the impacts of climate change, and then requested Mayor and Members of Council to declare a climate emergency.

At the time, the City of Vaughan, along with 31 other Canadian municipalities, joined a growing list of cities worldwide who have deepened their commitment to climate action by declaring a climate emergency. Currently, there are 2,351 jurisdictions across 40 countries that have declared a climate emergency.

Through the declaration, the City named and reaffirmed its commitment to climate action. The declaration also directs staff to report back to Mayor and Members of Council on eight related actions and initiatives, to ensure ongoing tracking of progress and impact of the City's declaration.

The information below outlines the progress made toward the eight climate actions since the declaration.

Action #1: Continue the revision of Green Directions Vaughan, the City's community sustainability plan, as a platform for public engagement and community collaboration to act on climate change and other sustainability initiatives and seek Council approval of Green Directions Vaughan by Q4 2019

Action #1 is complete. The revised Green Directions Vaughan 2019 was approved by Council in December 2019.

To advance this initiative, milestones are being tracked for the sustainability actions within the plan. To date, 27 actions are complete, 38 actions are in progress and five actions have not been started. In December 2023, data was also collected from City of Vaughan departments and York Region to update the 24 quantitative indicators outlined in the plan.

Action #2: Evaluate joining the Global Covenant of Mayors for Climate and Energy and bring forward a staff report to Council with more information

Action #2 is underway. The Climate Change Adaptation and Resilience Framework and the revised Municipal Energy Plan intend to meet the four main actions of the Global Covenant of Mayors:

- Develop a greenhouse gas (GHG) emissions inventory
- Assess climate risks and vulnerabilities in the city
- Define ambitious climate mitigation, resilience and energy targets
- Create full climate action plans

The City's natural assets risk assessment was completed as part of the Municipal Natural Assets Initiative Preliminary Natural Asset Inventory. This work was provided to the consultants undertaking the Climate Change Adaptation and Resilience Framework for the Official Plan Review.

Action #3: Report back to Council on the Climate Change Adaptation and Resilience Framework

Action #3 is complete. The Climate Change Adaptation and Resilience Framework (CCARF) is one of seven background papers supporting policy direction for the Official Plan Review. The background research is focused on adaptation to complement ongoing City-initiated mitigation strategies, however all recommendations support climate change mitigation and adaptation strategies.

The first draft of the CCARF Background Paper was circulated to Mayor and Members of Council, internal staff, agencies and Indigenous Communities for review and comment in September 2021.

The CCARF was made available to the public for review and discussed at the second Official Plan Review Community Working Group meeting on October 12th, 2022, as well as a topic-based webinar for Climate Change Resilience and Adaptation on April 20th, 2022. The CCARF background paper was finalized in August 2022.

A Vulnerability and Risk Assessment was completed as a component of the CCARF which helped inform the findings of the paper. Extreme weather events are predicted to increase through to and beyond 2050 in Vaughan which include:

- Increases in temperature in all seasons and on average across the year,
- Increase in extreme temperatures,
- Increase in extreme heat events,
- Decrease in extreme cold events, and
- Change in precipitation patterns.

The CCARF evaluated synergies between both mitigation and adaptation interventions through land use planning. The key recommendations of the paper are the following:

- The Official Plan should include co-beneficial policies that address climate change mitigation and adaptation,
- Climate change policies should be integrated across the Official Plan, and
- The effects of climate change will be costly to the City if no action is taken, but funding can support actions to build resiliency now.

Action #4: Continue the planned update of the Municipal Energy Plan through approved capital project PL-9576-19 with the aim to identify strategies to reduce per capita GHG emissions from the 2013 level of 5 tonnes CO₂e per person to between 2 to 3 tonnes CO₂e per person by 2030

Action #4 is underway. The Request for Proposals for the contract to revise the Municipal Energy Plan was awarded to Sustainability Solutions Group (SSG) in June 2021.

Data collection was completed in December 2021 and City staff have received an Actions Catalogue that outlines best practices from other jurisdictions. The Actions Catalogue and collected data have been reviewed and actions have been discussed that may build on Vaughan's current GHG emission reduction strategy. Actions relate to buildings, transportation, energy supply and business processes. A draft of the Municipal Energy Plan implementation guide was received from SSG in Q2 2023 after input from City staff. Action items that can be quickly implemented are currently being identified by the Policy Planning and Special Programs department. As identified in the implementation guide, one action item that is being undertaken by City staff is the creation and implementation of a Carbon Budget. The Carbon Budget is expected to be completed in Q2 of 2024.

A draft Municipal Energy Plan was circulated to staff for review and comment in Q1 2023. The revised Municipal Energy Plan and implementation guide will outline and recommend actions and how they are to be implemented to meet Council's climate change goals. Project completion is expected in 2024 and the final report is anticipated to be brought to Council in Q2 2024.

Action #5: Report back to Council by Q2 2020 with results of the study on the use of Local Improvement Charges to enable energy efficiency retrofits in private buildings as a key action to reduce energy use, save money, and reduce GHG emissions

Action #5 is complete. Council approved the Local Improvement Charges Study and endorsed a draft implementing by-law on April 21, 2020.

To advance this action, staff submitted an application to the Community Efficiency Financing initiative in 2020 to capitalize a home energy retrofit program and an award letter was sent to the City in January 2021. Staff are exploring implementation options.

Action #6: Through the update to the Sustainability Metrics Program, report back to Council on possible incentives to encourage new construction to be more energy efficient than the Ontario Building Code

Action #6 is underway. Staff are building on prior work conducted to provide a review of possible financial and non-financial incentives. Through the update of the Sustainability Metrics Program (SMP) in partnership with the cities of Richmond Hill, Markham, and Brampton, a multi-pronged approach to implementing sustainable measures was recommended by Morrison Hershfield through a Sustainable Development Implementation Measures Report (2020). Given the policy framework's relevance to the City of Vaughan, staff are monitoring and assessing opportunities to incentivize the SMP.

In May 2022, Council approved the updated SMP which includes associated threshold scores and minimum performance levels. The SMP and threshold performance levels are aligned with partner municipalities to ensure a level playing field for all development across the cities of Richmond Hill, Markham, Brampton, and Vaughan. All block plan, draft plan, and site plan applications submitted as part of a complete application to Vaughan on or after January 1, 2023, must use the updated version of the Sustainability Metrics.

The threshold levels are Bronze, Silver, and Gold. In Vaughan, all new development applications located within Strategic Growth Areas will achieve a minimum performance level of Silver, and a minimum performance level of Bronze for all other new

developments. The Program uses a point-based system in which a development proposal earns points for achieving criteria (metrics) organized around the categories of built environment, mobility, natural environment and parks, infrastructure and buildings, and innovation.

The SMP 2022 guidebook is a key implementation tool that contains program requirements for applicability and implementation for both external applicants and internal evaluators. Each metric intent is clearly stated and is aligned with the categories of Built Environment, Mobility, Natural Environment and Parks, Infrastructure and Building, and Innovation.

Vaughan's online assessment tool, known as the Sustainability Assessment Tool (SAT), is integrated in Vaughan's new online development application portal through Service Vaughan. The SAT allows for version control, auto-calculates overall threshold scores live, auto-filters metrics dependent on application scenario, and auto-summarizes all inputs.

Additionally, on November 29, 2022, Council endorsed five quick wins to address a member's resolution on climate change. One of the quick wins was to set a building performance minimum requirement for all new development applications through making metric IB-12 Energy Efficiency "good" level in the SMP mandatory. A second quick win was to set a requirement of five (5) percent on-site energy generation for all Industrial, Commercial, Institutional and Multi-Unit Residential Building developments through making metric IB-10 Solar Readiness in the SMP mandatory. Staff will work on integrating these requirements through the future update of the SMP 2022.

Action #7: Work with the ClimateWise Business Network and other partners to improve compliance to Ontario Regulation 506/18, Energy and Water Reporting and Benchmarking (EWRB) in the commercial sector

Action #7 is ongoing. The ClimateWise Business Network (CWBN) completed a contract for the City in 2020. CWBN engaged the owners of commercial floor space in Vaughan via a survey to understand energy retrofit and sustainability drivers. For the last three years, the City of Vaughan has participated in the ClimateWise Building Challenge, a York Region wide recognition competition created to reduce GHG emissions and improve energy efficiency through collaboration, education, and innovation.

In 2022, the City was presented with the Mayor's Energy Challenge Advocate Award for demonstrating leadership by implementing the following two innovative initiatives:

1. Conducting the above-mentioned survey with commercial building owners, developing intelligence on the sector as well as awareness of the EWRB program.

2. Including participation in the EWRB as a reporting metric in Vaughan's Climate Emergency Declaration.

The Mayors' Energy Challenge is a CWBN initiative used to create awareness on the opportunity to understand building energy performance through participation in the Provincial EWRB program, geared towards local businesses and commercial building owners. The initiative will also raise awareness on how to aid in the reduction of GHG emissions generated by York Region commercial buildings that are over 50,000 square feet.

A recommendation to continue partnering with CWBN was contained within Council's endorsement of the five quick wins to address a member's resolution on climate change in November 2022. Staff renewed membership with CWBN in 2023, to align with the fiscal year, and explored opportunities to benchmark energy and water consumption. The renewed membership included assistance on reporting corporate energy and natural gas consumption under Ontario Regulation 507/18, Broader Public Sector Energy Reporting and Conservation and Demand Management Plan.

Action #8: Continue to pursue the Sustainable Neighborhood Action Program (SNAP) in the Thornhill area in partnership with the Toronto and Region Conservation Authority (TRCA) and local resident groups

Action #8 is underway. Council endorsed the Thornhill SNAP Action Plan on September 27, 2021. In June, 2023 the City of Vaughan and the TRCA entered into a new Service Level Agreement to continue implementation of the projects identified in the Action Plan.

In 2023, the following projects were implemented:

- On May 28, 2023, 29 residents helped to plant 150 trees and shrubs at the J.E.H. MacDonald House. The event was supported by the Thornhill Historical Society who also led walking tours in the surrounding neighbourhood.
- On June 20, seven community members attended an event at York Hill District Park where we planted a rain garden aimed at helping with stormwater management in the area. The garden includes 75 shrubs and 180 herbaceous plants. A wooden fence was built around the garden. The project was aided by a grant from the Arbor Day Foundation and TD Bank.
- On June 21, six community members helped to plant a pollinator garden at Oak Bank Pond Park consisting of 75 shrubs.
- On November 3, 10 community members attended a Nature in the City event at the J.E.H. MacDonald House. Attendees enjoyed Indigenous teachings on the knowing and understandings of the fall harvest as well as interactive programming about how wildlife adapt to prepare for winter.

- In fall 2023, design and preparations were completed for a tree giveaway program to be run in the spring of 2024. The program will aim to increase canopy cover on private properties and provide residents with a multitude of benefits.
- On October 18, Vaughan's Environmental Sustainability team and TRCA SNAP staff gave a presentation to the Thornhill Garden and Horticultural Society on the program to date and potential areas for collaboration. 17 people attended virtually.
- Throughout the year, the SNAP team collaborated with Facility Management to inform the revitalization of the Gallanough Resource Centre amphitheatre.
- In December 2023, a site visit was held along Clark Avenue with staff from Forestry and Horticultural Operations to analyze the potential of adding pollinator gardens adjacent to the bike lanes to create Vaughan's first Butterfly Way. The SNAP Team also met with Economic Development to discuss the ARTonBOXES program and the potential to incorporate pollinator themed art onto the boxes on Clark Avenue and the surrounding area chosen to be a part of the program.

For more information, contact Will Baigent, Energy and Climate Change Specialist, ext. 8941

Approved by

A handwritten signature in black ink, appearing to read 'Haiqing Xu', written in a cursive style.

Haiqing Xu, Deputy City Manager,
Planning and Growth Management