

**FCM SOLID WASTE
MANAGEMENT FORUM**

**HALIFAX, NOVA SCOTIA –
NOVEMBER 2003**

Forum Report

Prepared for:

Federation of Canadian Municipalities

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Appendix A.1: Flipchart Transcription: Ontario/British Columbia Breakout Group..Error!
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Session 1. Friday am - Barriers to Moving Your Projects Forward**Error! Bookmark not defined.**

Session 2. Friday pm – Creating Solutions to Move Your Project Forward**Error! Bookmark not defined.**

Session 3. Saturday am – Next Steps to Make Projects Happen**Error! Bookmark not defined.**

Appendix A.2 – Flipchart Transcription: Prairies Breakout GroupError! Bookmark not defined.

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Session 2. Friday pm – Creating Solutions to Move Your Project Forward**Error! Bookmark not defined.**

Session 3. Saturday am – Next Steps to Make Projects Happen**Error! Bookmark not defined.**

Appendix A.3 – Flipchart Transcription: Quebec/Atlantic Breakout GroupError! Bookmark not defined.

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Session 3. Saturday am – Next Steps to Make Projects Happen**Error! Bookmark not defined.**

Appendix B – Forum Participants.....Error! Bookmark not defined.

Appendix C - Presentations

1. INTRODUCTION

In November 2003, FCM hosted a workshop in Halifax, Nova Scotia to explore ways of using FCM's Green Municipal Funds to promote new investments in municipal solid waste management (SWM) projects. This "Solid Waste Management Forum" brought together 36 experts from across the country, representing municipal governments (14 representatives from 8 provinces), the federal government, private sector, provincial associations and the FCM for a one and a half day workshop to develop ideas for new or expanded waste minimization and resource management projects. The Forum consisted of three half-day sessions: the **first session** explored barriers to new SWM projects; the **second session** drew up a long list of potential projects in each of the municipalities and looked at what FCM "products" could help make these projects happen; and the **third session** developed practical action plans for selected near-term projects. In each of these sessions, participants were broken out into three regional groups: Ontario/British Columbia, the Prairies, and Quebec/Atlantic.

This report provides a brief summary of findings from the Forum. It is intended as a follow-up reference document for both the Forum participants and for FCM staff. Following this introductory section, Section 2 of the report reviews key barriers to new projects as identified by participants. Section 3 describes the FCM products that Forum participants felt would be most appropriate in overcoming these barriers. Finally, Section 4 lists potential SWM projects identified by participants through the course of the Forum, and indicates what FCM products can help make these projects happen.

Three appendices are also included: Appendix A provides the transcribed flipcharts generated by each of the regional breakout groups. Appendix B lists the names and coordinates of all Forum participants and Appendix C provides copies of the presentations given during the course of the Forum.

2. BARRIERS TO INCREASED INVESTMENT

In the first half-day session, Forum participants identified key barriers to new projects. This discussion assesses these in terms of political, financial and technical barriers:

- **Political.** Forum participants identified **lack of political will** as the major barrier to SWM projects in most municipalities. This stems from insufficient understanding of the costs and benefits among municipal councils and senior management, and an unwillingness to give SWM the same priority and funding as other infrastructure investments (e.g. competing demands in transportation, water and wastewater management). Another significant barrier is **lack of legislation** on waste diversion. Current legislation in Nova Scotia (such as the 1995 Landfill Ban) has demonstrated the positive impact of mandatory organics diversion, and participants felt that the lack of similar legislation in other jurisdictions hindered development. Lastly, the **lack of full-cost accounting** was seen as a significant barrier. Few municipalities are currently pursuing user-pay systems or moving SWM to a utility model; both of

which tend to encourage transparency in municipal spending and promote public interest in long-term sustainable SWM investments.

- **Financial.** Participants indicated that **high operating costs** represent a significant barrier. Many municipalities are unable to support increased ongoing costs unless required to do so. Another significant, and related barrier is the **low cost of landfill** that can render more expensive diversion options unappealing. Lastly, participants indicated that **lack of markets** for recycled products and compost similarly hinders progress. This barrier can be partially overcome through green procurement policies.
- **Urban v. Rural.** Participants highlighted the need to overcome different barriers in urban and rural SWM systems. In **urban settings**, diversion programs often need to address construction and demolition (C/D) waste; a source that can represent a very significant portion of the waste stream. In addition, urban programs will often require “tailored” collection methods to reflect the fact that much of the population are in multi-unit residential buildings and/or require multilingual service. Lastly, many urban municipalities face a unique challenge in finding a use for the residuals that remain once they have attained high diversion rates; in these instances, thermal treatment represents a viable solution. In **rural settings**, agricultural waste is often a large element of the waste stream, requiring specialized collection and processing systems. Rural areas tend to also face unique financial barriers given their relatively low population densities. The challenge in instituting recycling programs is to find creative ways of achieving “economies of scale” that enable multiple municipalities to work together. There is a parallel need for creative, integrated systems design that utilizes “regional nodes” to aggregate recyclable product volumes to a cost-effective level.

3. FCM ACTIONS TO OVERCOME BARRIERS

Through the course of the Forum, participants discussed ways that FCM could best support new investments in municipal SWM projects. The recommended actions fall into three broad categories: financial “products”, policy development and other actions.

- **Financial Products.** Participants strongly supported **GMEF feasibility studies** as a necessary step towards capital projects. They also recommended that FCM consider allowing capital support for pilot projects within GMEF funding (for example, capital for a pilot organics collection system as part of a municipal-wide organics feasibility study).¹ Another high value product is **low interest loans to private sector partners**, whereby industry has access to municipal-rate loans (25% of capital at bond minus 1.5%) as long as FCM can “see through” the partner to the municipality (i.e. if the municipal-private contract is binding enough such that the risk of the loan is the risk of the municipality). Participants recommended that FCM provide a clear indication of the conditions that would have to be satisfied in order for this to apply; municipalities could then build these conditions into their Request for Bids when

¹ Note that GMEF funding may already be used in certain cases to fund “field tests” that represent first steps towards a larger capital project. As with all GMEF projects, FCM’s maximum contribution in these instances is \$350,000.

seeking private contractors. Participants also placed a high value on **GMIF grants** not only for pilot projects (e.g. thermal treatment) but also innovative organics and recycling projects. Participants felt that a grant in conjunction with a loan would help overcome some barriers with regards to high operating costs and lack of political will. Conversely, participants expressed relatively **little interest in low-interest loans to municipalities**, unless they were either accompanied by a grant or were for amounts greater than 25% of total capital. It is interesting to note that the 25% limit did not appear as a barrier when applied to a private sector partner.

- **Policy Development.** Participants noted a number of key policy areas that FCM should address at a national, provincial/territorial and municipal levels to promote municipal SWM investments. First, FCM should encourage the federal government to pursue **Extended Producer Responsibility (EPR)** legislation, giving municipalities a stronger voice at the table, and pressing for specific action with regards to EPR policies on plastics and electronic waste. Second, FCM should encourage all orders of government to implement **green procurement** policies that assist greatly in increasing demand for recycled products. Third, FCM should encourage provincial and municipal governments to **prioritize waste management** with respect to other infrastructure investments, making the case that waste management presents a serious crisis that can be dealt with in a cost-effective manner.
- **Other Actions.** Participants expressed support for **“Best Practice SWM Tours”** similar to the district energy study visits that FCM sponsors in Europe each year. In these tours, municipal political leaders and technical personnel would visit advanced facilities and explore ways of adopting Best Practices in their own contexts. Participants also recommended that FCM promote the **GAP methodology** (Generally Accepted Principles) to ensure “apples-to-apples” comparisons of municipal waste systems. FCM may even choose to make GAP reporting mandatory for any GMF-sponsored integrated SWM study or project.

4. POTENTIAL PROJECTS IDENTIFIED IN FORUM

Much of the Forum discussion focused on identifying real projects that FCM could help to develop in the next few years. Exhibit 1 provides an overview of the “near term” projects that show particular promise; for each of these, participants developed the basic scope of the project, identified FCM products that might be used, and developed a “quick start” Action Plan for both FCM and the municipality. Exhibit 2 describes other projects that were identified, but discussed in less detail at the Forum. Further information on each of these projects can be found in the transcribed flipcharts in Appendix A.

Exhibit 1
Identified Near-Term Projects with Action Plan
(listed from West to East)

Municipality / Region	Project (s)	Estimated Cost	FCM Offering	Next Steps
FVRD	Composting facility	\$20 m	GMEF to review disposal alternatives; GMIF for P3 partnership	Doug to visit to discuss EF and IF; provide “flow through” loan conditions
Kootenay Boundary	Central composting plant	\$5 m	GMEF to increase scope of study now underway	KBRP to apply to GMEF , develop partnership with Teck-Cominco and pulp mill
GVRD	Retrofit existing recycling fleet to collect organics	unknown	GMIF? - to be determined	Doug to speak with GVRD CFO about funding with MFA
Grande Prairie	<ul style="list-style-type: none"> • Organics feasibility study • “Stop and shop” depots • Regional processing system 	Study	GMEF - \$150 K study to look at integrated waste management system (comprising these three elements)	Submission of Intent to Apply: Feb 2004
Edmonton	Advanced thermal technology for system residual from processors	\$80 m	GMIF - Need high-risk financing; assistance with EA costs	EF study done; RFP to short list of providers; FCM to call January 2004 w/ intent to apply Jan 04.
Winnipeg	Landfill gas capture and utilisation; partner with Manitoba Hydro	Study	GMEF - \$100 K study; look at capture, flaring and utilisation options.	Intent to Apply March 2004; council adoption target: Budget 2005.
Saskatoon	Study recycling of construction & demolition (C/D) materials	Study	GMEF - \$50 K study; look at options for segregation and recycling	Start date for study: April 2004
York	Pilot thermal plant (20,000 t per year)	\$7 m – \$10 m	GMIF - Grant for pilot plant: \$3 to \$4 m	Apply for pilot project for 2004, expand to full-scale in 5+ years
York	Implement source separated organics (SSO)	unknown	GMIF - Loan to current private sector partner at municipal rate.	P3 contract with processor; Doug to clarify “flow through” loan conditions
MRC Haut St. Francis	Aerobic bioreactor landfill; recycle for ICI; depot for residential recycling	\$3.2 m	GMIF - Loan/grant for bioreactor, assistance to acquire trucks	Gilles to apply for GMEF (Nov 2003); then model capital cost avoidance from landfill
Halifax	Co-composting – sludge and leaf (driver = 3 new waste water plants coming)	\$10 m - \$15 m	GMEF	HRM to apply (use Moncton example); seek approvals Spring 2004
Newfoundland	Integrated Waste Management Facility - increase diversion from 20% to 50%	\$18 m	GMEF & GMIF - More than straight loans – 25% not sufficient. Consider possible guarantee of recycled material revenues.	Waste Committee to apply for GMEF and identify capital sources. Examine required regulatory approvals.

Exhibit 2
Identified Projects with No Specific Action Plan
(listed from West to East)

Municipality / Region	Project (s)	Estimated Cost	FCM Offering
Kootenay Boundary	Purchase of alternative fuel vehicles		To be determined
Kootenay Boundary	Small-scale on-site composting in ski area		To be determined
Kootenay Boundary	Curbside recycling to more rural areas		To be determined
GVRD	Clean wood waste Retrofit existing recycling fleet to collect organics		To be determined
GVRD	Plastic film systems and markets		To be determined
GVRD	Institute plastic bag tax (Ireland example)		To be determined
GVRD	Regulations on minimum recycled content		To be determined
GVRD	Styrofoam – EPR		To be determined
GVRD	Program targeting multiple languages and new Canadians – partner with Toronto?		To be determined
FVRD	Study C/D waste		GMEF study (\$40 K)
Edmonton	Front end composting pre-process to take out recyclables	\$4 m	GMEF. Need high-risk financing; assistance with EA costs
Winnipeg	“Ash” dump metal recovery		To be determined
Saskatoon	Expanded organics program (from yard to food and agricultural waste)		GMEF
York	Post-organic residential	\$20 m	To be determined
Toronto	Small scale research project		GMEF
Toronto	Pilot project for MURBs using tri-sorters or Molok		GMEF
Toronto	Front end processing		GMEF
Toronto	Research on stabilised landfill		GMEF
Toronto	Anaerobic digestion		GMEF
Muskoka (Michael)	Seasonal waste stream Expand organics		GMEF
Quebec	Large volume collection I/C/I		GMEF with capital \$ for pilot
Quebec	Integrated re-use centres		To be determined
Quebec	Toxics – lamps and ballasts		To be determined
Halifax	Best Environment Practice for SMEs		GMEF and capital to retrofit manufacturing facilities
Halifax	E-recycling		GMEF with pilot for handling
Halifax	Enhanced handling / processing capacity	\$2 - \$5 m	To be determined