The Corporation of the Town of Ajax **COUNCIL**



Monday October 17, 2016 at 7:00 p.m. Council Chambers, Town Hall 65 Harwood Avenue South

PRESENTATIONS

Alternative formats available upon request by contacting:

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Anything in **blue** denotes an attachment/link. By clicking the links on the agenda page, you can jump directly to that section of the agenda. To manoeuver back to the agenda page use the **Ctrl + Home** keys simultaneously

4. Delegation and Presentations / Public Hearings

4.1 Ontario Lottery & Gaming (OLG) 10th Anniversary Recognition ~ Rachael Matheson, Senior Communications Officer – Government Relations

4.3 Anaerobic Digestion Project Update ~ Mirka Januszkiewicz, Director of Waste Management Services

Ajax Council Celebrates 10 Years of Partnership with OLG



Smart Spending

Audley Road

2

Investing in Positive Growth



Investing in Positive Growth

Ajax Fire Headquarters

Engaging the Community

Canada Day

Contributing to UG Shared Goals

AJAX

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Pat Bayly Square

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Anaerobic Digestion Study Update

Mirka Januszkiewicz Craig Bartlett Regional Municipality of Durham Ontario, Canada



Ajax Community Council October 17, 2016



Program	Percentage
Blue Box	20%
Green Bin	12%
Leaf and Yardwaste	12%
Multi-residential recycling	1%
Other diversion programs	7%
Other program adjustments	3%
2015 Diversion Rate	55%

History of Organic Waste Diversion in Durham

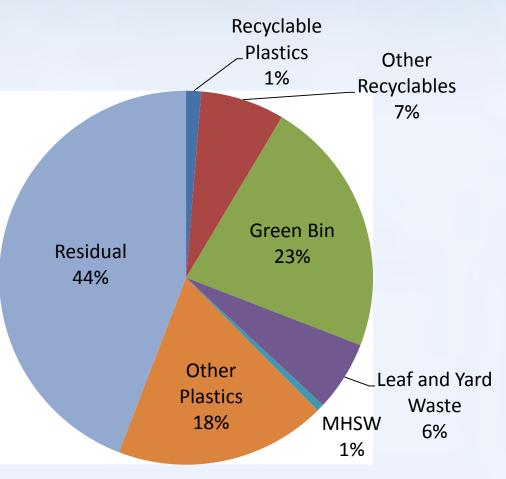


- Green bin program for residential food waste started in 2004 and launched Region-wide in 2006
- All single family homes are provided green bin service for majority of organics generated
- Durham aerobically composts 60,000 tonnes of kitchen organics and leaf and yard waste annually
- Aerobic composting is at capacity
- Cannot process expanded suite of organics (i.e. pet waste, diapers, sanitary waste) or organics with high contaminants (i.e. from multi-residential sector)

What's remains in the waste?



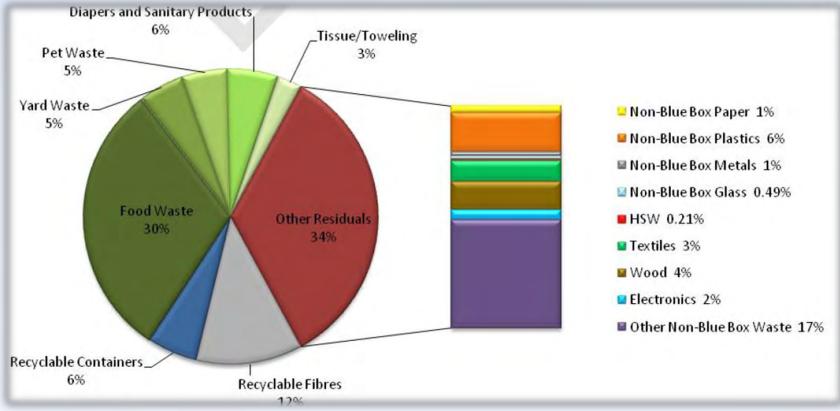
Household garbage contains over 50% divertible material!



Source: "Region of Durham Large Blue Box Container Study, AET, 2011

Multi-Residential Waste Composition





Multi-residential garbage contains almost 70% divertible material (50% organics)!

Source: extrapolated from "Region of Durham Multi-residential Waste Composition Study, AET, 2013

Anaerobic Digestion and Pre-sort/transfer Study underway to confirm:

- DURHAM REGION
- New pre-sort technologies are efficient and effective for extracting recyclables and organics from residual waste stream
- 2. AD can process organics into methane gas, water and digestate
- 3. Durham generates enough organics to justify its own pre-Sort/AD facility
- 4. Potential energy partner(s) to maximize the energy output, financial and environmental benefits of AD
- 5. AD's contribution to Durham's GHG reduction targets and capitalize on Cap and Trade opportunities

Questions to be answered:



- 1. Reconfirm that AD with Pre-Sort is viable for Durham Region.
- 2. Which AD technology is best for Durham (dry stackable, dry, wet)?
- 3. Which waste streams should we treat with AD (multiresidential, single-family, both)?
- 4. How to phase in treatment of waste streams? (i.e. multi-res first? single family first? or implement all at once?)
- 5. What type of energy should we generate (raw gas, renewable natural gas, electricity)?
- 6. Does Durham need an energy partner to maximize the energy output and financial benefits of AD? Who?
- 7. What is the highest and best use for digestate?



The 2016 AD business plan study will;

- Complete an options analysis to re-confirm AD with Pre-Sorting is the best management option for Durham
- 2. Determine a preferred business model for the most effective and efficient source material pre-sorting option, highest diversion potential, highest value AD fuel output, with lowest net cost and budget and tax implications for the Region

Next Steps



<u>Part 1</u>

Fall 2016

- 1. Complete options analysis
- 2. Identify preferred technologies
- 3. Identify preferred outputs (energy type, fertilizers)
- 4. Develop business model recommendation
- 5. Identify best type of energy partner based on above evaluations
- 6. Report to Council

<u> Part 2</u>

2017 (pending Council approval)

- 1. Negotiate with energy partners
- 2. Develop RFP and initiate procurement process



Thank-you

Mirka Januszkiewicz

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