

**Reducing Single Use Plastics in Nova Scotia**

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## Exclusive Summary

There will be more plastic than fish in the ocean by 2025 if current consumption and disposal trends continue, according to the findings by the World Economic Forum and Ellen MacArthur Foundation in 2016 (Harrington, 2017). The new Nova Scotia Legislature implemented last fall has banned the use of single use plastic bags beginning fall 2020 and has also allowed for further plastic bans. This paper will explore the possibility of a ban on an additional plastic application and what it entails.

Now that plastic bags have been banned in Nova Scotia the next steps of becoming a more sustainable and eco friendly province can begin. After the ban of plastic bags the government can now shift focus on implementing another single use plastic ban. Although banning plastic bags is a huge step in reducing the usage of single use plastics it is just a start in tackling the single use plastic overload that the world is facing. The new focus should include a ban on packaging. Packaging is the number one sector of plastic waste that holds 36% of all plastic waste (UN Environment, 2018).

The problem with plastics is not how well we can manage its disposal by recycling, but actually being able to reduce and eliminate it over time. Being eco friendly is becoming more and more popular as the new generation strives for climate justice. Alternatives are on the rise and young people are becoming aware of the negative impact plastic has had on the environment all this time.

Although there are many barriers that are involved in implementing policies, including societal norms and economics, there is always a way to overcome them. Learning from other policies and other jurisdictions can help minimize those barriers by understanding what worked for them and what caused issues.

## REDUCING SINGLE USE PLASTICS IN NOVA SCOTIA

Less than 10 percent of plastic in Canada is recycled leaving 90% elsewhere (MacLeod, 2019). Single use plastics end up in the environment by irresponsible behaviour and inadequate waste management. Plastic materials are a hazard to wildlife on land and in the oceans. High concentrations of plastic materials can block streams from flowing and block the breathing passages and stomachs of many species. There is substantial evidence that the chemicals added to the plastic during the manufacturing process transfers down the food chain and can end up digested by humans in the process known as bioaccumulation (UN Environment, 2018).

Plastic is widely used because it is a lightweight, hygienic and resistant material that can be molded into a variety of shapes. Most plastics do not biodegrade, but photodegrade into small fragments called microplastics. Microplastics are so small and extremely difficult to detect and remove, making the reduction of their existence the most effective way to protect the environment. Prevention is the most important tactic in order to reduce this substantial plastic waste that exists in the environment by switching to sustainable alternatives and halting the manufacture of plastic materials. Disposable plastics, which is another way of saying single use plastics, when used for packaging are typically intended to be only used once for a short period of time before they are thrown away and rarely recycled. These packaged materials such as styrofoam are made from polystyrene which is not biodegradable making them non-recyclable (UN Environment, 2018). However, all single use plastics can be replaced by a better sustainable version with thought. All it takes is action and collaboration with industries for the government to support the development of sustainable alternatives to slowly eliminate the use of single use plastics.

Single use plastics have been a major issue for many areas across the globe. Now that the Canadian government is shedding light on this particular issue they can explore what other places have

done to reduce plastic waste and learn what worked and what didn't. There are several bans on harmful single use plastics that are planned to begin in 2021, says the Environment Minister Jonathan Wilkinson, but in order to partake in a new movement the research of past implementations needs to be explored to decide what worked and why (Rabson, 2020).

Antigua and Barbuda have placed a single use plastic bag ban in 2016 and soon after banned plastic utensils and styrofoam. In 2018 the national health authorities heightened the penalties for selling, importing or using the now illegal materials. Their actions on banning specific single use plastics and their success, encouraged other countries such as Columbia and Chile to do the same (Contributor, 2020). Zimbabwe also placed an immediate ban on styrofoam food container material known as polystyrene in 2017 and the government also placed fines for people who are caught using the material. Shortly after Zimbabwe also banned other single use plastic materials such as bags (Contributor, 2020).

Costa Rica even plans on banning all single use plastics starting in 2021. The fact that Costa Rica is attempting such actions gives hope for a single use plastic free Nova Scotia. If they pull it off it can be a possibility for the province of Nova Scotia or even a town in the province to start. With government and societal support this could be a possibility for the future especially after studying in further years what worked for Costa Rica and applying it to our society (UN Environment, 2018).

Many places including Nova Scotia have implemented incentives on single use plastics. For example in Nova Scotia many grocery stores started to charge for plastic bags which ultimately decreased the amount of bags used, however it did not stop the continuous production of the product and they were still bought by the grocery stores for the people who decided to pay the small fee. This led to the ban of plastic bags which will be put in action in fall 2020, although moving forward a more immediate ban can be made on another single use plastic due to the legislature proposed last fall if alternatives are easily accessible. This immediate ban can be articulated by the study of other regions who have done the same

and be able to learn from their methods and make them work for our society. Social acceptance is another barrier to implementing new policies. Many people can be against change when they are stuck in their old ways and are uneducated on the negative consequences that come with the materials they use on a daily basis. An economic factor also exists as the alternative materials can sometimes come with a higher price tag. In order to overcome these barriers the new reusable alternatives to single use plastics must be affordable and accessible to all members of the community.

There are several steps that are needed to ban a single use of plastic effectively, which starts with social awareness and education. People must be aware of the consequences of the issue and why it is important in order to get their cooperation to start a movement. Many places around the world presented abrupt bans on plastic without informing the population with reason for their methods, which evidently causes controversy. In order to avoid societal disagreement the population must be educated on the topic of plastic waste and comprehend the reasoning for a sudden change to occur. Then public pressure comes in to make the community and industries responsible for their decisions to better their environment. Reduction strategies are then used to help minimize the specific single-use plastic that is being banned and also the adoption of new reusable options. After this process a collective voluntary agreement should be achieved, but also the voluntary agreements between government and retailers is important to develop a new sustainable future for plastic manufacturers that stimulates business (UN Environment, 2018).

Alternatives are key to a plasticless future. New sustainable materials need to be used in place of plastics for packaging in order to cater to people's needs and also to benefit the environment . Examples of this are palm leaves which naturally fall from the areca palm and can be moulded into any shape for food packaging. Bagasse is another alternative that can be moulded into packaging being biodegradable and compostable. Barley and wheat six pack rings, which are biodegradable, compostable, edible and actually benefit ocean life. Cornstarch and sorghum loose fill is an alternative to polystyrene loose fill that

is biodegradable and has no odor or static (Greenway, 2019). There are hundreds of different alternatives to packaging materials that have a positive impact on the environment by being able to decompose and benefit the organisms that walk the earth. These alternative materials stimulate wildlife rather than destroy it.

The younger generation can have a major role in the implementation of single use plastic policies, by having the right to voice their concerns on the topic. The younger generation can have a much greater sway on the decision making of the government because of their passionate views on the environment. They also have the technology available to raise awareness on social platforms and areas in their communities. Campaigns and strikes can also be run by younger people to gain attraction and spread social awareness on the new alternatives to single use plastics. The younger generation can carry it forward and have a prolonged impact on the policy development. As a part of the younger generation I feel responsible to stand up for what is right and make a difference to better the planet I live on.

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