



A Waste Recycling Plan for Admaston/Bromley



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Prepared for:

Admaston/Bromley Township
Waste Management Department
477 Stone Road, RR 2
Renfrew, ON K7V 3Z5

Prepared with assistance from
Waste Diversion Ontario
and
Jp2g Consultants Inc.

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1. Purpose

This Waste Recycling Strategy was initiated by The Township of Admaston/Bromley to develop a plan to increase the efficiency and effectiveness of its recycling programs and maximize the amount of blue box material diverted from disposal.

Admaston/Bromley is responsible for managing its residential solid waste, which is generated from a population of 2705 within 1353 households. Admaston/Bromley residents drop off garbage and recyclables at 3 sites. Douglas and Stone Road are Transfer Stations and Admaston/Bromley has one landfill site at Osceola. Residential recyclables are sorted on site into 3 categories, Blue Box Recyclables, cardboard and steel. These are placed into 3 sorting bins that are picked up on a regular basis by local recycling facilities. We include recycling info with each welcome package to new residents and a landfill site courtesy card. We also have a bin at the Municipal Office for household batteries and we participate with the Town of Renfrew who collects Household Hazardous Waste items such as paint during the spring and summer months. A list of acceptable Hazardous Waste items are also included in the welcome packages. Admaston/Bromley is also a registered collector in the Ontario Tire Stewardship and WEEE Ontario Electronic Stewardship programs.

Admaston/Bromley faces a number of waste management challenges, which this Waste Recycling Strategy will help address. In particular the decreasing tonnage and percentage of household waste being recycled. In addition, the public education that would accompany this program should increase participation in the community. Overall, Admaston/Bromley should realize an increase in recovery of residential recyclables and increase the amount of waste diverted from the landfill site.

This Waste Recycling Strategy was developed with support from Waste Diversion Ontario and using the Continuous Investment Fund's *Guidebook for Creating a Municipal Waste Recycling Strategy*.

2. Overview of the Planning Process

This Waste Recycling Strategy was prepared through the efforts of the Township of Admaston/Bromley and using the Continuous Investment Fund's *Guidebook for Creating a Municipal Waste Recycling Strategy*.

To complete this Plan the CIF Workshop held in Ottawa on June 28th, 2010 was attended by 2 staff members and after careful review of our recycling reports this Plan was created by using the information learned at the Workshop, our internal reports and the templates provided on the WDO website.

The steps completed to date to finalize the Recycling Plan and aid in its initial implementation include:

- Notice included in tax bills August 2010
- Hiring students to assist at the sites to promote blue box recycling in September, 2010
- Delivery of free blue boxes to all residents and promotion of the recycling program in September 2010
- Upgrades to Transfer Station at Stone Road for improved convenience and safer access.
- News media coverage of Council meetings promoting the program and contestant winners from July to October 2010

The next steps in this process include:

- A presentation to Council and approval of this Plan by By-Law or Resolution.
- Review and comparison of our tonnage and percentage of Recycled goods at all 3 sites and determination as to what affect our promotion and improvements had. Perhaps get public opinion on the programs.

3. Study Area

The study area for this Waste Recycling Plan includes all of Admaston/Bromley.

This Waste Recycling Plan will address the following sectors:

- Residential single family
- Small businesses
- Small institutions, such as schools or small community centres

4. Public Consultation Process

To ensure the public and local stakeholders were able to participate in the preparation of this Waste Recycling Strategy we delivered the blue bins to each resident and advertised in the local newspaper as well as notices in all the final tax bills and the program took place at all 3 sites for the 4 Saturdays in September.

The public consultation process followed in the development of this Waste Recycling Strategy consisted of the following activities:

- Advertisement in Local Newspapers
- Notices sent with Final Tax Bills
- Student Employment
- Recycling Contest
- Delivery of Free Blue Bins
- T-Shirts and Hats
- Demonstration of unusual recycling items at Council Meeting

Stakeholder groups included in this consultation included:

- Council
- General Public

The response from the public and stakeholders included feedback and ideas such as the demonstration of unusual recycling items at a Council Meeting to be covered by the local media. This feedback was used and new recycling ideas were shared and it expanded the knowledge base of what is recyclable with help of visual aids.

5. Stated Problem

Management of municipal solid waste, including the diversion of blue box materials, is a key responsibility for all municipal governments in Ontario. The factors that encourage or hinder municipal blue box recycling endeavors can vary greatly and depends on a municipality's size, geographic location and population.

The key drivers that led to the development of this Waste Recycling Strategy include:

- WDO requirements
- Shrinking disposal capacity
- Council Direction
- Improving cost/service efficiencies

6. Goals and Objectives

This Waste Recycling Strategy has identified a number of goals and objectives for The Township of Admaston/Bromley. These are presented below.

Waste Recycling Goals and Objectives	
Goals	Objectives
To maximize diversion of residential/municipal solid waste through the blue box/recycling program	Divert 25% of municipal solid waste through the blue box program
To maximize capture rates of blue box material through existing and future programs	Increase capture of blue box municipal solid waste by 10% within 3 years.
To increase participation in the recycling program.	Make recycling services available to 100% of residents.
To expand the lifetime of our landfill	Add 5 years to the lifespan of the landfill by increasing blue box diversion

This Waste Recycling Strategy has also identified a series of broader community goals to which it can contribute. These broader community goals are presented below.

Community Goals and Objectives	
Goals	Objectives
To reduce our emissions and carbon footprint	Reduce municipal greenhouse gas emissions.
To enhance service/value for our taxpayers	To deliver free blue bins to all residents

7. Current Solid Waste Trends, Practices and System and Future Needs

Community Characteristics

In 2009, Admaston/Bromley had a population of 2705 residing in 1353 total households or dwellings. Almost all are single-family households for permanent residents.

Current Waste Generation and Diversion

Currently, Admaston/Bromley generates approximately 936 tonnes of residential solid waste per year. Of this, 181 tonnes, or 19.3 percent, is diverted through the blue box program. Currently, the most common material recycled is Metals and Plastics, while the least is Papers.

The table below summarizes the current waste generation and blue box diversion rates according to Admaston/Bromley's records. According to Jp2g Consultants 2009 Annual Report there were 905.16 tonnes of total waste, papers 80.03 and metal & plastics 32.196 (not including scrap metal).

Residential Solid Waste Generated and Diverted through Blue Box		
Residential Waste Stream/Blue Box Material	Tonnes	Percent of Total Waste
Total waste generated	936.0	100%
Papers (ONP, OMG, OCC, OBB and fine papers)	20.25	2.16%
Metals & Plastics (aluminum, steel, mixed metal) (containers, film, tubs and lids)	160.48	17.15%
Total Blue Box material currently diverted	181.0	19.3%

As the table below indicates, Admaston/Bromley's current diversion rate is below average for its WDO municipal grouping.

Average Blue Box Diversion Rate (2007-2009)	
Admaston/Bromley	19.3%
Rural Depot - North	19.67%

Potential Waste Diversion

To estimate Admaston/Bromley's current waste composition, our municipality used the approximations from the CIF Waste Recycling Strategy Guidebook}.

A total of approximately 279 tonnes of blue box recyclable materials are available for diversion, of which approximately 31 tonnes are still currently in the waste stream. Estimates of blue box material available for diversion are listed in the table below.

Current and Potential Diversion			
Material	Total Available in Waste Stream (tonnes/year)	Currently Recycled (tonnes/year)	Potential Increase (tonnes/year)
Papers (ONP, OMG, OCC, OBB and fine papers)	51	20	31
Metals (aluminum, steel, mixed metal)	4.5	68	0
Plastics (containers, film, tubs and lids)	14	91	0
<i>Total</i>	69.5	179	31

Diverting the blue box material remaining in Admaston/Bromley’s waste stream could raise its waste diversion rate to 23%

Existing Programs and Services

Currently, Admaston/Bromley has the following policies and programs in place to manage residential solid waste other than household garbage:

- Tipping Fees

Drop off of regular waste and recycling services are provided at the landfill or depot. Disposal and recycling services are paid for primarily through fixed user fees and tax base. Once recyclable materials have been collected, they are taken to Recycling Facility, located in Renfrew, Ontario.

In 2009, the total net annual recycling costs for Admaston/Bromley was \$13,258. This amounts to \$73.25 per tonne, or \$9.80 per household. As the table below shows, net annual recycling costs for Admaston/Bromley are below average } for its WDO municipal grouping.

Net Recycling Cost (per tonne per year)	
Admaston/Bromley	\$73.25
Municipal Grouping: Rural Depot -South	\$597.56

Anticipated Future Waste Management Needs

Solid waste generated rates in Admaston/Bromley are expected to grow over the next 3-year planning period. The Table below depicts the expected growth rates for solid waste generation and blue box material recovery (based on projected population growth rates).

Anticipated Future Solid Waste Generation Rates and Available Blue Box Material			
	Current Year	{Current Year + 5}	{Current Year + 10}
Population	2705	2710	2715
Total Waste (tonnes)	936	937.66	939.39
Blue Box Material Available (tonnes)	69.50	69.38	69.50

8. Planned Recycling System

Overview of Planned Initiatives

Admaston/Bromley reviewed a number of options for consideration in its Waste Recycling Strategy. The options were then scored based on a series of criteria, which included:

- % Waste Diverted
- Proven Results
- Reliable Market/End Use
- Economically Feasible
- Accessible to the Public
- Ease of Implementation

A summary of the options reviewed and their scoring are provided in Appendix A.

Once scored, the top ranking Waste Recycling Strategy options were organized into Priority Initiatives. The estimated cost for implementing the priority initiatives is estimated to be approximately \$30,000. The estimated cost for implementing the future initiatives is estimated to be \$4,000. The Table below presents the Priority Initiatives and Future Initiatives and their estimated costs. A review of these initiatives and their steps for implementation are reviewed on the following pages.

Priority and Future Initiatives		
Initiatives	Implementation Costs	Operation Costs
<i>Priority Initiatives</i>		
Free Blue Bins for all residents	8,000	
Public Education and Promotion Program	2,000	
Enhancement of Recycling Depot/Transfer Station Upgrades	20,000	
<i>Estimated Total Cost (Priority Initiatives)</i>	30,000	
<i>Future Initiatives</i>		
Purchase a Solar Big Belly compactor	4,000	
<i>Estimated Total Cost (Future Initiatives)</i>	4,000	

Priority Initiatives

Initiative: Free Blue Bins for all residents

Overview: Providing free blue bins helps to ensure that residents have sufficient storage capacity for recyclables.

Implementation: Purchase Blue Bins, Advertise and Distribute Blue Bins door to door in the summer of 2010 before implementing the P&E program.

Initiative: Public Education and Promotion Program

Overview: Public Education and promotion programs are crucial for ensuring the success of local recycling programs. Well-designed and implemented education and promotion programs can have impacts throughout the municipal recycling program, including participation, processing and marketing of materials. Furthermore the P&E plan contributes toward the amount of WDO funding a municipality receives.

Implementation: Purchase T-shirts and hats for promotional material. Employ students to collect recycle bins and fill out a ballot for each full one receive. Draw ballots for prizes (1 – large compost container with stand, compost material and hand crank, 2 – blue bin with can crushed and kitchen compost pail, 3- two T-shirts and a blue bin). Material will be sent out in the form of notices and ads in the local newspapers. Promote unusual recycling items at Council meeting attended by local media.

Initiative: Enhancement/Upgrades to Transfer Station/Recycling Depot

Overview: Where curbside collection programs are not feasible, recycling depots provide an inexpensive means for municipalities to divert recyclable materials from disposal. Enhancements may include: improved public access and convenience, enhancements to landfill depot like landscaping, general cleanliness, maintenance, incorporating easy to read signage, provide additional part-time staff

Implementation: Purchase and install improved signage. Upgrade Transfer station ramp and recycling sorting area. Hire part time student employees to assist with implementation of our P&E program.

Future Initiatives

Initiative: Purchase of Solar Big Belly compactor unit

Overview: This purchase would help to optimize our processing operations by processing more blue box materials at a lesser cost by decreasing the frequency of recycling pick-ups by the recycling facility.

Implementation: We are in contact with the company that manufactures this product and hope the get to Ottawa to see the demo model at the Waste Management facility.

Contingencies

Even the best planning can be delayed by a variety of foreseen and unforeseen circumstances. Predicting and including contingencies can help to ensure that these risks are managed for minimum delay. The table below identifies contingencies for possible planning delays.

Waste Recycling strategy Contingencies	
Risk	Contingency
Insufficient Funds	Explore and apply for other funding sources (eg CIF grant)
Lack of available staff	Hire summer student to help implement P&E Program

9. Monitoring and Reporting

The monitoring and reporting of Admaston/Bromley’s recycling program is considered a Blue Box program fundamental best practice and will be a key component of this Waste Recycling Strategy. Once implementation of the strategy begins, the performance of the Waste Recycling System will be monitored and measured against the baseline established for the current system. Once the results are measured, they will be reported to Council and the public.

The approach for monitoring Admaston/Bromley’s waste recycling program is outlined in the table below.

Recycling System Monitoring		
Monitoring Topic	Monitoring Tool	Frequency
Recycling Tonnage	3 year comparison report	annually
Recycling Comparison	3 year report on different material types with tonnage and percentages	annually

10. Conclusion

In conclusion, Admaston/Bromley's plan is to increase the efficiency and effectiveness of its recycling programs and maximize the amount of blue box material diverted from disposal. Given the planned transfer station upgrades to improve public access and convenience as well as our new friendly, easy to read signage, this was an opportune time to implement a promotion and education program along side these improvements. In addition, the assistance of the CIF grant has made the implementation of these programs economically feasible. The program will enhance the existing integrated waste management system while encouraging increased participation in waste diversion by the public.

Appendix A: Waste Recycling Option Scores

Suitable? Y/N	Description of Options/Best Practices (For more information: <i>More information: Blue Box Program Enhancement and Best Practices Assessment Project Final Report, Volume 1</i>)	Criteria (Score out of 5)						Total Criteria Score
		% Waste Diverted	Proven Results	Reliable Market/ End Use	Economically Feasible	Accessible to Public	Ease of implementation	
<i>Promotion and Outreach</i>								
Y	Public Education and Promotion Program	4	4	1	4	4	4	21
	Training of Key Program Staff							
<i>Collection</i>								
	Optimization of Collection Operations							
	Bag Limits							
Y	Enhancement of Recycling Depots	3	3	1	4	4	4	19
Y	Provision of Free Blue Boxes	4	4	1	4	4	4	21
	Collection Frequency							
<i>Transfer and Processing</i>								
Y	Optimization of Processing Operations	2	2	1	4	4	4	17
<i>Partnerships</i>								
	Multi-Municipal Collection and Processing of Recyclables							

Suitable? Y/N	Description of Options/Best Practices (For more information: <i>More information: Blue Box Program Enhancement and Best Practices Assessment Project Final Report, Volume 1</i>)	Criteria (Score out of 5)						Total Criteria Score
		% Waste Diverted	Proven Results	Reliable Market/ End Use	Economically Feasible	Accessible to Public	Ease of implementation	
	Standardized Service Levels and Collaborative Haulage Contracting							
	Intra-Municipal Committee							
<i>Additional Research</i>								
	Assess Tools and Methods to Maximize Diversion							
<i>Administration</i>								
	Following Generally Accepted Principles for Effective Procurement and Contract Management							
<i>Other Options</i>								