

Organics Program Update

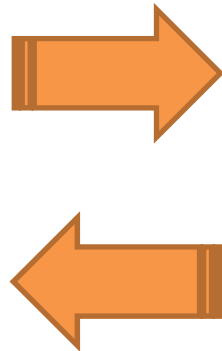
City Council Meeting

August 27, 2018

Processing RFP



Negotiation RFP



Organics Program

How the Green Cart program works



[Learn the basics about the Green Cart program.](#)

Using your green cart



[Learn how to use your green cart](#) and other tips to keep it clean and tidy.

What goes in the green cart



All food, yard waste and pet waste goes in the green cart. [See a complete list.](#)

Compostable bags and alternatives



[See a list of approved compostable bags](#) and other pail liner options.

Composting facility



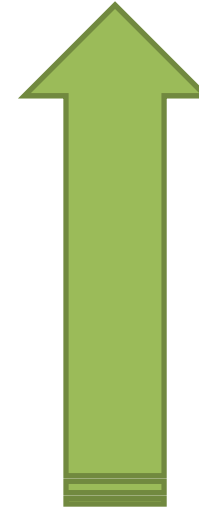
[Learn about the facility that will compost the Green Cart material](#) and how it works.



Engagement Results: Participation

- Collection frequency
- Bags (plastic)
- “Ick” factor, odours
- Freezing
- Kitchen receptacles

GHG savings from incremental participation rates significantly exceed the impacts of collection trucks



Participation Rate
Organic Material Capture Rate
Waste Diversion
GHG savings

Bags

- Kitchen Receptacles
- Cart(s)
- Yard
- Pet Waste

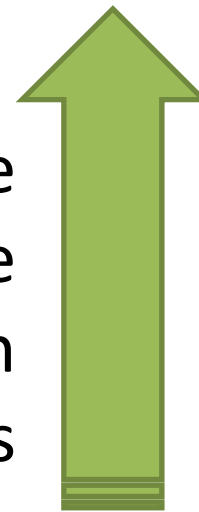


<https://goo.gl/images/opx5om>



<http://www.treetopproducts.com/tp-pet-waste-bag-dispenser>

Participation Rate
Organic Material Capture Rate
Waste Diversion
GHG savings

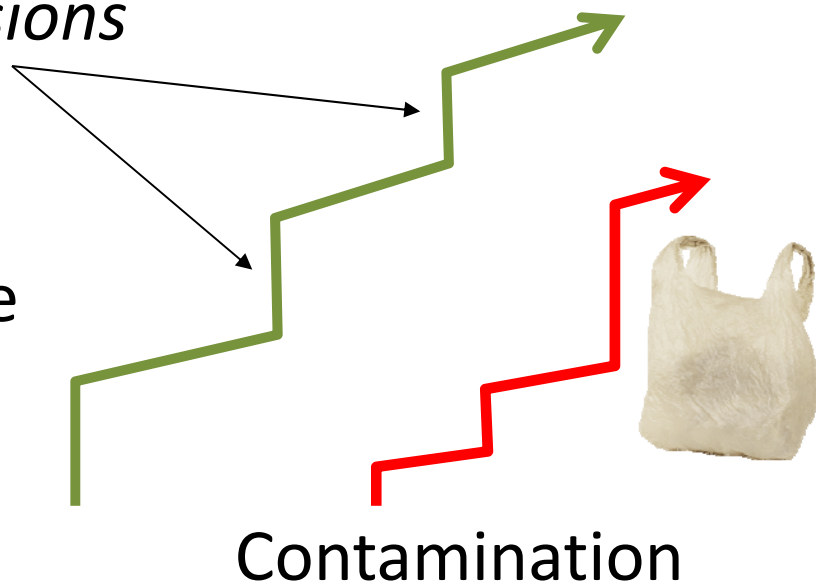


Contamination

+ High quality outputs

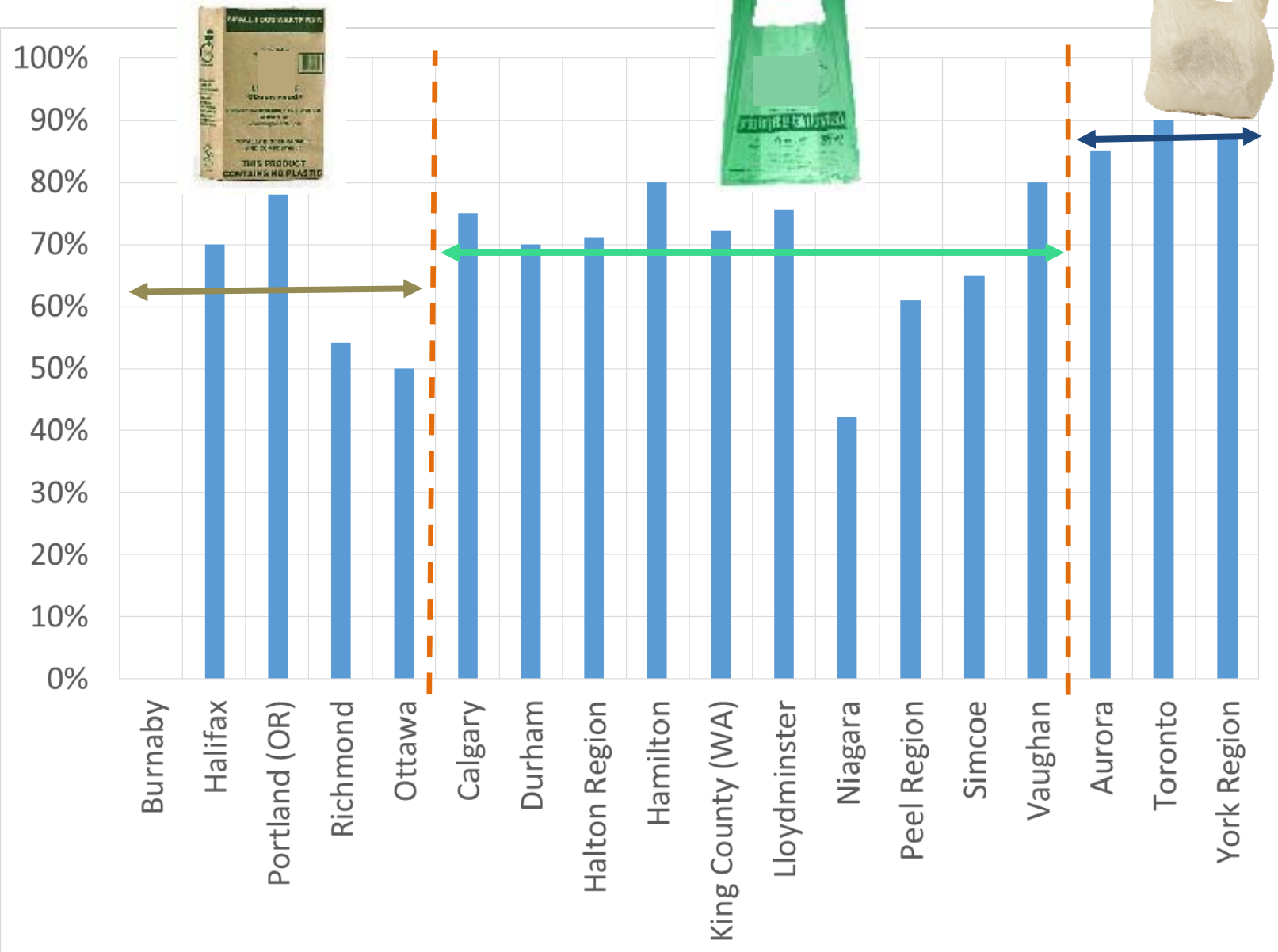
*Program Design
Decisions*

Participation Rate
Organic Material Capture Rate
Waste Diversion
GHG savings



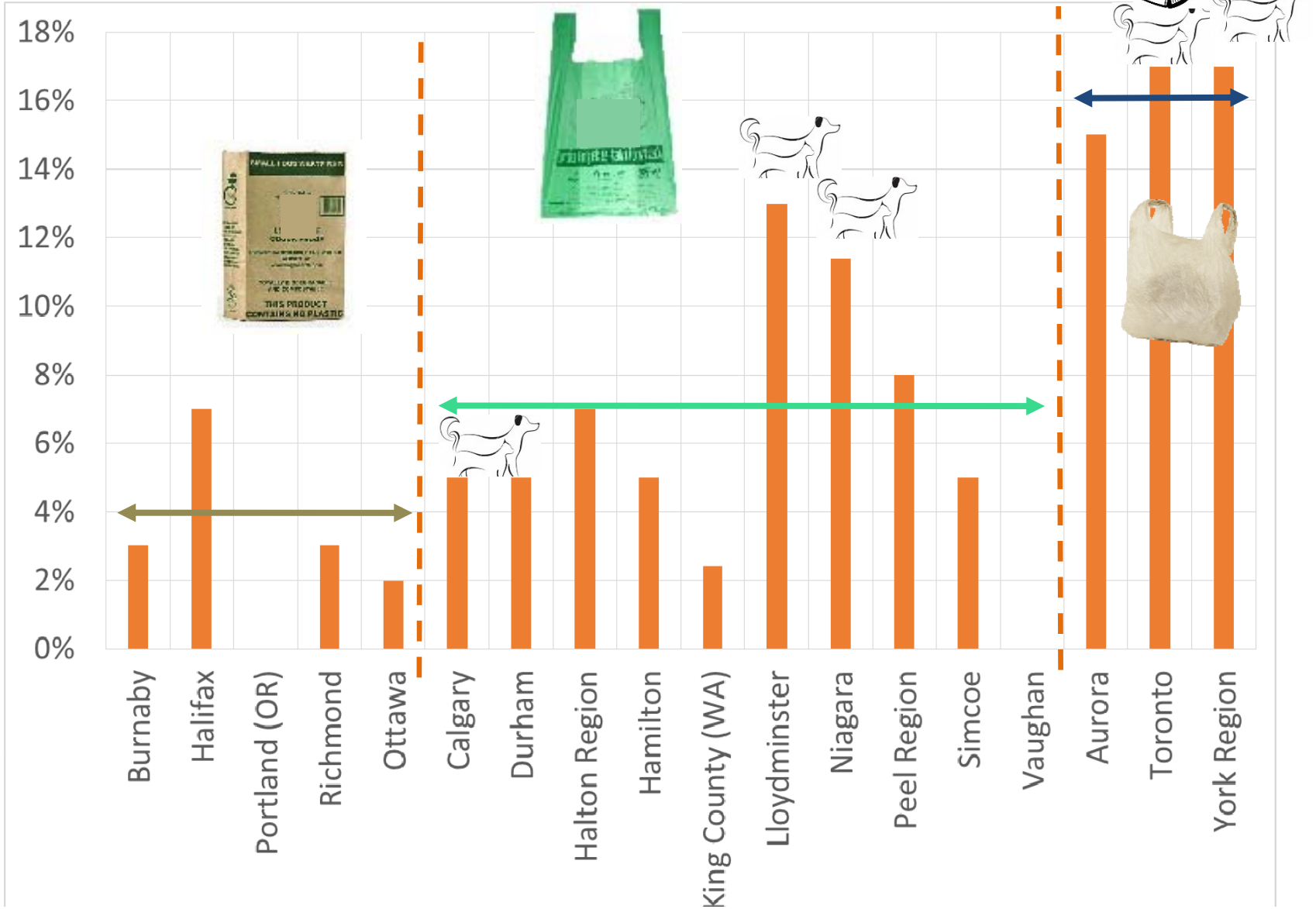
Participation Rates

	Kraft	Compostable Bags	Plastic
Avg Participation	63% ± 13%	69% ± 11%	88% ± 4%



Contamination Rates

	Kraft	Compostable Bags	Plastic
Avg Contamination	4% ± 2%	7% ± 3%	16% ± 1%



Organics Program

1. Role of bags

- RFP contains top two recommended approaches (kraft and compostable), one optional approach (plastic)
- Not mandating compostable bags

2. Materials to accept

- RFP contains mandatory minimum requirements,
- 1-3 optional materials (pet waste)

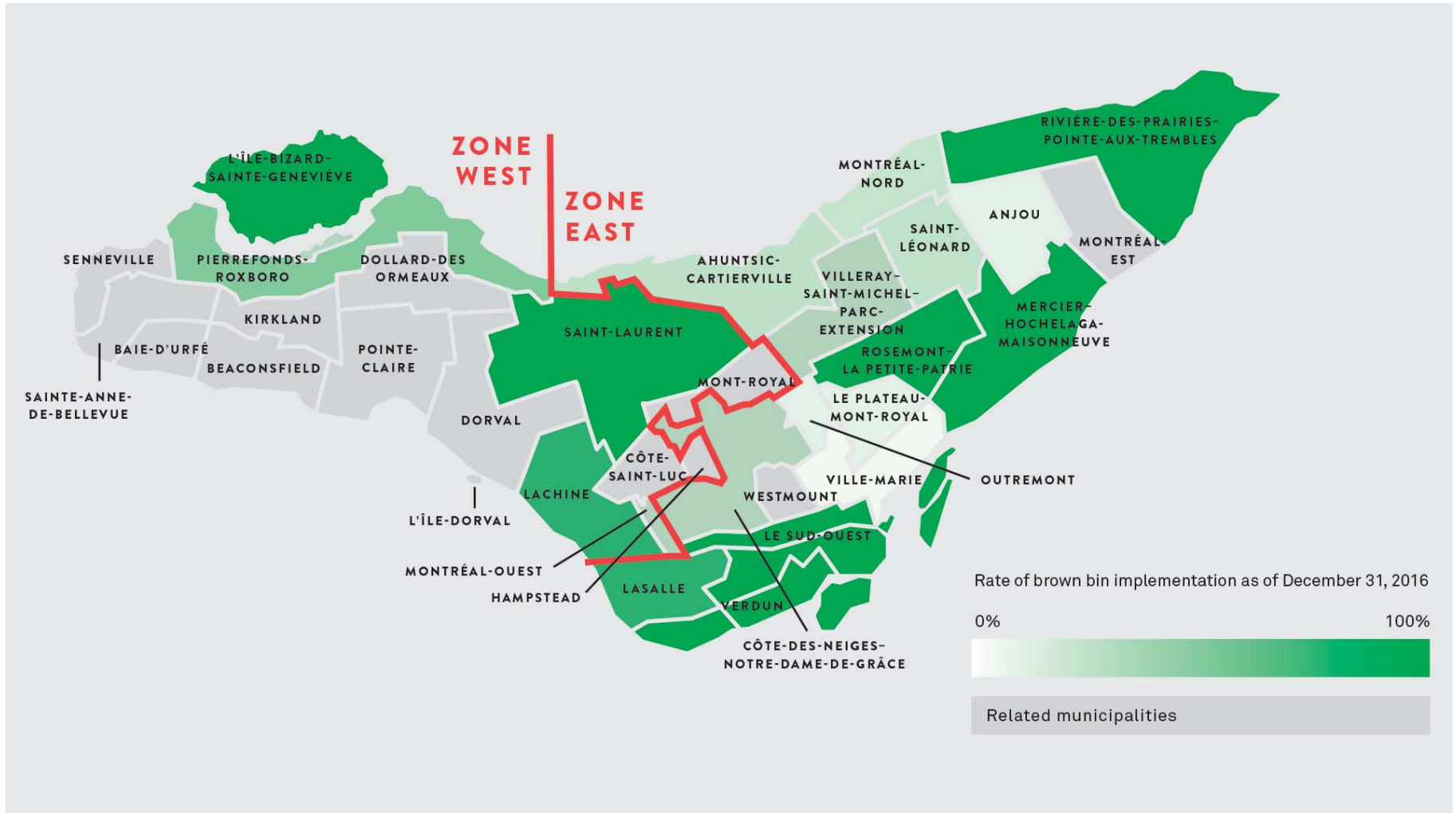
Pet waste:

- 7% of black cart contents, 9% of organics





Montreal Organics Collections



http://ville.montreal.qc.ca/portal/page?_pageid=7418,142596054&_dad=portal&_schema=PORTAL

Organic Materials in the Black Bin (2016)

	Winter	Summer	Fall	Avg % Waste	Avg % Org
Food Waste	44%	18%	50%	38%	44%
Yard waste	1%	45%	1%	16%	47%
Pet Waste	8%	4%	10%	7%	9%
Diapers and Sanitary Products	8%	N/A	9%	7%	
Total compostable waste	53%	67%	61%	61%	100%

Depackaging Technology



www.agrivert.co.uk



<https://goo.gl/images/JDkTb7>



<https://goo.gl/images/LQw8K3>

Waste Diversion Plan

- Ottawa: Subscription program for diapers and sanitary products
- Vancouver, Port Moody, Waterloo, Ottawa, Mississauga all have or are piloting pet waste bins in parks
- Calgary: Private company offers fee for service to composts all disposable diapers, offers a collection service on the same scheduled days of garbage pickup, with options to increase/reduce collection frequency

Pet Waste

- End product may not meet the fecal coliform standards required for Grade A compost
- However, facilities can process pet waste successfully.
- Public perception of using a compost product that contained pet waste can be negative.
- Pet waste is generally bagged
 - Kitty litter



“Biodegradable”
“Green” (100% recycled plastic)

Compostable Bags

.. a survey was conducted to determine why the collection of source-separated organic waste was not popular. Among the reasons cited by citizens were:

1. The paper bags required to contain the food wastes let liquids pass through,
2. Odors, and
3. The cleaning of the food waste container was not hygienic and took too much time.

These problems have largely been resolved through the utilization of certified compostable bags.

CBA

Public Demand	Public Opinion on Bag Option	Which bagging option do residents demand the most? (1 is lowest demand and 5 is highest demand)
Capture Rate & Participation	Quantity of organics collected & participation by residents	Is the bagging option likely to result in a higher quantity of divertible materials being collected through the organics program and/or a higher level of participation by residents? (1 is lowest quantity and 5 is highest quantities)
Contamination	Contamination & residue	Is the bagging option likely to reduce the amount of contamination (rejected loads/pre-processing issues) and/or levels of residue (what is screened out post-processing)? (1 is high contamination, 5 is low contamination)
Precedents	Similar Jurisdictions	How many similar jurisdictions use the bagging method and how many have achieved over 50% diversion rate? (highest number is best)
Program Flexibility	Ability to change the bagging option	How difficult will it be to change the bagging option in the future? (1 is very difficult and 5 is least difficult)
Winter Collections	Collection Issues Due to Freezing	Is the bagging option likely to result in fewer collection issues due to materials freezing in winter? (1 for no difference from loose materials, 5 elimination of freezing issues)
Compatibility	Adoptable with programs for MU & ICI	Is the bagging option likely to be compatible with the preferences/demands for the MU and ICI programs? (1 is not compatible, 5 is very compatible)
Education and Enforcement	Education	Does the bagging option require greater public education effort to achieve a high level of resident compliance (1 is significant effort, 5 is lower effort)
	Enforcement	Does the bagging option result in a high level of bylaw infractions or other enforcement challenges (1 is high infractions/challenges, 5 is low infractions/challenges)
Complexity	Launch and Operational Complexity	Does the bagging option increase the complexity of program launch or operation? (1 is higher complexity, 5 is lower complexity)

RFP

- Not specifying the processing technology
- Private Sector:
 - Find their own receiving site within 30 km
 - Site, design, permitting, etc.
 - Storage and marketing of outputs
- Evaluate total program operating costs
 - Consideration of longer hauling distances
 - Preferential rate to buy back compost
- Collection vehicles driving onto a tip floor, into a building, etc. (Receiving Site)
 - Assuming the “Collector” is the City

RFP

- Proposals that can demonstrate lower schedule risk and faster implementation schedules will be awarded greater points.
 - January 1, 2020
- Quality of the end product
 - Human and environmental
 - Citizens getting compost back from the processor
 - Assumption is that rates will be better if program decisions enable an end product that has market value

GHG Emissions

