One and Done: Ways to Reduce Nova Scotia's Single-Use Plastic Waste

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Executive Summary

Single-use plastics are dreadful for the environment, but people are slow to change from plastic items to environmentally friendly items. For the most part, there is already an environmentally conscious substitute to replace the common plastic items that humans use. These options are available, but there is little pressure in Nova Scotia to be more environmentally friendly. Nova Scotia's covered in forests and beautiful lakes. Most people do not realise the effect that single-use plastics have on the environment.

This paper below will outline plausible methods to reduce the impact of single-use plastic on the Nova Scotian environment. One item that should be reduced is disposable coffee cups. Nova Scotians go through thousands of coffee cups that end up in landfills and the environment. An easy way to reduce plastic cup waste is to use a reusable cup. Individuals can make this change, but there needs to be more encouragement in the form of bans or levies.

Another single-use plastic item that goes hand in hand with disposable cups is plastic straws. Straws are unnecessary and wasteful. They should not be available for the general public.

Chip bags are not currently recyclable in Nova Scotia, but it is possible to recycle them. People love chips, but there is a better way to deal with chip bags. For now, it is important that chip bags go in the garbage but in the future hopefully, they can be recycled.

Do people eat single-use plastics? They do, in the form of chewing gum. Chewing gum is not disposed of properly and can get into the environment where it causes issues for animals. If it does make it into the garbage it takes a long time to decompose.

Outlined below are methods other countries/regions have taken to protect the environment and how these methods would be effective in protecting Nova Scotia's beautiful environment.

A plastic bag ban is a good place to start protecting Nova Scotia's environment, but there are other single-use plastic items that should also be banned or limited. Examples of single-use plastic items are beverage cups, plastic straws, candy wrappers, and chip bags. Another unexpected single-use plastic is actually chewing gum. These items are commonly found littered in forests and beaches and pose a serious threat to wildlife. There are many feasible solutions that would help reduce Nova Scotia's single-use plastic waste.

Disposable coffee cups are one of the most detrimental single-use items in Nova Scotia. Disposable fibre cups and plastic cups make up 3.4% or 6034 tonnes of Nova Scotia's landfill waste (Ma, 2014, p. 8). Disposable coffee cups are also the most littered item in Nova Scotia, according to the Great NS Pick-Me-Up (n.d). For many Nova Scotians, disposable coffee cups are an everyday item. These cups appear to be made from paper and are often mistaken for something that can easily be recycled or is biodegrade. However "they're actually coated in plastic" which makes them nearly impossible to recycle and not compostable (The Coachlings, 2029).

Disposable cups are popular because they are incredibly convenient. To reduce the use of disposable cups there needs to be an alternative that remains convenient while protecting the environment. One way to reduce disposable cup waste is to use a reusable cup, however, this is not as convenient. If there were an additional charge for the disposable cup, people would be more likely to bring a reusable cup. In 2002, in hopes of reducing plastic bag

use, Irland implemented a levy of \$0.15 per plastic bag. This policy reduced the use of plastic bags by 90% (United Nations Environment Programme [UNEP], 2018, p. 47). A similar policy could be used on disposable cups in Nova Scotia.

In order for a similar policy to be effective, it must be well explained and promoted to reduce possible backlash. The plastic bag ban in Ireland "prove[d] that stakeholder buy-in and [...] public acceptance are essential for the successful implementation of such a policy" (UNEP, 2018, p. 47). If people are knowledgeable about environmental issues and possible solutions they will choose to be more environmentally friendly. The government of Nova Scotia could also impose a ban on disposable cups, but it is better if people make environmentally conscious decisions because they want to. The tax paid when a disposable cup is purchased should be put towards environmental initiatives to help counteract the damage that the cup could do.

Another item that is commonly found littered is plastic straws. Plastic straws only make up a scant 0.025% of the plastic that ends up in the ocean each year, but for most of us is completely unnecessary (Gibbens, 2019). Straws must remain available for those who need them because of a disability. With this exception straws are incredibly wasteful. They are only intended to be used for a little while and then thrown out. For the vast majority of people banning straws poses no obstacle.

Vancouver became the first Canadian city to ban plastic straws, with the bi-law coming into effect in April of this year. This ban is on "all plastic straws (includ[ing] plastic straws made from fossil fuel products, and plastic labeled or described as compostable, degradable, or made from plants or other biological materials), except for flexible plastic straws" (City of Vancouver, n.d). Flexible plastic straws remain available by request for those with disabilities.

Implementing a similar policy in Nova Scotia would not be overly difficult. Although there has been little talk of implementing a straw ban, some restaurants have taken it upon themselves to reduce their environmental footprint. Restaurants such as The Spitfire in Windsor Nova Scota. and the Old Triangle Irish Alehouse in Halifax have stopped serving straws, but still have them on hand for people who ask (Chisholm, 2019; Luck 2018). These restaurants are taking an important step towards becoming eco-friendly.

Mcdonalds in the UK and Ireland, have switched over to paper straws after plastic straws were banned (Said-Moorhouse 2018). A ban would be the most effective way to stop major corporations in Nova Scotia, like McDonald's, from using straws. A straw ban would be more convenient than a tax or levy as it would be met with little resistance. Banning straws is a meaningful step towards eliminating single-use plastics. However, paper straws also have a toll on the environment and a complete straw ban, such as the one implemented in Vancouver would do more to protect the environment.

Chip bags are another common item that can only be used once. Since chip bags are "made from aluminum laminated with [plastic]" they are not recyclable (Hancher, 2013).

However, some companies are working to reduce the number of chip bags that end up in landfills each year. TerraCycle is a company that has partnered with Hain Snacks to recycle their chip bags. The consumer must send their chip bags to TerraCycle where they are shredded into small pieces and then reshaped into other products. Their innovative solution to dealing with "typically non-recyclable" waste including chip bag waste has made them "a global leader" (TerraCycle, 2020).

If TerraCycle or a similar program was implemented in Nova Scotia. it would greatly reduce the amount of single-use plastic waste. Chips are a common item in Nova Scotian households yet there is currently no way to recycle chip bags. With the implementation "The Beverage Container Deposit-Refund Program" nearly 83% of Nova Scotia. beverage containers are returned for proper recycling (Divert Nova Scotia, n.d.). This has proven to be an effective method for encouraging Nova Scotians to recycle. Using this method, chip bag waste can easily be reduced.

Another surprising plastic is chewing gum. Chewing gum was traditionally made from "chicle – a gum made from tree sap" (Friends of the earth, n.d.). However, now it is typically made of flavoured plastic. It is one of the most littered items and "80–90% of chewing gum is not disposed of properly" (CustomMade 2015). Chewing gum then ends up on sidewalks, in bushes, and in the drains and sewage system. When it is not properly disposed of it can be eaten by birds, fish, and other animals who can be sick or choke.

Singapore has already banned chewing gum, although not for environmental reasons. In 1987, Singapore chose to ban gum to keep its streets clean, while reducing the cost of cleaning-up gum and stop people from putting gum on train door sensors (Ghosh, 2018). The chewing gum ban proved effective with "Chewing gum litter cases" decreasing to "just two compared with 525 before the ban" (Government of Singapore, 2019).

Although a complete gum ban seems severe and would be met with a lot of resistance, measures could be taken to reduce the amount of chewing gum that ends up in the environment. For instance, a tax could be added onto each pack of gum sold. The money made from this tax

could go toward the significant costs of cleaning-up gum from city streets. This could be accompanied by awareness campaigns to educate people on the environmental impact of gum.

There are many possible methods to effectively reduce Nova Scotia's single-use plastic waste. Common single-use plastic waste items can effectively be reduced using levies/taxes, bans, and educational promotion. The most effective way to reduce plastic straw waste is to completely ban it. Although banning disposable cups, chip bags and chewing gum might also be effective, this draconian method would be met with significant resistance. For these items, a levy or deposit would be more effective. For these bans, limitations, and programs to be put into place there needs to be enough public pressure. Youth have a lot of power over environmental policies. If youth stop accepting products like straws, disposable cups, and chewing gum the market will change to accommodate them. To make their voice heard, youth can organise cleanups, educate others, form groups to show that people want change, and even create petitions and email political leaders. It is important that humans put more effort into reducing single-use plastic waste before it is too late.

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