

# Development and Implementation of the City of Toronto's Environmental Management System

By Judy Simon and Shelley Grice<sup>1</sup>

In 1998 the City of Toronto<sup>2</sup>, Canada's largest city, amalgamated with six other adjacent municipalities to become North America's fifth largest municipality, with a population of 2.5 million people. In the midst of ironing out the institutional kinks of the amalgamation process, the City of Toronto embarked on developing and implementing a corporate wide environmental management system ("EMS").

Starting at the top, City Council developed a broad vision for the new Toronto that was encapsulated in an approved Strategic Plan, *Clean, Green and Sustainable City*. The Strategic Plan set the context for the environmental agenda for Toronto. The new city also continued the work on an environmental plan that the former smaller city of Toronto began in 1998. It was a major public planning project directed by an Environmental Task Force made up of City Councillors, City staff, environmental agencies, businesses, school boards, schools and universities across the City that engaged hundreds of stakeholders across the City. The planning process culminated with the approval of the Environmental Plan, *Clean Green and Healthy A Plan for an Environmentally Sustainable Toronto*, and its 66 recommendations by City Council in April 2000.

Recommendation 60 of the Environmental Plan called for the City to "develop an Environmental Management System for the corporation". Environmental Planning & Support (EP&S), a small line group in Environmental Services of Works and Emergency Services<sup>3</sup>, was charged with implementing Recommendation 60. Armed with few resources and a time constraint to begin implementation in 2001, EP&S retained IndEco Strategic Consulting Inc. in April 2000 to develop a strategy for the implementation of an EMS for the City corporation.

## Getting started, but not starting from scratch

In order to develop a successful EMS, it was necessary to engage senior managers from across the City corporation in the EMS planning process. Since these managers had different levels of understanding regarding EMS, IndEco and EP&S jointly designed and delivered a joint half-day training session on EMS for these managers<sup>4</sup>. The session covered the basics of EMS and ISO 14001 and identified the costs and benefits to the City of pursuing each option.

Next IndEco conducted follow up interviews with key senior managers to identify EMS issues of concern and to begin to identify priority areas for discussion at the strategic planning session. The common issues that emerged from the interviews were:

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<sup>2</sup> The City of Toronto (630 sq. km), located on the northwestern shore of Lake Ontario, is farther south than much of Michigan. It has 45,000 employees, an operating budget of \$6.1B and a capital budget of \$1.1B.

<sup>3</sup> Environmental Services, a focal point for environmental strategy and planning, provides leading edge thinking, research and expert advice. It is comprised of the Air Quality Improvement Office, Energy Efficiency Office, Soil/Water Quality Improvement Office, and EP&S. EP&S provides support to the other three offices and coordinates environmental policies related to air, water, soil and energy for the corporation.

<sup>4</sup> Senior managers from the Chief Administrator's Office, Corporate Services (Fleet Management, Facilities and Real Estate, Legal), Economic Development, Culture and Tourism, Finance, Urban Planning & Development Services, and Works and Emergency Services attended the training session.

- It is very problematic<sup>5</sup> to implement an integrated EMS while trying to sort out amalgamation
- It is crucial to obtain senior management commitment and buy-in to the priorities that emerge from the EMS planning process
- A business focus for environmental initiatives demonstrating the business case is key
- There is no consensus on whether the EMS should focus on the corporation as a whole, single or multiple facilities, or address the entire City.

IndEco facilitated a half-day strategic planning session with more than 20 key senior managers from across City departments to identify priorities for action. To the extent possible, senior managers that attended the training session were encouraged to attend the strategic planning session and did so. This made the session much more productive. The planning session was a precedent setting event because it was the first time that these managers participated as a group in joint strategic planning on environmental issues.

The strategic planning session began by identifying where the City should be heading with regard to the EMS, referred to as the Preferred State (Figure 1). The group then described where the corporation was now, referred to as the Present State (Figure 2).

**Figure 1 - The Preferred State of Toronto's EMS**

<p><b>Broad-based awareness and commitment</b></p> <ul style="list-style-type: none"> <li>• Provides adequate staff training</li> <li>• Has senior management commitment</li> <li>• Has broad employee buy-in</li> <li>• Garneres widespread external support</li> <li>• Enhances community involvement and corporate image</li> <li>• Provides support for Toronto as a world leader.</li> </ul> <p><b>Integrated and coordinated</b></p> <ul style="list-style-type: none"> <li>• Has clear links to the City's other plans: Strategic Plan, Official Plan, Environmental Plan, Economic Plan and Social Plan.</li> <li>• Has clear links to all major departments, TIE, CAO and Sustainability Roundtable</li> <li>• Has clear links to annual budgeting process and MYBP</li> <li>• Helps to recognize City staff for excellence in environmental performance.</li> </ul> <p><b>Coherent system</b></p> <ul style="list-style-type: none"> <li>• Has an environmental policy</li> <li>• Has measurable targets that flow from the policy</li> <li>• Identifies, monitors and tracks specific actions and training to achieve targets</li> <li>• Identifies all environmental activities (aspects) and their impacts</li> <li>• Eliminates disincentives to improving performance</li> <li>• Improves environmental and overall EMS performance continually</li> <li>• Meets international standards for EMS.</li> </ul> <p><b>Improves environmental performance</b></p> <ul style="list-style-type: none"> <li>• Is directed to City's environmental priorities</li> <li>• Limits liability exposure</li> <li>• Demonstrates reasonable care and due diligence</li> <li>• Helps to ensure compliance with environmental laws/regulations</li> <li>• Improves health of individuals who live, work and play in Toronto.</li> </ul> <p><b>Encourages efficient resource use</b></p> <ul style="list-style-type: none"> <li>• Helps achieve operational efficiencies and cost savings</li> <li>• Contributes to achieving a high credit rating for the City</li> <li>• Adequate resources are provided to maintain and enhance performance.</li> </ul>
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**Figure 2 – The Present State of Toronto's EMS**

<p><b>Does not have broad-based awareness and commitment</b></p> <ul style="list-style-type: none"> <li>• Senior management commitment is uncertain</li> <li>• Employee buy-in is not widespread</li> <li>• Uncertainty about environment as a priority</li> <li>• Inadequate awareness and understanding on environmental issues</li> <li>• EMS is achieving limited community support.</li> </ul> <p><b>Is not integrated and coordinated</b></p> <ul style="list-style-type: none"> <li>• Environmental initiatives are not well linked</li> <li>• City plans are not well linked to the EMS</li> <li>• City lacks information management strategy and tools</li> <li>• Has disincentives for rewarding environmental performance.</li> </ul> <p><b>Is not a coherent system</b></p> <ul style="list-style-type: none"> <li>• There are few measurable targets</li> <li>• Action plans do not exist for all the targets set</li> <li>• Targets do not exist for all the action plans</li> <li>• Performance is not always tracked</li> <li>• There is incomplete and inconsistent data</li> <li>• No consensus on EMS extending beyond the City as a corporation.</li> </ul> <p><b>Underachieves in improving environmental performance</b></p> <ul style="list-style-type: none"> <li>• There are variable or unknown levels of compliance</li> <li>• The EMS is not a major contributor to compliance, limiting liability exposure, reasonable care or due diligence</li> <li>• Environmental initiatives do not always include a business case.</li> </ul> <p><b>Underachieves in encouraging efficient resource use</b></p> <ul style="list-style-type: none"> <li>• There are inadequate resources to invest in efficiency and conservation</li> <li>• The EMS is underachieving in contributing to operational efficiencies and cost savings</li> <li>• The EMS is not making a direct contribution to increasing the City's credit worthiness.</li> </ul>
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<sup>5</sup> Some suggested that the EMS should be delayed until greater progress had been made on amalgamation.

It was clear from the description of the Present State that the City had many of the elements of an EMS already in place. The City had developed broad-based environmental goals (Strategic Plan). It had adopted over 60 recommendations for improving environmental performance (Environmental Plan), and had formulated some quantifiable targets for environmental performance (e.g. reduce the City's carbon dioxide emissions by 20% relative to 1991 levels by 2005; purchase 25% of the City's electricity needs from green power). Council had delegated responsibility for environmental matters to several City departments.<sup>6</sup> There were a number of Council committees (e.g. Sustainability Roundtable, Works, Planning and Transportation) addressing environmental matters, a CAO's Office with overall responsibility for sustainability and an Inter-departmental Environmental Team (TIE) that served as a sounding board for environmental initiatives and a means to co-ordinate the implementation of the Environmental Plan recommendations.

What was missing primarily was a place to start to fill in the EMS gaps and the glue – infrastructure, resources, authority and responsibility – to integrate the existing components into a coherent whole that would be managed, tracked and continually improved. No City staff consensus was reached on whether to achieve this through ISO 14001 registration and ISO 14001 was dropped from further consideration at the time of plan preparation.

The results of the strategic planning session were very exciting. There was an overwhelming demand to develop a framework that would integrate social development, economic vitality and environmental sustainability into a Sustainability Framework and to rework the priorities for action that emerged from the session within that context. The challenge was to create the Sustainability Framework in a manner consistent with the City's Strategic Plan and to refine the priorities accordingly within a three-year time frame.

Figure 3 depicts the Sustainability Framework that was created. It is derived from the City's Strategic Plan that contains the City's Vision, Guiding Principles and Community Goals and a set of sustainability objectives and management systems to implement them. Within this framework IndEco refined the priorities for action for 2001-2003 that emerged from the strategic planning session, which are presented in Figure. 4 The EMS plan and the planning process that led to it, documented in IndEco's report, *The City of Toronto's Environmental Management System*, was approved and released in December 2000.

### **Status of EMS Implementation –where are we and what's next**

In 2000 Toronto found itself in a major upheaval. The City had to deal with a wide range of amalgamation issues including streamlining and harmonizing the seven previous municipal infrastructures. It had to restructure its programs and services to deal with the major reallocation of responsibilities between cities and the provincial government. With severe constraints on its ability to raise revenues to address these new revenue requirements<sup>7</sup>, the City was under pressure to deliver without raising the residential property tax. As a result Council cut expenditures in many areas and did not provide any funding in 2001 to implement the Environmental Management

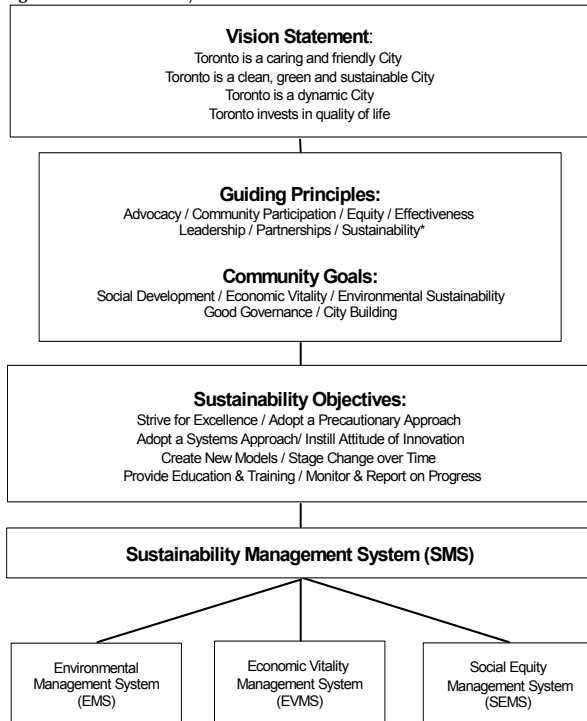
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<sup>6</sup> For example, Community and Neighbourhood Services – Toronto Public Health; Urban Development Services – environmental aspects of the Official Plan; Economic Development, Culture and Tourism – Parks and Recreation, green tourism and green economy matters; Corporate Services – environmental aspects of facilities and real estate, incidents and accident tracking, and fleet management; and Works and Emergency Services – Solid Waste, Environmental Services, and Water and Wastewater.

<sup>7</sup> The provincial government froze commercial property taxes, leaving the raising of residential property taxes as the only vehicle for cities to raise revenues.

System. This left EP&S with the task of trying to implement whatever aspects of the EMS plan that it could with no new resources.

Figure 3 – Sustainability Framework



\*Sustainability is defined as meeting the needs of the present generations without compromising the ability of future generations to meet their own needs.

Figure 4 – Recommended Priority Actions for developing and implementing an EMS

	Phase 1	Phase 2	Phase 3	Responsibility	
	Jan 2001- Jun 2001	Jul 2001 – Jun 2002	Jul 2002 – Dec 2003	EP&S	Other depts.
<b>Strive for excellence in environmental and social practice</b>					
Undertake and document inventory of key environmental aspects (PCBs, asbestos, underground storage tanks)	X				X
Inventory and document aspects and impacts of City-owned contaminated lands on property by property basis		X	X		X
Identify 3-5 City facilities with most significant potential impacts and risks	X				X
Conduct compliance audit of 3-5 facilities		X			X
Develop compliance measures and compliance tracking system		X	X		X
Implement compliance measures & compliance tracking system		X	X		
Develop and action plan for the existing City CO <sub>2</sub> reduction target		X			X
<b>Adopt a “precautionary approach” to decision making</b>					
Add sustainability checklist to capital and operating budget request forms	X			Env. Component	X
Include sustainability considerations in MYBP		X		Env. Component	X
<b>Adopt a systems approach</b>					
Coordinate and link the Environmental Plan with the EMS	X			X	
Coordinate and link the EMS with other City Plans	X			X	
Prepare an inventory of sustainability activities being undertaken	X			Env. Component	X
Add sustainability considerations to the high priority consideration of dealing with immediate safety issues for capital expenditures			X	Env. Component	X
Develop “Sustainability Plan” for 2001	X	X		Env. Component	X

Figure 4 continues on following page.

Figure 4 – Continued

<b>Instill an attitude of innovation</b>					
Eliminate the practice of reducing operating budgets by the amount of savings achieved	X				X
Create incentives to achieve efficiency gains and performance improvements	X				X
Increase awareness and understanding of linkages between EMS, sustainability, and TIE	X			X	
<b>Education and outreach</b>					
Develop communication plan for reaching employees		X			X
Develop awareness initiatives for employees		X			X
Training and tools for managers	X				X

In 2001 EP&S moved forward on three priority areas described in the EMS plan through the coordination of an inventory of all new environmental initiatives in the corporation that go beyond core business activities. This helped to coordinate and link the environmental initiatives with the EMS and other City plans such as the Official Plan, a road map for the future of the City over the next 30 years, expected to be completed this year. It also contributed to the inventory of the environmental components of the sustainability activities being undertaken by the City. In addition, this work helped to increase awareness and understanding of the linkages between EMS, sustainability and TIE.

In 2002, the focus will shift to building the EMS based on a facility focus through ISO 14001 registration. This focus will address all of the priority actions in the EMS covered under the objective of striving for excellence in environmental and social practice. Environmental Services in partnership with Solid Waste Management Division will participate in a one-year federal pilot program to facilitate the implementation of an EMS based on ISO 14001 on a facility basis. The City's goal is to register the Ingram Transfer Station to ISO 14001 by January 2003. In addition, EP&S has begun to explore opportunities to develop an EMS for one or more of its water or sewage treatment facilities and to register a facility to 14001 over the next two to three years.

**Future Challenges**

A major challenge for EP&S will be to continue to implement the EMS under major staff and financial constraints in a time of political upheaval. The pressures from amalgamation and the reallocation of responsibilities and resources from the province to the city will continue for some time.

Commitments to ISO 14001 registration may help to meet this challenge. The resulting benefits from building and implementing an EMS such as reducing emissions, liability risks and operating costs as well as increasing pollution prevention may help to funnel existing resources from other parts of the corporation to achieve them.

Moving forward on implementing the City's EMS is essential to achieving Toronto's vision of being a caring, clean, green and sustainable city. These attributes are essential to the economic vitality of the City. The challenge is to clearly link the EMS with these goals.