



London
CANADA

An aerial photograph of London, Ontario, showing a mix of residential and commercial buildings, green spaces, and a road with traffic. The word "LONDON" is overlaid in large, white, semi-transparent letters across the middle of the image.

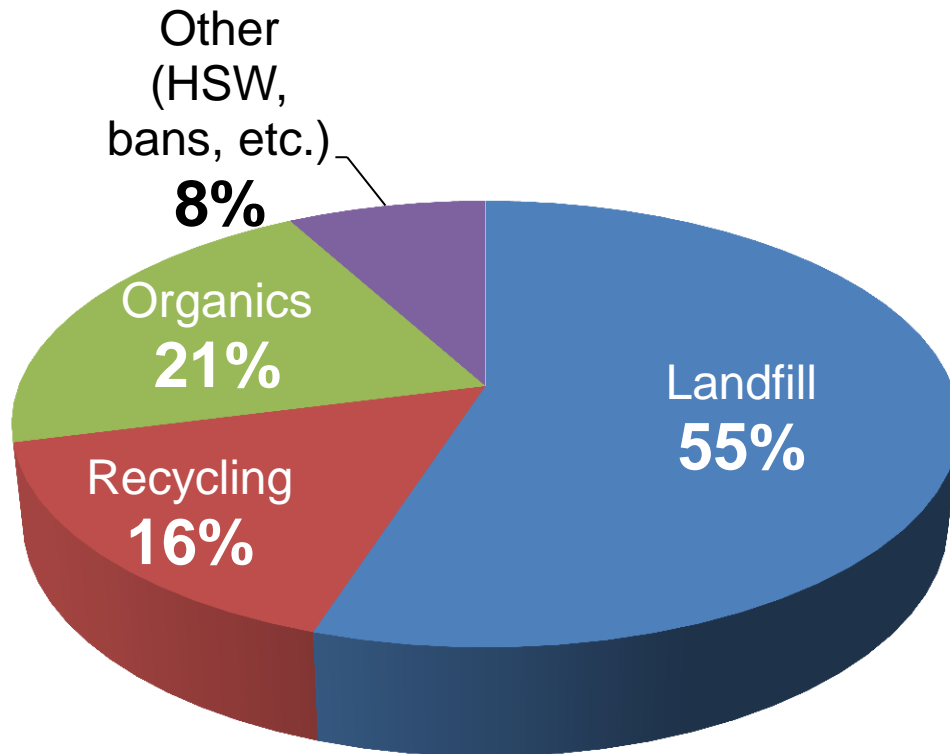
LONDON

UPDATE ON EXAMINATION OF RESIDENTIAL ORGANIC WASTE (FOOD SCRAPS) AND NEXT STEPS

**CWC Meeting
April 20, 2015**



45% Waste Diversion - 2014



2013 OMBI Data

- 10 municipalities with Green Bin
- Average diversion = 51%
- Low = 45/46% (Sudbury, Ottawa)
- High – 56/58% (Halton, York)



How we Manage our Organics?

GrassCycling

Cut it. Leave it. Watch it thrive.





DIVERSION PERFORMANCE

All Organics – Food Scraps,
Leaves, Yard Waste, Grass,
Tissues, Paper Towels

Tonnes

%

Diverted

32,800

49%

Disposed

34,200

51%

TOTAL MANAGED

67,000

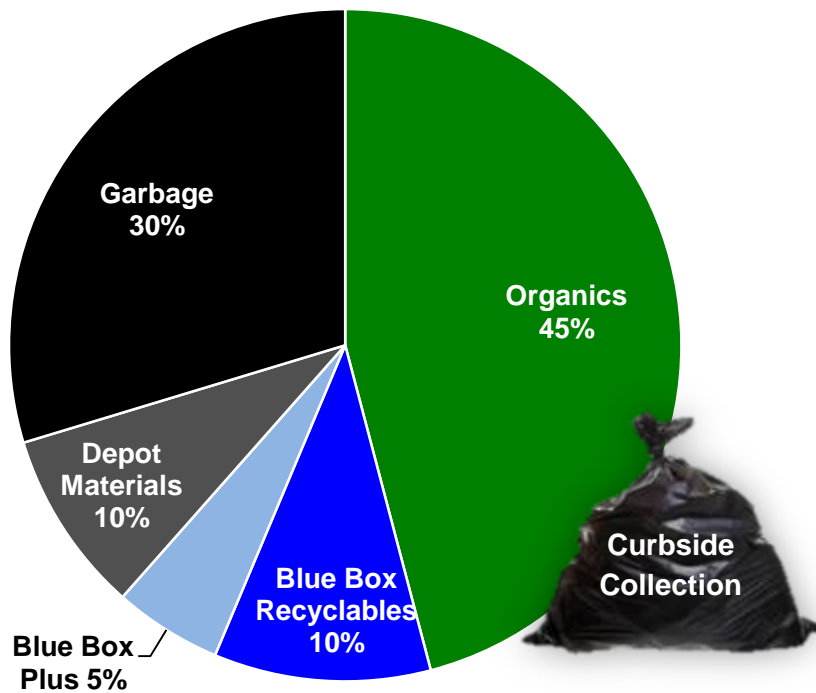


What is the Estimated Composition of Residential Organics Managed?

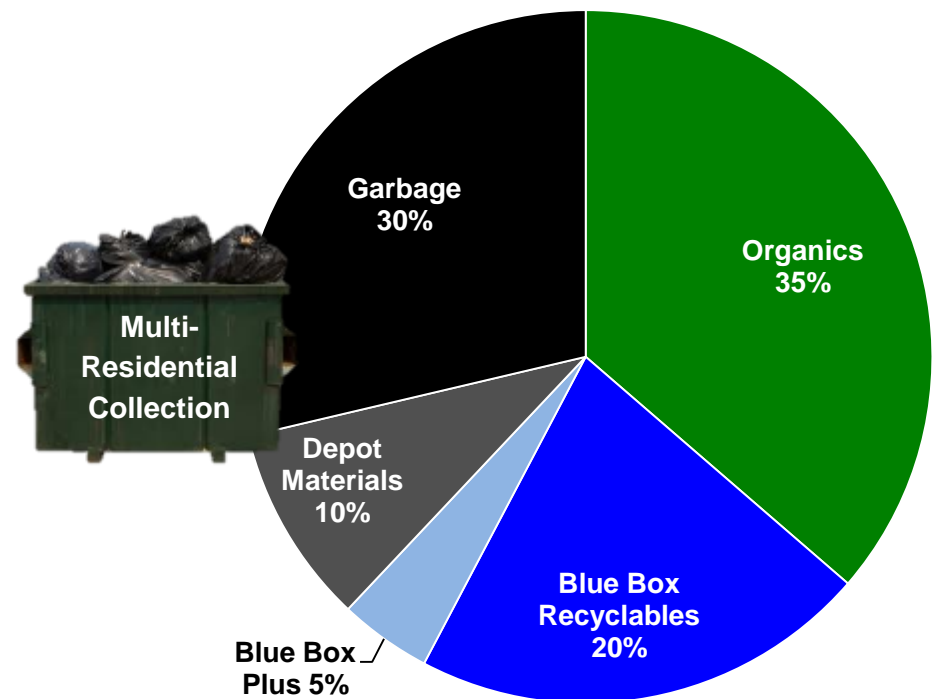
	Tonnes	%
Food Scraps	32,450	48%
Tissues, Paper Towels	4,100	6%
Leaves, Yard Waste	30,450	46%
TOTAL MANAGED	67,000	



What's in the Bag (or Bin)?



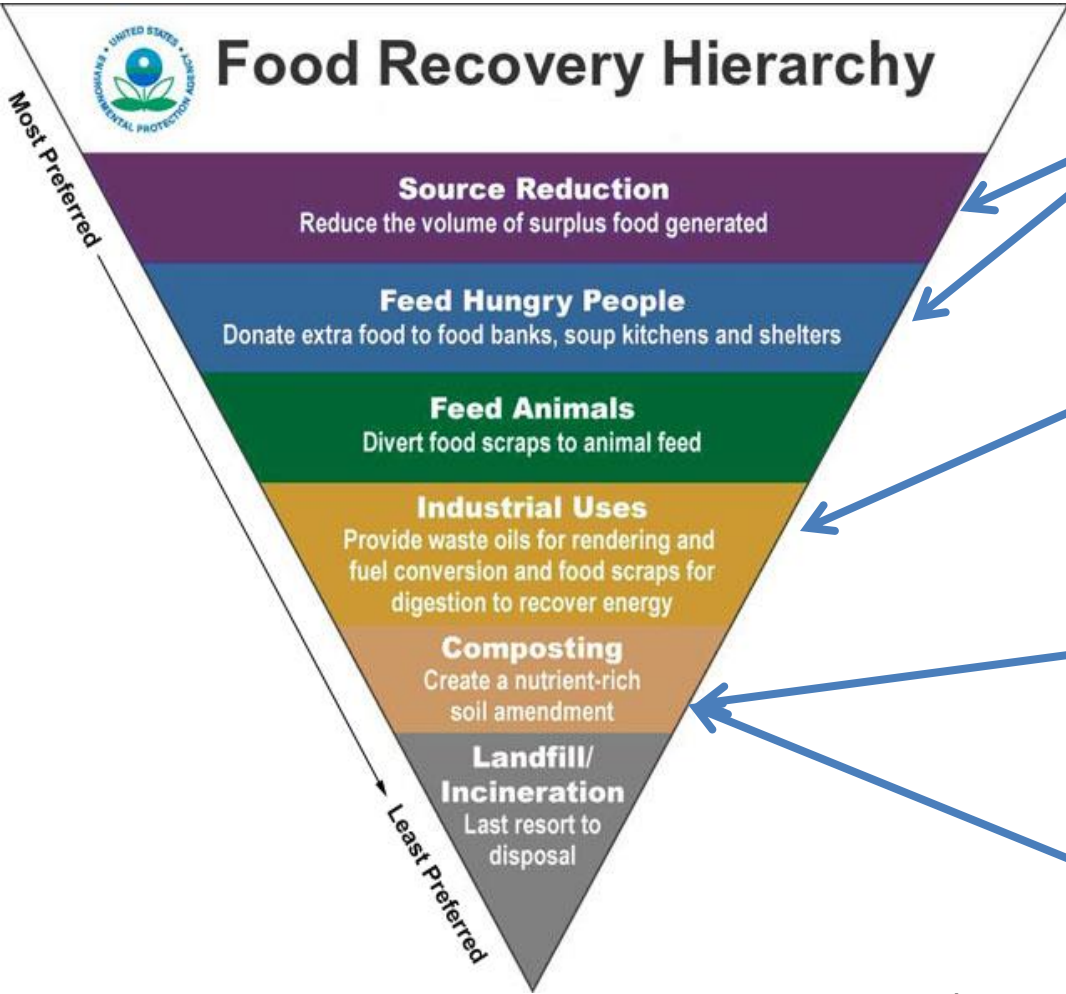
Generally single family homes, duplexes, townhomes, condos



Generally multi-residential 'stacked' buildings



Residential Organics - 4 Initiatives



Food Waste Reduction Pilot (Appendix A)
Remaining Organics (Energy) (Appendix D)
Community Composting Pilot (Appendix B)
Green Bin (Appendix C)



Food Waste Reduction Pilot (Appendix A)

Current Information



- 20%+ avoidable food waste (5,800 tonnes++)
- \$125 to \$375 per household (\$20 to \$60+ million/year)
- Increasing interest and concern in municipalities





Food Waste Reduction Pilot

Potential Partners

- London Poverty Research Centre
- Western – Geography Dept.
- Western – Realizing Waste's Resource Potential Project
- Middlesex London Health Unit
- Southern Ontario Food Collaborative
- Ontario Municipal Waste Association's Food Waste Reduction Working Group





Community Composting Pilot (Appendix B)

Short Term

- large multi-residential building complex
- small multi-residential building



Longer Term

- community park or community garden (MOECC approvals required)





Green Bin Programs (Appendix C)

Other Ontario Municipalities

- 55% of Ontario households
- Most large municipalities

Main Challenges

- 100% municipal funded
- Yuk factor
- Lower quantities/participation than projected (Ottawa, Waterloo)
- Bi-weekly garbage collection/low container limits drives participation





Green Bin Estimates for London

- Divert 12,000 to 14,500 tonnes
- Total diversion = 45% → 54%- 56%
- Curbside diversion = 50% → 60%- 65%
- 60% program participation
- Many benefits
- Annual cost estimate = \$3 million (\$25 per household)
- Capital investment estimate = \$7 to \$9 million





Residuals (Organics) Management for Energy (Appendix D)

- Gas Phase Reduction Technology – Pilot Project
- Creates “syngas”, a biofuel
- 92% combustion power of natural gas
- MoU signed in February 2015

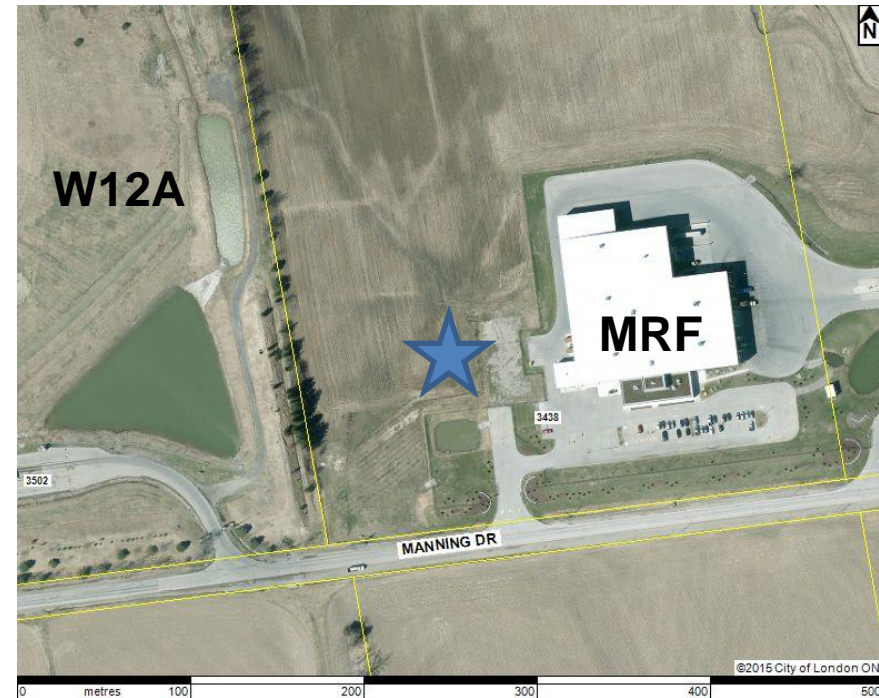
Some other North American locations:

Edmonton, Alberta; Lawrenceville, Virginia; near
Reno, Nevada . . . World-wide interest



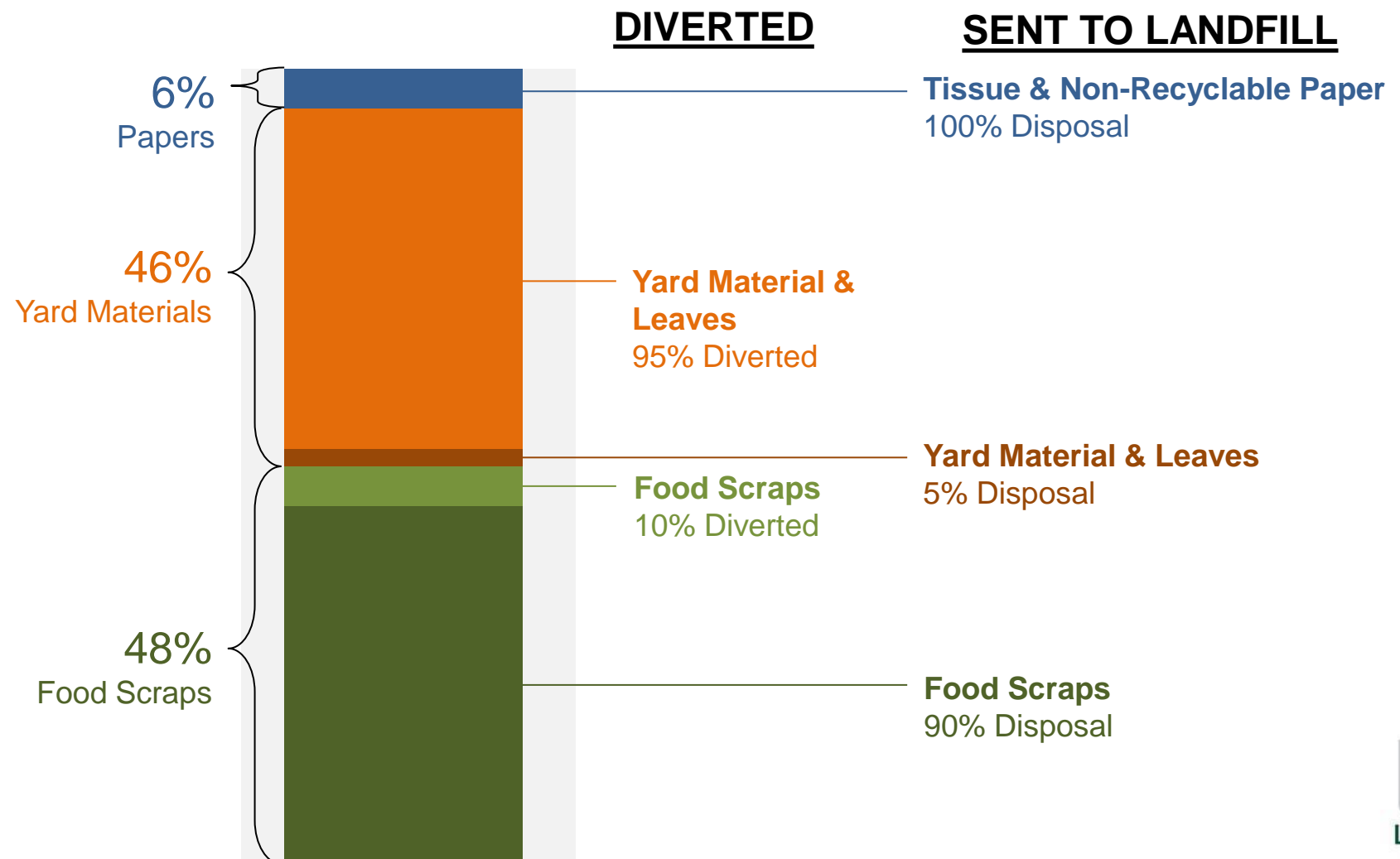
Residuals (Organics) Management

- **Concept - Waste to Resources Innovation Centre**
- **Potential research and potential training Centre**
- **Proposed testing to include:**
 - **household garbage**
 - **source separated organics (Green Bin)**
 - **other waste materials**



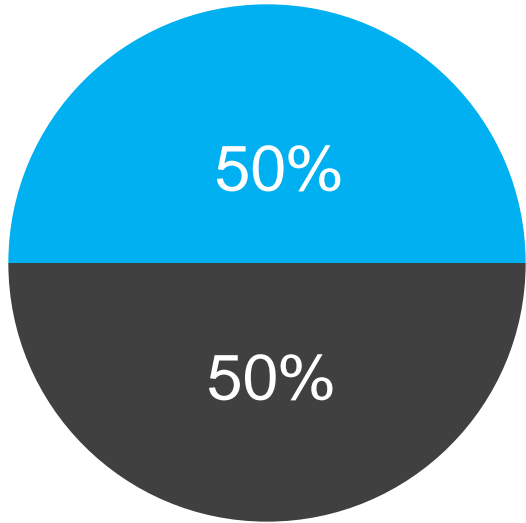


Summary- Organics Management



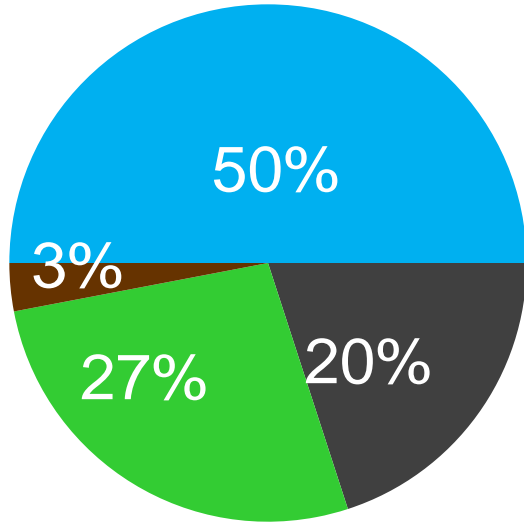


Potential Organics Diversion



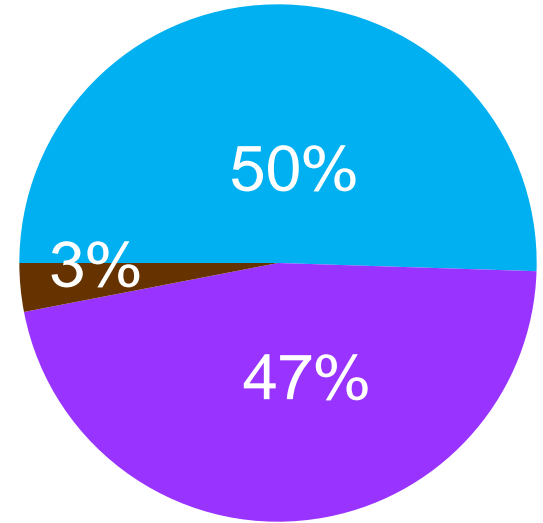
Current Programs

50% Existing Diversion
50% LANDFILL



Scenario 1

50% Existing Diversion
3% Prevention & Composting
27% Advanced Green Bin Program
20% LANDFILL



Scenario 2

50% Existing Diversion
3% Prevention & Composting
47% Gas Phase Reduction
0% LANDFILL



Institutional, Commercial & Industrial (IC&I) Organics/Recyclables (Appendix E)



“Increased waste diversion results in job creation and GDP growth, and therefore represents a significant economic opportunity for Ontario.”



We estimate that increasing Ontario's rate of waste diversion from its current 23 per cent to 60 per cent would create about 13,000 jobs and increase GDP by \$1.5 billion.”

Conference Board of Canada, 2014



IC&I Organics/Recyclables

- *IC&I diversion -12% to 13%*
- *Opportunities exist – determine:*
 - what others are doing and why?
 - what legislative, regulatory, and associated policies need to be considered?
 - potential actions to increase waste diversion and create local and regional jobs





Next Steps – Staff Perspective

1. Continue work on the 4 initiatives
2. Participate on Public Liaison Committees as a resources
3. Participate in Provincial legislation for recycling/composting proposed for 2015/2016
4. Participate in a couple province-wide projects
5. Council decision – next steps for IC&I diversion



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Questions?