



SUBJECT: Climate Action Update Report for Burlington

TO: Committee of the Whole

FROM: Capital Works

Report Number: CW-21-19

Wards Affected: All

File Numbers: 210-09

Date to Committee: June 10, 2019

Date to Council: June 17, 2019

Recommendation:

Approve funding request in capital works department report CW-21-19 of \$80,000 from the Strategic Plan Reserve Fund to retain consultants for the purpose of completing Burlington's Climate Action Plan; and

Approve the single source procurement for LURA Consulting (Land Use Research Associates Inc.) to undertake community engagement and SSG (Sustainability Solutions Workers Group Cooperative) to complete the Climate Action Plan, given their experience with the Bay Area Climate Change Office engagement process and the Low Carbon Pathway report for Hamilton and Burlington; and,

Direct the Executive Director of Capital Works to implement option 1 to engage the community and stakeholders to develop the Climate Action Plan and report back by December 2019; and

Approve funding request in capital works department report CW-21-19 of \$20,000 from Strategic Plan Reserve Fund to support Burlington's commitment in 2019 to participate in the Bay Area Climate Change Office and Council.

Purpose:

The purpose of this report is to:

- 1) Respond to the Council directions included in the Climate Emergency Declaration approved by Council on April 23rd, 2019, and provide a summary update on the initiatives that the city is involved in to address climate change; and

- 2) Obtain Council approval for funding to support Burlington's ongoing participation in the Bay Area Climate Change Office and Council.

Burlington's commitment to climate change action relates to the following section of the city's Strategic Plan:

A Healthy and Greener City

- Environmental and Energy Leadership

Background and Discussion:

On April 23, City Council declared a climate emergency for the purposes of deepening the city's commitment and ambition to protecting the environment, community and economy from climate change. A copy of the declaration is included in Appendix A. As stated in the Council declaration, Canada is on average experiencing warming at twice the rate of the rest of the world, with Northern Canada heating up at almost three times the global average, according to Canada's Changing Climate Report led by Environment and Climate Change Canada, released April 2019. The City of Burlington is being impacted by a changing climate with increasing frequency and intense wind and rain storms, with a significant ice storm in December 2013 and the flood in 2014, and infrastructure being impacted by increasing freeze/thaw cycles.

The declaration directs staff to complete a Climate Action Plan. Burlington has had a Community Energy Plan since 2014 with a goal to use energy more efficiently, improve energy security and reduce the carbon footprint. The Community Energy Plan will transition to the new Climate Action Plan, to meet the city's Strategic Plan goal to work towards being a net carbon neutral community.

There are two options for Council to consider with respect to the time required to develop the Climate Action Plan. Option 1 will meet Council's direction to develop the Climate Action Plan by the December 2019 date. Option 2 provides additional time for the consultation process with stakeholders and the community with a longer time horizon to report back on the plan by April 2020.

The following section provides a response to the staff directions (**in bold**) included in the Climate Emergency Declaration:

That Council and staff immediately increase the priority of the fight against climate change and apply a climate lens to the plans and actions of the City of Burlington including the Council strategic workplan and future budgets;

Direction has been provided to the Burlington Leadership Team that a climate lens must be applied to plans and actions being developed for the City of Burlington.

There are two components to a climate lens:

1. A greenhouse gas mitigation assessment, measuring the anticipated greenhouse gas emissions impact of a project or service being proposed, and
2. A climate change resiliency assessment, applying a risk management approach to anticipate, prevent, withstand, respond to, and recover from a climate change related disruption or impact. Adaptation measures will be assessed where applicable.

Staff are researching best practices on how best to apply a climate lens to plans, actions, future budgets and Council's strategic workplan – 2018-2022 Burlington's Plan: From Vision to Focus. It is expected that staff training will be required to implement this direction effectively.

That staff are directed to bring a report to the June 3, 2019 (updated to June 10th) Committee of the Whole meeting that outlines actions taken to date and includes a critical path for the development of the first City of Burlington Climate Action Plan.

The City of Burlington has been active for several years working in collaboration with other municipalities, agencies and organizations on measures related to conserving energy, reducing greenhouse gas emissions and improving resiliency.

Examples of completed actions or that are underway include:

- Planning for City View Park pavilion to be a net carbon neutral operation;
- Planning for a near net zero carbon Skyway Arena re-build;
- Four city facilities have met LEED (Leadership in Energy and Environmental Design) requirements (2 LEED gold and 2 certified);
- Almost 7 megawatts of installed renewable energy in Burlington (primarily solar);
- Completion of the Sustainable Building and Development Guidelines which reference the Strategic Plan net zero carbon goal for community;
- 29 Level 2 electric vehicle charging stations have been installed on city property and an additional 64 level 2 and 3 charging stations are available in the community (as of 2018);
- Improved active transportation infrastructure – upgrading of the Francis Road multi-use trail and paving of the downtown multi-use trail from Elgin to Graham's Lane;
- Community engagement to promote active transportation – bike to work day, bike to school events and cycling with councillors;
- Stormwater management measures to help manage flood events;
- Low impact development measures such as improving infiltration, permeable paving and rain gardens;

- Home flood protection program in partnership with the Intact Centre on Climate Adaptation; and,
- A pilot tree by-law in the Roseland neighbourhood and community tree planting events.

Quick wins in the next four years which are either doable or low cost could include:

- Expanded electric vehicle charging stations to city recreation facilities and increased engagement to encourage electric vehicles in the community;
- Addition of electric vehicles to the city's fleet and updated Green Fleet Strategy;
- An updated corporate sustainable buildings and energy policy to reflect the city's goal to be net zero carbon by 2040;
- An updated Sustainable Building and Development Guideline to strengthen requirements to achieve net zero carbon development;
- A local developer to agree to build a net carbon zero development; and,
- A local program to support deep residential energy retrofits.

Appendix B includes further details about Burlington's climate change activities. Critical paths for Options 1 and 2 to develop the Climate Action Plan, as noted on page 2, are included in Appendix C.

The following directions (**in bold**) relate to the development of the Climate Action Plan:

a. Address the operations of the corporation of the municipality as well as the functioning of the entire community;

The new Climate Action Plan will focus on actions to both reduce the community carbon footprint and adapt to the impacts of a changing climate. Staff are proposing that the plan be written in two parts.

- Part one will focus on actions to mitigate (reduce) the community carbon footprint.
- Part two will be the climate change adaptation plan – initiatives to adapt to a changing climate.
- Once part two is completed, the two plans can be combined into one overall plan.

The Climate Action Plan will include highlights of city actions to reduce the operational carbon footprint to show local leadership, but the primary focus will be on community wide actions similar to the 2014 Community Energy Plan. The Corporate Energy Management Plan (CEMP), which is currently being updated, will provide a pathway to meet the city's Strategic Plan goal for city operations to be net carbon neutral by 2040. The updated CEMP will be presented to the

Committee of the Whole (COW) and Council in July. In addition, an update on the city's flood resiliency work will also be presented at the same COW meeting.

b. Include a plan for a thorough and complete consultation with stakeholders and the community;

Two options for community consultation are provided in Appendix C.

Option 1 is streamlined where there will be community engagement opportunities in parallel with the development of the Climate Action Plan, meeting council's direction to report back by December 2019.

Option 2 provides additional time for engagement with stakeholders and the community but would require an extension to council's direction to report back by December 2019. Engagement opportunities would include upfront community workshops for community members and stakeholders to voice ideas and solutions; online surveys and posting of draft information such as actions for feedback; townhall meetings with councillors and their constituents; and final information sessions to present the draft plan. Additional details for options 1 and 2 are found in Appendix C.

c. Increase action and ambition for the City's climate change-related activities;

The Climate Action Plan will include a 2050 reduction target with milestones, utilizing the analysis recently completed by SSG (Sustainability Solutions Group) showing a possible scenario to significantly reduce the community carbon footprint by 2050. Actions will be based on fuel switching (electrification of transportation and thermal energy), use of renewable energy, improving sustainable transportation options, and developing community energy systems, among others.

d. Include performance metrics to track progress and timelines for achieving key deliverables/major milestones, and a strategy to report back publicly on progress.

Performance metrics will be reviewed and a process to report to the public will be developed in consultation with the community and stakeholders. Examples of metrics include energy consumption and greenhouse gas emissions, total and on a per capita basis, as well as progress on specific actions.

Direct the City Manager to bring back the Burlington Climate Action Plan to Council no later than December 2019 for approval.

The Climate Action Plan will provide a pathway to a low carbon community. It will need to be a dynamic plan or a living document with flexibility to adapt to changing government policies and programs at the senior level. There will be a focus on actions to be implemented over the next four years, avoiding lock-in of decisions

which increase the carbon footprint, but there will also be a long-term view to work towards being a net carbon zero community. A community engagement strategy will also be an important part of implementation to ensure success.

As noted, there are two options provided in this report to complete the Climate Action Plan. Option 1 will meet council's direction to report back by December 2019 with a Climate Action Plan. Option 2 provides additional time for community consultation but would require extending the deadline to April 2020.

Staff are recommending that the two consultants be retained who recently completed work for the city's partnership with the City of Hamilton and Mohawk College through the Centre for Climate Change Management and the Bay Area Climate Change Office.

- Lura Consulting engaged the community on the climate change issue and the structure for the Bay Area Climate Change Office and Council, as well as the work plan for the Council.
- SSG (Sustainability Solutions Group) completed the greenhouse gas emissions inventory for the Bay Area communities and modelled the low carbon scenario for both Hamilton and Burlington.

Given the tight timeframe to complete the Climate Action Plan and report to the Committee of the Whole by December 2nd, 2019, it would save time and money to continue working with these consultants who are familiar with the local issues and information. SSG is familiar with the energy and emissions data for Burlington and therefore could expeditiously prepare a community-based Climate Action Plan without spending time collecting the data once again and completing a new analysis. Staff will work closely with the consultants to help coordinate the community engagement process and the development of the Climate Action Plan.

Staff are proposing a budget of \$80,000 to complete part one of the Climate Action Plan.

Climate Action Plan Recommendations:

Approve funding request in report CW-21-19 of \$80,000 from the Strategic Plan Reserve Fund to retain consultants for the purpose of completing Burlington's Climate Action Plan;

Approve the single source procurement for LURA Consulting (Land Use Research Associates Inc.) to undertake community engagement and SSG (Sustainability Solutions Workers Group Cooperative) to complete the Climate Action Plan, given their experience with the Bay Area Climate Change Office engagement process and the Low Carbon Pathway report for Hamilton and Burlington; and,

Direct staff to implement option 1 to engage the community and stakeholders to develop the Climate Action Plan and report back by December 2019.

The second part of this report is focused on providing an update of the city's participation in the Centre for Climate Change Management at Mohawk and the Bay Area Climate Change Office and Council.

Centre for Climate Change Management at Mohawk and The Bay Area Climate Change Office & Council

On June 23, 2016, City Council directed staff to work with the City of Hamilton to develop a governance model for the Community Climate Change Action Plan Implementation Team, in collaboration with staff from the federal and provincial offices of the Ministries of Environment and Climate Change. The new partnership would be modelled on the Bay Area Restoration Council (BARC) structure which is a multi-level government initiative to support the de-listing of the Hamilton Harbour as an area of concern.

Mohawk College also joined the collaboration and funding was obtained from the provincial Ministry of Environment and Climate Change (\$1.6 million) through the provincial cap and trade program. The funding would support the Centre for Climate Change Management at Mohawk (CCCM) and three separate entities:

- Mohawk's Campus Carbon Management Office
- Mohawk's Industry Partnerships Office, and
- The Bay Area Climate Change Office

At the beginning of this process, Burlington's commitment was to provide in kind staff time to act as an advisor to the Bay Area Climate Change Council and provide support for implementation teams. The City of Hamilton agreed to provide some funding support for project management/coordinating staff, but the bulk of the funding would be provided by the province.

During the development of the governance structure, the new Ontario government informed the CCCM that the funding was cancelled.

To fill the resource gap, both the City of Hamilton and Mohawk College have provided staff resources to assist with coordination of activities. Mohawk College has also absorbed the cost of the Executive Director position for the CCCM. Burlington's Senior Sustainability Coordinator participates on the BACCO team and acts as one of the municipal advisors to the BACCC.

The BACCC includes representatives from both communities and has developed a three-year work plan. To date work completed includes community consultation

through workshops, climate change summits and pop-up events and a detailed baseline inventory of community greenhouse gas emissions. Lura Consulting was retained to lead the community engagement process and SSC Consultants lead the technical analysis to complete a baseline GHG inventory and low carbon future scenario. The next step is to create teams of experts to implement actions in the workplan. It is anticipated that select city staff will be invited to participate on an implementation team as subject matter experts. Further details about the CCCM and BACCC are provided in Appendix C.

Funding: A request has been made to both the Cities of Burlington and Hamilton to provide funding support for the activities of the Bay Area Climate Change Office, the Council and Implementation Teams. For 2019, Burlington has been requested to contribute approximately \$20,000 and then approximately \$32,000 for each year from 2020 to 2023. Staff have found value for this collaborative initiative to date and recommend that the city support requested funding to allow this partnership to continue.

Recommendation: Approve funding request in report CW-21-19 of \$20,000 from the Strategic Plan Reserve Fund to support Burlington's commitment in 2019 to participate in the Bay Area Climate Change Office and Council.

Staff will submit a business case for funding of \$32,000 per year for 2020 and 2021 in the 2020 budget process. Staff will report back to council in 2021 with an assessment regarding future support for this initiative.

Strategy/process

City staff and external stakeholders were consulted on this report, particularly to provide updates on actions and initiatives related to climate change, including:

- Manager of Urban Forestry
- Business Continuity & Emergency Planning Coordinator
- Manager of Stormwater Management & Development Engineering
- Manager of Transportation Planning and Parking
- Transportation Technologist (Cycling)
- Sustainability Project Coordinator
- Coordinator Project Management (Energy)
- Manager of Communications
- Communications Advisor (for Capital Works)
- Corporate Public Involvement Consultant
- BurlingtonGreen
- Sustainable Hamilton Burlington
- Halton Climate Collective

- McMaster University

The Burlington Leadership Team were consulted on the financial details related to this report. In addition, a high-level presentation was provided at a recent Stakeholder Advisory Committee Meeting for the Community Energy Plan related to this report and the process to develop the Climate Action Plan.

Financial Matters:

Staff recommend a budget of up to \$100,000 to support the development of the Climate Action Plan – part one.

Staff recommend that Burlington contribute funding to support the activities of the Bay Area Climate Change Office and Council for 2019 in the amount of \$20,000. For the subsequent years, staff will submit a business case through the budget process for \$32,000 per year (2020-21). Staff will assess the partnership in 2021 with a report to council on the benefits and effectiveness to participating in the Bay Area Climate Change Office and Council.

Total Financial Impact

| | |
|-----------------------------------------------|------------------|
| Burlington Climate Action Plan | \$80,000 |
| Bay Area Climate Change Office/Council | \$20,000 |
| Total | \$100,000 |

Source of Funding

The source of funding for the \$80,000 to support the Burlington Climate Action Plan and \$20,000 to support the Bay Area Climate Change Office is the Strategic Plan Reserve Fund.

Other Resource Impacts

Other resources such as staff time has been identified in the climate change actions described in the 'Background and Discussion' section.

Connections:

There are several climate change connections with city and community action related to city plans, strategies and policies such as the Strategic Plan, Official Plan, Integrated

Mobility Plan, and the corporate workplan – 2018-2022 Burlington’s Plan: From Vision to Focus.

Public Engagement Matters:

Staff will work with communications and engagement staff and the consultant to engage the community as outlined in Appendix C.

Conclusion:

Burlington is ready to increase its ambition and commitment to working towards a net zero carbon community as evidenced by declaring a Climate Emergency Declaration. It will take significant effort but the city is well positioned with the number of climate initiatives and partnerships it is involved in as outlined in this report.

Respectfully submitted,

Lynn Robichaud
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Appendices:

- A. Burlington Climate Emergency Declaration
- B. Burlington Climate Initiatives and Partnerships
- C. Critical Paths to Develop the Climate Action Plan (2 Options)

Report Approval:

All reports are reviewed and/or approved by Department Director, Director of Finance and Director of Legal. Final approval is by the City Manager.