

Source Separated Organics and Leaf & Yard Collection

*“The Important Role of Certified Compostable Bags
In The Diversion of Leaf & Yard and Organic Wastes”*



Introduction

- Organics (and Leaf & Yard waste) make up over 1/3rd of the municipal waste stream.
- To achieve higher landfill diversion rates, many municipalities are now implementing collection programs for this organic stream
- The use of Certified Compostable bags can help make these programs as effective as possible
- Certified bags have been successfully used in community collection programs around the world for more than a decade.
- This presentation will give the facts on Certified Compostable Bags
- **Based on the facts, residents should have the choice to use certified compostable bags**

● ● ● | Compostable Bag Applications

Certified Compostable Bags Used Successfully In:



Kitchen Bin Liners



Green Bin Liners



Leaf & Yard Waste



Standards Exist

Canadian BNQ and ASTM Standards exist for Certified Compostable Bags requiring:

- Disintegration into small particles so no remnants remain to clog screening equipment in 84 days, or less (on par or faster than kraft paper bags)
- Safely biodegrade in 180 days or less leaving no visible or toxic residues so the compost can support plant growth

Two Agencies Certify Bags for Conformity with Standard

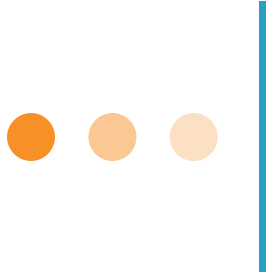
- Certification is done by two North American independent third party organizations BPI & BNQ
- Getting certified provides proof that manufacturers conform to composting standards
- When certified, manufacturers are allowed to use the composting “**Mark of Certification**” on bags & outer packaging
- Municipalities, citizens and commercial operations can look for the “**Mark of Certification**” when purchasing compostable bags

[Biodegradable Products Institute \(BPI\)](#)



[CAN/BNQ 0017-088](#)

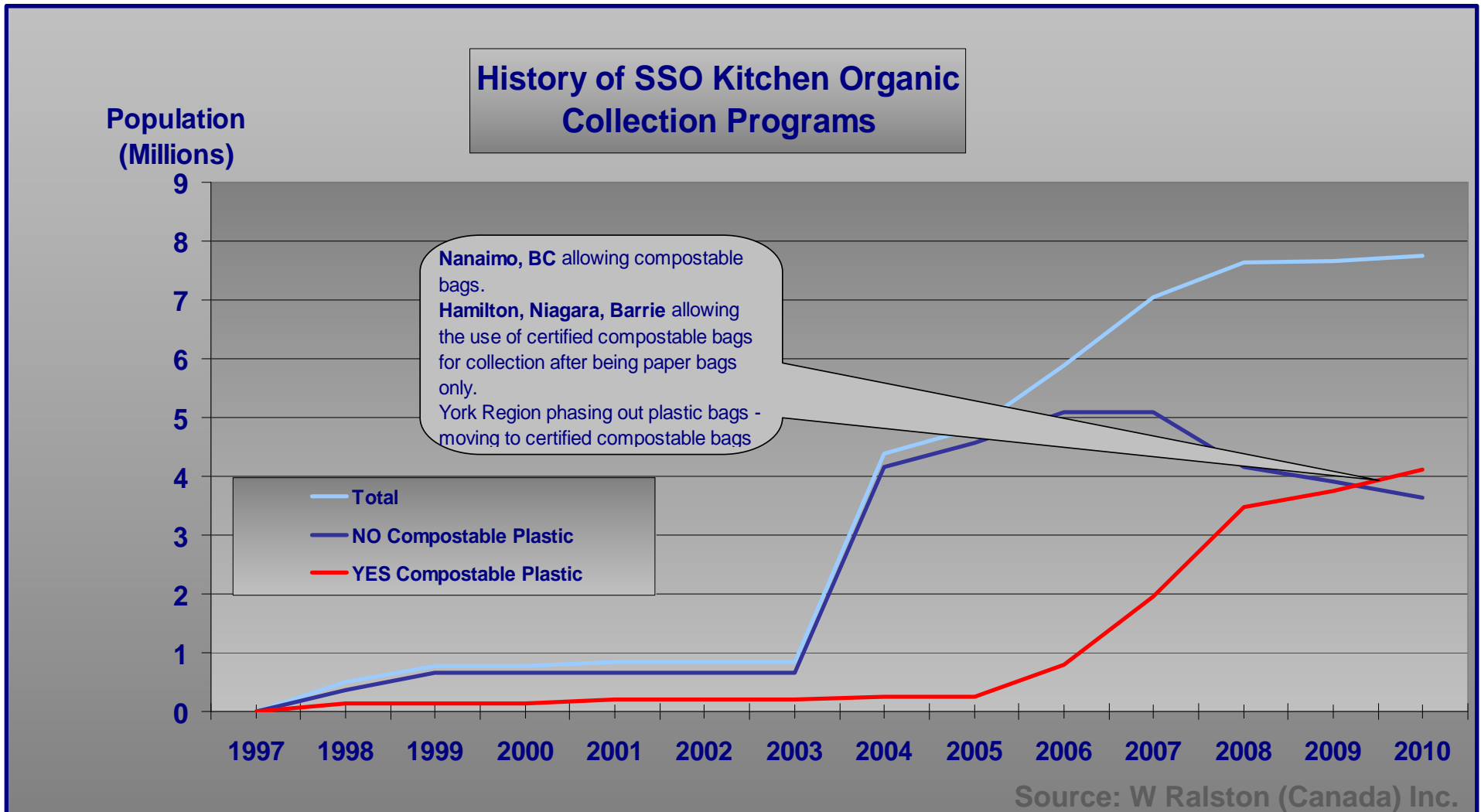




Composting Industry Has Invested in Compostable Bags

- Producers have invested in the development of resins to meet composting standards
- 30 companies have compostable bags certified by BPI & BNQ
- Commercial organics processing facilities have invested in advanced technology to process and manage incoming L&Y Waste and organics in certified compostable bags and paper bags
- Municipal & Commercial collection programs invested in communication & education programs

4.3 Million Canadian Households Using Certified Compostable Bags



Municipalities

Working together with retailers to offer Certified Compostable Bags

- Letter represents three million residents

- Durham Region
- City of Hamilton
- Peel Region
- Niagara Region
- Halton Region

Organics recycling

February 2008

Subject: Joint Municipal Initiative for Compostable Liner Bags - Organics Recycling Programs

Dear Retailer:

The Regions of Durham, Halton, Niagara and Peel, and the City of Hamilton, which represent over three million residents in Ontario, have formed a joint initiative on compostable bags for organics recycling containers.

These five municipalities have or are in the process of introducing organics recycling programs in their regions. Organics collection programs enable residents to recycle their food waste and soiled paper products for centralized composting.

Household organic material can be wet and odorous. To encourage participation, residents are permitted to use paper and certified compostable liner bags to line their kitchen containers and/or green bins.

Residents in these municipalities are not permitted to line their organics containers with non-compostable plastic bags, such as shopping/grocery carry-out sacks or special purpose plastic liner bags. Non-compostable plastic bags do not break down and contaminate the finished compost.

We are asking you to stock certified compostable liner bags, and paper liner bags specifically designed for municipal organics programs in your stores.

To assist you in listing the acceptable products, certified compostable liner bags are identified by the following logo from the Biodegradable Products Institute (BPI):



The Bureau de normalisation du Québec (BNQ) is in the process of developing a Canadian logo which will also be acceptable in our programs. We will notify you once the logo is issued. Compostable liner bags with the BPI or BNQ logos conform to industry acceptable standards for 100 per cent compostable products.

Only certified compostable plastic liner bags carrying these logos are accepted in the Joint Initiative municipalities' organics programs. Please note, paper liner bags are accepted in our programs but do not carry these logos.



Benefits of Certified Compostable Bags

To Citizens

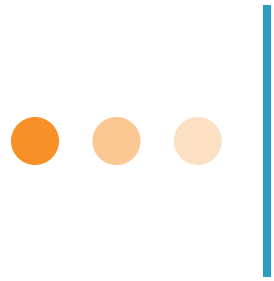
- **Compostable bags reduce the “Yuck Factor” by containing liquids, odours & reducing insects, pests, clumping of organics:**
 - Contributes to the success and convenience of SSO programs
 - Can significantly increase recovery rates
- **Easily identifiable by their certified compost “Mark of Certification” and appearance**
- Puncture and tear resistant
- Secure and convenient to use
- Fits and conforms to regular organic collection containers



Benefits of Certified Compostable Bags

To Waste Collectors

- Easily recognized at curb or in the bin from regular bags – labeled with **BPI & CAN/BNQ “Mark of Certification”**
- Translucent to view contents
- Bag breathes to reduce moisture content up to 25% in five days - to mitigate odorous anaerobic conditions
- Weather resistant



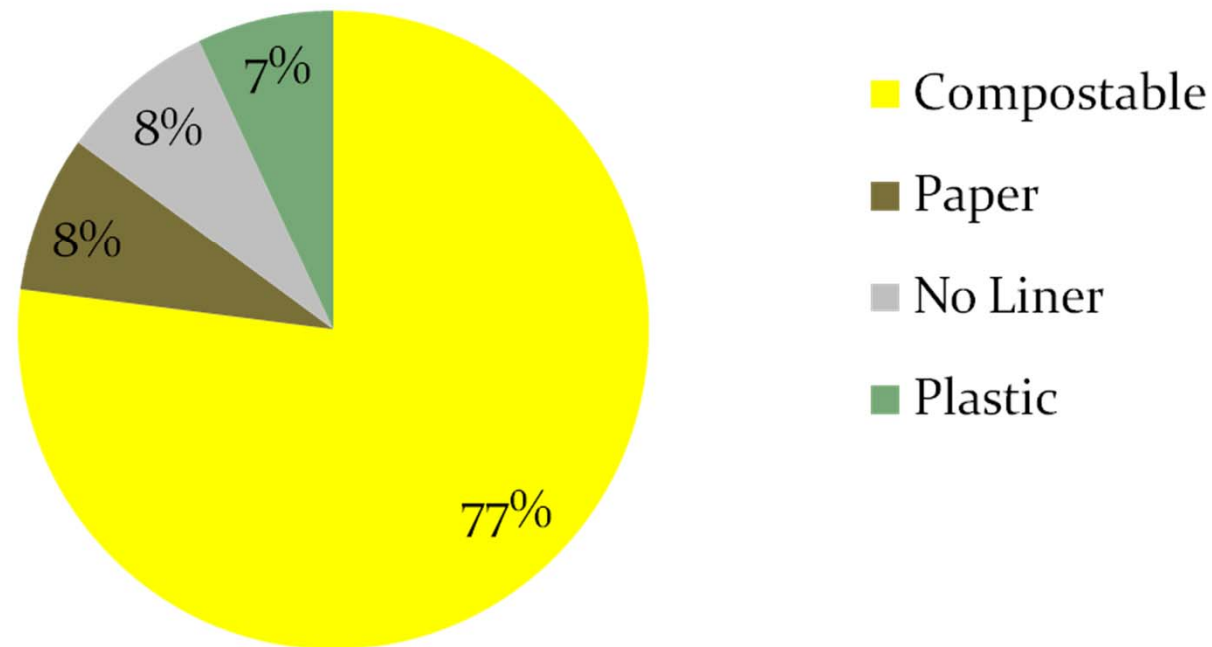
Benefits of Certified Compostable Bags

To Commercial Compost Facility Operators

- No debugging required
- Treated the same as the organic contents
- Becomes part of the compost produced
- Halton Region Report PPW82-05 on All Treat Farms – *“with the introduction of the compostable plastic bags, there has been no increase in contamination levels and they are breaking down effectively in their system.”*

When Given a Choice, Citizens Preferred to Use Compostable Bags

Organic Material Set-out method
(inside curbside bin) %



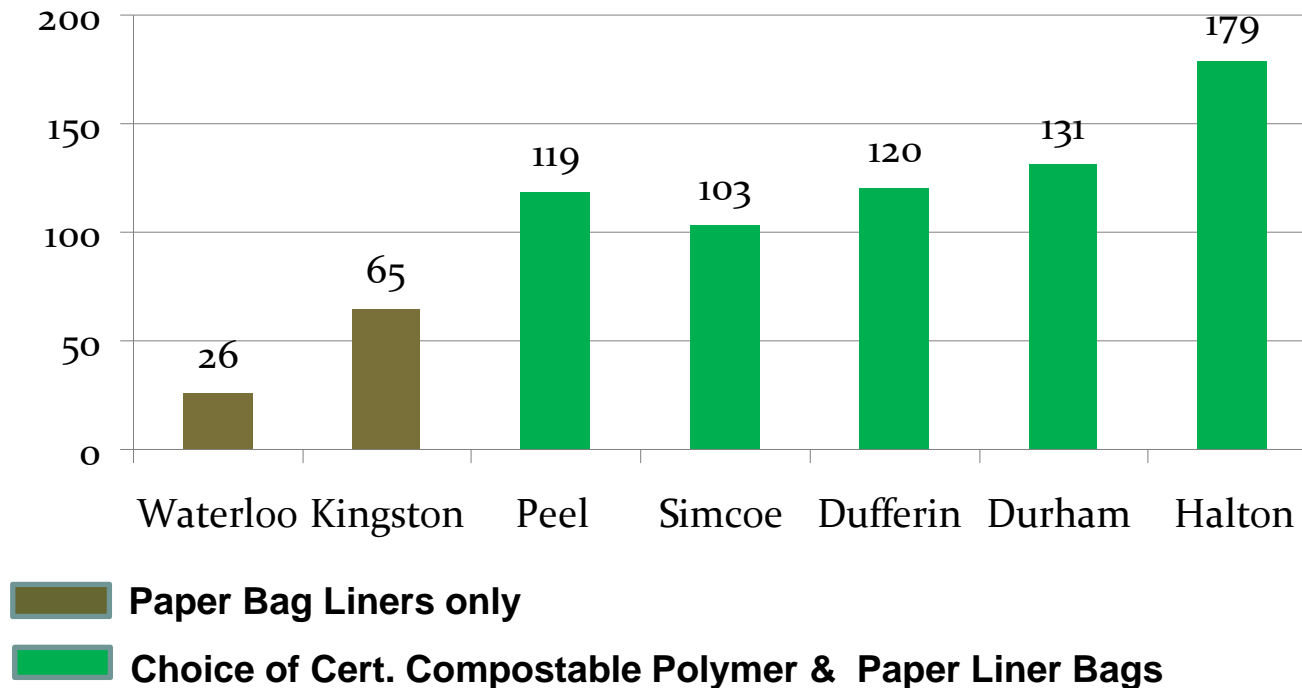
Source: Region of Halton, Waste Management Dept. Sept 18, 09

Diversion Benefits

“Giving Citizens a Choice”

Municipal SSO (Food) Program Capture Rate Comparison

SSO (food) Collected - HHL / Yr (kg's)



Source: VisionQuest at US Composting Council AGM January 26th, 2011



Municipal Testimonial (1) - on the Benefits of Certified Compostable Bags

- **Municipal Comment - June 9, 2010 - Andrew Pollock, Director, Waste Management Services, Niagara Region**

“I would like to confirm that use of certified compostable plastic bags for lining kitchen organic containers and Green Bins is considered essential feature of Niagara Region’s Green Bin Program. Certified compostable bags offer residents an affordable, low cost solution to address the “yuck factor” associated with food waste composting. These bags also break down quickly in the composting process and do not contribute to odour conditions. Any decision by the Province to ban the use of certified compostable bags in municipal Green Bin programs would have a significant negative impact on program participation levels and overall municipal waste diversion performance.”



Municipal Testimonial (2) - on the Benefits of Certified Compostable Bags

- **Municipal Comment - June 23, 2010 – *Rob Rivers, Director, Waste Management Services, Halton Region***
- The Regional Municipality of Halton supports the continued acceptance of Biodegradable Products Institute (BPI) certified compostable bags in source separated organics program.
- Initial participation in the program was low, and residents were enquiring why compostable plastic bags were not accepted in the program.
- A telephone survey from November 2005 revealed that residents felt a barrier to participating in the Green Cart program was inconvenience (Council Report PPW07-06). Halton began to accept certified compostable bags and participation rates increased.



Municipal Testimonial (2)

Halton continued

Municipal Comment - June 23, 2010 – *Rob Rivers, Director, Waste Management Services, Halton Region*

- Participation studies conducted in 2009-2010 show that nearly 80% of households are using BPI certified compostable bags, 8.5% are using paper products, and 6.5% are not using any liner.
- As Halton prepares to pilot the Green Cart program in multi-residential buildings, tenants, superintendents, and property managers have all expressed that the use of certified compostable bags will make participation more convenient.
- With 500 buildings in Halton, the exclusion of certified compostable bags from the program would greatly hamper these residents' abilities to divert waste away from the landfill. Preventing the use of BPI certified compostable plastic bags would place an increased financial burden on residents that prefer to use a bag liner for sanitary reasons.
- Halton Region has implemented the Green Cart program into 95 publicly-funded schools, with a goal to have the program in all schools by 2012. Waste audits indicate that schools are diverting 55% to 90% of their waste away from the landfill as a result of the program. Schools and school boards have indicated they would not participate in the program without the use of the certified compostable bags. The use of the Green Cart program in schools reinforces waste diversion practices at home.



Certified Compostable Bags for Leaf & Yard (L&Y) Programs

“Another Choice for Increased Participation and Diversion of Leaf and Yard Wastes”

Certified Compostable L&Y Bags an Additional Collection Choice

- Certified to Compost By Independent Third Party Organizations (BPI, BNQ)
- Standards:
 - ASTM D6400
 - CAN/BNQ 0017-088





Leaf & Yard Waste Choice of Bags Encouraged

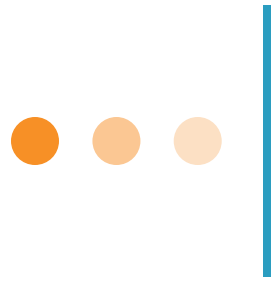
- We recommend a choice of bags that includes certified compostable bags be offered as long as the bags meet BNQ & BPI standards for compostability.
- Will assist in greater participation, waste diversion and satisfaction in L&Y waste programs.



Certified Compostable L&Y Bags An Additional Collection Choice

Certified Compostable Leaf & Yard Bags benefits include:

- **Easily identifiable by their certified compost “Mark of Certification” and appearance**
- Resist tearing, punctures and do not propagate tears
- Not affected by rain or by sitting on wet grass
- Bags breathe helping to keep materials aerobic
- Very practical for citizens and commercial operations to use in the extended waste collection cycles.
- Citizens and collectors are already used to handling bags
- Excellent environmental, collection and composting performance



Jurisdictions Using Compostable L&Y Bags

- Niagara Region
- Fundy Region
- Cape Breton
- Lunenburg, NS
- Cold Lake, AB
- London, ON
- Houston, Texas
- Minneapolis, Minnesota (State-wide 2013)



Summary

- Certified Compostable Bag Technology is proven for use in municipal and commercial composting operations
- Giving participants a choice which includes certified compostable bags, helps support higher participation in diversion of Source Separated Organics and Leaf & Yard wastes
- Third party agencies are in place to certify compostable bags

Additional Information & Links to Certified Compostable Bag & Resin Suppliers

Independent Third Party Organizations

The BNQ

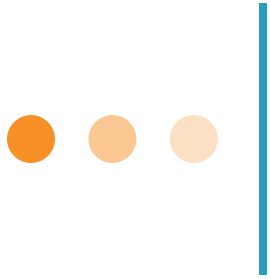
- The Bureau de normalisation du Quebec (**BNQ**) is accredited by the Standards Council of Canada (SCC) as a Standards Development Organization and a Certification Body:
- **Link:** www.bnq.qc.ca



The BPI

- The Biodegradable Products Institute (BPI) is a professional association of key individuals and groups from government, industry and academia, which promotes the use, and recycling of biodegradable polymeric materials (via composting).
- **Link:** www.bpiworld.org





Acknowledgements

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