

COMMITTEE OF THE WHOLE – SEPTEMBER 15, 2003

CITY OF VAUGHAN ENVIRONMENTAL INITIATIVES

Recommendation

The Commissioner of Economic / Technology Development & Communications in consultation with Senior Management Team recommends:

1. THAT this report be received as information only

Background

In 1992, the Government of Canada became a signatory of the United Nations Framework Convention on Climate Change. Canada and more than 160 other countries met in Kyoto, Japan in December 1997 and signed the “Kyoto Protocol”, an agreement that sets out international commitments for reducing greenhouse gas (GHG) emissions affecting global climate change. The Protocol will become legally binding when it is ratified by at least 55 countries, covering at least 55 per cent of the emissions addressed by the Protocol. Recently the Federal Government announced funding of more than \$1-billion for measures to curb global warming. The Climate Change Plan for Canada challenges individuals to reduce their GHG emissions by 20% or one tonne per individual. Achieving this goal would reduce Canada’s GHG emissions by more than 30 megatonnes.

Municipal governments have an important contribution to make to climate protection, as up to half of Canada’s GHG emissions are under the direct or indirect control or influence of municipal governments. Through land use, energy and transportation planning; infrastructure design; green procurement; building retrofits; water conservation; solid waste diversion; and use of renewable energy, municipalities can facilitate the reduction of emissions. In addition, municipal economic development can foster green business development opportunities, increase public awareness and facilitate action.

In 1991, the City of Toronto established the Toronto Atmospheric Fund (TAF), an endowment of \$23 million, derived from the sale of surplus City property. TAF’s purpose is to finance local initiatives to combat global warming and improve air quality in Toronto. TAF’s endowment supports projects (through grants or loans) in the areas of transportation, green energy, energy efficiency, public education, and adaptation to summer heat. Arising from TAF are a number of programs including: Better Building Partnership, Business Development Program, Energy Efficiency Office, the Clean Air Partnership, etc.

The first of 3 Smog Summits were held in 2000, bringing representation from all three levels of government in the GTA together with industry and community, to share best practices; report on progress made on initiatives announced at previous summits; and to further commit to clean air initiatives. As of June 2003, all regional and municipal governments in the GTA, with the exception of Vaughan, Aurora, East Gwillimbury, Whitby and Georgina have signed the Inter-Governmental Declaration on Clean Air.

Although Toronto has clearly led the way in clean air and environmental initiatives, they are not alone. The City of Calgary has established a business unit within their organizational structure. Vancouver and Edmonton (since 1990) have Offices of the Environment. Ottawa has adopted the principle of a “Green and Environmentally Sensitive City” as part of its Ottawa 20/20 Corporate Strategy. Kingston has an Environment Division responsible for environmentally sensitive properties, strategic environmental projects and development review.

Many GTA municipalities have also adopted a diverse array of programs and some have environment committees or advisory boards. Almost all municipalities have smog alert and anti-

idling programs. Transportation demand management programs are in place in Toronto, Richmond Hill, Markham and Vaughan. The Region of York has established Clean Air and Pesticide Reduction Task Forces. The attached Survey of the GTA Initiatives Toward the Kyoto Protocol provides a brief overview of local environmental initiatives. With the breadth of issues under the "environment umbrella", collaboration with government, community and environmental organizations is critical to developing and implementing effective programs.

Funding for Environmental Programs

Communities considering opportunities for developing an environmental stewardship program at the local level may be aided by funding programs from federal and provincial governments, as well as the private sector. To date, two federal government programs, Green Municipal Enabling Fund and Green Municipal Investment Fund, administered by the Federation of Canadian Municipalities, have invested almost \$40 million in loans and grants to 235 projects and studies, and are well on their way to delivering 10 million tonnes of GHG emissions. The federal government also recently announced over \$1 billion in funding for climate change measures.

Affiliated with the provincial government, the Trillium Foundation can provide multi-year funding so key to environmental change. Industry-specific funding is also available.

City of Vaughan Environmental Initiatives – Findings

The City of Vaughan is Canada's fastest growing municipality with a current population of 220,000. Every month the City welcomes 1,000 to 1,200 new residents. Such growth places enormous demands on resources and requires a proactive approach to planning. As such, the City of Vaughan in its strategic plan, Vaughan Vision 2007, has identified the environment as one of its top priorities. On June 23 2003, Council approved its commitment to environmental initiatives. Subsequently, a meeting was convened on July 24, 2003 to discuss co-ordinating a cross-departmental team to explore and recommend directions. Representation was available from the Vaughan Public Libraries, as well as City Staff and Council.

While the City is already engaged in a number of green or environmental municipal practices, more work remains to be done to publicize these practices; create awareness and activate the Kyoto Protocol at local levels; and develop new opportunities for our businesses in the environmental sector. It was recommended that a Staff Task Force on the Environment be established and that Terms of Reference be drafted for Council's consideration.

Current Programs

The following programs are only a sample of the initiatives that the City is already engaged in. Additionally, the City has completed a number of Planning and Urban Design studies that will have a positive effect on the built and natural environment.

1. Pesticide Reduction Pilot

A two-year pilot, to study the condition of sports fields and parks as a result of the elimination of pesticide use in Wards 4 and 5 was initiated in 2002. The premise is to reduce human exposure to harmful chemicals.

2. Communities in Bloom

The City participated in a province-wide competition aimed at beautifying the City through public and private incentives. In 2002, the City received four out of five blooms and a special award for its sports turf maintenance.

3. Integrated Pesticide Management (IPM)

The purpose of this program is to reduce the use of pesticides by creating healthy turf areas using a natural approach to pest removal. A committee consisting of community representatives and staff meets semiannually to discuss pesticide issues and public education on alternatives to spraying.

4. Earth Day

In co-operation with the TRCA, Vaughan Chamber of Commerce and District School Boards, City staff participates in annual tree plantings in open spaces and parks. The trees are donated.

5. Bartley Smith Greenway & William Granger Greenway

Two programs aimed at rehabilitation of natural areas and trail development. In partnership with the Toronto & Region Conservation Authority, the City has been involved with the Bartley Smith Greenway since 1992 and the William Granger Greenway since 1999. In June 2003, Council approved a 5-year, \$1-million commitment for these two conservation projects, which provide extensive nature trail connections through the City. The Bartley Smith Greenway also receives funding from the Trillium Foundation and other agencies. Parks Development Staff works closely with the groups.

6. Mayors' Megawatt Challenge

The Challenge provides a forum for GTA municipalities to share information about energy reduction. The goal is to reduce a combined load of one megawatt by the end of 2003 through low or no cost initiatives.

7. Building Automation Systems

Installation of computerized HVAC and lighting systems in major recreation facilities reduced hydro consumption by 25%-33% in each building. These new systems also reduced maintenance costs. Ontario Hydro provided partial funding on the initial installations.

8. Energy Efficient Lighting Retrofits

The City replaced older lighting fixtures with energy efficient fixtures and bulbs. The improved lighting reduced hydro consumption and heat gain in buildings. Ontario Hydro provided funding in the form of rebates.

9. Pilot Biodiesel Project

Pilot project to convert selected City and Hydro Vaughan fleet to biodiesel fuel with the objective to convert the entire fleet in the future.

10. Woodlot Acquisition Bylaw

Through OPA 400, the City identified tableland woodlots for acquisition. Woodlots that were dedicated to the City are preserved from the development process. In total 15 significant woodlots have been or will be retained as a result of the Woodlot Acquisition Bylaw.

11. Black Creek Regional Transportation Management Association (BCRTMA)

The BCRTMA, established in 2001, is a non-profit organization supported by York Region; Cities of Toronto and Vaughan; York University; TRCA and various private sector employers, to provide alternative transportation solutions to its members. The City contributes \$5,000 annually to the operating costs. Economic Development staff sits on the Executive Committee.

12. Anti-Litter Campaign

In June 2003, Council approved the City's participation in an Anti-Litter Campaign. The purpose of Vaughan's campaign is to raise awareness and encourage use of litter containers in high pedestrian and transit areas. Public Works and Corporate Communications will be implementing this program.

13. Alternative Winter De-icing Materials

Since 2002, the City has been experimenting with alternate de-icing materials in an attempt to reduce winter road salt use. While one half of the City is maintained with straight salt, the other half is maintained with "ClearLane", a modified salt product containing molasses and magnesium chloride. Applied at rates 20% less than straight salt, this product has proven to be as, if not more, effective as straight salt in maintaining the roads in a safe condition. The trials will continue through the 2003-2004 winter season.

14. Elimination of Sand from the Winter De-icing Mix in Urban Settings

The elimination of sand from the winter de-icing mixture in the urban settings has reduced the amount of sediment entering ponds and streams from the storm sewer outfalls, and has reduced the amount of material to be cleaned from the road and disposed of in a landfill site. In addition, the elimination of sand will improve the general air quality by reducing the amount of airborne particulate matter (PM).

15. Back Yard Composter Subsidy

In 2003, the City initiated a \$10 subsidy on the sale of back yard composters to encourage residents to reduce their household waste through back yard composting. Each household is projected to compost approximately 200 kg of food waste per year.

16. Extension of the Leaf and Yard Waste Collection Program

In 2003, Council voted to provide a weekly collection of leaf and yard waste materials commencing in April and ending at the end of November. Previously, the City only had an 8 week collection period in the Spring, and an 8 week collection in the fall. By providing collection throughout the summer months also, it is expected that a significant amount of leaf and yard waste material that otherwise would have been sent to landfill, will be diverted and centrally composted.

17. Water Meter Change-out Program

To ensure that the City is accurately measuring the amount of water used, the City has put a water meter change-out program in place. The program targets water meters between 15 and 20 years of age, a time when some meters may start to lose their accuracy. By ensuring that residents' water consumption is accurately measured, and the residents are billed accordingly for their water usage, it will assist in the City's long-term goal of water conservation.

Conclusions

There is broad scientific consensus on the reality of climate change and its serious implications on our health, economy and future. While greenhouse gases form naturally, many human activities add additional GHGs to the atmosphere. There is a direct link between rising GHGs, global warming, more frequent extreme weather events and decreasing quality of health, environment and economy.

As individuals, we have the ability to take action to reduce GHGs. But residents and businesses in Vaughan need to know what actions they can take; the cost of their investment and more importantly, that individual action does have measurable outcomes. The City of Vaughan, in establishing a Task Force on the Environment, can take a leadership role in developing a framework for promoting environmental awareness and encouraging local action towards the Kyoto Protocol. A report identifying Terms of Reference for the Task Force as well as requirements for resources will be provided to Council at a future date.

Attachments

Attachment 1: Survey of GTA Initiatives Towards the Kyoto Protocol

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Respectfully submitted,

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Attachment 1 - Survey of GTA Initiatives Towards the Kyoto Protocol

Anti-Litter	Energy Efficiency		Alternative Energy Sources		Green Bldgs	Public Transit	TDMs ***	Air Quality		Urban Form	Urban Forest/ Trails	Waste Diversion	Water Conservation	Pesticide Mgmt	Green Procurement	Comm. in Blooms
	In Bldgs (Retrofits)	Fleets	Staff Practices	Energy Sources				Smog Alerts	Anti-Smog							
Aljaz	0		trip reduc	Pending		YRT Plan		D	C	0	Tree bylaw			YES		
Aurora				Pending						0						
Brampton	HVAC		dress	Biodiesel		YES		D	D	0	renewable					YES
Burlington	HVAC			Biodiesel		YES		D	D	0	Tree			YES		
Calson			Soy fuel			YES	YES	C	D	0	renewable					
Charington								D								
East Gwillimbury																
Georgina																
Halton Hills	street lights	0	Dress	Biodiesel				D	D	0	Tree plant			YES		YES
King				Ev wind turb							Tree bylaw			YES		YES
Markham	Audits	C	Trig reduc	Low Sulphur	Green roof	YRT Plan	TMA & bike	D	D	0	Tree plant				0	
Milton																YES
Mississauga	YES		Audits/Info			YES		D	Awareness	0	C	C				
Newmarket				YES		YRT Plan		D	Bylaw	0	Heritage					
Oakville	HVAC	YES	Dress					D	Bylaw	0	waterproof			YES		
Oshawa						YES		D		0	renewable					YES
Pickering				YES				D	Policy	0	YES					
Richmond Hill						YRT Plan		D		0	YES					YES
Toronto *	YES	YES	Educ	Wind turbine	Green roof	YES	BORTMA	D	D	0	0	0	0	Competition		
Vaughan	Pending	YES	Dress	Biodiesel	Pending	YRT Plan	BORTMA			Policy	Policy			Perks	YES	YES
Whitby																
Whitchurch-Stouffville	0			Pending		YRT Plan	Invcs/sg	0		0	YES			YES		

Anti-Litter	Energy Efficiency		Alternative Energy Sources		Green Bldgs	Public Transit	TDMs ***	Air Quality		Urban Form	Urban Forest/ Trails	Waste Diversion	Water Conservation	Pesticide Mgmt	Green Procurement	Comm. in Blooms
	In Bldgs (Retrofits)	Fleets	Staff Practices	Energy Sources				Smog Alerts	Anti-Smog							
Durham	Audits		conserv							0			Tobacco, lawn			
Halton **	HVAC/lights			Biodiesel		YES		D	D	0	YES			YES		
Peel *	0	YES		Eddible oils						0			Awareness			
York	Audits	YES		Low sulphur		YRT Plan		D	D	0	YES	separation		YES		

* Exploring emission credits trading
 ** Established a "Green Fund" to promote development of new and environmentally friendly technologies
 *** UTSP - Urban Transportation Showcase Program - applies to all municipalities and regions in the GTA including Hamilton
 Key
 C - Complete
 O - Ongoing
 P - Pending
 BORTMA - Black Creek Regional Transportation Management Association
 YRT Plan - York Region Transit Plan
 Note: This survey is based on information contained in the Progress Report on Commitments in the Toronto 2002 Inter-Governmental Declaration on Clean Air, Made at Stouffville III in June 2002 and a survey of websites.