



Staff Report for Council Meeting

Date of Meeting: February 24, 2021

Report Number: SRPI.21.021

Department: Planning and Infrastructure

Division: Policy Planning

Subject: SRPI.21.021 – 2020 Greening the Hill
Environment Strategy Update and
Environmental Scorecard

Purpose:

The purpose of this staff report (SRPI.21.021) is to provide Council with the 2020 Greening the Hill Report, an annual progress update on the implementation of Richmond Hill's Environment Strategy, and to introduce Richmond Hill's first Environmental Scorecard.

Recommendation(s):

- a) That Council receive staff report SRPI.21.021 for information.

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Report Approval:

Submitted by: Kelvin Kwan, Commissioner of Planning and Infrastructure Department

Approved by: Mary-Anne Dempster, City Manager

All reports are electronically reviewed and/or approved by the Division Director, Treasurer (as required), City Solicitor (as required), Commissioner, and City Manager. Details of the reports approval are attached.

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Background:

1.0 Introduction

The City of Richmond Hill and its community are strongly committed to protecting their local environment. The role of municipalities remains essential to environmental stewardship by providing corporate leadership, public policy, community programming, and education and outreach. Through implementation of Richmond Hill's Environment Strategy, *Greening the Hill: Our Community, Our Future*, the City continues to protect, restore and enhance our natural environment.

This staff report provides an update to Council on the progress of Environment Strategy initiatives implemented throughout 2020. The report also introduces the City's first Environmental Scorecard, a snapshot of the environmental progress achieved during the first five years of Environment Strategy implementation (2015-2019).

2.0 Environment Strategy Overview

2.1 Greening the Hill – A Strategy for Environmental Action

Richmond Hill's Environment Strategy, *Greening the Hill: Our Community, Our Future*, outlines policy direction and actions to reduce our community's impacts on the environment and make improvements for a more resilient and sustainable community. Based on extensive community and stakeholder consultation, the Environment Strategy was approved by Council in 2014 (Council extract C#14-14) and identifies short, medium and long-term actions with a planning horizon to the year 2031. The Strategy considers how air quality, water resources, and land resources can best be managed using the City's regulatory powers, municipal services and operations, and community programming.

2.2 Implementing Richmond Hill's Strategy – Our Actions and Leadership

The Environment Strategy includes an Implementation Plan that outlines actions and defines roles and responsibilities across all City departments. The Environment Strategy Steering Committee, comprised of directors and managers, select environmental priorities on a yearly basis, share information and updates, and collaborate on strategic actions.

Achieving the goals of the Environment Strategy relies on City departments collaborating with one another and working in partnership with residents, businesses and other stakeholders in the community. An Environmental Communications Strategy was developed to convey key information and messages to the community and to help foster local partnerships.

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3.0 Environment Strategy Progress in 2020

3.1 Turning Challenges into Opportunities – Adapting to the ‘New Normal’

2020 marked the sixth full year of implementation of the Environment Strategy; it also marked an extraordinarily difficult year due to the COVID-19 pandemic. Despite the many challenges faced by the City, 2020 also yielded unique environmental opportunities and insights. In Richmond Hill and around the world, COVID-19 provided an opportunity for pause and reflection on our priorities. It became clear that access to local amenities such as parks, public green space, trails, and walking and cycling infrastructure are essential to vitality and quality of life in our community. The importance of local food production and access to community gardens was also underscored, as changes to financial situations and disruptions in supply chains caused fear and uncertainty.

The pandemic resulted in major shifts in commuting and travel habits. As social distancing, lockdown and telework became the norm, people depended less on cars and were forced to rely on services and amenities closer to home. As a result, worldwide CO₂ greenhouse gas (GHG) emissions declined an estimated 4-7% in 2020 from 2019 levels.¹ This significant yet temporary decline illustrates both the potential and magnitude of work ahead to reduce GHG emissions to tackle climate change. Additionally, the pandemic brought to light the need for more equitable access to transit, infrastructure and technology, as those hit hardest by the pandemic tend to live or work in underserved communities with fewer safe and accessible options. The importance of maintaining reliable utility systems (electricity, heat, and water) was also highlighted, as disruptions to these systems (e.g. from extreme weather events) could have catastrophic impacts for residents and businesses. These insights are important considerations to bear in mind as the City continues work on its climate change mandate and as the Environment Strategy is updated (see section 5.1).

Despite the challenges of COVID-19, City staff adapted quickly and progress on most Environment Strategy actions continued in 2020. The Environment Strategy Steering Committee and related working groups continued to meet virtually, and public participation in environmental webinars, workshops, and virtual events remained high due to the flexibility of participants being able to attend from home. Reimagined environmental events, such as Healthy Yards, yielded high levels of participation by providing curbside delivery and drive-through pick-up options for residents. The public closure of facilities led to building optimization opportunities, which drove energy and cost savings for the City.

3.2 Highlights of Environment Strategy Achievements in 2020

Highlights of Environment Strategy progress in 2020 are described in the sections below and showcased in the Environment Strategy 2020 Accomplishments leaflet

¹ Le Quéré, C., Jackson, R.B., Jones, M.W. et al. Temporary reduction in daily global CO₂ GHG emissions during the COVID-19 forced confinement. Nat. Clim. Chang. (2020). <https://doi.org/10.1038/s41558-020-0797-x>

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(Attachment 1). A detailed progress chart (Attachment 2) summarizes milestone achievements and the status of actions underway or completed in 2020.

3.2.1 Air Quality Achievements

The Environment Strategy aims to improve air quality by reducing pollutants released into the air – especially GHG emissions related to energy use and fuel combustion. Conserving energy and transitioning to cleaner and renewable sources of energy improves long-term cost savings and reduces GHG emissions that contribute to climate change. The City continues to advance projects that encourage sustainable transportation, improve efficiency, and mitigate the impacts of climate change both corporately and in our community.

a. Climate Change and Community Energy Planning

The City's Corporate Climate Change Framework was finalized and endorsed by Council in 2020. This framework helps to focus Richmond Hill's climate change mandate and ensures a coordinated approach. By applying a climate change lens to City activities, including a reference to climate change in staff reports, creating climate action programs, and engaging with stakeholders to foster collaboration and innovation, the City aims to become a leader in transitioning Richmond Hill to a low carbon, resilient future.

Development of the Community Energy and Emissions Plan (CEEP) continued in 2020 with extensive stakeholder consultation, analysis, and plan drafting. This citywide document will examine energy consumption patterns at the community level in order to identify actions to reduce GHG emissions, promote related economic opportunities and benefits, and increase resiliency to climate change. The City's Resilient Richmond Hill campaign to increase climate awareness and encourage community participation in the CEEP was recognized for its innovative engagement approaches with two awards in 2020:

- Award of Distinction from the RGD So(cial) Good Design Awards for the Resilient Richmond Hill educational video; and
- Best Web GIS Award from BeSpatial/URISA Ontario for the Resilient Richmond Hill Story Map.

The City also initiated development of a Climate Change Outreach Toolkit in 2020. Through a series of virtual workshops, staff are working with a diverse range of community members to co-create a climate change outreach and engagement product that will encourage residents to take action and educate others on climate change. Finalization of both the CEEP and the toolkit is expected in 2021.

b. Corporate Energy Planning

Implementation of the City's 2019-2023 Corporate Energy Plan continued in 2020. Although certain energy conservation programs were put on hold due to COVID-19 and the closure of public facilities, the City continued to optimize energy efficiency

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opportunities wherever possible. For example, once the closure of City facilities was announced, staff moved swiftly to develop and implement checklists to ensure energy-related settings were optimized at each facility to reduce consumption and costs. The City also continued to optimize the smart lighting control system installed on its LED street, park, and parking lot lights in order to achieve further energy and cost savings through dimming and energy consumption reporting.

In 2020, a corporate GHG emissions inventory was completed, revealing a 15% overall reduction in corporate GHG emissions and a 21.6% reduction in GHG emissions per square foot of City building space from 2014-2019. This improvement can be attributed to the City's conversion of street, park, and parking lot lights to energy efficient LED lights, implementation of energy conservation projects in City facilities, and Provincial measures to reduce emissions from electricity production. In addition, Richmond Hill was recognized once again for its energy conservation leadership. In 2020, the City received the Living City Energy Efficiency Leadership Award (Gold) from the Mayor's Megawatt Challenge Program for surpassing its energy efficiency target for City hall for 2019. The City also received '10 percent Club' awards for achieving more than 10% energy savings at Lois Hancey Aquatic Centre, Centennial Pool, and Bayview Hill Community Centre and Pool for 2019.

c. Sustainable Transportation

In 2020, Richmond Hill was recognized by the World Council on City Data (WCCD) for having more bike paths per 100,000 population than cities such as Los Angeles and Amsterdam. Because of lockdown measures and indoor restrictions from COVID-19, the City experienced first-hand the benefits of this strong active transportation network. Momentum for active transportation improvements continued in 2020, with sustained progress on the Lake-to-Lake Cycling and Walking Trail. In partnership with York Region, the segment from Major Mackenzie Drive to Elgin Mills Road was completed in 2020, as was feasibility and design work for the remaining segments of the route. Additionally, design work was initiated for upgraded cycling infrastructure along Bethesda Side Road from Bayview Avenue to Highway 404, and for pedestrian and cycling infrastructure for a future Highway 404 flyover north of 16th Avenue.

The City also continued advocating for high order public transit, particularly the delivery of the Yonge North Subway Extension (YNSE). In 2020, these efforts continued through collaboration with York Region to advocate for federal funding for the YNSE. The City prepared briefing notes and key messages for Councillors attending events with other levels of government to support their advocacy for this key piece of community infrastructure.

3.2.2 Water Resources Achievements

Preserving lakes, rivers, and streams, protecting aquatic plants and animals, and preventing flooding in Richmond Hill all depend on the responsible management of our local water resources. Human activities and climate change affect the health of water

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systems. Richmond Hill's Environment Strategy actions aim to develop a suite of policy, infrastructure, and operational tools that reduce current impacts and future risks.

a. Stormwater Management and Valleyland Restoration

Excessive stormwater runoff (from heavy rainfall or snowmelt combined with an increase in hard surfaces) causes flooding, erosion, and damage to public and private infrastructure. Through investments in Richmond Hill's stormwater management facilities and restoration of our valleylands, the City continues to improve resiliency and protect infrastructure. Progress on key stormwater management and valleyland enhancement projects in 2020 includes:

- South Richvale Greenway restoration – construction substantially completed;
- Twickenham stormwater pond rehabilitation and valleyland restoration – Environmental Assessment completed, detailed design initiated;
- Mill Pond rehabilitation – Environmental Assessment underway;
- Don Head East stormwater pond rehabilitation – Environmental Assessment underway;
- Doncrest valleyland restoration – feasibility study underway;
- Beaufort Hills stormwater pond rehabilitation – feasibility study initiated;
- Cedar Springs stormwater pond rehabilitation – feasibility study initiated.

Together, these projects benefit the local environment and increase resiliency by providing flood protection, reducing erosion, and improving water quality. To minimize costs, the City successfully obtained funding from the Federation of Canadian Municipalities (FCM) for the Environmental Assessment phase of the Twickenham stormwater pond rehabilitation and valleyland restoration project.

b. Lake Wilcox SNAP Recognition

In 2020, the Federation of Canadian Municipalities (FCM) recognized Richmond Hill, TRCA, and eight partner municipalities with an Honourable Mention for the 2020 Sustainable Communities Visionary Award for its Sustainable Neighbourhood Action Program (SNAP). Richmond Hill participated in this initiative from 2011-2015 with a SNAP project in the Lake Wilcox area that focused on a locally tailored Eco-Landscaping program. Through front-yard makeover demonstrations, this program promoted low impact development (LID) features to reduce stormwater runoff, improve water quality, conserve water, and promote biodiversity.

3.2.3 Land Resources Achievements

Building healthy and resilient communities means balancing growth with sustainable development while respecting our natural resources. The Environment Strategy aims to preserve Richmond Hill's land resources through actions that support sustainable development, manage invasive species and local wildlife, enhance our natural areas, encourage local food production, and responsibly manage our solid waste.

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a. Urban Forest Management

In 2020, Council approved Richmond Hill's first Urban Forest Management Plan. This comprehensive plan will guide the City's efforts to strengthen, manage, and maintain a healthy urban forest over the next 20 years. The Plan aims to promote a tree canopy that is more diversified, sustainable, and resilient to the ongoing challenges created by urban intensification, climate change, and invasive species such as the Emerald Ash Borer (EAB). The plan also builds upon the City's strong foundation of urban forest management through ongoing work such as the block pruning and inspection program, Community Stewardship and Healthy Yards programs, by-laws that protect large and/or historically significant trees, EAB management, and the incorporation of urban trees and woodlands into corporate asset management planning.

b. Healthy Yards, Community Stewardship, and Flight of the Monarch Day

In light of COVID-19 restrictions, the City followed proper safety protocols to deliver successful community events that encouraged residents to plant native trees, shrubs, and wildflowers. In June, Richmond Hill's popular Healthy Yards event was adapted to provide curbside delivery of more than 2,350 native wildflowers and 915 native trees and shrubs. A drive-through pick-up event sold over 350 rain barrels and 300 backyard composters. The Community Stewardship Program also continued in 2020. In total, 8,800 trees and shrubs were planted, 5 hectares of land in parks and natural areas was restored, 180 volunteers participated in 78 partner-led events, and more than 750 residents participated in six partner-led virtual workshops – a significant increase in participation over previous years.

In August, the City celebrated National Flight of the Monarch Day by providing a total of 2000 monarch-friendly plants to 200 residents at no cost. A webinar series was held to educate residents about pollinators and ways to enhance their habitat, and an online 'pollinator garden' photo collage was developed based on submissions from the public. The City continued to protect and promote its pollinators in 2020 through participation in the National Wildlife Federation's 'Mayor's Monarch Pledge', the City's 'Bee City' designation, and Richmond Hill's 'Butterfly Way' partnership with the David Suzuki Foundation.

c. Waste Management Improvements

Waste management has been an important ongoing facet of Richmond Hill's response to COVID-19. The City has worked closely with York Region to develop and implement COVID-19 safety protocols for proper waste disposal, and staff continue to address issues related to community litter and a rise in single-use items. In 2020, Council approved a Single-use Plastics Reduction Strategy, which aims to encourage residents, businesses, and staff to reduce reliance on single-use items such as disposable cutlery, straws, stir sticks, shopping bags, and take-out containers. To achieve this, the City will develop a corporate waste reduction and diversion policy, public education campaign for residents and businesses, and a business recognition program.

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In 2020, Richmond Hill enhanced tracking and data collection capacity for multi-residential buildings through the addition of weight scales on collection trucks and radio-frequency identification (RFID) tags on bins; the data received will help inform the City's efforts to reduce and divert multi-residential waste. To further support diversion, the City added two more multi-residential buildings to its organics collection program in 2020. Finally, Richmond Hill continued to collaborate with York Region and local municipalities to inform the drafting of the Provincial Blue Box transition regulations and to secure the preferred transition timing for Richmond Hill. Preparations for the transition to full producer responsibility of the Blue Box program will continue in 2021. All municipalities are required to transition to this new model by the end of 2025.

3.3 Communicating the Strategy to the Public

Richmond Hill's Environmental Policy makes a commitment to engaging the community in environmental actions. To communicate the Environment Strategy and support implementation, public outreach and engagement continued to take place through various mediums, including:

- Greening the Hill social media (Facebook and Twitter), including a 'Did you Know?' (#DYK) campaign launched in 2020 to promote the City's environmental achievements, current programs, and opportunities to participate;
- Participation at environmental community events (primarily virtual events in 2020 due to COVID-19);
- Development of environmental education materials and outreach activities for staff and the community; and
- Environmental liaison meetings and speaking engagements with community groups to listen to concerns and promote participation in City initiatives.

4.0 Richmond Hill's Environmental Scorecard – Measuring our Progress

Richmond Hill's Environmental Scorecard (Attachment 3) provides a high-level snapshot of environmental progress from the first five years of Environment Strategy implementation (2015-2019). The Scorecard fulfils the Council commitment contained within the Environment Strategy to develop and publish an Environmental Scorecard at regular intervals.

4.1 Tracking and Distribution of the Scorecard

Within the past five years, a cross-department team of subject matter experts has worked collaboratively to track, collect and analyze indicator data and develop the content contained within the Scorecard. Indicators were established to reflect goals in the Environment Strategy that are meaningful to the community and easy to understand. It was also important that the indicators be relevant to Richmond Hill's urbanizing context, be within municipal control and influence, and leverage data collection and monitoring already taking place given limited resources.

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The electronic version of the Scorecard will be available on the City's website and a small number of copies will be printed in a tri-fold brochure format (using sustainable printing techniques) for distribution at community events. Data collection for the next five-year Scorecard period (2020-2024) will begin in 2021 and will consider opportunities to incorporate new data as well updates to the Environment Strategy.

4.2 How to Read the Scorecard

The Scorecard is organized into three broad focus areas for 'greening Richmond Hill'. Each focus area contains specific environmental topics by which progress is determined through the indicator data.

- *Greening our Consumption*: greenhouse gas emissions and energy use; water use; and waste generation and diversion.
- *Greening our Natural Spaces*: tree canopy and natural heritage; water quality and stormwater management; and community gardens.
- *Greening our Growth*: sustainability performance ratings for new developments; and sustainable transportation options.

The Scorecard tells the story of each environmental topic area through three elements:

- a 'battery' icon which provides a visual indicator of progress (e.g. good, stable, needs improvement);
- an infographic illustrating data trends from 2015-2019; and
- 'Status' and 'Next Steps' sections which provide additional narrative and context for each topic and its related indicators.

Together, these elements provide a snapshot of the state of Richmond Hill's environment to date.

4.3 What the Scorecard Tells Us

As the Scorecard demonstrates, environmental progress has generally been positive in Richmond Hill over the past five years. Corporate energy use and water consumption has significantly declined, and waste generation and diversion remains stable. Urban forest canopy and native plant and wildlife species has increased, as has community garden uptake. Although chloride (salt) levels in Lake Wilcox have risen, phosphorus levels are trending downward, and the City's Salt Management Plan identifies actions to explore the reduction of salt levels. Sustainable development ratings through the Sustainability Metrics program remain relatively stable and are likely to improve as the City introduces its updated Sustainability Metrics program. Active transportation infrastructure, such as bike lanes, trails, and sidewalks have increased, and modal split for our commuting residents has remained stable. These successes can be attributed to the collective actions initiated and supported through the Environment Strategy, along with continued support from Council, the community, and our partners.

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5.0 Next Steps

5.1 Updating the Environment Strategy – A Vision for the Future

As part of implementation, a Council commitment was made to update the Environment Strategy at regular intervals to reflect emerging issues and trends and consider current priorities. Building on information from the Environmental Scorecard and direction from other corporate initiatives, an update to the Environment Strategy is now underway.

With completion expected in 2022, the Environment Strategy Update will cover the remainder of the Strategy's time horizon (2022-2031). Although originally envisioned in five-year intervals, a mid-way timeframe for this update makes best use of staff time and resources and aligns with updates of other corporate plans and strategies. Throughout 2021, focused consultation with internal and community stakeholders will take place to ensure ample opportunity to provide input. Ultimately, the updated Environment Strategy will provide a clear and concise path forward for the City to continue its mission of becoming a more environmentally sustainable community.

5.2 Continued Implementation of Environment Strategy Actions

In 2021, while the Environment Strategy Update is taking place, implementation of priority short and medium-term actions will continue under direction from the inter-departmental Environment Strategy Steering Committee.

Notable projects anticipated for 2021 include:

- Transportation Master Plan Update
- Community Energy and Emissions Plan
- Sustainability Metrics Update
- Climate Change Community Outreach Toolkit
- Update to the Products, Standards & Design Criteria Manual
- Lake Wilcox Management Plan Update
- Parking and Transportation Demand Management Study
- Implementation of the Single-use Plastics Strategy
- Environment Strategy Update (community and stakeholder consultation)

Financial/Staffing/Other Implications:

There are no financial implications resulting from this staff report.

Relationship to Council's Strategic Priorities 2020-2022:

The Environment Strategy strongly aligns with Council's Strategic Priorities 2020-2022.

The Environment Strategy is a key driver for the City's long-term planning for sustainable development aimed at *Balancing Growth and Green*. Recognizing the changing urban context, the Strategy sets a course to enhance and restore Richmond

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Hill's green spaces, improve air and water quality, manage waste reduction and diversion, and helps lay the foundation for the City's climate change initiatives.

The Environment Strategy also contributes to a *Strong Sense of Belonging* and place by creating opportunities for people to experience and immerse themselves within the City's natural environment and take part in stewardship programs.

The Environment Strategy promotes the improvement of connections for *Getting Around the City* through our built and natural environment (e.g. trails, bike lanes, natural corridors and greenspaces) and encourages sustainable transportation solutions (e.g. carpooling and active transportation, advocating for high order transit such as the YNSE).

Environment Strategy initiatives also demonstrate *Fiscal Responsibility* by resulting in less waste (e.g. energy and water efficiency improvements, and waste diversion) and supporting actions to improve resiliency and avoid risks and costs associated with the impacts of climate change.

Conclusion:

Richmond Hill's Environment Strategy, *Greening the Hill: Our Community, Our Future* identifies actions to manage environmental impacts, enhance local ecosystems, and create a more sustainable community over a 15+ year timeframe. Combined with its attachments, this staff report illustrates how Environment Strategy implementation progressed in 2020 and provides a snapshot of overall environmental progress through the Environmental Scorecard (2015-2019). It demonstrates the effectiveness of harnessing the City's regulatory powers, municipal operations and services, and community programming to achieve environmental improvements through the Strategy. In 2021, the City will build on this positive momentum as it undertakes an update to the Environment Strategy that will continue advancing Richmond Hill's vision for a more sustainable, environmentally responsible and resilient community.

Attachments:

The following attached documents may include scanned images of appendixes, maps and photographs. If you require an alternative format, please call the contact person listed in this document.

- Attachment 1 – Environment Strategy 2020 Accomplishments
- Attachment 2 – Environment Strategy Progress Tracker (2020)
- Attachment 3 – Environmental Scorecard (2015-2019)

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Report Approval Details

Document Title:	SRPI.21.021 - 2020 Greening the Hill Environment Strategy Update and Environmental Scorecard.docx
Attachments:	<ul style="list-style-type: none">- SRPI.21.021-Attachment 1-Env Strategy 2020 Accomplishments.pdf- SRPI.21.021-Attachment 2-Env Strategy Progress Tracker (2020).pdf- SRPI.21.021-Attachment 3-Environmental Scorecard (2015-2019).pdf
Final Approval Date:	Feb 4, 2021

This report and all of its attachments were approved and signed as outlined below:

Patrick Lee - Feb 3, 2021 - 10:18 AM

Kelvin Kwan - Feb 3, 2021 - 5:03 PM

MaryAnne Dempster - Feb 4, 2021 - 7:39 AM