

## REPORT

COMMUNITY SERVICES COMMITTEE

MEETING DATE: DECEMBER 5, 2016

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**FROM:** Environmental Policy Department

**DATE:** November 14, 2016

**SUBJECT:** Climate Change Strategy - Implementation Report

**LOCATION:** Town wide

**WARD:** Town wide

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**RECOMMENDATION:**

1. That the Climate Change Strategy – Implementation Report from the Environmental Policy Department, dated November 14, be received; and
2. That Council continue to support the recommendations within the Strategy to improve the town's climate change readiness in the applicable departmental work plans and budgets brought forward for consideration within each budget year.

**KEY FACTS:**

The following are key points for consideration with respect to this report:

- Council endorsed the town's Climate Change Strategy in September 2014.
- The Climate Change Strategy – Technical Report has enabled integration of climate change considerations across town operations and programs with all Strategy objectives being met.
- Sixty-four (64) per cent of the 295 actions are underway within two years of implementation. A positive shift was noticed in action items advancing from medium term to short term implementation schedules.
- The public education document, Oakville's Climate Change Primer, updated website and the 'Keep Calm and Adapt – Emergency and Extreme Weather Preparedness' event are helping to build awareness, preparedness and resiliency amongst town residents.
- ICLEI awarded the town Milestone 5 of its five Milestone Building Adaptive and Resilient Communities (BARC) program for implementation of the Strategy and community education program. This achievement places the town at the forefront of municipalities in Canada working to address climate change.

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## BACKGROUND:

### Corporate Action

ICLEI – Local Governments for Sustainability is an international association of government organizations committed to sustainable development. The town has been an active member since 2004 participating in the joint ICLEI / FCM Partners for Climate Protection (PCP) program to develop and implement the town's greenhouse gas emissions reduction strategy.

Similar to the PCP program, the framework for ICLEI's *Building Adaptive and Resilient Communities* (BARC) program, formerly known as *Changing Climates, Changing Communities* municipal climate change adaptation program involves a five step milestone approach to improve a community's readiness. There are currently 19 Canadian municipalities working through ICLEI's BARC program.

Working through an inter-departmental team of 23 members from over 15 departments, staff determined the expected climate change impacts, town activities potentially affected by these impacts and associated risks and vulnerabilities completing Milestones 1 to 3 of the five milestone program between 2012 and 2014.

Staff reviewed over 80 plans, policies/procedures and programs to compile almost 300 actions that can be implemented, over time, to help mitigate and adapt town operations to the projected changes in climate. The town received Milestone 4 of 5, once the strategy was endorsed and implemented for at least one year. This award was received by Town Council on November 9, 2015.

Town staff have developed a community climate change awareness program called *Keep Calm and Adapt* which is comprised of a variety of web-based resources, social media awareness and public outreach campaigns and an annual event to coincide with Safe Boating Week, National Safe Building Month, Earth Week and Emergency Preparedness Week. The town was recognized by the Office of the Fire Marshall and the Insurance Bureau of Canada for enhancing emergency preparedness in Ontario, at its inaugural Keep Calm and Adapt – Emergency and Extreme Weather Preparedness event on May 9, 2015.

### Related Provincial Action

A memo is provided as Appendix A, which highlights key actions of the provincial five-year Climate Change Action Plan (CCAP) released in June 2016.

Environmental Policy staff have discussed the impacts of the CCAP with staff in multiple departments and the Senior Management Team. Staff are monitoring the release of details related to programs and funding referred to in the CCAP and these opportunities will be highlighted to staff and Council as programs are announced.

The CCAP is heavily focused on mitigation and curbing greenhouse gas emissions but discusses the release of a Provincial Climate Change Adaption Plan in 2017.

#### **COMMENT/OPTIONS:**

The Town of Oakville received Milestone 5 of ICLEI's national Building Adaptive and Resilient Communities (BARC) program in Halifax this past September at the Livable Cities Forum. The Town of Oakville and the City of Windsor are the first two of the 19 participating municipalities that have reached Milestone 5 demonstrating the town's environmental leadership nationally.

A requirement to receiving Milestone 5 includes launching an initiative to improve adaptation planning. Before updating the town's climate change strategy, town staff will review the provincial adaptation plan when available in 2017 to align initiatives and recognize incentives and funding that may become available.

A key step supporting Oakville's climate change adaptation planning was to define Objectives and Next Steps to guide the implementation of, and continuous improvements to, this strategy. The progress made on meeting the objectives and implementing the Next Steps is how staff will continue to report out annually on the Strategy's progress.

#### **Implementation by Objectives:**

The following table outlines actions undertaken since the last Climate Change Strategy implementation report dated November 9, 2015, organized by strategy objectives. Some of these initiatives are actually new and will be integrated into the recommendations going forward. This demonstrates the need to respect the Strategy as a 'living' document revised regularly to incorporate new initiatives.

<b>Objective 1:</b> To increase the town's capacity to protect against and respond to projected climate change impacts.	
Comply with current legislation	<p>Energy Conservation and Demand Management Plan – most recent implementation report received by CSC on November 7, 2016.</p> <p>To satisfy Ontario Regulation 102/94, town waste audits are conducted annually at all facilities with greater than 10,000 square feet of office space including Oakville Transit, Town Hall and Central Operations. Most recent report was provided to CSC on November 7, 2016.</p> <p>Ontario's 5 year Climate Change Action Plan - town staff have discussed the impacts on town operations to understand how the town will be required to comply with the province's proposed actions and identify</p>

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	<p>opportunities and emerging issues.</p> <p>The Official Plan Review will need to consider the new provincial legislation and initiatives contained with the CCAP related to integrating its recommendations into provincial legislation, regulation and policies across many ministries and the coming 2017 adaptation plan.</p>
Provide input on proposed and existing legislation	<p>Staff provided input on Ontario's Climate Change Strategy – in November 2015 stakeholder input was sought to establish provincial greenhouse gas emission and energy reduction targets.</p> <p>Staff attended the Federal Member of Parliament Town Halls - on July 20 and August 22, 2016 town staff attended Burlington and Oakville federal town halls held by local MPs to discuss federal action on climate change.</p> <p>The Large Communities Chief Building Officials (LCMBO) technical subcommittees will review/comment on pertinent proposed amendments that affect their work and will report back to the executive. The intention of the LMCBO executive is to provide comments to the Ministry of Affairs and Housing by the December 20, 2016 commenting deadline.</p> <p>Comments provided on the province's Ontario's Cap and Trade Program.</p> <p>Comments provided on the Provincial Growth Plan and Greenbelt Plans.</p> <p>Staff are following the provincial proposal to incorporate climate change considerations into the environmental assessment process.</p>
Build mitigation and adaptation considerations into existing and new plans, policies and projects	<p><u>Plans</u></p> <p>Storm Water Master Plan – Phase 2</p> <p>Harbour Master Plan</p> <p>i-Tree Report</p> <p>Official Plan Review</p> <p>Community Energy Plan (CEP) – 2017/18</p> <p>Environmental Strategic Plan (ESP) – 2016/2017 update</p> <p><u>Projects</u></p> <p>Municipal Natural Asset Initiative</p> <p>Asset Management</p> <p><u>Programs</u></p> <p>Oakville's Clean Marine program now includes extreme weather</p>

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	<p>preparedness and safe boating messaging.</p> <p>Emergency preparedness exercise presented an extreme weather event scenario for training purposes.</p>
Embed climate change considerations in staff reports and purchasing processes	<p>Opportunities are being explored in relation to asset management.</p> <p>Climate change was added as criteria for consideration in the Sustainable Purchasing Procedure.</p>

**Objective 2:** To educate through effective and efficient means of communication.

Be timely and proactive using a multi-media approach	<p>Partnership with community groups, local utility service providers, regional and town departments, TOWARF, Insurance Bureau of Canada and the Weather Network to deliver the 2<sup>nd</sup> annual Keep Calm and Adapt event on emergency and extreme weather preparedness, April 30, 2016.</p> <p>Updating of Oakville's Climate Change Primer – available on line and hard copy upon request. Infographics, presentations and gamification are utilized as part of the public education program.</p> <p>Created new Climate Change Adaptation webpages and infographics to present information for residents as well as the corporate strategy.</p> <p>Use of social media to promote and educate residents on events, emergency preparedness and heat and health alerts.</p>
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Participate in internal and external outreach and educational events	<p>22 outreach events attended with information on climate change, its impacts and available mitigation and adaptation tools.</p> <p>Parks and Open Space's Tree Pruning Information Session held in partnership with Oakville Hydro.</p> <p>Hosted successful 2nd annual Keep Calm and Adapt – Emergency and Extreme Weather Preparedness event</p> <p>Staff were invited to present on aspects of the development and implementation of the town's Climate Change Strategy at:</p> <ul style="list-style-type: none"> <li>• Sustainable Communities Conference, Ottawa, February 9-11, 2016</li> <li>• Halton EcoFest – April 16, 2016</li> <li>• Livable Cities Forum, Halifax – September 12-14, 2016</li> <li>• Boating Ontario Conference, Collingwood – November 28, 2016</li> </ul>
Encourage training and continuous education through webinars, conferences and courses	<p>Numerous webinars attended by various staff on the topics of storm water management, flooding, health impacts, urban forestry, and electrical distribution system disturbances among others.</p> <p>Several conferences/workshops attended on climate change data and impacts, technologies and best management practices and the Province's new Cap and Trade program and Climate Change Action Plan.</p>

<b>Objective 3:</b> To monitor the implementation of adaptation actions and goals in order to make continuous operational improvements.	
Identify and use available funding and partnerships to support actions	<p>Partnering with several Canadian municipalities, the David Suzuki Foundation and Municipal Natural Asset Initiative to pilot valuation of natural assets in existing storm water services.</p> <p>Oakville joined the global Compact of Mayors and will be submitting its greenhouse gas emission data by the end of 2016.</p>
Support innovation and research on best management practices and new	<p>Fleet greening includes vehicle tracking systems, electric vehicle purchases, and installation of charging stations and piloting of new technologies.</p> <p>The Municipal Natural Asset Initiative (MNAI) is helping staff to understand the value of natural assets within a specific area in Oakville.</p>

technologies	Staff are monitoring the Burlington - HAAP Halton Adaptation Assessment Program, municipal storm water incentive and fee programs.
Initiate, research and implement best management practices (BMP)	<p>Numerous webinars attended by various staff on the topics of storm water management, flooding, health impacts, urban forestry and electrical distribution system disturbances among others.</p> <p>Several conferences/workshops attended on climate change data and impacts, technologies and best management practices, including storm water charges, low impact development and community outreach.</p>
Review impacts and vulnerabilities annually	<p>Participation in the Compact of Mayors will involve reviewing the town's risks and vulnerabilities to our changing climate.</p> <p>Impacts and vulnerabilities will be reviewed by impact specific staff teams. The Storm Water Master Plan is assessing risk and vulnerabilities for potential climate change impacts.</p>

### Next Steps:

Through the development of the corporate strategy, five priorities were determined to be critical Next Steps to continue to improve the town's climate change preparedness. These Next Steps and achievements to date are:

1. *Incorporate climate change considerations, strategies and actions into appropriate policies, procedures, plans and purchasing decisions.*

Objective 1 above details the specifics actions underway to address this Next Step. Policies and plans are being updated and town staff are taking the opportunity to incorporate climate change considerations at that time.

The Provincial CCAP promises funding for the municipal development of Community Energy Plans and Climate Action Plans (and their supporting data) with greenhouse gas pollution inventories. Staff will continue to monitor this initiative.

2. *Continue to research and implement climate change mitigation and adaptation actions including, but not limited to those mentioned in Section 6.0 under the heading Adaptation Actions.*

Since Council's endorsement, town staff has been implementing actions recommended in the Strategy at every opportunity. There are 295 actions recommended in the Strategy. Of these 188 (64%) are recommended for implementation in the short term, 98 (33%) in the medium term and 9 (3%) in the

long term. Currently sixty-four (64) per cent of the actions are being implemented to different degrees. Many of these actions are on-going. The actions and their progress are provided in Appendix B. This shows remarkable town commitment with a shift of numerous actions from implementation in the mid-term to short-term along with improving the percent of actions underway from last year's 56 (56) per cent.

Staff will continue to implement the corporate strategy and will look to align the 2017 town's Climate Change Strategy updating with the federal and provincial adaptation strategies, once released.

*3. Develop a tracking and monitoring tool related to climate change adaptation.*

Staff are currently tracking the implementation of specific actions within the Strategy (Appendix B). Staff have been monitoring the development of climate change readiness indicators underway by ICLEI and other organizations and will be well positioned to participate once available.

*4. Conduct a more detailed and integrated risk assessment on all impacts with vulnerability ratings of V4 and V5.*

Through the creation of the Strategy staff identified 39 impacts to town operations, 11 of these were high to medium vulnerability and 28 were identified as medium to low vulnerability. Six of the town's 11 highly vulnerable impacts (V4 and V5) are caused by an increase in the severity and frequency of precipitation events.

The town remains focused on completing Phase 2 of the Storm Water Master Plan, are involved in the corporate Asset Management project and the Municipal Natural Asset Initiative all designed to provide information on risks, capacities, vulnerabilities and opportunities related to storm water infrastructure.

Town staff have formed climate change working groups with partner organizations including ICLEI, FCM, Engineers Canada, Water Environment Association of Ontario, The Canadian Institute of Planners and the Institute for Catastrophic Loss Reduction (ICLR).

*5. Based on the more comprehensive integrated risk assessments the phased implementation of actions will continue.*

Work on this Next Step is integrated into the work of the impact-specific staff teams.



**Summary:**

Overall the town continues to make positive and measurable progress to address climate change impacts, improve resiliency and prepare for extreme weather events. The town is recognized as a Canadian leader in municipal climate change planning and staff are often called upon to represent the town's successes and continued progress, as a credit to Council's continued commitment to environmental leadership.

**CONSIDERATIONS:****(A) PUBLIC**

Opportunities to engage the public and provide education on Oakville's climate change and actions that can be taken by residents to enhance their preparedness have been integrated into the ongoing Environmental Policy outreach initiatives.

**(B) FINANCIAL**

Further Climate Change Strategy implementation may identify needs to include new projects and budget allocations related to infrastructure and staffing resource requirements to implement climate change adaptation initiatives. These would be brought forward to Council at the appropriate time during budget deliberations.

**(C) IMPACT ON OTHER DEPARTMENTS & USERS**

Many town departments have been involved in the development of the Climate Change Strategy and will continue to be involved in its implementation and continued review and updating.

**(D) CORPORATE AND/OR DEPARTMENT STRATEGIC GOALS**

This report addresses the corporate strategic goal to:

- enhance our natural environment
- have environmentally sustainable programs/services
- provide outstanding service to our residents and businesses
- be accountable in everything we do
- be the most livable town in Canada

**(E) COMMUNITY SUSTAINABILITY**

Climate change adaptation planning addresses all four pillars of sustainability supporting social, cultural, environmental and economic sustainability.

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**APPENDICES:**

Appendix A: Provincial Climate Change Action Plan Information Update

Appendix B: Climate Change Strategy Action Implementation Tracking Table

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