
Phase 1 Research Document

Topic Description

Sustainable packaging. With both the global pandemic and the overall technological advancements, there has been a surge in online shopping with non-essential retailers. With people shopping from various stores, it is important for individuals to educate themselves about recycling guidelines and companies that advocate for and produce sustainable packaging and other environmentally friendly initiatives. By controlling where you shop and how this waste is eliminated, it can push retailers to lower their waste levels and adapt sustainable initiatives. This will consequently lower their shopper's individual ecological footprint, especially of the Gen Z demographic (ages 18-22)

Call to Action

Headline / Topic Summary

The increasing negative impact of online shopping on the environment.

Call to Action

Individuals should become aware of recycling guidelines and ensure their waste is being correctly managed. In order to make changes both retailers and individuals should focus on sustainable packaging as there is a recent and continuous surge in online shopping when surveying Gen Z shopping trends. Individuals should take the first step in controlling the way their recyclables are being handled by ensuring their packaging waste is being recycled and that they are aiming to shop from organizations that are implementing sustainable strategies.

The Issue

According to data based on the 2020 online shopping survey that included 1002 respondents from Canada, it was reported that many Gen Z customers choose to online shop for apparel and non-grocery items. "With Gen Z shoppers looking for enhanced experiences and additional services to justify a trip, retailers will have to address not only health and safety concerns but also the role of the store" (PwC Canada, 2020).

In response to the online shopping customers are also concerned with the amount of waste. "COVID-19 has pushed one in two Amazon customers in Canada to shop online even more than they did before the pandemic, but half of those buying more are "bothered by all the extra plastic packaging they are now receiving," according to a new poll commissioned by Oceana, the world's largest ocean-conservation organization" (Li, 2020). These issues of waste are very important now more than ever as customers purchase items more frequently

for both leisure and necessity. “Currently, less than 14 percent of the nearly 86 million tons of plastic packaging produced globally each year is recycled. The vast majority is landfilled, incinerated, or left to pollute waterways and poison wildlife” (Chua, 2021).

Actions Needed

Retailers and individuals need to become more aware of initiatives that advocate for sustainable packing. They have to take responsibility as producers to ensure their products are being recycled. There seem to be few examples of this with some shops such as, “Local indie shops focused on refillables are popping up across Canada, too. BYOC (bring your own container—anything clean will do) to Montreal’s Klova, Calgary’s Canary or Vancouver’s The Soap Dispensary & Kitchen Staples” (Tang, 2020). Big retailers should be aware of their ecological footprint at a time where environmental waste is at a detrimental level. Some small companies have begun enacting these changes as written on the Food Tank website, “While searching for a more sustainable and equally secure alternative, BuddyFruits has partnered with TerraCycle” (Fagundes, 2019). These changes can also be enacted with the help of individuals. There are programs that individuals can take part of to recycle their own products and ensure their waste is being reused.

These recycling programs allow individuals to ship in their recyclables and earn points, which they can later donate to charities of their choosing in the program. This means that their waste is eliminated as well as their efforts helping a secondary cause such as helping the bees. In terms of changing the way brands manage their products, individuals can sign a petition to ban single use plastics. This would lead to a ban that would push producers and retailers into changing the management of their waste and taking more responsibility. These government policies need to be supported in order to later have a chance of being enacted. There are various ways in which brands can change their processes and lessen their ecological footprint. Finally, both brands and individuals can make a donation to TerraCycle in order to fund and support their initiatives to go to various countries and plan programs to eliminate waste and build systems to create that as well.

The Advocate

TerraCycle is a social enterprise on a mission to eliminate waste. They collect recyclables and send them to facilities where they can be converted into usable materials and later send them to a wide variety of users that will incorporate these materials in their products. Although they have zero waste boxes that are for purchase, they are usually aimed at companies and users who would purchase these materials in high quantities rather than to single individuals. TerraCycle’s Zero Waste Box allows users to recycle almost any type of waste, from your coffee capsules to complex laboratory waste. “TerraCycle’s affiliated non-profit, the TerraCycle

Global Foundation, is on a mission to address the complex challenges of the waste crisis in emerging countries around the world” (TerraCycle, 2021). There also happen to be initiatives where TerraCycle partners with municipalities to collect cigarette butts for recycling. They have a variety of programs to not only provide sustainable packaging, but collect materials to reduce waste in over 20 countries. They also have programs for recycling drop-off for individuals. This outline is based on information from: TerraCycle, TerraCycle website <https://www.terracycle.com/en-CA/about-terracycle> (with editing): 2021

References

- “Accelerating Shifts Driving a Radical Rethink of the Customer Journey.” PwC Canada, PwC Canada, 2020, www.pwc.com/ca/en/industries/retail-consumer/consumer-insights-2020.html.
- Aston, Jason, et al. “Retail e-Commerce and COVID-19: How Online Shopping Opened Doors While Many Were Closing.” Statistics Canada, Government of Canada, 24 July 2020, www150.statcan.gc.ca/n1/pub/45-28-0001/2020001/article/00064-eng.htm.
- Chua, Jasmin Malik. “Online Shopping Has Boomed in the Pandemic. But What about All the Packaging?” Vox, Vox, 8 Jan. 2021, www.vox.com/the-goods/22214017/online-shopping-pandemic-packaging-ecommerce-waste-plastic.
- Fagundes, Colton. “16 Companies Rethinking Packaging” Food Tank, Food Tank, June 2019, www.foodtank.com/news/2019/06/16-companies-rethinking-packaging/.
- Li, Wanyee. “More Canadians Are Relying on Amazon Due to COVID-19. It’s Time for Online Retailers to Reduce Plastic Packaging, Say Advocates.” The Star, The Star, 15 July 2020, www.thestar.com/news/canada/2020/07/15/amazon-urged-to-cut-plastic-packaging.html?rf.
- “TerraCycle | About Us.” TerraCycle, 2021, <https://www.terracycle.com/en-CA/about-terracycle>
- Tang, Wing Sze. “How Beauty Brands Are Taking a More Sustainable Approach to Packaging and Products.” Fashion Magazine, Fashion Magazine, 22 June 2020, fashionmagazine.com/face-body/beauty-products-sustainable-packaging/.

Appendices Table of Contents

Appendix

A. Journals and Papers Evaluating Waste Management	5
B. TerraCycle Initiatives	6
C. News Articles Regarding Recyclables	8

Appendix A: Journals and Papers Evaluating Waste Management

Various sources discussed the implications online shopping has on waste management and of those, two specifically looked at this within the context of COVID-19. The third article focused on solely packaging waste from e-commerce in 2019 in an exploration of sustainable waste management. This article concludes that, “In order to transform e-commerce into Green commerce, companies need to invest in packaging innovation and sustainable supply chain mechanisms including reverse logistics system to promote reuse and recycling, while consumers also need to display sustainable consumption behavior” (Chueamuangphan, 2019). This exemplifies that the the solution to the rising amounts of packaging waste holds both consumers and companies responsible. Consumers must have more awareness and companies need to promote these ideas as well. In a survey done with Lazada’s consumers, a Thai company, “Of the online shoppers (86.2%), only 11.8% felt that the product arrived with an ‘excessive’ packaging, and they, however, simply discard those packaging materials” (Chueamuangphan, 2019). When looking at texts that are directly looking at covid-19 in relation to the packaging waste, it is easier to identify how there have been increases. One article mentions, “Between January and November of this year alone, American consumers spent about \$547 billion online. That’s an increase of roughly 33% from the same period in 2019” (ProQuest, 2020). Although there have been changes made in shipment packaging, there are still 8% of cardboard boxes that go to landfills. There is an ongoing issue of literacy where consumers are unaware of what materials can be recycled and what to do with them. In the article it states that, “Most Americans have access to community curbside or drop-off recycling for paper and paperboard packaging. But as consumers receive more products directly from online retailers, they’re recycling less and throwing away more. Part of the reason is the confusion over what is recyclable, according to Venditti.” (ProQuest, 2020) It seems that other than the environmental damage, the increase in online shopping can have negative health effects in some countries too, “Over 5 million people lose their lives due to diseases caused by waste. Annually, waste generation in Pakistan is more than 20 million tons with a growth rate of nearly 3%, annually” (Siyal, 2020) This shows that it is not only an environmental issue, but a health issue as well.

Chueamuangphan, K., et al. “Packaging Waste from E-Commerce: Consumers’ Awareness and Concern.” *Sustainable Waste Management: Policies and Case Studies*, 22 June 2019, pp. 27–41.

This article glances at how packaging waste is changing as trends with e-commerce occur. Looking at the consumers and how they can be more aware of their affects on the environmental impact they create. The article was unavailable

but the abstract provided some detail on the subject. It would've been quite helpful to also see how this issue can be solved.

Siyal, Saeed, and Chunlin Xin. "Implications and solutions for municipal solid waste management: Surge in household waste arising from increased online shopping during the COVID-19 pandemic.", 2020, <https://sciforum.net/manuscripts/9016/manuscript.pdf>.

Within this pdf, the writers Siyal, Saeed, and Xin look at possible reasons for waste and how to improve waste management all in the context on COVID-19. The writers take a closer look at developing countries where the waste has physically not been completely collected and how this begins to affect people's health. The source examines possible solutions to the outcomes of online shopping in the pandemic. The article would have been more informative if it had also discussed the affected in developed areas but was solely focused on developing countries for the context of this article.

"Shopping Online this Holiday Season? Recycle those Cardboard Boxes, Expert Says." ProQuest, Dec 10, 2020, <http://ezproxy.library.yorku.ca/login?url=https://www-proquest-com.ezproxy.library.yorku.ca/blogs.-podcasts.-websites/shopping-online-this-holiday-season-recycle-those/docview/2468691714/se-2?accountid=15182>.

ProQuest is a source that was responsible for examining the effects of online shopping during both the holidays as well as a pandemic. It discusses the way that people are unaware of how to properly handle their waste due to confusion within the system. Rather than criticizing companies for a lack of initiatives, the reading compliments the degree of recycling that is done but pushes the consumer to think of what to do with those unknown recyclables such as cardboard boxes to completely eliminate waste.

Appendix B: TerraCycle Initiatives

TerraCycle is a company that mainly focuses on collecting and repurposing recyclables. They are a social enterprise and therefore work with both companies and individuals to eliminate waste within several initiatives. For individuals, they mainly have collection programs where the user picks the category of their choice that they have recyclables for and ships them to TerraCycle to be repurposed.

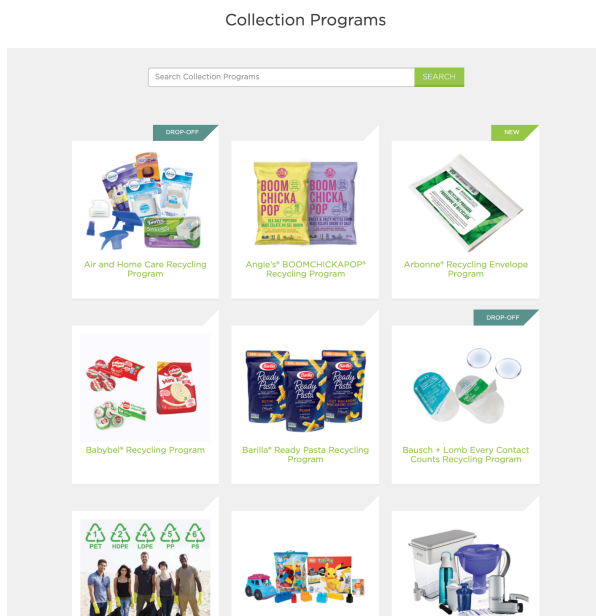


Figure 1: Screenshot of some of TerraCycle's collection programs

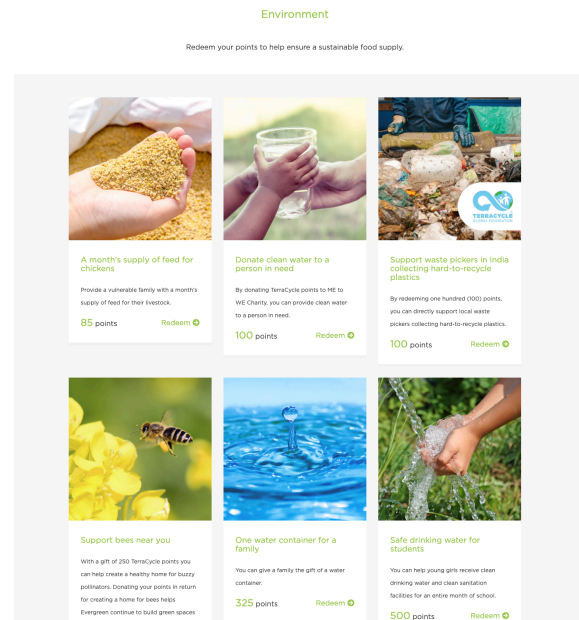


Figure 2: Screenshot of some of TerraCycle's partnered charities

These programs allow users to also sign up and receive points based on a rewards system. Although the rewards do not result in any monetary prizes, they can be collected and gifted to different charities that TerraCycle supports. On their website, it is listed as, “Through many of our programs we reward you with TerraCycle points for qualifying waste. These points are redeemable for a cash payment to the non-profit organization or school of your choice” (TerraCycle, 2020). The points can also be to your own school or organization when you sign up and amount to at least 1000 points (\$10 equivalent). It is written that, “TerraCycle has partnered with various non-profit organizations so that your recycling efforts not only help the environment, but also contribute to a wide variety of causes. Whether you want to provide water to someone in need, protect bees or supply chicken feed for a family's livestock, your efforts can truly make a difference” (TerraCycle, 2020). Each shipment can work towards the points system. For those who do not wish to participate in the programs, there is also an option for donation which is said to, “help us develop marine trash capture devices and provide resources and equipment to local waste workers” (TerraCycle, 2020).

“TerraCycle | About Us.” TerraCycle, 2021, <https://www.terracycle.com/en-CA/about-terracycle>.

TerraCycle is a company that provides initiatives as well as purchases to help eliminate waste in public spaces ranging from streets to office spaces. It also works with both individuals and companies to help recycle material that can later

be used as well as motivating its consumers to complete initiatives in order to help a secondary group as well. Unfortunately they do not have their own petition or programs for completing recycling as a volunteer activity but do offer options such as donations for their waste elimination initiatives from their viewers. They rely on both the individual and the collective to work to completely eliminate waste.

Appendix C: News Articles Regarding Recyclables

Quite a few news sources have begun examining the waste management in recent years. There has been increase in waste as well as the ban from China on importing waste materials. China has historically been a major importer of recycled materials from North American countries but this all changed in 2018. It is stated that, “China announced [Operation National Sword](#) in 2018, a program which effectively banned the import of many recyclable materials. Plastic imports dropped by [as much as 99%](#) between 2017-2018. Operation National Sword is still expanding, with the goal of [banning all ‘waste’ imports](#) by 2020” (ENERGYminute 2019). This means that Canada must now rely on other countries for their recyclable waste as well as managing it domestically. Currently, only 9% of plastic waste is actually recycled and these recent bans have drastically changed the prices of recyclable materials. Research states, “With prices for the recyclables plummeting, municipalities - including many across Canada - are left with two unpopular choices: either raise taxes or cut recycling programs” (ENERGYminute, 2019).

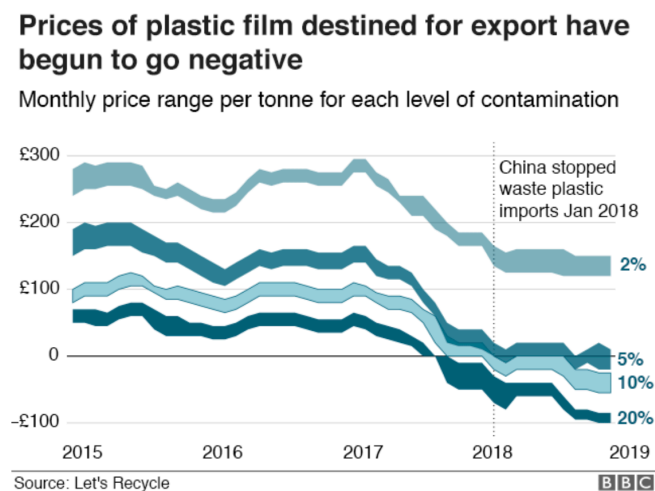


Figure 3: Price of Recyclable Materials

In order to avoid having these materials in landfills, producers must be held responsible for paying for recycled materials, many of which can be achieved through partnerships with organizations such as TerraCycle. A senior policy analyst with Cardwell Grove said, “Now, we want you to take the responsibility that once the consumer’s done with that soft drink bottle or that potato chip bag, that you set up a system to take responsibility to pull that stuff back from consumers” (Jarvis, 2019). The NP Nathan Cullen would like to make changes as stated, “Cullen introduced a private member’s bill last February to ban any packaging that can’t be recycled or composted in Canada. But in order for his bill to pass, Cullen will need the support of the Liberal government” (Jarvis, 2019) These changes cannot be made until there are several policies in place. In response to this, there have been petitions people can now sign such as the one on [change.org](https://www.change.org). It is listed as, “To make matters worse, the volume of plastic waste is expected to increase four times by 2050. Canada is part of the problem but can also be part of the solution. **Canadians want a future with plastic-free choices.** The federal government has committed to reducing single-use plastics to stop the flow of this toxic waste into the oceans. If the government fails to act, the oceans will continue to drown in plastic. **We must act now** to ensure Canada implements a national ban on unnecessary single-use plastics” (Change.org, 2019). The plans for this petition are to ban single use plastics by 2021. Although the goal has not been met, the petition is still open for signatures.

“HELP END THE PLASTIC DISASTER.” Change.org, Change.org, 2019, www.change.org/p/join-oceanacan-in-building-a-future-without-plastic-pollution-endtheplasticdisaster.

This [change.org](https://www.change.org) petition was created in 2019 in order to bring awareness to the dire effects of waste on the environment. It warns the viewer about the dangers of continuing on in the same manner and urges the viewer to sign a petition in order to ban single use plastic. It seems that only 9% of items in recycling actually get recycled and many items from the waste that is created is placed in landfills that are harming the ecosystem. The petition aims to change that by bringing awareness but has yet to reach the goal of 150,000 signatures.

Jarvis, Carolyn, and Megan Robinson. “Canada’s Recycling Industry Is on Life-Support. Here’s How to Fix It.” Global News, Global News, 2 May 2019, globalnews.ca/news/5207352/how-to-fix-canadas-recycling-industry/.

The Global News shares this article as a way of reflecting on the Canadian Recycling Industry and how producers have a major role on its effectiveness. The article discusses how many provinces are inconsistent in the role of recycling as it is done by companies and handled by the municipalities. It brings to light the bills

that the MPs are beginning to explore to hold producers more accountable and lower the recycling waste that there is in Canada.

“Recycling A Modern Tragedy.” ENERGYminute, ENERGYminute, 2019, energyminute.ca/newsletter/9950b7db6a/recycling-a-modern-tragedy?gclid=Cj0KCQiA6t6ABhDMARIsAONIYyWxmSAs0ijSfzOIF9Y4wzM2XlpfPjyxWzhfeOlobrYIPFJW-EXtA9UaAnoHEALw_wcB.

This article reflects on the affects of the China ban on recycling imports from North America. As that ban went to affect, Canada was greatly affected as the price of plastic film was also lowered by these changes beginning with China but later taking place in more asian countries. The article also poses possible solutions similar to the Global News response and shows figures that have risen recently with the rise in online shopping and the simultaneous economic changes.

Visual Outline

