

Executive Summary

Recently (January 1st, 2018), China, which buys approximately two-thirds of North America's recyclables, has imposed new restrictions regarding purity standards on the recycled material they are able to take in. This has resulted in a growing stockpile of film plastic throughout various municipalities across Nova Scotia, leaving us with the question... What do we do with it?

At present, it's looking as though much of it could windup in a landfill, but this is strictly a last resort. So, what can we do to prevent this?

Just about any thin plastic is considered "plastic film." This includes food wrap, product packaging, and those plastic grocery bags that we all know so well. There have already been numerous municipalities across Canada to ban the use of plastic shopping bags, looking to reusable bags as an alternative, and even entire countries have fazed them out (some for more than a decade now). If Nova Scotia were to jump on board with this idea it could significantly reduce our stockpile in the long run. With support from the government (provincial and municipal), environmental organizations (such as Divert NS), businesses, and manufacturers, as well as the cooperation of individuals, we could reduce our plastic film consumption in various other ways also, such as reducing product packaging, and investing in more reusable products.

That still leaves us with what we currently have, and what we cannot avoid. Some have suggested burning what we can of it, but there are much more innovative ideas out there. In the long run, this could potentially lead to some environmental positives.

Nova Scotia: Reduction and Elimination of Plastic Film

Recent changes in international recycling markets have left many recycling facilities in Nova Scotia with a stockpile of plastic film, including shopping bags and other plastic wraps, that they are unable to market. There's plenty that we, as Nova Scotians, can do to address this situation, beginning with the reduction or elimination of plastic shopping bag. The flat-out ban of plastic bags has already taken affect in numerous countries, and even, partially, in a number of provinces. With the support and cooperation of businesses and managers, as well as the general population, this is an extremely doable goal. Besides plastic bags, we can combat the film plastic issue in various other ways... especially with the support of our local and provincial governments, or organizations such as Divert NS. As for the inevitable film plastic, there may be other options besides simply dumping it in a landfill.

A large portion of the issue we are facing now can be traced back to the recent decision, made by China, to implement stricter purity standards on the materials which they take in, according to the Globe and Mail "China's decision to impose tough new purity standards on the recycled materials it takes in from around the world has Canadian municipalities facing pileups of garbage, hefty extra costs and the risk of losing millions in revenue," (Bula, 2018). In the past, China has bought approximately two-thirds of North America's recyclables. Not only have we taken a blow from this environmentally, but financially as well. Global News states "The municipality's paper and plastic recyclable materials have been mainly sent to China. Of the government's \$2,166,000

recycling revenues in the prior fiscal year, \$1,660,000 derived from selling materials to the country [China],” (Silva, 2017). This article also says “Plastic bags, newspapers, and other recyclables will no longer be accepted by China in the country’s effort to better protect its environment. In all, 24 kinds of imported solid waste will be banned.” If Nova Scotia doesn’t find an alternative or solution for these plastic films, many could find themselves in landfills.

Plastic film can be described as, “thin flexible sheets of plastic,” typically less than 10mm thick. This includes things such as plastic wrap, food wrap, and plastic bags. According to CBC News, “More than 300 tonnes of the material, which includes shopping bags and food wrap, had piled up at Halifax's storage facility in Bayer’s Lake in the wake of the China ban, and the municipality had asked the province for permission to send it to a landfill in Hants County,” (*Halifax told it can dump film plastics in landfill, but will burn them instead.* 2018), although, the city promises to only use landfills as a last resort, and have looked into other alternatives, such as burning the plastics in a kiln. At present, the material is being stored in an undisclosed location, in another province. According to Halifax Today, “Film plastics make up about five per cent of materials currently being recycled in Nova Scotia,” (HalifaxToday, Staff. 2018). Halifax Regional Municipality’s (HRM) manager of solid waste, Matt Keliher, is quoted, in this same article, as saying, “Putting film plastic in the landfill is a last resort, we have been actively looking for new markets and will continue to do that in the months to come.”

A major portion of the film plastic stockpile is made up of those plastic shopping bags we all know so well, but do we need them? According to BBC News “In 2002,

Bangladesh became the first country in the world to ban thinner plastic bags after they were found to have choked the drainage system during devastating floods,” (Onyanga-Omara, 2013). Since then, they have been prohibited in various other countries; including South Africa, Rwanda, China, Australia, and Italy. If these countries can survive without them, Canada certainly can as well. Plastic bags are already outlawed in various portions of Alberta, Manitoba, and Montreal. In an interview with CBC News, Montreal mayor, Denis Coderre, had described the bags as “volatile and represent[ing] a clear environmental concern.” This same article also reads, “The ban applies to lightweight plastic shopping bags, specifically ones that are less than 50 microns (or 0.05 millimeters) thick, as well as bags that are oxo-degradable, oxo-fragmentable, oxo-biodegradable and biodegradable. Certain bags are exempt from the ban for hygienic reasons, such as small plastic bags used for fresh vegetables or medication,” (*Montreal to ban plastic shopping bags as of 2018*, 2016).

According to The Chronicle Herald, “A recent poll indicates a majority of Halifax residents support a ban on plastic shopping bags. The survey, conducted by Corporate Research Associates, Inc., found that 71 per cent of respondents support banning the bags. Twenty-eight per cent oppose a ban,” (*Poll: 71 % of Halifax residents favour plastic grocery bag ban*, 2018). This leads to one question in particular... how do we go about persuading the other 28%, and encouraging this ban? That could potentially lay with business owners, and management, along with their cooperation in supporting this change. Many franchises, such as *Walmart* and *No-Frills*, have implemented the option to buy plastic bags, rather than give them away for free. Perhaps there could be a more positive incentive for utilizing reusable bags though. In order to support the transition,

businesses could, potentially, offer rewards programs, or promotions, to shoppers who pack their goods in reusable bags. This could be in the form of a percentage discount, in-store rewards, prizes, etc. In time, people opposed to the idea would adjust. These bags could also be handed out, free of charge, not just by stores and businesses, but also environmental organizations, and municipal governments.

Plastic film consists of more than just plastic bags; it also includes things like food wrap, the plastic covering over cases of water, and various other forms of packaging. In order to reduce our consumption of items such as these we could all, easily, make the switch from food wrap to reusable, plastic, containers. People have been pushing the idea of reusable water bottles and tap water for years, yet the message is yet to fully sink in for many. It's also just convenient to grab bottled water before you leave your house in the morning, or from vending machines and corner stores throughout the day. A solution to this could be the implementation of water stations in all government owned buildings. These could be government funded, or implemented by environmental organizations such as Divert NS. In order to keep them sustainable a small fee could be charged for each fill-up.

Lastly, entrepreneurs and manufacturers can make changes to their product packaging in order to reduce the amount of plastic film used. In an interview with Global News, policy director of the Ecology Action Centre, Mark Butler, had been quoted saying, "I make a new product, and I come up with some fancy packaging that I think is cool, but it actually can't be recycled. Who has to deal with it? The taxpayer. So put it back on the company that makes the initial product," (Silva, S. 2017). With that said, companies that don't wish to reduce their packaging should be responsible for dealing

with its disposal.

While there may be multiple options to reduce our use of plastic film, it may be nearly impossible to fully eliminate it, so, what do we do with what remains? One Nova Scotian woman has taken on the innovative idea of converting recycled plastic into children's clothing (specifically raincoats). The CBC article reads, "Tabitha Osler's company, Faire Child, is set to manufacture waterproof raincoats, anoraks, rain pants, coveralls, backpacks and caps for children ages 3 to 10 made out of old polyethylene terephthalate (PET) bottles that are woven into a new polyester fabric. When they get worn out, the idea is for customers to return the clothing to the company so that it can be recycled into a new product. Osler said she's offering people a 15 per cent discount on their next purchase as incentive to return the clothing," (Corfu, 2017). Perhaps some of our remaining film plastics, in the future, could be used for similar purposes.

Overall, while the China situation could be considered an inconvenience to the province, it may be beneficial in the long run. We can't help but hope that our film plastic waste won't end up in a landfill, but it certainly means that we'll be cutting back, saving the environment as a whole. Plastic bags are detrimental for the planet; it's about time we begin to make a change, catching up to many other nations. The majority of Nova Scotians are already on board. Aside from the use of plastic bags themselves, we are more than capable of making small changes in our everyday lives to address this issue, and with some guidance from the province, and environmentalists, along with the cooperation of businesses, we can make some larger changes as well. In the long run, I can see this resulting in some true innovations.

Citation

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