

Waste Management Working Group

Report

3rd Meeting of the Waste Management Working Group
July 13, 2018
Committee Room #1

Attendance PRESENT: Councillor M. van Holst (Chair); Mayor M. Brown;
Councillors J. Helmer and S. Turner and J. Bunn (Secretary)

ABSENT: Councillors M. Cassidy and H. Usher

ALSO PRESENT: W. Abbott, M. Losee and J. Stanford

The meeting was called to order at 12:00 PM.

1. Call to Order

1.1 Disclosures of Pecuniary Interest

That it BE NOTED that no pecuniary interests were disclosed.

2. Scheduled Items

2.1 Decision Report #8 – 60% Waste Diversion Action Plan

That, on the recommendation of the Director, Environment, Fleet and Solid Waste, the following actions be taken with respect to the 60% Waste Diversion Action Plan:

a) the staff report dated July 13, 2018, with respect to the 60% Waste Diversion Action Plan, BE RECEIVED;

b) the action plan to achieve 60% waste diversion by 2022 BE SUPPORTED IN PRINCIPLE; and,

c) the release of the above-noted Action Plan for review and comment by the general public and other stakeholders BE SUPPORTED; it being noted that minor changes/revisions to the report may be made prior to release to improve readability or layout of the report;

it being noted that the attached presentation from J. Stanford, Director, Environment, Fleet and Solid Waste, with respect to this matter, was received.

3. Consent

3.1 2nd Report of the Waste Management Working Group

That it BE NOTED that the 2nd Report of the Waste Management Working Group, from its meeting held on March 8, 2018, was received.

3.2 Update Report #10 - Draft Proposed Terms of Reference

That it BE NOTED that the staff report dated July 13, 2018, with respect to an update report (#10) related to the Draft Proposed Terms of Reference for the Environmental Assessment of the Proposed W12A Landfill Expansion for the City of London, was received.

4. Items for Discussion

None.

5. Deferred Matters/Additional Business

None.

6. Adjournment

The meeting adjourned at 1:12 PM.

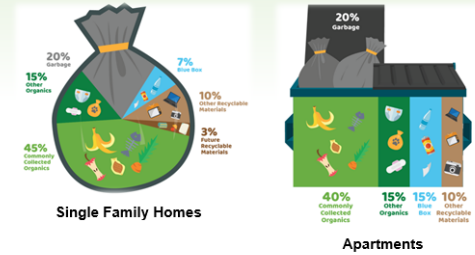
Presentation to Waste Management Working Group

July 13, 2018

Environmental & Engineering Services

60% Waste Diversion Action Plan

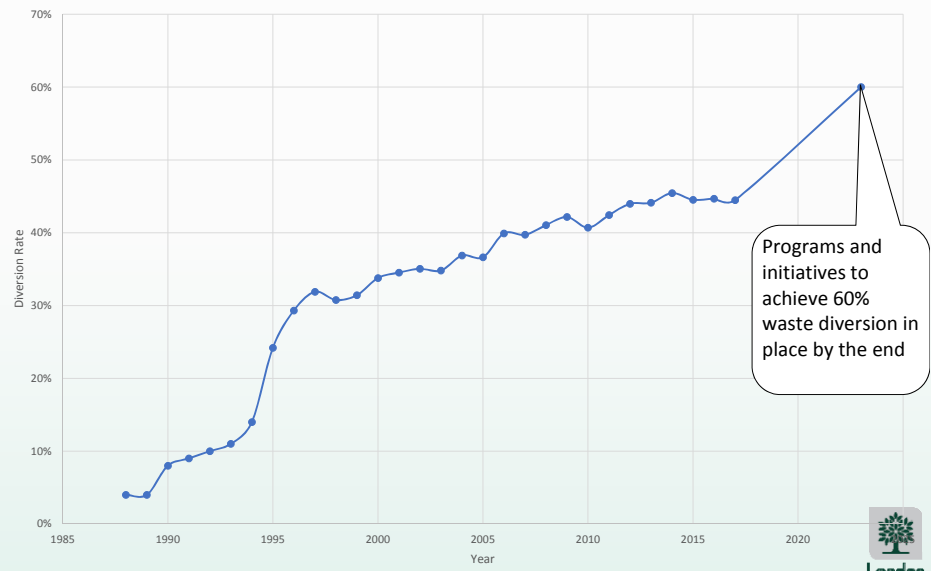
What's in the garbage?



Waste Management Working Group: July 13, 2018
 Civic Works Committee: July 17, 2018
 Municipal Council: July 24, 2018
 Community Engagement: July 25 – September 27, 2018



The Road to 60% Diversion



Why Waste?

How much waste and resources?

Residential
160,000 tonnes
45% diverted



IC&I
~ 170,000 tonnes
~ 20% diverted



CR&D
~ 120,000 tonnes
~ 50% diverted

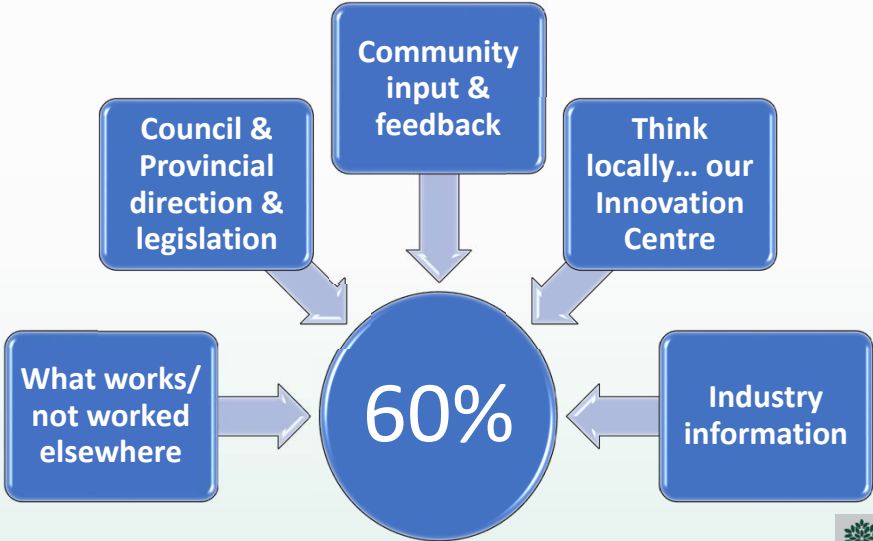


Between 425,000 and 450,000 tonnes per year




Why Waste?

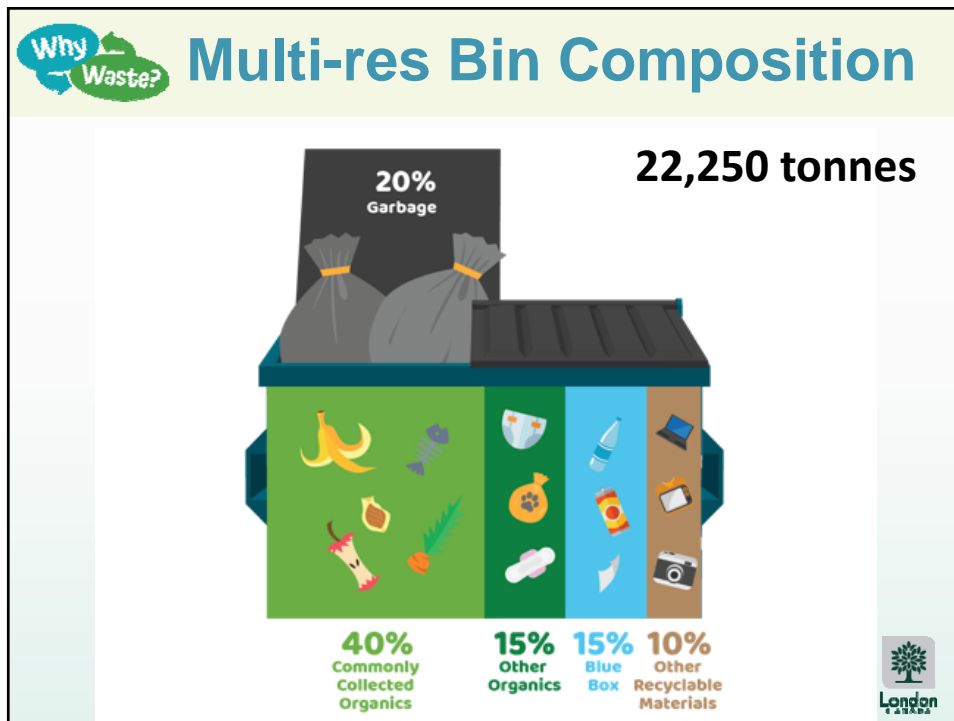
How this Report was Prepared



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graph TD; A[Council & Provincial direction & legislation] --> C((60%)); B[Community input & feedback] --> C; D[Think locally... our Innovation Centre] --> C; E[Industry information] --> C; F[What works/ not worked elsewhere] --> C;
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60%






Why Waste? **Composition – Did You Know!!**

Top 5 Diversion Opportunities	Estimated tonnes	% of Waste	Kg/hhld/year
1. Avoidable food waste	19,300	24%	107
2. Unavoidable food waste	10,100	12%	56
3. Pet waste	8,500	10%	47
4. Items for Blue Box/Cart	8,300	10%	46
5. Construction/Reno/Demo	4,700	6%	26
Total	50,900	62%	282



 Blue Box – Blue Carts	
Why is this important?	<ul style="list-style-type: none"> • Provincial law - shifting to EPR is key • Industry will be funding
How many actions?	<ul style="list-style-type: none"> • None • Industry will be responsible • Council/City staff to continue to push
How much will it divert?	<ul style="list-style-type: none"> • 1% to 3% • 1,600 to 4,800 tonnes
What is the cost/hhld estimate?	<ul style="list-style-type: none"> • SAVINGS estimated at \$1.5 to \$1.8 million by 2023 • SAVINGS \$8.00 to \$10.00 per year

 New (or Expanded) Recycling	
Why is this important?	<ul style="list-style-type: none"> • Items are easy to identify/describe • Identified in provincial direction
How many actions?	<ul style="list-style-type: none"> • 7; some pilot projects • Support local jobs; potential for more • New business opportunities
How much will it divert?	<ul style="list-style-type: none"> • 0.4% to 0.8% • 640 to 1,280 tonnes
What is the cost/hhld estimate?	<ul style="list-style-type: none"> • Range \$2.00 to \$3.00 per year • Likely \$2.50


 <h2 style="display: inline;">Curbside Organics</h2>	
Why is this important?	<ul style="list-style-type: none"> • Largest portion of the waste stream • Proven programs (that have improved) • Legislated
How many actions?	<ul style="list-style-type: none"> • 2 • Weekly Green Bin, recycling • Biweekly, same day garbage pickup
How much will it divert?	<ul style="list-style-type: none"> • 8% to 12% • 13,000 to 20,000 tonnes
What is the cost/hhld estimate?	<ul style="list-style-type: none"> • Range \$21.75 to \$30.50 per year • Likely \$28 • Likely curbside home only \$40









Mixed Waste Processing and Mechanical/Biological Treatment (MBT)




 FOCUS - Green Bin vs Mixed Waste Processing	
<p>MWP Advantages</p> <p>Environmental</p> <ul style="list-style-type: none"> • 25% to 80% more organics captured • 25% to 80% more GHG reduction 	<p>MWP Disadvantages</p> <p>Financial (Curbside Homes)</p> <ul style="list-style-type: none"> • Costs \$70 to \$115/hhld compared to \$30 to \$45/hhld for Green Bin
<p>Social</p> <ul style="list-style-type: none"> • More convenience • No “Yuk” factor 	<p>Technical</p> <ul style="list-style-type: none"> • Rules are evolving • Uncertainty for product quality




 Multi-res Organics	
Why is this important?	<ul style="list-style-type: none"> • Largest portion of the waste stream • Legislated
How many actions?	<ul style="list-style-type: none"> • 1 • Pilot project (15%) – mixed waste processing and composting/digestion • Follow progress of other communities
How much will it divert?	<ul style="list-style-type: none"> • 0.5% to 0.7% • 800 to 1,120 tonnes
What is the cost/hhld estimate?	<ul style="list-style-type: none"> • Range \$2.25 to \$4.00 per year • Likely \$2.75 • Likely Multi-res unit only \$62.50

 Other Organics Programs	
Why is this important?	<ul style="list-style-type: none"> • Food waste avoidance should be a priority • Lowers costs; community oriented
How many actions?	<ul style="list-style-type: none"> • 3 • Builds on 2 existing actions, BYC and community composting
How much will it divert?	<ul style="list-style-type: none"> • 0.3% to 0.6% • 480 to 960 tonnes
What is the cost/hhld estimate?	<ul style="list-style-type: none"> • Range \$1.50 to \$2.00 per year • Likely \$1.75

 FOCUS – Food Waste Avoidance	
	<p>Local Research (Western University), local Pilot Projects and experience in Canada, USA and Europe</p>
<ul style="list-style-type: none"> • Audits – confirmed up to 2/3rds avoidable food waste • \$450 to \$600 per household (\$80 to \$100 million/year) in avoidable food • 10% reduced = \$8 to 10 million saved locally 	
	

 <h2>Reduction & Reuse</h2>	
Why is this important?	<ul style="list-style-type: none"> • Lowers costs; community oriented • Council policies, directions and by-laws set stage
How many actions?	<ul style="list-style-type: none"> • 7, includes community investment • People are the driving force behind reduction and reuse
How much will it divert?	<ul style="list-style-type: none"> • 1% to 4% • 1,600 to 6,400 tonnes
What is the cost/hhld estimate?	<ul style="list-style-type: none"> • Range \$0.50 to \$2.00 per year • Likely \$1.50


 <h2>FOCUS – Working with the Community</h2>	
<p>Build Collaborations Explore options to build community collaborations</p>	 <p>What Is A Tool Lending Library?</p>
	<p>More (Fun) Reporting and Feedback . . . celebrating community success</p> 



Ipsos Survey June 2018


Parameters


- 301 respondents; Single family and apartments
- +/- 6.4%, 19 times out of 20



Findings

- waste diversion is important (90%)
- support food waste avoidance program (90%)
- support curbside/multi organics program (75%)
- prepared to deliver more to depots (65%)






Ipsos Survey June 2018


Willingness to pay more for increased waste diversion

\$0 per household per year	<div style="width: 24%; height: 15px; background-color: #008080; margin: 0 auto;"></div>	24%
\$1 to \$25 per household per year	<div style="width: 47%; height: 15px; background-color: #008080; margin: 0 auto;"></div>	47%
\$26 to \$50 per household per year	<div style="width: 18%; height: 15px; background-color: #008080; margin: 0 auto;"></div>	18%
\$51 to \$75 per household per year	<div style="width: 4%; height: 15px; background-color: #008080; margin: 0 auto;"></div>	4%
\$76 to \$100 per household per year	<div style="width: 7%; height: 15px; background-color: #008080; margin: 0 auto;"></div>	7%


76% willing to pay more




Benefits


Environmental 

- increased waste diversion (33% more)
- reduced GHG gas emissions (equivalent of removing 4,200 to 6,800 cars)
- reduced landfill impacts (odour, traffic)
- better use of material and resources







Benefits


Social 

- creation of jobs (between 125 and 170, direct & indirect)
- satisfaction/pride of community


Financial 

- short-term landfill cost savings
- avoid long term export costs (\$5 to \$7 million/year)




 **Estimated Annual Costs**


Program Category	Cost Range	Likely Cost
Blue Box Recycling Improvements	\$0	\$0
New Recycling Programs and Initiatives	\$350,000 - \$550,000	\$450,000
Curbside Organics Management Program	\$3,900,000 - \$5,500,000	\$5,000,000
Multi-Res Organics Pilot Program	\$400,000 - \$700,000	\$500,000
Other Organic Programs	\$250,000 - \$350,000	\$300,000
Waste Reduction, Reuse Initiatives and Policies	\$150,000 - \$350,000	\$250,000
Total	\$5,050,000 - \$7,450,000	\$6,500,000

 **Potential Funding Sources**


Source	Potential amount	Possible Date	Who Controls	Level of Risk
Full EPR for Blue Box	\$1.5 M to \$1.8 M	2022 to 2025	Province	Low
Full EPR for Other Programs	\$50,000 to \$150,000	2023/2025	Province	High
W12A Landfill Levy	\$250,000 to \$1 M	2020/2022	City	Low
Total	\$1,800,000 - \$2,950,000 (\$2,000,000 likely)			

 **Estimated Capital Costs**

Program Category	Items	Estimated Cost
New Recycling Programs and Initiatives	<ul style="list-style-type: none"> • EnviroDepot Improvements 	\$500,000 to \$2,700,000
Curbside Organics Management Program	<ul style="list-style-type: none"> • Green Bin Carts • Kitchen Catchers • Collection Vehicles 	\$12,000,000
Other Organic Management Programs	<ul style="list-style-type: none"> • Community composting 	\$100,000
Waste Reduction, Reuse Initiatives and Policies	<ul style="list-style-type: none"> • Reuse facilities 	\$200,000
Total	\$12.5 - \$15 million	

 **Annual Cost Summary**

	Low	High	Likely (Anticipated)
Cost	\$5,050,000	\$7,450,000	\$6,500,000
Cost/hhld	\$28.00	\$41.50	\$36.00
Revenue	\$1,800,000	\$2,950,000	\$2,000,000
Revenue/hhld	\$10.00	\$16.50	\$11.00
Total Estimated Cost			\$4,500,000
Total cost/hhld			\$25.00

 **MBNC Cost Comparisons**

2016 Municipality	Cost per Tonne		Cost per Household		
	Collection & Disposal	Diversion	Collection & Disposal	Diversion	Total
Hamilton (lowest Diversion & GB)	344	151	150	69	218
Niagara (Lowest with GB)	195	138	90	102	192
Average of 9 GB municipalities	264	234	127	100	227
London (60% - likely cost)	156	161	87	86	173
London (60% - high cost)	156	171	87	91	178

 **Next Steps – 60%**

Next Steps	Comments	Timeline
CWC and Council “Approval in Principle”	<ul style="list-style-type: none"> • CWC Meeting – July 17 • Council - July 24 	July 2018
Seek Community Feedback on Action Plan	<ul style="list-style-type: none"> • Interactive WhyWaste website • Circulate to Stakeholder Groups • Attend Gathering on the Green II • Presentations to WMCLC and ACE • Public Participation Meeting (Sept. 27) 	July to September, 2018
CWC and Council Approval	<ul style="list-style-type: none"> • Implementation details and final cost estimates to be provided 	January/February, 2019