

City of Toronto
New and Emerging Technologies, Policies and Practices Advisory Group

**Recommendations on Policies and Practices for Increased Diversion from Landfilling
of Toronto's Municipal Solid Waste**

Over the past two decades, the City of Toronto has implemented a number of programs, such as the Blue Box, Grey Box, and Environment Days, for recycling municipal solid wastes and therefore diverts this waste from going to landfill. Additional programs, such as the Green Bin for source-separated organic waste, proposed by Task Force 2010, are currently being implemented by the City to further increase waste diversion. With the full implementation of currently approved programs, the City has estimated that the overall diversion rate will increase to approximately 38%, which falls short of the City's 60% diversion target to be achieved through source separation efforts.

The New and Emerging Technologies, Policies and Practices Advisory Group has considered a range of policies and practices to significantly increase the diversion of the City's municipal solid wastes beyond 38%. To do so, and again become a leader in waste diversion, the City must adopt and implement more aggressive policies and practices that will:

- 1) maximize the effectiveness of the currently approved diversion programs; and
- 2) expand diversion programs to capture additional recyclables.

It will also be necessary to ensure effective planning, design and implementation of new policies and practices.

The Advisory Group therefore recommends that the City adopt the following recommendations in order to significantly increase the diversion of the solid wastes generated by single family (SF) and multi-family (MF) residences, and the City's agencies, boards, commissions and departments (ABCDs) and schools. Attachment 1 provides further comments on the first two sets of recommendations. The Advisory Group emphasizes that in order for the City to significantly increase its diversion from landfilling there is a need for increased commitment by both the City and its residents to more aggressive reduction, reuse and recycling of wastes, and a need for other levels of government to assist the City by passing regulations to encourage the reduction and reuse of materials.

Recommendations:

1. TO INCREASE PARTICIPATION IN DIVERSION PROGRAMS:

1.1 Promotion and Education: *The City should implement an aggressive and creative education and promotion program to increase both participation rates and capture rates in municipal reduction, reuse, recycling and source-separated organics (SSO) programs.*

1.2 MF Diversion: *The City should aggressively implement programs for diversion from existing and new MF buildings for current recyclable materials and SSO.*

1.3 Agencies, Boards, Commissions and Departments (ABCDs) and Schools: *The City should lead by example by aggressively supporting diversion programs with targets for its ABCDs and schools, beginning with full participation in existing diversion programs, and then expanding the capture of SSO.*

1.4 Public Space Waste: *The City should increase the diversion of materials (Blue/Grey Box and SSO materials) generated in public spaces, such as parks and sidewalks, by ensuring that there are adequate recycling containers in public spaces, and by establishing incentives for participation in these diversion programs.*

1.5 Recycling Containers: *The City should ensure that all SF and MF residences have easy or ready access (at no or low cost) to appropriate reusable containers for recycling, SSO, and backyard composting (BYC).*

1.6 By-law Enforcement: *The City should improve compliance with current by-laws and policies for diversion from SF and MF residences, ABCDs and schools, and expand these by-laws to include SSO.*

1.7 Waste Limits and User Fees: *To further increase diversion from SF and MF residences, the City should implement a combination of reduced limits on the amount of waste that the City will accept for pick-up and user pay-as-you-throw (PAYT) fees based on the amount of waste collected over and above a specified amount.*

City staff has estimated that implementation of the above recommendations would divert an additional 11% to

16% of the waste, thereby increasing the overall diversion rate from 38% to between 49% and 54% by 2010.

2. TO EXPAND MATERIALS CAPTURED IN DIVERSION PROGRAMS:

2.1 Recyclable Materials: *The City should expand recycling programs to accept additional types of recyclable materials. This should include accepting into the Blue/Grey Box program additional types of paper fibres, plastics, glass and metals.*

2.2 Expansion of Non-curbside Reuse and Recycling Programs: *The City should establish and aggressively promote programs, such as depots, to reuse and/or recycle materials that are not collected curbside for recycling, such as hazardous materials, used clothing, scrap metals and wood, small appliances and other electronic equipment, furniture, mattresses, carpets, and construction/demolition waste.*

City staff has estimated that full implementation of the above recommendations (2.1 and 2.2) would divert an additional 3% to 5% of the waste by 2010.

The combined effect of implementation of all of the above recommendations would be to increase diversion from 38% to approximately 50% to 60% by 2010, based on estimates by City staff. A higher level of diversion should be achievable with even more aggressive implementation of the recommendations.

These increases in diversion will only be achieved, however, if there is effective planning, design and implementation of the above recommendations. Detailed decisions should be based on the following criteria:

- a) Maximization of use of existing diversion programs
- b) Potential quantities, by weight and volume, that can be diverted
- c) Recyclability and marketability of the materials
- d) Negative impacts of the materials on the environment if not diverted
- e) Net cost of diversion (relative to landfilling and other methods)
- f) Impositions on waste generators (e.g. residents)
- g) Feasibility of the City implementing actions (jurisdictional constraints).

3. TO ENSURE EFFECTIVE IMPLEMENTATION OF NEW POLICIES AND PRACTICES:

3.1 Working Group: *The City should establish a Waste Diversion Working Group to oversee the planning, design, implementation, promotion and monitoring of diversion programs. The Working Group should include members of the public, City staff, frontline collection workers, and possibly Works Committee members. It should also establish plans with timelines, and clear reporting structures for its work and for implementation and operation of diversion programs, and should coordinate its work with that of the working groups for apartments, ABCDs and schools.*

3.2 Cost Estimates: *In order to determine the net revenue/cost of various diversion programs, the City should estimate the following for each program: a) cost of implementation; b) cost savings from diversion (landfill cost avoidance); and c) revenues. These estimates should account for possible future changes over time, and uncertainties in these estimates should be explicitly included.*

3.3 Funding: *The City should establish as soon as possible, dedicated, long-term funding to support its waste diversion programs. Such funding could come from any or all of the following sources: user fees (PAYT), private sector tipping fees, waste utility fee (similar to water and sewage bill), and/or city budget.*

3.4 Contracts: *New contracts for waste collection and processing should include incentives to maximize diversion and be written to encourage, and not be impediments to, the effective implementation of the above recommendations.*

3.5 City Staff: *The City should establish ways to recognize City staff who meet or exceed diversion targets.*

4. TO SECURE ASSISTANCE FROM THE PROVINCIAL AND FEDERAL GOVERNMENTS:

4.1 Assistance from Provincial and Federal Governments: *The City should proactively lobby and work with the Provincial and Federal governments and Waste Diversion Ontario (WDO) for laws, regulations, policies and practices, and funding that would aid in the reduction and diversion of waste.*

ATTACHMENT 1 – ADDITIONAL COMMENTS ON THE RECOMMENDATIONS

This attachment provides additional comments under each of the recommendations to increase participation in diversion programs (recommendations 1.1 to 1.7) and recommendations to expand the materials captured in diversion programs (recommendations 2.1 and 2.2).

1. TO INCREASE PARTICIPATION IN DIVERSION PROGRAMS:

1.1 Promotion and Education: *The City should implement an aggressive and creative education and promotion program to increase both participation rates and capture rates in municipal reduction, reuse, recycling and source-separated organics (SSO) programs.*

Examples of promotion and education initiatives include, but are not limited to:

- a. Aggressively promote participation in recycling, SSO, backyard composting (BYC), depots, and other programs that are, and will be, established.*
- b. Encouraging best practices by helping to educate SF residents and MF residents/ superintendents, e.g. by developing a set of possible models and plans for diversion from different types of residences.*
- c. Developing education and promotion initiatives for targeted groups to increase their participation in various diversion programs. The focus should be on those that do not participate in diversion programs. These should be community/neighborhood-based and developed for targeted groups in SF residences, MF residences, different gender and age groups, cultural groups, commercial establishments, and ABCDs and schools.*
- d. Educating groups on the cost of diverting and cost of not diverting various types of materials.*
- e. Using creative methods such as newspaper ads, TV spots, billboards, written materials, City web site.*
- f. Using volunteer groups and students to promote reduction, reuse and recycling, including student volunteers through Toronto Environmental Volunteers, scouts, guides, community organizations, etc.*
- g. Using incentive programs such giving prizes, e.g. special lottery prizes, to those who participate in certain diversion programs.*
- h. Recognizing through municipal wards, individuals and groups who demonstrate the waste diversion ethic.*
- i. Giving awards to commercial re-users and recyclers.*

1.2 MF Diversion: *The City should aggressively implement programs for diversion from existing and new MF buildings for current recyclable materials and SSO.*

This should include:

- a. Expanding SSO to include MF residences.*
- b. Amending zoning by-laws to require all new MF buildings to have systems for SSO (recycling systems already required).*
- c. Providing support, e.g. subsidies and expertise, for changes in waste disposal infrastructure at existing MF buildings to encourage diversion.*
- d. Using audits of MF buildings to help design MF diversion programs.*

1.3 Agencies, Boards, Commissions and Departments (ABCDs) and Schools: *The City should lead by example by aggressively supporting diversion programs with targets for its ABCDs and schools, beginning with full participation in existing diversion programs, and then expanding the capture of SSO.*

Implementation of this recommendation should be done in consultation with the ABCDs Waste Diversion Team and both School Working Groups.

<p><u>1.4 Public Space Waste:</u> The City should increase the diversion of materials (Blue/Grey Box and SSO materials) generated in public spaces, such as parks and sidewalks, by ensuring that there are adequate recycling containers in public spaces, and by establishing incentives for participation in these diversion programs.</p> <p>This should include, but not be limited to the City:</p> <ol style="list-style-type: none"> a. Promoting diversion programs at special events on public spaces. b. Requiring diversion by those given City permits for vending and events. c. Charging (PAYT) for collection of non-diverted wastes at special events, such as for sports and music, where the City collects such wastes. d. Providing methods for source separation during community clean up activities.
<p><u>1.5 Recycling Containers:</u> The City should ensure that all SF and MF residences have easy or ready access (at no or low cost) to appropriate reusable containers for recycling, SSO, and backyard composting (BYC).</p> <p>This should include:</p> <ol style="list-style-type: none"> a. Allowing residents some flexibility in the choice of container sizes. b. Not using plastic bags (film plastics) as containers for recycling unless bag producers establish recycling programs and markets for such bags and other film plastics.
<p><u>1.6 By-law Enforcement:</u> The City should improve compliance with current by-laws and policies for diversion from SF and MF residences, ABCDs and schools, and expand these by-laws to include SSO.</p>
<p><u>1.7 Waste Limits and User Fees:</u> To further increase diversion from SF and MF residences, the City should implement a combination of reduced limits on the amount of waste that the city will accept for pick-up and user pay-as-you-throw (PAYT) fees based on the amount of waste collected over and above a specified amount.</p> <p>Such limits and fees should be introduced in a two phase manner: 1) an immediate reduction in current limits in recognition that all residences currently have access to the blue/grey box recycling program; and 2) a further reduction in the limits upon the introduction of an SSO program. In addition, fees should be instituted immediately for the collection of bulky items and “white” goods.</p>

2. TO EXPAND MATERIALS CAPTURED IN DIVERSION PROGRAMS:

<p><u>2.1 Recyclable Materials:</u> The City should expand recycling programs to accept additional types of recyclable materials. This should include accepting into the Blue/Grey Box program additional types of paper fibres, plastics, glass and metals.</p> <p>This should be implemented in several stages, as follows:</p> <ol style="list-style-type: none"> a. Ensure full implementation for currently recyclable and marketable materials that are not captured in the Blue/Grey Box programs, such as polystyrene and film plastics. b. Investigate the recyclability and potential markets for all other materials such as multi-layer papers and various plastics that are not captured in diversion programs. c. For recyclable materials with weak or no markets, help develop and promote markets for these materials, e.g. through procurement policies. Also, consider that if no ready market exists, the City could give the material away or pay someone to take it because of the anticipated cost savings from diversion.

2.2 Expansion of Non-curb-side Reuse and Recycling Programs: *The City should establish and aggressively promote programs, such as depots, to reuse and/or recycle materials that are not collected curbside for recycling, such as hazardous materials, used clothing, scrap metals and wood, small appliances and other electronic equipment, furniture, mattresses, carpets, and construction/demolition waste.*

This should start by increasing the participation in existing systems, developing new systems for capturing currently reusable and recyclable materials, and then developing new programs for additional materials.

A number of individual or integrated systems should be used for different types of materials, including:

- a. Depots, such as at grocery store lots and city yards*
- b. Reuse centers. The City should promote giving of materials to non-profits (e.g. Goodwill)*
- c. Community based garage sales in various locations, such as parks*
- d. Scavenger days*
- e. Contractor pick up*
- f. Waste exchange via city web site*
- g. Arrangements with commercial enterprises, e.g. commercial enterprises, to take back used goods in keeping with the principle of Product Stewardship. This should start with hazardous wastes such as paints, oils, batteries, fluorescent lights, medications, and smoke detectors. It should then be expanded to other materials based on quantities that can be diverted.*
- h. Awards to commercial re-users and recyclers.*

The above set of programs could be integrated into a single system with an identifiable logo.

