



Staff Report for Council Meeting

Date of Meeting: March 24, 2021

Report Number: SRPI.21.022

Department: Planning and Infrastructure

Division: Policy Planning

Subject: Draft Community Energy and Emissions Plan

Purpose:

The purpose of this staff report is to provide the draft Community Energy and Emissions Plan for information and public comment.

Recommendation(s):

- a) That Council receive staff report SRPI.21.022 and the attached Draft Community Energy and Emissions Plan and refer all comments to staff; and,
- b) That the attached Draft Community Energy and Emissions Plan be made publicly available on the City's website for a review and comment period before finalization of the plan.

Contact Person:

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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:

The purpose of this staff report (SRPI.21.022) is to present the Draft Community Energy and Emissions Plan to Council and to make it available to the public for review and comment. The Community Energy and Emissions Plan (CEEP) is a community plan to reduce our greenhouse gas (GHG) emissions and promote related economic benefits by outlining Richmond Hill's pathway to a low-carbon future. In conjunction with the corporate Climate Change Framework, the CEEP was initiated under the "Resilient Richmond Hill" program to develop a coordinated approach to addressing climate change through mitigation and adaptation (Council C#24-18, Item 13.2.4, June 2018) and is largely focused on improving the resiliency of community and corporate assets through climate mitigation. A draft CEEP has been prepared in consultation with both internal and external stakeholders. It recommends actions to reduce our community's GHG emissions, conserve energy and explore related economic opportunities, including some of the actions directed by Council in its confirmation of the City's commitment to climate change action (Council C#04-20, Item 13.8, February 2020). Partially funded by Ontario's Ministry of Energy, the CEEP will also inform climate change policies in the Official Plan as mandated by the Growth Plan for the Greater Golden Horseshoe, 2019 and consistent with direction in the *Planning Act* and the Made-in-Ontario Environment Plan.

As mentioned in the Interim Report on the CEEP (Council C#51-20, Item 13.6, December 2020), the consequences of severe weather patterns and changing climate conditions are being felt in many communities. As with the rest of York Region, generally "wetter, warmer, and wilder" conditions in Richmond Hill have resulted in disruptions to business continuity, infrastructure damage, an increase in invasive species, risks to health and safety, and increased financial costs. Through the Resilient Richmond Hill climate change program, Council recognizes that local communities must now adapt to the impacts of climate change and, conversely, each has a responsibility to mitigate their own contributions to greenhouse gas emissions.

The past year alone has demonstrated that community leaders and residents are able to act and change habits quickly in a time of a crisis. As social distancing, lockdown and telework became the norm, people relied less on cars and more on services and amenities closer to home. They turned to walking and cycling to get around, local businesses to conduct their errands, and parks and greenspace for a sense of community and respite. As people spent more time at home, domestic comfort and energy and water costs became a more prominent concern, sparking a desire to renovate and renew homes and offering the opportunity to upgrade old technologies and retrofit buildings with more efficient designs and materials. Over the last year, the lower emission levels seen initially during the pandemic are returning to pre-pandemic levels. Now is an opportune time to take steps to change the trajectory to a low-carbon future as governments at all levels focus on economic recovery and tie stimulus to measures that will help us 'build back better'. Council has taken the first step by identifying the Resilient Richmond Hill CEEP as a term of council priority (Council C#49-20, Item 13.5, December 2020).

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Draft Community Energy and Emissions Plan (CEEP) – Richmond Hill’s Path to a Low Carbon Future:

The Draft Community Energy and Emissions Plan, titled “Richmond Hill’s Path to a Low-Carbon Future” (see Attachment 1), was developed through public consultation and engagement with community stakeholders and a technical advisory team. Key components of the CEEP are summarized below.

Richmond Hill is envisioned to be a resilient and low-carbon city

The goal of the CEEP is to reach net-zero emissions by 2050. Net zero signifies that, by the year 2050, Richmond Hill will have reduced its GHG emissions as much as possible and will not be emitting more than it is offsetting. Offsetting is the reduction of emissions in one place to compensate for emissions in another location. This low-carbon pathway is community driven and the entire Richmond Hill community is invited to take part in its transformation.

What does this look like? The CEEP states: “In 2050, the vision for a low-carbon city includes rooftop gardens and bioretention gardens/LIDs across the city and more trees everywhere. The air is cleaner and everyone is healthier. Those who own a car have an electric one that doesn’t emit any pollution. On many days, people don’t use their cars at all. All essentials are a short walk away, there’s more bike paths than ever, and the subway shuttles residents downtown within minutes. Everything—the lights, heating and air conditioning, computers, public buses—is powered by electricity generated from renewable sources like hydro, wind, and solar.”

Richmond Hills’s Low-Carbon Pathway – recommended actions

While the low-carbon vision is ambitious and aspirational, the steps to get there are not unattainable. To implement this strategy and become a low-carbon city, the City of Richmond Hill must work together with residents, businesses, and all levels of government. The Low-Carbon Strategy details seven program areas with twenty-nine area-specific sub-targets to help Richmond Hill achieve its emissions reduction target of net-zero GHG emissions. In some cases, the City’s role will be to advocate and work with other agencies and levels of government to achieve program goals; in other areas the City will be tasked with facilitating or incentivizing actions through its policy and regulatory framework; and in many cases it will also demonstrate corporate responsibility through its own GHG reduction measures. The same commitment and multi-pronged approach will be required by all members of the community and stakeholders to do their part in promoting and supporting uptake of low-carbon actions.

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Net-Zero Program Area Sub-Targets

Transportation Transformation	Energy Efficient Buildings	Smart, Renewable	Towards Zero Waste	Compact Community	Municipal Leadership	Natural Heritage
65% active transportation mode share	Net-zero energy Residential	Rooftop Solar	Anaerobic Digestion and water conservation	Development along Yonge Street corridor	Net-zero Municipal Buildings	Land-use based restoration planting targets
E-bike and car share	Net-Zero energy non-residential	Energy Storage	100% methane recovery	Promote Intensification	Electric Municipal Fleet	Natural Heritage Strategy
Zero-emission ownership vehicle targets	Retrofit existing residential	District Energy		Car free zones in Richmond Hill Centre	Education Plan	
Electrify transit	Retrofit existing non-residential	Ground mount solar				
Expand subway	Green Roofs	Wind generation				
Expand VIVA	Increase efficiency of Industrial	Renewable Natural Gas and Hydrogen				
Areas with Zero-emission vehicle exclusivity						

Priority actions are identified in each of the program areas that chart a pathway to achieve the Net-Zero Target and the 29 Sub-targets. Details of all the actions can be found in the Draft CEEP, Attachment 1 of this Report.

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Investment in a low-carbon economy is expected to bring net benefits

According to the Business-as-Planned Scenario, total spending by all sectors of the community in Richmond Hill (residents, businesses, all levels of government, etc.) would normally be in the range of \$2 billion per year or \$67 billion over the 2020-2050 scenario period. Additional investments required under the Net-Zero Scenario over that same time period are estimated to be \$8.1 billion (2016 dollars) or an average of about \$250 million per year. In relation to normal spending, investments towards a low carbon future would be in the order of 10-13% more.

From 2032 forward annual savings and revenue begin to increase as energy improvements turn into savings. By 2050, cumulative net benefits reach \$12.3 billion and are still growing. Most actions save and/or generate more money than they cost, as does the plan as a whole.

Many investments into the CEEP will have direct benefits for Richmond Hill. The strategy is projected to add over 68,000 person-years of employment, or an average of 2,000 person years of employment per year. Person-years of employment is a unit of measurement for the amount of work done by an individual throughout the entire year, expressed in the number of hours. These do not necessarily represent new jobs, as some jobs may be displaced or eliminated each year, but they represent new employment opportunities within the city supporting investment and growth in green industries, knowledge and innovation positioning Richmond Hill competitively in the emerging low-carbon economy in Ontario, Canada, and beyond.

Next Steps

Based on Council's decision on this report, the CEEP will be released for public comment for a period of 3 weeks. Following that period, comments received from the public will be incorporated into the plan. The finalized plan will be brought forward to council in the second quarter of 2021.

Financial/Staffing/Other Implications:

While there are no immediate financial impacts from this staff report, implementation of the plan will include resources from the City, residents, businesses, and all levels of government. Projects requiring additional funds and resources from the City will be considered through business cases as part of normal budget procedures.

Relationship to Council's Strategic Priorities 2020-2022:

The CEEP is identified in the Council Strategic Priorities in the Balancing Green and Growth Strategic Priority Area as an initiative under Resilient Richmond Hill. This is a plan to reduce GHG emissions that proposes to create jobs and reduce costs for residents, embodying the outcomes of the Strategic Priority Area in which it is found.

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Climate Change Considerations:

This initiative is a climate change mitigation plan. It contains a number of actions and strategies to reduce GHG Emissions, including planting trees and enhancing natural areas, converting vehicles to electric or other low-carbon sources, and retrofitting buildings to be more energy efficient.

Conclusion:

This staff report SRPI.21.022 recommends Council receive the Draft CEEP (“Richmond Hill’s Path to a Low-Carbon Future”) for information and make the draft plan available public comment before finalization. The CEEP is a community plan to reduce our greenhouse gas (GHG) emissions and promote related economic benefits by outlining Richmond Hill’s pathway to a low-carbon future. The goal of the CEEP is to reach net-zero emissions by 2050. Net zero signifies that, by the year 2050, Richmond Hill will have reduced its GHG emissions as much as possible and will not be emitting more than it is offsetting. Based on Council’s decision on this report, the CEEP will be released for public comment for a period of 3 weeks. Following that period, comments received from the public will be incorporated into the plan. The finalized plan will be brought forward to council in the second quarter of 2021.

Attachments:

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

- Attachment 1 - Draft Community Energy and Emissions Plan (Richmond Hill’s Path to a Low-Carbon Future)

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Report Approval Details

Document Title:	SRPI.21.022 Draft Community Energy and Emissions Plan.docx
Attachments:	- SRPI.21.022 Attachment 1 - Draft CEEP.docx
Final Approval Date:	Mar 4, 2021

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

Patrick Lee - Mar 3, 2021 - 9:27 AM

Kelvin Kwan - Mar 3, 2021 - 9:49 AM

MaryAnne Dempster - Mar 4, 2021 - 6:54 AM