



## **E&E Fund – 2004/2005 Priorities – Fall 2004**

### ***Background***

Stewardship Ontario's Efficiency and Effectiveness Fund (the E&E Fund) has been operational since July 1, 2004. The Fund has available up to \$3.2 million to spend in its first year of operation and up to \$5.8 million available for Year Two. As per the Blue Box Program Plan, the E&E Fund is open to applications from Ontario municipalities to improve the effectiveness and efficiency of their Blue Box recycling programs. As a general rule, 50% of funding is available for eligible projects. Funding of more than 50% is available for priority projects as established by Waste Diversion Ontario's Municipal – Industry Programs Committee (MIPC). The current priority areas for the first year (2004/2005) are:

1. MRF rationalization;
2. Multi-family recycling;
3. Innovative financing and program compliance;
4. Benchmarking studies and waste audits;
5. Communications and education; and
6. Cost Containment (including the Blue Box Assistance Team)

MIPC has determined that the E&E Fund needs to be more proactive to help municipalities better define projects in support of the priority objectives of the fund. As well, given the continued increases in diversion in recent years, and given the dramatic increases in system steward costs, **the current focus of the fund will be on reducing the system cost and on minimizing future increases in system costs as recovery increases.** Priority E&E projects should specifically address and demonstrate the potential to realize these objectives. MIPC is seeking to support projects that result in direct benefits to Ontario's Blue Box system; MIPC's emphasis is on projects with an action/implementation orientation, not just research/studies.

MIPC decided it would be timely to provide more detail for E&E Fund applicants to the definition of the current priority areas under which projects can be eligible for greater than 50% funding.

### ***1.0 MRF Rationalization***

Currently there are 70 MRFs serving municipal Blue Box recycling programs in Ontario, processing some 800,000 tonnes of residential blue box materials. The focus of MRF rationalization is two-fold:

1. ***Optimizing existing MRFs*** to make the current infrastructure perform more cost effectively, and
2. ***Regionalizing processing infrastructure*** to take advantage of potential economies of scale

### ***1.1 Optimizing Existing MRFs***

Involves making improvements to an existing MRF to reduce cost/tonne of Blue Box materials processed. Priority projects may include:

- ⇒ Labour-saving technology or practices
- ⇒ Increasing recovery of specific materials
- ⇒ Reducing residue
- ⇒ Increasing revenue/high-grading
- ⇒ Increasing productivity

The E&E Fund will also consider, as justified, projects to:

- ⇒ Investigate & install new state-of-the-art technology from North America, but also overseas, e.g. Europe
- ⇒ Make minor modifications not requiring capital investment
- ⇒ Install & test latest equipment or modified process
- ⇒ Test & implement best practice from other facilities
- ⇒ Determine framework for assessing and improving MRF design & operation (see discussion of benchmarks below)

### ***1.2 Regionalizing Processing Infrastructure***

Investigate opportunities to regionalize processing capacity, including potentially closing some of the smaller MRFs where this could reduce the cost/tonne of Blue Box materials processed. Priority projects may include:

- ⇒ Identifying & overcoming barriers to regional processing
- ⇒ Cost effective transfer of recyclables – technical and economic issues
- ⇒ Assessing single stream versus two-stream for more regional facilities

The E&E fund will also consider projects to:

- ⇒ Study the feasibility of regional processing for a specific group of interested regional partners
- ⇒ Develop action plans for a specific group of interested regional partners to move to a regional system
  - Assess and find solutions to technical, financial, contractual & political barriers, possibly using financial incentives
  - Plan for capital modifications – processing & transfer
  - Plan for contract renewals
  - Provide assistance with tendering
- ⇒ Field-test transfer operations
- ⇒ Design and implement modifications to MRFs to expand throughput to accommodate material from neighbouring programs, resulting in lower cost or serving as a step toward developing a more regional facility

- ⇒ Provide financial incentives to encourage change
- ⇒ Design a practical framework for the regionalization process based on learnings from initial projects

## **2.0 Multi-family Recycling**

Recycling in multi-family buildings is a priority because with opportunities for bulk collection, recycling in multi-family buildings likely represents the largest un-tapped source of next least cost/tonne Blue Box recyclables. Ontario Regulation 101/94 requires that multi-family buildings over 6 units have recycling programs, but to date these programs have not been optimized. As recovery targets are increased, it is important to ensure that effective MF systems are in place to achieve them cost-effectively. Therefore, MIPC is encouraging multi-family applications to:

1. Promote the researching, planning & implementing of more effective approaches to MF recycling;
2. Focus MF proposals to the E&E Fund on the key issue of reducing costs; and
3. Ensure that effective MF systems are in place to help achieve expected higher targets cost-effectively

## **2.1 Multi-Family Priority Areas**

MIPC has identified five multi-family recycling priority areas:

1. The top priority is to establish *enforcement and mandatory recycling elements initiatives*. This might include support for bylaw enforcement and lease agreements establishing the needed monitoring process.
2. *Appropriate communications are required* to support effective regulation and enforcement. Work is required to develop the most effective messaging and communication vehicles that can sustain recycling activity (e.g. posters, door hangers, focus groups, social marketing, meetings with building owners, etc.)
3. In order to make enforcement effective, there needs to be *adequate infrastructure* for recycling. Sufficient capacity and convenience are the most important. Therefore, examination of container capacity and collection frequency should be undertaken. Convenience, clarity and style are important. Truly innovative systems with potential to have a lasting impact should be examined.
4. To systematically assess the impacts of the initiatives implemented and on-going needs and opportunities, *monitoring and measurement are required*. This will include waste audits and as well assessment of the cost impacts on the system.
5. *Documentation and active dissemination* of the progress and learnings of all projects and on-going assessment of the research and project needs will be required. MIPC will actively monitor implementation of the MF strategy and assess look for gaps where additional work is required (e.g. consideration of user fees and other incentives).

## **2.2 Multi-Family Project Areas**

There have been numerous studies and trials of approaches (in Ontario and elsewhere) to implementing and enhancing recycling programs in multi-family buildings, many of which are documented. Multi-family projects should be designed to increase recovery cost-effectively and realize this potential source of “cost effective tonnes”. MIPC will look at multi-family projects from a “total system” perspective – e.g. how does the request for E&E funding support for a specific activity fit within the applicant’s overall approach to the multi-family sector in their community.

- ⇒ Assess and document best practices in existing programs, identifying different characteristics affecting performance. Identifying and addressing barriers to participation and cost effective recovery
- ⇒ Mandatory recycling, enforcement & incentives (lease agreements, bylaw & enforcement assistance, user fees, etc.). More effective enforcement of Reg 101/94 (and alternative incentives).
- ⇒ Identify and test new and innovative approaches (e.g. containers, chutes and storage systems) that have potential to achieve sustainability (i.e. noting that a range of approaches have been tested in the past and new projects should consider what has been learnt from these rather than repeat them)
- ⇒ Communications – messaging
- ⇒ Measurement & benchmarks – including waste audits and monitoring program performance and effectiveness
- ⇒ Evaluation of increased MF recycling on overall system cost; enhancing the sustainability of apartment recycling programs
- ⇒ Dissemination and adoption of best practices – knowledge network, follow-up projects, training

## **3.0 Innovative Financing and Program Compliance**

Imposing limits and variable fees on the amount of garbage that will be collected increases the recovery of recyclable materials. User fees and bag limits have been implemented generally for curbside collection from single-family households in the range of programs in Ontario using many different approaches. However, similar financial incentives for municipal collection have not been implemented for multi-family households. If recovery targets are increased, then the need for greater application financial and regulatory incentives will become greater.

The E&E Fund encourages applications for projects covering:

- ⇒ Financial and regulatory incentives to promote increased recycling, particularly for multi-family buildings
- ⇒ Innovative approaches to enforcement, particularly in MF buildings

The Fund will consider projects to:

- ⇒ Assist with the planning and promoting the implementation of financial incentives, including user fees, particularly the application in multi-family buildings

#### ***4.0 Benchmarking and Waste Audits***

This area addresses the need to evaluate the performance of the current system and to establish measures of improved performance and change over time.

##### ***4.1 Residential Waste Audits***

Waste audits are used for three main purposes:

1. As a cross check against stewards reports and for the purpose of setting stewards fees
2. Determining the recovery performance of existing programs
3. Assessing opportunities and priorities for recovery improvement

A waste audit plan has been established for the next fifteen months (i.e. to January 2006). It involves some 36 audits in 9 municipalities at several times over the year. Additional waste audit projects will be considered to:

- ⇒ establish baseline and post-implementation recovery performance for E&E and other projects
- ⇒ test generation and recovery in specific demographic areas not covered by the current waste audit plan and in extreme waste generation conditions.

##### ***4.2 Benchmarks***

Benchmarks need to be established for measuring system performance with respect to recovery, productivity and cost. Benchmarks will be used to define best practice against which performance can be measured over time. Benchmarks for recovery of each material in different program types will largely be established through WDO's annual municipal datacall. Similarly some cost benchmarks will be established through the municipal datacall.

However, additional benchmarks will be required for:

- ⇒ Collection productivity (e.g. passes/day, tonnes//hr, etc.) and cost (e.g. capital, labour & operating cost/tonne)
- ⇒ Processing productivity (e.g. kg/hr, and kg/staff-hr), capital utilization (e.g. capital cost /design tonne) and cost (e.g. capital, labour & operating cost/tonne)
- ⇒ P&E expenditures of different types per tonne and per household

E&E Fund projects will be considered for:

- ⇒ Identifying best practice benchmarks and key success factors

- ⇒ Developing practical approaches to systematically assess opportunities in a range of programs for improving performance of operations and implementing measures learned from other programs moving toward best practice

### ***5.0 Communication & Education***

Communication and Education (C&E) is an important component of successful recycling programs. It will also be an important tool in achieving greater recovery and greater efficiency.

The E&E Fund seeks projects covering:

- ⇒ Strategic aspects of C&E in Ontario
  - What C&E is required in Ontario to optimize program performance
  - The effectiveness of provincial and/or regional C&E initiatives
  - Assessing the most effective vehicles
  - Barriers to appropriate C&E spending by municipalities
  - Effective communications for multi-family buildings
- ⇒ Identifying successful motivational messages
- ⇒ Identifying messages to reduce costs
- ⇒ Enhancing the recovery of “next least cost tonnes”

The Fund will also consider C&E projects to:

- ⇒ Develop a strategy for C&E in Ontario considering role for provincial & regional initiatives
- ⇒ Produce or update guides for local C&E planning based on assessment of best practice, including the most appropriate vehicles and targeting
- ⇒ Developing the justification for C&E expenditures & initiatives for use in convincing local politicians & other decision-makers
- ⇒ Developing communications to support initiatives in multi-family buildings.

### ***6.0 Cost Containment***

This is a new priority identified through discussions at the WDO Board regarding current and future net recycling system costs. The first priority project in this area is the need to promote the most effective approach to issuing tenders and arranging contracts for recycling services.

It has been recognized that the structure and specifications of a contract are significant factors in the overall net cost of municipal Blue Box Programs and that there is significant variation in contractual arrangements throughout the province. Moreover, opportunities to make significant changes to the structure and cost of recycling programs that rely on services delivered under contract are tied inextricably to the cycle of contracts. The turnover of contracts then represents a significant opportunity to affect the efficiency and cost of the Blue Box system.

The E&E Fund will consider as justified, projects to

- ⇒ Develop of model recycling contracts and tender documents (underway)
- ⇒ Assist with the development of tenders and contracts, particularly, particularly where the assistance will help a group or several programs or has the potential to be replicable.

The E&E Fund is also available to be used to help implement the peer – based “Blue Box Assistance Team” (i.e. the A team) concept that was recommended by WDO’s Municipal Affairs Committee as this service develops.