Plastic Shopping Bag Management in Newfoundland and Labrador Status and Options



Revised February 2018

Contents

Background 1
Plastic Shopping Bag Product Characteristics
Plastic Shopping Bag Management Alternatives
Current Plastic Shopping Bag Management in Newfoundland and Labrador
Alternative Plastic Shopping Bag Management Activities in Canada
Review of Alternative Plastic Bag Management Activities
Bag Levies or Fees
Landfill Bans
Curbside Collection9
Extended Producer Responsibility (EPR)9
Return-to-Retail10
Distribution Bans11
Summary13

Background

On October 4th, 2016, at the request of Municipalities Newfoundland and Labrador (MNL), Minister Trimper (formerly Environment and Climate Change) and Minister Joyce (formerly Municipal Affairs) met with MNL representatives to discuss an MNL resolution to request that the Province of Newfoundland and Labrador prohibit all retail stores from distributing single-use plastic shopping bags.

During this meeting, the Ministers committed to reviewing the merits, logistics, and legislative aspects of banning the distribution of plastic shopping bags. However, it was also made clear that though MNL are seeking a provincial ban, this review would also consider the merits of other policy alternatives that could achieve the same or similar ends.

Ministers directed the interdepartmental Waste Management Steering and Technical Committees to conduct this review. In keeping with this direction, the Technical Committee (composed of senior officials from Municipal Affairs and Environment (MAE), Service NL (SNL), and Multi-Material Stewardship Board (MMSB)) initiated a review process to compile an internal discussion document on the issues associated with single-use plastic shopping bags as well as the merits of a ban and other alternatives.

As part of this process, the Technical Committee held a technical consultation with MNL on December 9th, 2016. The purpose of this meeting was to receive information and research used by MNL to form the rationale and to define the merits of implementing a provincial ban. At the meeting, MNL provided the Technical Committee with anecdotal information, web links to programs in other jurisdictions and a list of websites related to plastic bags. The Technical Committee advised MNL that it would conduct further research, complete its review, and advance a discussion document to senior management for their consideration and next steps.

Subsequent to the publicizing of the MNL resolution in September of 2016, the following positions on the banning of plastic shopping bags have been made publicly:

- On September 26, 2016, the Canadian Federation of Independent Business submitted a letter to the Ministers of MAE and SNL stating they did not support a provincial ban and instead proposed an investigation of this and other alternatives.
- In November of 2016, a non-binding motion was passed by the Liberal Party to urge the Government to implement a complete ban on plastic shopping bags.
- On December 15, 2016, the Retail Council of Canada submitted a letter to MMSB presenting issues that it perceived with the appropriateness and feasibility of a provincial ban and suggested that alternatives be investigated.



- The Minister of MAE has received written correspondence from individual municipalities and individual stakeholders supporting a ban on plastic shopping bags.
- On April 4, 2017 the Canadian Federation of Independent Grocers (CFIG) submitted a letter to the Minster of MAE stating their opposition to a ban or a fee and suggested instead that CFIG enter into a non-binding agreement with the provincial government to reduce the number of bags.

Since December of 2016, the Technical Committee, through MMSB, has consulted with the Government of NL, all other provincial/territorial jurisdictions, industry association representatives and local industry representatives on the issues surrounding the management of plastic shopping bags. MMSB has also conducted research into international best practices in the management of plastic shopping bags.

This document is intended to provide a balanced and informed background for discussion on the issue of plastic shopping bag management within the greater context of legislative authority, current and planned waste management practices, environmental stewardship and economic reality.

Plastic Shopping Bag Product Characteristics

Plastic shopping bag:	A plastic film bag with the intended one-time use of transporting consumer goods from the point-of-purchase to the home. This does not include a number of other types of plastic bags (e.g. bags used to contain or protect loose grocery goods like apple bags, bread bags, shellfish bags, etc.).
Average size:	8 grams/bag (0.0176 lbs/bag)
Material composition:	Plastic, low and high density polyethylene (LDPE #4, HDPE #2).
Average annual provincial generation:	100-120 million bags/year which weigh 2,112,000 lbs.
Per centage of total household waste:	Plastic shopping bags make up less than 0.2 per cent of all waste generated in NL annually.
Local market production:	No plastic shopping bags are produced in NL.
Per centage of roadside litter:	Plastic shopping bags make up 6 per cent of large litter found along the roadways in NL.



Impact on marine life:	According to Dr. Max Liboiron, who studies the impact of plastics on marine life in NL, hard and thread plastics, not film plastic such as plastic shopping bags, are the most prevalent plastic in the stomachs of marine life.
Commodity market value:	\$0.022/lb - curbside collected plastic shopping bags \$0.038/lb - return-to-retailer collected plastic shopping bags
Provincial market revenue potential:	\$46,000-\$79,000/year.
Cost to transport to market:	Approximately \$42,000/year
Current return-to-retailer locations:	 Currently there are 28 return-to-retailer locations: Avalon = 16 Central = 3 Western = 5 Northern Peninsula = 0 Green Bay = 1 Burin Peninsula = 1 Labrador = 2
Current return-to-retailer collection:	4.3 million plastic shopping bags/year (75,000 lbs) or 3.5 per cent of all plastic shopping bags distributed in NL.
Landfilling:	Over 96 per cent of plastic shopping bags are landfilled in NL.

Plastic Shopping Bag Management Alternatives

Distribution ban:	Prohibiting, through municipal by-law or provincial legislation, the distribution of certain types of plastic shopping bags within a given jurisdiction.
Landfill ban:	Prohibiting the disposal of certain types of plastic shopping bags in landfills through legislation.
Fee or levy:	An environmental levy on the distribution of plastic shopping bags. Levies can be voluntary or mandated through legislation.



Return-to-retail:	The collection of used plastic shopping bags by distributors at the point of purchase. Return-to-retail can be voluntary mandated through legislation.			
Curbside recycling:	Collection of plastic shopping bags through a curbside recycling program.			
Landfilling:	The burial of plastic shopping bags in landfills.			

Current Plastic Shopping Bag Management in Newfoundland and Labrador

Bans

The Towns of Nain, Makkovik and Postville all instituted bans on the distribution of grocery bags while grocers on Fogo Island adopted a voluntary ban on plastic shopping bags, and instead provide paper bags to customers.

Reuse

The extent of plastic shopping bag reuse is not currently known for NL. However, the Canadian Plastics Industry Association estimates that approximately 40 per cent of all plastic shopping bags are reused in some form or another before being disposed.

Recycling

Plastic shopping bag recycling in NL is carried out through voluntary return-to-retail programs that are provided at select grocery stores throughout the province. As is the case with most non-regulated, voluntary recycling programs, participation in these return-to-retail programs is low, with less than 3.5 per cent of the plastic shopping bags distributed being collected each year. That is equal to two tractor trailer loads per year.

Plastic shopping bags are not currently collected through curbside recycling programs in NL. If they were, these bags would be processed with other plastic recyclables at material recovery facilities.

In spite of their low volume, plastic shopping bags get caught in the moving parts of processing equipment, and a result are costly to manage. Furthermore, plastic shopping bags have a relatively low end market value. As a result, this low-volume, low-value, high cost material has been excluded from curbside recycling programs in NL.



Landfilling

Over 96 per cent of plastic shopping bags are landfilled in NL. Landfilled plastic bags are easily compacted and take up relatively less space in a landfill compared with other packaging materials such as plastic foam or cardboard. When landfilled properly, this material will not leach into groundwater and will not generate methane. Given the windy climate of NL, the greatest challenge to landfilling plastic shopping bags is managing windblown debris.

At the Central Newfoundland Regional Waste Management Facility located in Norris Arm North, where roughly 40,000 metric tonnes of waste is managed per year, a 40 foot high and 2,130 foot long netting fence was installed to prevent windblown debris, such as plastic shopping bags, from migrating from the landfill into the surrounding environment. As a result, the surrounding environment is relatively free of plastic shopping bags.

At The Robin Hood Bay landfill, where over 200,000 metric tonnes of material is managed per year, there are forty 15 foot high by 24 foot long mobile litter fences that are moved around the working area to try to catch windblown debris. Additionally, the city installed a 30 foot by 265 foot wind fence in an area of the landfill where prevailing winds carry most of the windblown debris toward the trees and coastline that border the East Coast Trail. In spite of having 625 feet of fencing available, windblown debris, which includes plastic shopping bags and other plastic film, is caught up in the treeline surrounding the landfill site.

In keeping with the requirements of their respective certificates of approval, all landfill sites in NL must maintain the cleanliness of their site, including the periodic clean-up of plastic shopping bags and other windblown debris. It is unknown what proportion of the windblown debris that is caught in fencing or in tree lines is comprised of plastic shopping bags.

Litter

In July of 2016, MMSB completed roadside litter audits of 231 sections of road in the province. In all, 5,453 pieces of large, visible litter (greater than one inch square) were found during these audits. Of this large litter, roughly six per cent comprised of single-use plastic shopping bags; while take-out cups, their lids and straws, made up over 16 per cent (the second highest category behind other litter).



Alternative Plastic Shopping Bag Management Activities in Canada

						Bag Fees			Distribution Ban	
Province/ Territory	Landfill	Landfill Ban	Curbside Recycling	EPR	Voluntary Return-to- Retail	Voluntary	Provincial	Municipal	Provincial	Municipal
NL	•				•	•				•
NS	•	•	•		•	•				
NB	•		•		•	•				
PEI	•	•	•		•	•				
QC	•		•	٠	•	•				•
ON	•		•	٠	•	•		•		
MB	•		•	٠	•	•				•
SK	•		•	٠	•	•				
AB	•		•		•	•				•
BC	•	•	•	٠	•	•				
NU	•					•		•		
NWT	•				•		•			
YK	•		•		•					



Review of Alternative Plastic Shopping Bag Management Activities

Bag Levies or Fees

Levies or fees charged on the sale of plastic shopping bags are a policy tool designed to provide an economic disincentive for their consumption. The argument follows that if you increase the cost of a good (in this case a plastic shopping bag) beyond a certain point, the consumption of that good will decrease or cease all together.

As can be seen in the examples highlighted below, fees and levies can be very effective in reducing the number of plastic shopping bags consumed. However, how the fee is applied and how much you charge impacts the success of the program.

If the fee is set too low, then consumption will not decrease by a significant amount. If the fee is not charged by all players in the market, then consumers may migrate to competitors who do not charge a fee and plastic shopping bag consumption may remain constant.

Implementing a mandatory fee will require a moderate degree of administration when compared with other mandatory fee or levy programs such as the Beverage Container Recycling Program. Voluntary programs require no administration on behalf of the provincial government.

Once fees are collected, the question of how those fees will be invested must be answered. Should the fee rest with the distributor? Should the funds be earmarked as special purpose revenue and remitted to a government agent to be disbursed in the management of litter or waste management?

Examples

Northwest Territories (NWT)

In 2010, the government of the North West Territories created the Single-use Retail Bag Regulations under the Waste Reduction and Recovery Act which requires distributors to collect a 25 cent Single-use Retail Bag (SRB) fee and remit the SRB fees to the Environment Fund on a quarterly basis. These funds are special purpose funds that do not go into the NWT consolidated revenue fund.

SRB fees cover the program's administrative costs. Any excess revenue goes toward waste reduction and recovery programs and initiatives. The program currently generates between \$400,000-\$600,000 per year which is invested in new programs and pays for community waste reduction and recycling initiatives that are not currently regulated under legislation.

Since 2010, there has been a 70 per cent reduction in the number of plastic shopping bags distributed in NWT.



Exclusions from the fee include small bags for loose foodstuffs, fresh fish, poultry, meats, confectionary, dairy products, cooked food and prescription drugs.

Ireland

In 2002, Ireland introduced a 15 cent levy on the distribution of single use plastic shopping bags, including biodegradable bags. This levy was increased to 22 cents per bag in 2007. Funds collected from this levy are payable to the Irish government; are earmarked as special purpose revenue; and are invested in environmental and waste management initiatives through an environmental trust fund.

This policy decision was made primarily as a litter abatement initiative. Since the levy was put in place, the number of plastic shopping bags consumed per-capita has decreased from 328 to 14.

Exemptions are made for bags less than 22.5cm by 34.5cm that contain unpackaged or double bagged fresh fish, poultry, meats, nuts, confectionary, dairy products, cooked food and ice. Exemptions are also made for bags used to contain goods or products sold on board an aircraft or ship or in an area of a port or airport where passengers must have a ticket or boarding pass to enter. Bags designed for re-use must be sold to consumers for no less than 70 cents

Netherlands

In 2016, the government of the Netherlands prohibited the free distribution of plastic shopping bags and required that a fee be charged on every bag distributed. This prohibition did not prescribe the amount of money that distributors were expected to charge as a fee. Revenue from the fee rests with the distributor.

Exemptions were made for bags that were less than 0.015mm thick if they were airport duty free bags or bags to be used for the transport of unpacked or loose food stuffs, nuts, poultry, fish, and dairy products.

Loblaw

In 2009, Loblaw adopted a five-cent fee on all plastic shopping bags distributed in a select number of stores in Toronto as a pilot project. As a result of the fee, participating stores saw a 75 per cent reduction in the number of plastic shopping bags consumed. To build on the success of this pilot, Loblaw announced that it would expand the pilot to locations throughout Canada in 2009. A portion of the revenue from this initiative was to go to the World Wildlife Fund.

In NL, Loblaw adopted the fee in mid-2009. However, none of its competitors implemented the same fee. As a result, leading up to the Christmas season in 2009, Loblaw decided to remove the fee in NL citing lost market share attributed to the fee charged on plastic shopping bags.

Walmart

In 2016, Walmart Canada instituted a Canada-wide initiative to charge five cents on plastic shopping bags distributed at all of its locations. NL was the last jurisdiction to have this program put into place in January of 2017.



Under this initiative, five cents is charged on the first ten bags distributed to a consumer. Funds collected rest with Walmart Canada and a portion is invested in supporting local environmental initiatives. None of Walmart's NL competitors have followed suit.

Landfill Bans

Landfill bans that include banning plastic shopping bags are in place in NS, PEI, and BC. In NS and PEI, the landfill bans are provincial in scope, whereas in BC, the landfill bans are only in place in certain jurisdictions. Landfill bans are implemented to support jurisdictions where curbside collection is available.

Enforcement of a landfill ban requires onsite inspection of material that is brought to a landfill for disposal. This can be problematic as there are over 120 landfills in NL. Many of these landfills have no staff or enforcement capacity. Furthermore, until recently, all waste was placed in opaque black bags. As a result, there is little opportunity to determine if there are plastic shopping bags inside. With the advent of mandatory clear bag programs for waste collection, the enforceability of landfill bans may increase. However, this does not address the complications inherent in implementing a landfill ban in a jurisdiction where there are no recycling or diversion opportunities. If you ban it from landfill, it has to go somewhere.

Curbside Collection

Curbside collection of plastic shopping bags as part of a curbside waste diversion or recycling program is present in every province except NL. According to officials in NS and PEI, though landfill bans are in place, curbside collection programs only capture roughly 10 per cent of the plastic shopping bags generated in each of those provinces.

Though these materials may be collected in other jurisdictions, this is not to say that they should be collected. Certain materials were added to early curbside programs in Canada with little consideration to the environmental and economic cost of recycling. With the public now accustomed to placing these materials at curbside, it becomes difficult to remove problematic materials from programs as this may leave some with the perception that less is being done for the environment.

Through consultations with other jurisdictions, NL waste managers have learned that in spite of their low volume, curbside-collected plastic shopping bags get caught in the moving parts of processing equipment, and as a result, are costly to manage. These plastic shopping bags have a relatively low-end market value and it is unknown if the energy used in the collection, processing and shipping of this material from NL generates more greenhouse gases than the production of a new plastic shopping bag.

Extended Producer Responsibility (EPR)

QC, ON, MB, SK, and BC all have curbside recycling programs which are financed, whole or in part, by the packaging industry through Extended Producer Responsibility (EPR) legislation.

EPR legislation is a blanket approach to the management of all recyclables. Canadian EPR legislation for the management of printed paper and packaging (PPP) waste includes foam packaging, cardboard, other



types of plastic bags and plastic film and many other materials including plastic shopping bags. Plastic shopping bags make up a very small proportion of this material.

For plastic shopping bags, as much as any other product named in an EPR regulation, the makers of these products are required to pay for their end-of-life management. In essence, the brand owners of the plastic shopping bags and other products that are distributed to consumers must pay all or a portion of the cost to collect and recycle them.

Though this offsets some of the costs that municipalities pay in the management of this material, it has not shown to increase waste diversion or to diminish the number of plastic shopping bags that are disposed in landfill.

NL has a commitment, under the Canadian Council of the Ministers of Environment, to implement an EPR program for the management of PPP. Such a program would, at present, include all plastic bags. However, should waste management regions not collect this material at curbside, there would be no funds to pay for its management. Furthermore, should another approach such as a distribution ban or a bag fee or levy be put in place prior to the finalization of EPR legislation for PPP, consideration would have to be given to its inclusion or exclusion from EPR.

Return-to-Retail

Voluntary return-to-retail can be found throughout Canada. In consultation with representatives from other jurisdictions, capture rates seen in NL (less than 4 per cent) are typical. However, few jurisdictions track the performance of these programs as they are voluntary and driven by individual store owners.

Mandatory or regulated return-to-retail programs for plastic shopping bags require distributors to have in-store recycling programs to take back used plastic shopping bags from consumers. There are no such programs in Canada. In some areas of the United States there are mandatory programs which exclude small corner stores and grocers so as not to saddle them with the cost associated with establishing an in-store collection and recycling program.

Example

Rhode Island

General Assembly House Bill 7159 requires that retail establishments, with over 10,000 square feet of retail space, must establish an in-store recycling program for the collection of plastic bags, including grocery and shopping bags, dry cleaner film, fresh produce bags and newspaper sleeves. Under this bill, Retailers are responsible for the cost of collection and distribution of the plastic bags to suitable recycling facilities.



Distribution Bans

There are nine distribution bans in place in Canada. All are in place by municipalities. No provincial jurisdiction bans plastic shopping bags.

Unlike any of the preceding approaches to managing plastic shopping bags, distribution bans aim to eliminate the consumption of certain bags by removing the choice of consumers to acquire them. Successful implementation of bag bans depends on many factors including: authority to ban bags; who bans them; what products are banned; and what alternatives are available.

If a municipality bans bags and an adjacent town does not adopt the same ban, it is possible that that consumers from one town will shop in another town to acquire free bags. This creates an inequity which could be remedied by enacting a provincial ban.

Banning the free distribution of plastic shopping bags may not achieve the intended objective of reducing the number of plastic shopping bags distributed if retailers are permitted to "sell" plastic shopping bags for a nominal fee that does not incent a change in consumer behaviour.

Limiting a ban to a certain type of bag based on its physical characteristics and its function may cause a shift to another type of product that undermines the overall environmental objective of the ban.

As customers choose alternatives to plastic shopping bags for secondary use such as kitchen catchers, which are typically thicker, this may translate into an increase in overall plastic consumption by consumers in the short term.

Instituting a ban on plastic shopping bags would create a competitive advantage for alternative one-time use disposable bags such as paper bags. Life cycle comparative analysis of single-use paper and plastic shopping bags has shown that paper bags have a greater potential for negative environmental impact than plastic shopping bags. It is unclear what the environmental and economic impacts of the use of other alternatives are.

Significant administration and enforcement of a ban would require provincial enforcement resources to be deployed (likely through Service NL) to regularly ensure that retailers were not distributing plastic shopping bags.

Examples

Manitoba

The Town of Leaf Rapids implemented a mandatory retailer bag ban through Municipal By-Law No. 462. Under this by-law, effective April 2, 2007, retailers are not permitted to give away or sell plastic shopping bags that are intended for single use. Exceptions are small plastic bags that are used to store non-packaged goods such as: dairy products, fruit, vegetables or nuts, confectionery, cooked foods (hot or cold), ice, smaller bags for fresh meat, fish, candy and poultry and bags that cost more than \$1.50.



Québec

The Towns of Huntingdon, Deux-Montagnes and Broassard have implemented retailer bag bans through municipal by-laws. Though not exactly the same, each bans a certain type of bag while allowing exemptions for certain bags such as bags for unpackaged fresh fish, poultry, meats, nuts, confectionary, dairy products, cooked food.

In 2016, the City of Montreal announced its intention to ban certain plastic shopping bags while permitting exemptions similar to those in pre-existing municipal bans in Québec. This ban is to come into effect in 2018. The two-year grace period has been granted to allow consumers and distributors time to prepare.

California

In 2016, the State of California voted to formally adopt Senate Bill No. 270 which required a state-wide ban on the distribution by a "store" of "single-use carry out bags."

Stores covered by the ban are retail establishments with gross sales greater than \$2,000,000 annually; have over 10,000 square feet of retail space; and/or either a grocery store, liquor store or a corner store.

Stores are prohibited from distributing a single-use carry out bag that is not a re-useable bag or a recycled paper bag.

Re-useable bags, recycled paper bags and compostable bags can be distributed but they must meet a standard set out in the statute and be charged a fee of at least ten cents per bag.

Bag exclusions include bags from pharmacies and non-handled bags designed to protect an item from damaging or contaminating other purchases.

Pre-existing municipal by-laws relating to the management of these bags are permitted to stay in place indefinitely.



Summary

Though plastic shopping bags are a small contributor to overall waste and litter, they have become a symbol of the impact that single-use products and throw-away culture are having on our environment.

Banning the distribution of plastic shopping bags is one of many options for reducing the amount of material found in our environment.

The Newfoundland and Labrador government has taken many steps toward reaching its commitment to reduce the negative impact that plastic bags and other packaging have on the natural environment. Over \$150 million dollars has been invested in waste management infrastructure capable of collecting and responsibly managing plastic shopping bags and many other products wasted in our province. Additionally, the province has committed to establishing an EPR program which may offset the cost to collect and manage plastic shopping bags.

Singling out a product for a stand-alone program is not unique to plastic shopping bags. In fact, Canada's many deposit-based beverage container recycling programs began in much the same way; with calls from the public for a solution to a nuisance product; and a desire by governments to find funds to advance other waste diversion programs.

The Canadian experience of plastic shopping bag management has been a combination of EPR, curbside collection, localized bag bans and fees, and yet there are still calls to ban the bag or charge a provincial fee for the bag.

Any discussion on the management of plastic bags must consider the greater context of legislative authority, current and planned waste management practices, environmental stewardship and economic reality.

