

ENVIRONMENT COMMITTEE APRIL 13, 2010

PRESENTATION BY THE TORONTO REGION CONSERVATION AUTHORITY GETTING TO CARBON NEUTRAL: A GUIDE FOR CANADIAN MUNICIPALITIES

Recommendation

The City Manager, the Commissioner of Planning and the Senior Management Team recommend:

- 1) That the presentation by the Toronto and Region Conservation Authority titled, "Getting to Carbon Neutral: A Guide for Canadian Municipalities" be received; and
- 2) That the Guide be provided to all department heads and made available to other staff as required.

Contribution to Sustainability

The presentation and toolkit, "Getting to Carbon Neutral: A Guide for Canadian Municipalities", outlines an approach for consideration in achieving two Objectives in Green Directions Vaughan, the City's Community Sustainability and Environmental Master Plan. The two Objectives are provided below:

- Goal 1, Objective 1.1: To reduce greenhouse gas emissions and move towards carbon neutrality for the City of Vaughan's facilities and infrastructure.
- Goal 1, Objective 1.2: To promote reductions of greenhouse gas emissions in the City of Vaughan.

Economic Impact

There is no economic impact associated with this Report.

Purpose

The purpose of the Report is to provide Council with information on approaches and actions to achieve two Objectives in Green Directions Vaughan.

Background - Analysis and Options

There is a general consensus that climate change requires action in the areas of (a) mitigation by reducing greenhouse gas (GHG) emissions and (b) adaptation to potential future changes in climate and weather systems. The new City-wide Official Plan, currently in development, includes policies to address climate change mitigation and adaptation as articulated in the environmental chapter of the Plan. In addition, Goal 1 of Green Directions Vaughan includes action items to address reduction of GHG emissions while Goal 5, and specifically Action Item 5.1.4, addresses climate change adaptation.

The guide, "Getting to Carbon Neutral: A Guide for Canadian Municipalities", is a collaboration of the Toronto and Region Conservation Authority (TRCA) and the University of Toronto and outlines actions to address GHG emissions reductions. A synopsis of the guide is provided below.

The concept of 'carbon neutral' is a useful benchmark to gauge progress toward overall sustainability. Within the context of this report, carbon neutral is defined as: *the total greenhouse gas (GHG) emissions generated by a city, directly or indirectly, less the emissions sequestered*

and offset summing to zero. Achieving carbon neutrality is an indicator of living within our ecological means and consuming resources at a rate that does not impede future generations' ability to enjoy them. Without balancing the rate of emission generation with the rate of sequestration, climate change is inevitable. For an individual municipality, establishing a carbon neutral target makes a statement about the priority level of sustainability and provides a framework to guide a wide range of programs and regulation; collectively working toward carbon neutrality, municipalities could significantly lessen the impact of climate change.

The first step toward reducing carbon emissions is to conduct an inventory of energy consumption and GHG emissions. Many Canadian municipalities have already taken this first step as is evident by the over 200 Canadian municipalities participating in Partners for Climate Protection (<http://gmf.fcm.ca/Partners-for-Climate-Protection/>). Data collection is critical to designing and implementing effective strategies for reducing emissions, but many cities are finding it difficult to translate this information into actual programs and projects that are meaningful. The analysis conducted for the "Getting to Carbon Neutral" guide aims to facilitate the transition from data collection to strategic action.

The areas identified in the guide as having the greatest mitigation potential in the municipal context are familiar to the environmental policy and planning community. They are consistent with previous knowledge of the key drivers of GHG emission reduction, as are the actions highlighted as best practices in the guide. However, maximizing the GHG abatement potential may require a collaborative effort between municipal, provincial and/or federal governments. The areas recommended for strategic action are:

1. Buildings
 - a. Retrofits of existing buildings for greater efficiency.
 - b. Stricter regulation for resource consumption in new buildings.
2. Land use and urban planning
 - a. Increased density.
 - b. Increased urban green spaces (parkland, urban tree canopy, green roofs).
 - c. Neighbourhood design that encourages active transportation (cycling and walking)
3. Transportation
 - a. Improve coverage of public transit infrastructure.
 - b. Reduce personal automobile use in urban areas (tolls, restricted parking, traffic calming mechanisms).
 - c. Encourage adoption of electric or low-emission vehicles.
4. Energy Supply
 - a. Integrated community energy planning.
 - b. Harvest energy from municipal waste stream.
 - c. Increase renewable energy supply.
5. Efficiency and demand management
 - a. Increase efficiency of municipal services and buildings.

The guide concludes that there are indeed opportunities for municipalities to reduce their emissions dramatically, and that achieving carbon neutrality is possible in the Canadian municipal context. The guide also notes that there are social, economic and environmental benefits to many of these projects beyond their climate change mitigation potential, further enhancing their value.

Relationship to Vaughan Vision 2007

The approach described in the guide and presentation is consistent with the Strategic Goal regarding Service Excellence (Providing Service Excellence to Citizens) and the Strategic Objective to Lead and Promote Environmental Sustainability.

Regional Implications

No Regional implications.

Conclusion

This report summarizes the presentation made by the Toronto Region Conservation Authority on the guide book, "Getting to Carbon Neutral: A Guide for Canadian Municipalities".

Attachments

Not applicable.

Report prepared by:

Tony Iacobelli, Senior Environmental Planner, ext. 8630

Respectfully submitted,

JOHN ZIPAY
Commissioner of Planning

DIANA BIRCHALL
Director of Policy Planning/Urban Design