

Update: Toronto Hydro Climate Action Plan & Next Steps

Date: June 29, 2022

To: Executive Committee

From: City Manager

Wards: All

REASON FOR CONFIDENTIAL INFORMATION

The Confidential Attachment to this report has been provided to the City of Toronto by Toronto Hydro Corporation in accordance with Section 4.4 of the Shareholder Direction and contains technical, commercial, financial or labour relations information of Toronto Hydro Corporation. The disclosure of this information may reasonably be expected to significantly prejudice Toronto Hydro's competitive position and result in undue loss to Toronto Hydro. In addition, any disclosure could give rise to a breach of law, including applicable securities laws.

SUMMARY

At City Council's request at its December 15, 2021 meeting, City staff and Toronto Hydro Corporation have continued a collaborative analysis of the Toronto Hydro Climate Action Plan and relevant City strategies and programs to determine specific goals, outcomes, actions and timelines for enabling Toronto's net zero climate targets.

This report responds to further Council direction that the City Manager report to City Council on the results of this analysis and any recommendations regarding new climate action mandates such as a shareholder direction for Toronto Hydro. In support of this request, as well as other requests of Toronto Hydro made at the December 2021 Council meeting, Toronto Hydro has prepared a Status Report on their Climate Action Plan (CAP), included here as an Attachment.

City staff will continue to work with Toronto Hydro on implementation of the CAP subject to the requested City Council mandates. The opportunities identified for near-term implementation are:

- Climate Advisory Services (CAS), a new unregulated business focused on supporting customer adoption of low carbon technologies; and
- Climate Capital Investments, with the immediate focus on conversion of streetlights to LEDs, subject to the development of an implementation plan by City staff, in consultation with Toronto Hydro.

Toronto Hydro estimates that annual CAS operating costs will rise from approximately \$8 million to \$15 million from 2023 to 2026. Toronto Hydro proposes to fund CAS from revenues and net income within their regulated electricity distribution business, and operating budget would be allocated through their typical budgeting process.

Toronto Hydro also estimates that LED conversion of street and expressway lighting will require a capital investment of approximately \$180 million. Technology options, timeline, budget and funding sources for the conversion will be addressed in an implementation plan being developed by Transportation Services in consultation with Toronto Hydro.

City staff and Toronto Hydro agree that any expansion of electricity distribution is generally a matter of Provincial/Ontario Energy Board regulatory jurisdiction, therefore no mandate related to an expansion of electricity distribution is being sought in this report. As the City of Toronto continues work on implementation of TransformTO, including through engagement with the Climate Advisory Group and the Joint TransformTO Implementation Committee, it will provide inputs to help inform Toronto Hydro electricity demand growth scenarios.

The City and Toronto Hydro will also continue to coordinate and collaborate on implementation and to identify short, medium, and longer-term actions.

RECOMMENDATIONS

The City Manager recommends that:

Regulated Electricity Distribution

1. City Council, on behalf of the City of Toronto as shareholder, request Toronto Hydro to include in the publicly available portion of its annual report to the City of Toronto the status of the provincially regulated expanded grid capacity for growth, electrification and incremental local renewable generation in relation to helping the City of Toronto achieve its TransformTO: Net Zero Strategy goals.

Climate Advisory Services

2. City Council, on behalf of the City of Toronto as shareholder, request Toronto Hydro to expand its business activities beyond electricity distribution services by establishing a new stream of non-rate regulated operations within its regulated business, specifically Climate Advisory Services (the climate action opportunity that excludes Toronto Hydro owning and operating assets), in keeping with the proposal set out in Toronto Hydro's

Climate Action Plan received by City Council at its meeting on December 2021 and the Toronto Hydro Climate Action Plan Status Report.

3. City Council, on behalf of the City of Toronto as shareholder, request Toronto Hydro to deliver publicly to the Executive Committee through the City Manager, the Chief Financial Officer and Treasurer, and the Deputy City Manager, Corporate Services, an annual report on the progress, key performance indicators, and next steps of Climate Advisory Services.

Climate Capital Investments: Street Lighting

4. City Council confirm its support in principal for proceeding with City-wide LED street and expressway light conversion, including the related enabling infrastructure investments.

5. City Council request the General Manager, Transportation Services, in consultation with the Chief Financial Officer and Treasurer, and in consultation with Toronto Hydro, develop implementation options for the City-wide LED street and expressway light conversion including applicable budget, and report back with a recommendation by the end of the second quarter of 2023.

6. City Council authorize the City Solicitor to sign an amendment to the existing retainer agreement with Stikeman Elliott LLP (Purchase Order No. 6042019) for legal advice and support to negotiate amendments that may be necessary to the 2006 Street and Expressway Lighting Service Agreement between the City and Toronto Hydro Energy Services Inc. for LED conversion and other related matters under this agreement, increasing the current upset value of the retainer by \$475,000 so that it increases from a total \$305,000 (excluding HST) to \$780,000 (excluding HST), for a term that expires when the services are completed.

Climate Capital Investments: Other

7. City Council direct the Executive Director, Environment and Energy to continue to investigate with Toronto Hydro on other possible Climate Capital Investment opportunities (whereby Toronto Hydro owns and operates climate action assets such as EV chargers) to implement Transform TO: Net Zero goals.

Confidential Attachment

8. City Council direct that Confidential Attachment 1 to the report (June 28, 2022) from the City Manager remain confidential in its entirety, in accordance with Section 4.4 of the Toronto Hydro Shareholder Direction, as it contains technical, commercial, financial or labour relations information of Toronto Hydro Corporation.

FINANCIAL IMPACT

The recommendations in this report have no immediate impact on the City's 2022 Capital or Operating budgets, except for the recommended additional legal fees of up to \$780,000 plus HST that would be supported through the City's annual Hydro Dividend.

In the near term, City staff will continue to work with Toronto Hydro on implementation of the Climate Advisory Services, subject to Council's consideration along with other City priorities and mandates, with an estimated annual cost of \$8 million to \$15 million from 2023 to 2026. These costs would be funded from revenues and net income within Toronto Hydro's regulated electricity distribution business, impacting annual dividends received by the City.

City staff will also work with Toronto Hydro on Climate Capital Investments, with the immediate focus on the exploration of conversion of streetlights to LEDs. Toronto Hydro has estimated that LED conversion of street and expressway lighting will require a capital investment of approximately \$180 million. Technology options, timeline, budget and funding sources for the conversion will be addressed in an implementation plan being developed by Transportation Services in consultation with Toronto Hydro and subject to the outcome of these efforts will be brought forward for Council's consideration as part of future budget processes.

Going forward, any costs associated with further programs discussed in this report will be identified and reported back as part of the 2023 and future budget processes, in consideration of City priorities, capacity to deliver, and available funding. Future investments in the Toronto Hydro Climate Action Plan are expected to result in positive environmental outcomes in support of the City's climate action goals.

The Chief Financial Officer and Treasurer has reviewed this report and agrees with this financial impact statement.

EQUITY STATEMENT

The impacts of climate change disproportionately affect certain populations, including seniors, people with health conditions, people with low income, those experiencing homelessness, and Indigenous and racialized communities. In addition to this burden, in Toronto and cities around the world, these communities are facing disproportionate health and economic impacts from the spread of COVID-19 and the consequences of lockdowns. The recommendations in this report are intended to identify and accelerate actions that Toronto Hydro, in collaboration with City divisions and agencies, can take to mitigate and adapt to climate change and support community resilience. These actions will lead to a reduction in greenhouse gases while improving equity, economic prosperity, resilience and health.

DECISION HISTORY

On May 11, 2022, City Council received a report on the Accountability and Management Framework for the TransformTO Net Zero Strategy, and requested staff identify any

funding enhancements necessary to accelerate the TransformTO Net Zero Strategy to achieve upcoming community-wide greenhouse gas reduction targets.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2022.IE29.10>

On December 15, 2021, in response to the Toronto Hydro Climate Action Plan, City Council requested additional information from both City Staff and Toronto Hydro. Council also directed the City Manager to report to Council on the information submitted by Toronto Hydro, in consultation with Toronto Hydro and relevant divisions and agencies.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2021.EX28.1>

On April 7, 2021, City Council requested Toronto Hydro to report to the City Manager by the end of the third quarter of 2021 on current work and an action plan to achieve outcomes regarding electric vehicle-charging infrastructure, modernization of outdoor lighting, renewable energy and energy storage, and attracting revenue through non-rate sources of capital funding. Council also directed the City Manager to report to Council on the information submitted by Toronto Hydro by the end of the fourth quarter of 2021, in consultation with Toronto Hydro and relevant divisions and agencies.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2021.EX22.5>

On October 27, 2020, City Council directed the City Manager, in consultation with the Environment and Energy Division and the Toronto Atmospheric Fund, to develop recommendations for Toronto Hydro to achieve greater outcomes for energy efficiency, demand management and renewable energy within the service area, and report back to City Council by the end of 2020 on the proposed recommendations and how to implement them.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2020.EX17.1>

COMMENTS

Toronto's 2040 net zero emission target is predicated on continued decarbonization of the electricity grid, therefore being proactive is critical to success. The City of Toronto's TransformTO Net Zero Strategy emphasizes the need for the City to work in step with Toronto Hydro to successfully support the growth and prosperity of Toronto through reliable, uninterrupted electric service provision. As the City's electricity distribution company, Toronto Hydro is uniquely positioned to enable rapid electrification necessary to respond to climate change, and the City and its divisions and agencies can be a strategic partner in achieving common objectives.

Toronto Hydro is requesting a new mandate from the City in support of two new business opportunities, represented by Climate Advisory Services and Climate Capital Investments. Pursuing these opportunities will have a material impact on Toronto Hydro's financial performance objectives in the short run. However, over the medium-to-long term, the additional returns generated through the Expanded Electricity Distributor are expected to greatly exceed the short run cost.

The mandate represented by the recommendations of this report serves as documented guidance from the shareholder that informs and assures the Toronto Hydro Board of Directors as it balances the Shareholder Direction objectives and principles.

NEAR-TERM BUSINESS OPPORTUNITIES

City staff have engaged with Toronto Hydro over the past six months to identify opportunities for Toronto Hydro to further advance climate action in alignment with the TransformTO Net Zero Strategy. The following opportunities have been identified for near-term implementation:

Climate Advisory Services

Similar to Toronto Hydro's Conservation and Demand Management business line, Climate Advisory Services (CAS) will enable Toronto Hydro to work directly with customers on emissions reduction projects related to buildings, energy, transportation and other sectors. The scope of services will be from project concept to implementation to monitoring and evaluation, including advice on vendor selection and assistance with applications for financial support.

In January 2022, Toronto Hydro began temporarily seconding employees to its CAP Project Team, which has already established a pipeline of CAS projects. Toronto Hydro estimates that annual CAS operating costs will rise from approximately \$8 million to \$15 million from 2023 to 2026. Toronto Hydro proposes to fund CAS from revenues and net income within their regulated electricity distribution business, and operating budget would be allocated through their typical budgeting process.

City staff are supportive of Toronto Hydro pursuing CAS in order to advance Toronto's electrification and help achieve the City's climate action targets. As described below on page 8, Toronto Hydro requires clear guidance from City Council to pursue CAS. Toronto Hydro will report annually on the progress, key performance indicators, and next steps of CAS.

If approved by City Council, Toronto Hydro will begin permanently staffing the CAP Project Team, which will help expedite CAS delivery. The phased-in timing described above will allow Toronto Hydro to develop the necessary expertise and programing in consultation with City Staff and other local stakeholders.

Street Lighting LED Conversion

Many peer municipalities in Canada and the United States have already completed or have LED conversions underway. Not only is there value in pre-empting the obsolescence of current technologies, there are direct benefits to LED conversion:

- LED bulbs are more energy efficient, and since replacement is less frequent, conversion may generate maintenance savings.
- Conversion would present an opportunity to introduce smart technologies that improve street lighting operation (e.g. controls, self-testing, sensors, etc.).
- Generally improved lighting quality.

City staff support conversion to LEDs in principal, and are therefore recommending that Transportation Services, in consultation with the Chief Financial Officer and Treasurer and Toronto Hydro, prepare an implementation plan, including any required amendments to the existing 2006 Street and Expressway Lighting Service Agreement (SLA). The plan will provide technology options and timelines for city-wide street and expressway lighting conversion to LEDs, as well as budget and funding sources.

Staff are also recommending an amendment to an existing retainer with Stikeman Elliott LLP to provide legal support on negotiations and possible amendments to the SLA. In 2006, this firm provided legal services to the City for the sale of the street lights to Toronto Hydro. Given this experience with the street lighting file, this same firm was retained in 2015 to provide legal services in respect of renegotiating certain aspects of the SLA. The scope of work of the 2015 retainer includes legal advice and drafting for the renegotiation of the SLA including, but not limited to conversion of some of the City's street lights to LED, and the impact of the Ontario Energy Board decisions and directions affecting Toronto Hydro's street lighting assets. In 2017, the scope of work was clarified and the value was increased by \$105,000 to a total value of \$305,000.

Given Stikeman Elliott's history with this agreement and complex legal issues involved, it is recommended that the existing retainer be amended by an additional amount of \$475,000 (excluding HST) to provide legal advice and support to implement the City's decision to move forward with LED Conversion and any related amendments that may be negotiated.

Other opportunities

Climate Capital Investments – While developing its CAP, Toronto Hydro identified a potential opportunity for City investments in emissions-reducing capital projects that would be owned and operated by Toronto Hydro. Based on discussions with Toronto Hydro, City staff have agreed to defer consideration of this particular approach until 2023 based on initial results of CAS program delivery and progress on implementation of TransformTO. If an opportunity to further leverage Toronto Hydro for the delivery of Climate Capital Investments is identified, the City will work with Toronto Hydro to seek appropriate approvals from the Toronto Hydro Board and City Council.

Expanded Electricity Distributor – City staff and Toronto Hydro also agree that expansion of electricity distribution is generally a matter of Provincial/Ontario Energy Board regulatory jurisdiction, therefore no mandate is being sought in this report. As the City of Toronto continues work on implementation of TransformTO, including through engagement with the Climate Advisory Group and the Joint TransformTO Implementation Committee, it will provide inputs to help inform Toronto Hydro electricity demand growth scenarios.

TRANSFORMTO ELECTRIFICATION CONTEXT

As City staff work with Toronto Hydro on the above items, and through implementation of TransformTO, work will continue on determining how the City can best support electrification necessary to meet a net-zero by 2040 goal.

Electrification to displace fossil fuel use is an issue of municipal, provincial, federal, and ultimately global significance. It is primarily market-driven and is well underway, particularly with respect to electric vehicles due to lower overall cost of ownership, and increasingly with solar PV and battery storage. After more than a century of electricity history, local electricity storage is becoming economically viable, but the relationship between increased consumption, local storage, and any resulting grid expansion needs for climate action electrification is uncertain.

However, there are a number of initiatives at the provincial and federal level that support electrification to reduce emissions, including:

- [Ontario Energy Board Strategic Plan](#) (on page 14) describes the future outlook and sector trends, which include climate change and decarbonization.
- [Ontario Power Generation Climate Change Plan](#) commits OPG to reduce emissions and be a climate change leader, which is fundamental to decarbonization of the grid.
- Independent Electricity System Operator (IESO) [Pathways to Decarbonization](#) initiative
- Electricity Canada's (former Canadian Electricity Association) [Actions for Achieving Net-Zero GHG Emissions by 2050](#)
- Canada's [2030 Emissions Reduction Plan](#), in particular the action "Powering the economy with renewable electricity"

However, there will be uncertainty as decarbonization proceeds in the coming years and decades due to anticipated regulatory changes, decentralization, business models, economics, and funding sources/financing strategies. The choice for governments and electricity stakeholders is between reacting to this change and taking a proactive approach (i.e. provide the necessary funding to accelerate the transition, embrace new business models, align with trends, and support customer demands).

TORONTO HYDRO'S INDEPENDENT GOVERNANCE STRUCTURE & SHAREHOLDER DIRECTION

The Toronto Hydro Board of Directors – appointed by Toronto City Council – is legally responsible to supervise the management of the corporation in carrying out its mandate, including by approving annual business plans. In carrying out its responsibilities, Toronto Hydro must balance a number of objectives and principles noted within the Shareholder Direction, as well as legal obligations including the interests of stakeholders, in making strategic and other decisions.

The recommended resolutions provided above serve as necessary, clear and tangible expressions of stakeholder expectations from the City, in its role as sole shareholder, to Toronto Hydro's Board of Directors that the City supports the reasonable trade-offs between the objectives set out in the Shareholder Direction required to carry out these incremental climate action activities and lines of business. This mandate will empower Toronto Hydro's Board of Directors to evolve its business planning and other corporate activities from the degree to which it currently focuses on financial performance objectives, and give incremental weight in its balancing of priorities to climate change objectives provided for in the Shareholder Direction, while continuing to meet its legal obligations.

NEXT STEPS

As outlined in this report, and in Toronto Hydro's CAP Status Report, the ongoing need for coordination and collaboration between the City of Toronto, Toronto Hydro and other internal and external partners will be key to supporting implementation of proposed actions and ultimately achieving the City's goal of net zero emissions by 2040.

The City of Toronto and Toronto Hydro have built productive relationships to deliver on climate action over a number of years including new construction incentive programs, solar PV, and electric vehicle charging implementation. As the role of Toronto Hydro expands into areas like Climate Advisory Services, and significant work continues related to distribution expansion and LED streetlight conversion, there is a need to enhance these relationships building on existing frameworks where our organizations work together, such as infrastructure and development.

On April 26, 2022, the Environment & Energy Division brought a report entitled "Accountability and Management Framework for the TransformTO Net Zero Strategy" to the Infrastructure and Environment Committee for information. As outlined in that report, the City is establishing a TransformTO Climate Leadership Table (TCLT) made up of internal, inter-divisional City senior management staff. The intention of this table is to provide leadership on implementing climate action across City divisions, agencies and corporations. It will manage high-level issues, track accountability for the City's climate-related activities, direct City staff across the divisions, agencies and corporations, and lead the City's corporate transformation to enable success in meeting Net Zero Strategy targets. Toronto Hydro has been invited to participate on this table, as appropriate, given the important role electrification will play in achieving net zero emissions city-wide by 2040.

In addition, the Environment & Energy Division and Toronto Hydro have identified an opportunity to build on the existing City-Hydro meeting framework to address their respective organizational priorities and support issues resolution. This framework includes existing meetings between senior and executive leadership within both organizations, including the City Manager and the President & CEO of Toronto Hydro. To supplement this framework an ongoing and regular meeting series would be established between the Environment & Energy Division and the Climate Action Plan Project Team to support coordination and collaboration among the various operational discussions underway, and to ensure issues are escalated and resolved in a timely manner.

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SIGNATURE

Chris Murray
City Manager

ATTACHMENTS

- Attachment 1: Toronto Hydro Climate Action Plan Status Report
- Attachment 2: Letter from Toronto Hydro President and Chief Executive Officer
- Confidential Attachment 1: Appendix I: Corporate Finance