



Clean Air Council Bringing Climate Change into Official Plans Primer and Workshop Summary

ACKNOWLEDGEMENTS

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About Clean Air Partnership

Clean Air Partnership (CAP) is a charitable environmental organization launched in June, 2000. CAP's mission is to help municipalities become sustainable, resilient, vibrant communities where resources are used efficiently, the air is clean to breathe and greenhouse gas emissions are minimized. We achieve this mission through research, knowledge transfer, and by fostering collaboration among all orders of government, academia, NGOs and a range of additional stakeholders.

INTRODUCTION

Many municipalities have been trying to understand how to better integrate Climate Change into their municipal decision-making and service delivery. One of the avenues that has been identified as a mechanism to achieve that goal is the policy direction of incorporating Climate Change into Official Plans.

Local decisions about growth management significantly influence the amount of energy used, and have energy cost implications for local governments, businesses, institutions, and residents. The direction and principles that govern local decisions about land use and community energy needs are laid out in municipal Official Plans. As such, considerations on how climate change will impact the community should be taken into account when planning for growth and infrastructure.

While the principle of incorporating climate change into municipal decision making has been identified as a policy direction at the municipal, provincial and federal level, many municipalities are seeking additional guidance in order to better understand how to put this into practice.

Towards that goal, Clean Air Partnership convened a consultation bringing together planning, climate change and public health staff to gather their input and to better understand commonalities and differences in perspectives. This report highlights general areas of agreement as well as variances in perspectives, and identifies next steps necessary for staff to increase alignment through the integration of climate policy goals across municipal departments.

WHAT DOES BRINGING CLIMATE CHANGE INTO OFFICIAL PLANS LOOK LIKE?

Gabriella Kalapos, Clean Air Partnership

In April of 2018, CAP conducted a preliminary scan exploring how Ontario municipalities have integrated climate change into their Official Plans (OPs). A webinar consultation followed, where participants learned more about Integrating Climate Change into Official Plans. A face-to-face workshop in September 2018 provided an opportunity to further this conversation.

Participating municipal staff from planning, public health and environment/sustainability defined what bringing Climate Change into Official Plans would look. This is described below.

CLIMATE CHANGE AND OFFICIAL PLANS

- The OP should reference language for why climate action is important to the municipality and why climate change needs to be incorporated into OPs.
- There is the opportunity for the insertion of the above climate change language to serve as an educational opportunity describing the context, science, roles and commitments of different orders of government, social, economic and environmental connections and synergies.
- The OP should define what climate change means to the municipality and what they see as their role, what they will do, and how they will report on it.

If the municipality does not have a Climate Action Plan, then the OP should state that the municipality will develop one that will commit them to: (Resource: Guideline on Community Emissions Reduction Planning)

- Undertake an energy and greenhouse gas emission inventory;
- Set a greenhouse gas reduction target (as well as other associated targets that the municipality deems important (ex. energy avoided costs target);
- Develop a plan or strategy that outlines actions that the municipality and its stakeholders have prioritized for implementation
- Indicators on progress made towards actions and/or emissions reductions
- The monitoring and reporting framework in place for the Plan and the timeframe associated with progress reporting; and
- Time frame and process for evaluation and updating of the Plan.

If the municipality does not yet have a council direction to develop a Climate Adaptation Action Plan. The Official Plan should state the direction to develop such a Plan. The Plan itself should include:

- The context and rationale for why the municipality needs to address climate change adaptation and resilience (i.e. impacts of severe weather events);
- The scope the Plan will focus on: departmental/corporate-wide/community/sector-specific (e.g. agriculture, infrastructure);
- The Plan itself should then identify the actions that will be undertaken to mitigate risk

- and vulnerabilities and build resilience to climate changes impacts;
- The monitoring and reporting framework in place for the Plan and the timeframe associated with progress reporting; and
- Timeframe and process for evaluation and updating of the Plan.

If the Municipality already has a council approved Climate Mitigation/Adaptation Plan then the Climate Change integration into appropriate sections of the OP could include any of the following:

- **Possibilities for mitigation plans:** Summarize community energy and emissions; GHG targets (and any other corresponding targets); The actions that the municipality has prioritized in the Climate Action Plan; The monitoring, evaluation, progress reporting, and Plan update plan and schedule.
- **Possibilities for adaptation:** Summarize the priority risks and the priority actions to address and mitigate risk; actions; progress report and adaptation plan progress reporting, evaluation and update process and schedule.
- **It is important to note that there is a difference in perspectives between planners and climate change staff related to the level of details in Climate Plans that are incorporated into OPs.** Climate change staff feel that detail adds strength to the commitments made in Climate Plans. Planning staff note that too much detail increases the likelihood of necessitating OP amendments, which take a significant amount of time. This is an area that would greatly benefit from further conversations between environment and planning staff.

There was recognition by all departmental staff (planning, climate change/sustainability, public health) that climate change integration into OPs does not sufficiently achieve the goal of incorporating climate change into municipal decision-making and service delivery. Integration of climate change considerations into numerous municipal plans over time is required in order to achieve that larger goal, as well as strengthening inter-departmental collaboration and future updates to Climate Change Mitigation and Adaptation Plans. Some additional areas that workshop participants felt would benefit from further discussion include:

- Regional/Local government – how would they need to be handled differently?
- Actions being undertaken at other levels of government that the municipalities deem important to addressing greenhouse gas emissions within their communities. administrators dedicated to monitoring, selecting and applying for applicable funding streams. Given funding was so integral to successful implementation, and in the context of ongoing staff capacity issues within municipal climate change offices, this was of particular advantage.

ACTIONS/POLICIES THAT NEED TO BE UNDERTAKEN AT OTHER LEVELS OF GOVERNMENT IN ORDER TO ACHIEVE PROVINCIAL/FEDERAL TARGETS AT THE COMMUNITY LEVEL

OFFICIAL PLAN AND CLIMATE CHANGE INTEGRATION

Mike Sullivan, Ontario Professional Planners Institute (OPPI) and Canadian Institute of Planners (CIP)

Climate change permeates the work of most municipal departments as can be seen from the list of Plans that have climate change considerations. But, with ever increasing awareness of the connection between land use, energy use and climate change, planners have been advancing their climate change integration efforts. For example, the Canadian Institute of Planners (CIP) which is a national and international not-for-profit organisation advocating for good, policy-based planning developed a Climate Change statement.

To advance this policy direction, CIP developed a suite of tools that were developed through extensive consultation with professional planners, climate change researchers, advocates, and other partner organizations using interviews, surveys, and focus groups.

Planning and Climate Change Mandate

The Planning profession is guided by a Code of Conduct. Section 1.3 of the Code states that planners must acknowledge the inter-related nature of planning decisions and their consequences for individuals, the natural and built environment, and the broader public interest.

The climate change mandate within the Provincial Policy Statement (2014) is under Section 1.8 – energy conservation, air quality and climate change) states that planners shall support sustainability-related planning principles and design features such as:

- Compact form;
- Active transportation;
- Transit;
- Mixed use development;
- Energy efficiency and conservation;
- Renewable/alternative energy system; and
- Vegetation among others.

The climate change mandate within the Provincial Planning Act sets the minimum standard. However, municipalities have the agency to go beyond this provided it remains consistent with the Act. For example, York, Peel and Durham Region, Toronto, Hamilton and Guelph are examples of municipalities that have gone well beyond the Planning Act requirements.

As Climate Change integration into OPs is a new and emerging area there are a lot of questions that would benefit from ongoing sharing of experiences. A common question is what is the different role regional and local governments would play in climate Change OP integration?

Some regional government approaches include:

- Risk assessments – identifying the severity, likelihood of occurrence and costs of climate impacts
- Vulnerabilities – identifying areas vulnerable to climate impacts
- Adaptation/Mitigation requirements (ex. Requiring Energy Plans for Growth Nodes – York Region)
- Conducting staff training to ensure planners have the skills and expertise to understand climate change connections and concepts
- Setting the direction at the Regional level for expectations and/or requirements so local level governments can play a significant role in increasing climate change action at the local government level.

OPPI and CIP are looking to develop an accredited climate change specific program in 2019. In addition, there is also an Annotated Bibliography, Cross Canada Jurisdictional Scan and Municipal Planning Templates (OP/Zoning Amendments; Site Plan Agreement; and Checklists) being developed.



UPPER-TIER GOVERNMENT CASE STUDIES

REGIONAL GOVERNMENT PLANNING AND CLIMATE CHANGE PERSPECTIVE, EFFORTS AND GOAL:

Teresa Cline, York Region

York Region has been working since 2016 to develop a range of climate change-related plans:

- Energy Conservation and Demand Management Plan → corporate mitigation
- Asset/Risk Management Plan → corporate adaptation
- Community Energy Plan → community mitigation
- Municipal Comprehensive Review → community adaptation

York Region is now developing a Climate Action Plan where vulnerability assessments are being conducted (e.g. health, roads and bridges, natural systems, energy agriculture and so on) to help set climate targets.

The Climate Action Plan process involves:

- Conducting a current state analysis;
- Incorporating this with corporate and community actions;
- Identifying gaps; and
- Developing a climate change action plan to address these gaps.

This Climate Action Plan will inform policy updates for York Region's OP review (scheduled for 2020). In the revised OP, the Region expects to reference existing corporate and municipal actions and use an infographic or alignment map to illustrate overlaps and gaps.

The Region plans to integrate their Climate Action Plan into their OP by inserting climate change considerations into the various chapters of their OP including sustainable natural environment, healthy communities, economic vitality, urbanization, agricultural and rural areas and servicing our population. Some example areas are outlined below.

Sustainable natural environment:

- Recognize the role natural heritage sites play in moderating climate change impacts.
- Introduce tree canopy cover targets (for urban forests).
- Watershed targets and objectives.

Healthy communities:

- Expand climate change and air quality detail.
- Introduce GHG emission reduction targets and support high priority actions.
- Detail how climate change impacts human health (especially for vulnerable populations).

Economic vitality:

- Detail the financial case for climate mitigation and adaptation.
- Full lifecycle costing.

REGIONAL GOVERNMENT PLANNING AND CLIMATE CHANGE PERSPECTIVES:

Amanda Bathe and Brian Kelly, Durham Region

Durham Region's experience (thus far) with integrating climate change into their new OP emphasizes that integration does not need to come at the cost of important detail. The Region plans to include information on the policies/actions committed to within their climate mitigation and adaptation plans such as:

- District energy systems
- Urban tree canopy targets
- Electric vehicle targets
- Smart city measures
- Green infrastructure
- Transit-friendly community design

Durham Region is currently going through the Municipal Comprehensive Review (MCR) process to create a new OP called "Envision Durham 2041: Our Region. Our Plan. Our Future". The MCR was initiated in early 2014 requiring the Region to produce a revised OP with a progressive, forward-thinking plan process for the Region until 2041. Incorporating climate change considerations throughout this new OP is a key goal. Since the Region's previous OP review, there have been many changes in Provincial legislation. These changes are set to guide this OP review. These include the updated:

- Provincial policy statement;
- Growth Plan amendment (that provided population employment forecasts to 2041);
- Planning Act;
- Water Resource Protection Plan

The MCR plans to address a number of socio-economic and environmental matters as required under new provincial legislation.

The Region has divided work into the following areas (while remembering that climate change is interdisciplinary meaning it is an important consideration in each one of these areas):

- Growth management
- Housing
- Agriculture/rural system
- Environment/Greenlands system
- Climate change/healthy neighbourhoods
- Transportation system

Some examples of how the Region intends to integrate climate change are:
In terms of the environment/Greenlands system, the MCR plans to:

- Incorporate the new Provincial Growth Plan's natural heritage system additions.
- Update the Greenbelt Plan natural heritage system (including minor greenbelt boundary adjustments and the addition of urban river valleys).
- Review water resource system mapping (including the Lake Simcoe Protection Plan policies and source protection issues).

- Update watershed planning (via partnership with local conservation authorities) to include climate change considerations and embed recommendations in the OP.

In terms of climate change/healthy neighbourhoods, the MCR plans to:

- Incorporate climate change policy requirements from the Provincial land use plans (growth and Greenbelt Plans).
- Incorporate climate change policy recommendations and initiatives from other levels of government
- Ensure conformity with Provincial guidance materials (including community emissions reduction planning, low impact development and green infrastructure).
- Develop OP policies from Regionally-led climate change initiatives (from the Local Climate Action Plan, Adaptation Plan, Community Energy Plan and others).

At present, the Region is conducting background research to develop various discussion papers. It also plans to consult lower tier municipalities as well as citizen advisory committees (such as the Durham Agricultural Advisory Committee and the Environmental Advisory Committee) for input.



LOWER-TIER GOVERNMENT CASE STUDIES

CITY OF BURLINGTON,

Leah Smith

The City of Burlington's experience with integrating climate change into their new OP emphasizes the co-benefits of many existing land use planning and development policies as a way to incorporate climate change into an OP (and influence key decision makers).

Climate change has been firmly on the agenda in Burlington in recent years. For example, the City successfully passed their Community Energy Plan (2014) on its economic (rather than environmental) merit with key decision makers attracted to its efficiency, economic viability and energy security benefits.

The City's new Strategic Plan (2015-2040) also lays out the goal of achieving carbon neutrality as well as for all new growth in the City to be from intensification. Drawing on these recent success stories, the City was also undertaking an OP review and opted to create a completely new OP, which integrated climate change. The major success is that the new OP uses a growth framework that it is climate change-supportive and contains explicit climate change policies.

The OP's growth framework designates three different growth areas:

- Primary growth areas
- Secondary growth areas
- Employment growth areas
- Established neighbourhood areas

This growth framework is climate change-supportive because it leads to more efficient use of infrastructure, increased energy efficiency, better facilitates, and more sustainable transportation. On the other hand, this approach is sustainability-supportive because it better protects the municipality's rural areas and natural heritage system which provide ecosystem services such as carbon sinks, flood attenuation and more.

The OP also contains a number of climate change-relevant policies such as:

- The frequent transit network concept
- A set of sustainable design policies
- Sustainable building and development guidelines
- Urban forestry policies

Importantly, none of these policies are standalone. Instead, the OP's climate change section highlights the climate change-relevant benefits of new land use/planning policies (alongside their other benefits).

Challenges

- Better models and data are needed to more robustly compare and contrast different development scenarios in terms of GHG emissions etc.
- Much remains outside the scope of the Provincial Planning Act (e.g. green development standards, building codes etc.).
- Budgets and other implementation tools need to be aligned.

Opportunities

- Provincial Planning framework: The Provincial Planning framework has been highly beneficial in helping to protect the Niagara Escapement and other rural areas and allow growth primarily through intensification.
- Co-benefits of climate change policies: Emphasizing the co-benefits of climate change policies can strengthen their rationale and increase municipal stakeholder buy-in (especially where Provincial governments are less supportive of climate action).

TOWN OF RICHMOND HILL, Michelle Dobbie and Maria Flores

The OP is a useful tool to advance climate action, however it needs to also be kept in mind that it is only one of a number of tools that are needed to fully implement climate change into municipal decision making. The OP serves to advance the climate change policies of the municipality, but it is through climate change being integrated into other municipal plans that climate change considerations can move from policy to implementation.

The Town of Richmond Hill will be focusing on using the OP to communicate the risks that climate change impacts pose to the municipality. This direction is seen as a more effective way to engage key decision makers and highlights:

- The increased health and safety risks to life and property;
- The increased need to respond to emergencies and service disruptions;
- The increased capital repair and maintenance costs; and
- Municipal liabilities relating to these effects.

Richmond Hill conducted a Corporate Climate Change Risk Scan (in partnership with the Ontario Climate Consortium in late 2017). Through 12 inter-departmental workshops they identified municipal climate risks and recommended the development of a corporate Climate Change Action Framework to align municipal initiatives for better climate adaptation and to prioritize initiatives that address the highest risks. Richmond Hill also conducted a framework-scoping workshop with municipal staff, recognizing they did not have the resources to create a comprehensive plan for both mitigation and adaptation. The framework scoping workshop identified:

- The main functional areas for climate change action across the municipality;
- Related corporate plans, policies and strategies that have potential climate benefits; and
- The stakeholders and engagement opportunities that related to these functional areas.

Some of the key lessons learned thus far regarding bringing climate change into an OP include:

- OP land use planning policies are a key area where climate adaptation can be incorporated (e.g. location, design and construction of buildings, green infrastructure).
- However, only certain adaptation opportunities can be addressed through OP land use policies.
- Furthermore, many municipal departments/divisions are not governed by the OP (e.g. business continuity and emergency services, community programming, facility operations, health and safety etc.).
- Therefore, there is a need to integrate climate change across municipal departments and to identify regulatory and policy requirements that govern other areas of the municipality's work

To try and reconcile these issues, Richmond Hill is now developing a 2-fold approach: **Climate Change Framework:** The Climate Change Framework is an umbrella document outlining Richmond Hill's climate change mandate and direction for applying the climate change lens on existing and new initiatives to identify possible gaps.

Community Energy and Emissions Plan: The Community Energy and Emissions Plan is a comprehensive municipal study and action plan to measure, set targets for, reduce and report on GHG emissions.

Currently, Richmond Hill's OP (in alignment with Provincial guidelines) provides the high-level strategic direction needed to push land use development towards more compact, walkable built form with a connected Greenway System, including an expanded parks and urban open space system. Looking towards their next OP review, Richmond Hill is exploring new areas where they can introduce more climate-resiliency measures. Some examples include:

Built Form

- The Town's existing OP already requires updates to their sustainability metrics.
- The Town is also interested in exploring the possibility for green roofs as in Toronto's Green Roof Bylaw and Hamburg's Green Roof Strategy to either require green roof development or set an aspirational target.

Natural Environment

- The Town is interested in exploring geographic-specific tree canopy targets, recognizing that much of the municipality's tree cover is unevenly distributed in low population areas.
- This could be achieved by updating targets in the OP or introducing a comprehensive zoning bylaw.
- The Town is also interested in ensuring trees can withstand extreme weather events.
- This could be achieved by urban forest planting guidelines or soil volume standards.

Parks and Open Spaces System

- The Town is exploring how to actively incorporate parks and other open spaces as a part of their climate resiliency infrastructure.

Richmond Hill's experience highlights a number of insights:

Every municipality is different: Richmond Hill's approach to bringing climate change in their OP evolved out of the need to balance regulatory requirements and corporate priorities against resource constraints. Know your municipality when designing your approach. This can include asking:

- How can you gain buy-in from stakeholders?
- Where in your municipality does progress get made?
- Where are the best opportunities to mitigate and adapt to climate change in your municipal context?
- What other tools are available to implement climate action?

TOWN OF HALTON HILLS,

Gabriel Clarke

Climate change terminology alone is unlikely to influence key decision makers. Instead communicating the economic benefits of climate change-ready land use planning and development (and conversely the economic costs of inaction) is important. Dialogue also needs to be established and sustained between the development, commercial and business community.

Halton Hills has a green development standard (that includes both site and building metrics) in place that was required to be integrated into the OP. The authority for the green development standards came from the Provincial Policy Statement and Bill 51- the ability to review development applications from a sustainable development perspective.

Landscape-level GHG reductions are also an important consideration for integration into OPs. Overall the climate change-centred policy goal is to 1. retain existing GHG sinks (e.g. trees and wetlands) and 2. integrate new GHG sinks (e.g. urban tree canopy and landscaping).

Achieving GHG emission reductions through land use planning requires an interdisciplinary approach to successfully integrate density, mixed use, transit and active transportation. This approach would be of most value if municipalities had the ability to create GHG inventories for each development scenario under consideration. For example, the GHG impact from building stock and energy systems, transportation, and natural carbon sinks.

This would enable GHG emissions metric to be taken into consideration along with other socio-economic metrics (e.g. from land needs assessments, fiscal impact assessments and so on). This would be of significant value in creating an ability to truly take climate change into consideration in development and land use decisions and would enable municipalities to move from climate change policy towards climate change implementation.

A similar approach can be used to integrate climate change adaptation into the planning process by:

- Completing a local future climate impact assessment
- Identifying key resilience and adaptation challenges
- Stress-testing development scenarios.

Municipal staff and council would then be in a much stronger position to compare “climate-ready” development scenarios to Business as Usual scenarios and then evaluate these against the other municipal economic, social and environmental priorities.



BREAKOUT GROUPS

The second half of the workshop involved break out groups
Regional/Local Government Collaboration and Supports Break Out Group

1. There is need to better define the roles and responsibilities of regional and lower tier municipalities.

While there is often a resistance from local governments towards regional requirements, when it comes to climate change there was a preference for regional governments to provide more guidance and direction to local governments for climate change integration. It was also noted that the Growth Plan did allocate that responsibility to regional municipalities enabling them to set the bar for where lower tier municipalities should aim.

2. There is a need for greater transfer of resources and training.

There was an understanding that regional municipalities need to recognize the different levels of expertise/capacity that lower tier municipalities have to advance implementation of climate change-related planning policies. This could be addressed by providing staff training, resource sharing and wider guidance as to how lower tier municipalities could/should conduct implementation.

3. Existing structures are effectively fostering collaboration, however only in some areas.

Different regional departments working on different areas of OP integration are engaged in dialogue. However, dialogue focusing on inter-departmental implementation between regional and lower tier levels is more challenging and would benefit from increased support and effort.

CLIMATE CHANGE COMMUNICATIONS BREAK OUT GROUP

1. There is a need to better engage key decision makers.

Engaging Council, CAOs and other senior-level staff is an essential, but often underachieved step. Their engagement energises and sustains municipal discussion around climate change-ready land use planning and climate action implementation.

There is also an understanding that justifying and communicating the economic advantages of climate change-ready land use planning and development resonates more strongly with CAOs and other senior officials than less tangible messages around purely environmental climate change impacts.

2. Speak to the Interests of Specific Target Audiences

These issues also translate to other audiences in that it is important to tailor communications to speak to a more specific audience. This would involve more

specificity in communication materials and efforts to speak to the need, interest, what it means to them and how it relates to land use planning and development and requires more efforts towards target audience communications.

3. Climate Data

There was a recognition that there is insufficient climate data available to municipalities for municipal decision-making. There is a need to improve how climate data can inform land use planning and development. For example, emissions inventories would benefit from increased understanding of total and intensity calculations from different sectors (for example commercial energy use is often a challenge). There is also the issue that energy use/emissions from different forms of development are not well documented in a quantitative way and if they were then that would allow comparison of different energy requirements associated with different developments. There also needs to be a better understanding of how municipal GHG emission reductions/targets relate to provincial and federal targets and policies.

4. Climate risks assessments

Risk assessments are currently an uncertain process for municipal staff. There needs to be better dissemination of robust methods used from the Province and between municipalities to improve consistency and certainty that will increase the buy-in to incorporating the risks into municipal decision making.



NEXT STEPS

Jurisdictional scan on the state of climate change and OP integration

Work could be carried out to conduct a jurisdictional scan to explore the state of climate change integration into OPs across municipalities in southern Ontario. This work could then identify what drives and what hinders successful integration as well as identify best practices and recommendations for future efforts. This could be particularly useful for municipalities struggling to engage key decision makers.

Exploring the costs associated with different land uses in the face of climate change

Work could be conducted to explore different types of land uses and their costs (e.g. infrastructure renewal, maintenance and otherwise) in the face of climate change impacts. This could help to illustrate the financial savings/costs associated with particular planning and development decisions and to help advance the implementation of climate-ready development.

