

## **Talking Ocean Plastics**

Examining Plastic Pollution In The Beauty & Cosmetics Industry

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## EXECUTIVE SUMMARY

This paper is about plastic pollution in the beauty and cosmetics industry. The analysis is broken down into two distinct parts and is designed to explore how the creation of personal care products has resulted in an industry that is one of the largest contributors to plastic pollution in the world, and what can be done to remedy this situation.

The first section is about background information and understanding the market as a whole. The analysis will focus on the size and scope of the industry, and the intricacies of the plastic pollution problem that is plaguing it.

The second section is designed to explore possible solutions to the problem. Focusing firstly on the financial incentives associated with switching to a more sustainable business model, and secondarily on the different paths corporations could take to reduce the amount of plastic pollution in the industry.





#### INTRODUCTION

Every year the world produces more than 300 million tonnes of plastic waste. That number is nearly equivalent to the weight of the entire human population. We have put so much plastic into our environment that scientists believe we will be able to identify the birth of modern civilization in the future based on the amount of plastic that will be buried in the Earth.

It can take a plastic bag 20 years to decompose, a toothbrush 500 years, and some plastic items take nearly a 1000 years to fully decompose. They sit in our planet's oceans, streams, and delicate ecosystems, progressively degrading our planet every year that we don't start to solve the problem.

Many industries have created and implemented sustainable alternatives to items that have traditionally been plastic. Unfortunately, one industry that has fallen miles behind in terms of sustainable innovation is the beauty and cosmetics industry. It is estimated that the production of personal care products (PCPs) produces more than 42,000 tonnes of plastic pollution in packaging alone. Consumers in the beauty and cosmetics industry have become so accustomed to their personal care products being single-use-products that industry leaders have no incentive to change.

The purpose of this paper is to bring awareness to the increasingly problematic issue of plastic pollution in the beauty and cosmetics industry, and to explore potential actions that industry leading brands can take to right the proverbial ship.

#### BACKGROUND INFORMATION

### THE BEAUTY & COSMETICS INDUSTRY

The beauty and cosmetics industry can be broken up into 5 distinct categories that make up the majority of the industry. Within these categories there is a seemingly unending amount of options for the specific type of product a consumer may need. However, the majority of these products are traditionally housed in single-use containers.

#### **INDUSTRY SIZE:**

The cosmetic and beauty products industry is a \$357 billion dollars industry that has its products in the homes of every citizen in the developed world. The industry is expected to grow by an annual rate of around 3.3%. There are many players in the market, and the barrier to entry is relatively low. Meaning that there are many niche brands that meet the interests of a very specific sub-populations, making it increasingly difficult for one company to possess any quasi-monopolistic qualities. That being said, there are several main corporations that control a significant portion of the market.

#### INDUSTRY COMPOSITION

Together, Procter & Gamble, Estee Lauder, Unilever, and L'Oreal control about 20.5% percent of the beauty and cosmetics market. However, none of these players have true market control. L'Oreal has the most market share with 9.5%, and the market is saturated with smaller companies that cater to different sections of the market in the industry. These smaller, niche market companies focus on innovation and differentiation. The main point that the remainder of this paper will focus on is how smaller companies have used environmentally sustainable business practices as a point of differentiation and growth.

## THE PLASTIC PROBLEM

The industry's plastic problem can be broken down into two distinct categories. **Single-use-plastics** and **microplastics**. Each category has its unique challenges, but both categories are caused by large beauty and cosmetics companies and consumers' reluctance to shift away from products that are inexpensive and convenient.

#### Single-Use-Plastics

The result of this reluctance is that only 20% of products used in the bathroom are ever recycled, and even fewer are ever used more than once. Every year more than 42,000 tons of plastic packaging produced by companies in the personal care products industry enters our oceans.

However, this is only a small part of the problem with plastic waste in the industry. People think plastic becomes a problem once it is done being used and is thrown away. What most consumers fail to acknowledge is the toll that the creation of plastic containers takes on the environment before it is even made into a physical container. The initial creation and production of plastic has an equally detrimental effect on the planet.

Oil, gas, and coal are the fossil-fuel building blocks of plastics. It is estimated that the extraction and transportation of these building blocks emits between 12.5 to 13.5 million metric tons of carbon dioxide for the creation of plastics in the United States alone. That is roughly the same amount of weight as 40 Empire State Buildings. While that number may seem unimaginably large, it actually underestimates the real impact of plastic production on the environment. When factoring in land disturbances and refining processes associated with finished plastic products. You can add another couple hundred million metric tonnes of carbon dioxide emissions to the total amount associated with the creation of plastics in the beauty and cosmetics industry.

In short, plastics are and always will be bad for the environment in every stage of their obscenely long lifespan.

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#### **Microplastics**

The other important part of plastic pollution from the personal care products industry that often gets overlooked is microplastics. Microplastics and microbeads in the beauty and cosmetics industry can best be described as tiny particles of plastic (less than 1mm) used in personal care products like exfoliating cleansers, scrubs, body wash, and even as a toothpaste whitener. Generally, these particles and microbeads enter marine environments through wastewater treatment plants that have a difficult time filtering out the smaller particles. It is estimated that before their eventual ban, that more than 8 trillion plastic microparticles made it past these filtration systems everyday in the US alone.

The main ecological and environmental risks associated with the ubiquitous nature of microplastics and microbeads in our ocean environments is their increased likelihood of ingestion by biota (primarily small ocean organisms like plankton) and the harmful chemicals they carry. Microplastics, respectively large surface area in comparison to water particles, makes them perfect carriers for toxic pollutants that can harm both marine wildlife and marine ecosystems as a whole.

As microplastics and microbeads break down in the environment they release harmful chemicals and greenhouse gases into the environment that can reduce the growth of essential microalgae and diminish their ability to remove carbon dioxide from the atmosphere. So not only do microplastics cause irreparable damage to marine wildlife, they also reduce the ocean capacity to act as one of our key natural carbon dioxide filtration systems.

Thankfully these microplastics have been banned in the US, Canada and United Kingdom in recent years, but legislative action for the rest of the world is still way behind.

PRISMA INC. PAGE 08

#### EXISTING EFFORTS TO COMBAT PLASTIC POLLUTION

There have been a variety of clever efforts to reduce the amount of plastic waste produced by the cosmetic and beauty industry. Unfortunately, not many of these methods have been adopted by the larger and more influential corporations. Some smaller companies have tried using the following methods to reduce their contribution to plastic pollution

- Turning typically liquid products, like shampoo and conditioner, into solids to reduce the amount of plastic packaging required to contain the substance.
- Using biodegradable plastic packaging instead of traditional plastics made with petroleum.
- Opting for refill based business models that eliminate the need for plastic packaging all together.
- Switching to natural exfoliants like: salt crystals, rice, powdered walnut and pecan shells, crushed seed, pumice, jojoba, oatmeal, crushed bamboo.

While all of these methods have been effective at reducing the amount of single-use-plastics and plastic microparticles that enter marine environments, the most common alternative that the majority of the larger cosmetic and beauty companies have turned to is recyclable plastics. While this sounds effective in theory, we know that only a small fraction of recyclable plastics actually gets recycled. Large corporations' reluctance to adopt and support more 'radical' methods of plastic pollution prevention has created an industry that is one of the world's largest contributors to oceanic plastic pollution.

#### RECOMMENDATIONS

Brands ultimately control what goes into their products, what type of packaging their products are transported in, and the stories they tell their consumers. The goal here is to illustrate the value that beauty and cosmetics companies can add to their brands by switching to a more environmentally sustainable business model.

So why should beauty and cosmetics brands abandon a single-use-plastics business model that has fueled a multibillion dollar industry for decades? Well... morals! Yes yes, the morals and ethics of preserving the planet we all live on. Let's assume all large corporations in the beauty and cosmetics industry are inherently immoral creatures—not the largest stretch of imagination. Then what? Is there any other reason for them to abandon such a lucrative business model? The answer is yes.

Studies have shown that the majority of Americans (75% of Millennials, 63% of Gen Z, 64% of Gen X, and 57% of Boomers) are willing to pay more money for products they perceive to be environmentally sustainable, and according to Nielsen, 81% of consumers feel that companies should invest more resources to improve the environment. It is possible that even the increased demand and willingness to pay a higher price may not cover switching costs associated with implementing sustainable packaging and components onto production lines. However, it will help position brands for future current and future generations demand in a way that plastic reliant companies will not be able to accomplish.

In an industry characterized by over consumption and single use containers, switching to a more sustainable business model is an amazing opportunity to create a meaningful, purpose-driven point of differentiation in an industry categorized by high levels of competition and nearly identical product offerings. Consumers have spoken, 94% of which said it is important that the companies they engage with have a strong Purpose, and 83% of which said companies should only earn a profit if they also deliver a positive impact. Consumers are willing to spend more money on a company's products if they believe their values align with the company's.

Combine that with a projected increase in disposable income for the average consumer over the next 5 years, and you have a population that will be willing to pay more for a product that they know is environmentally friendly or reusable. Leading brands in the sector have the opportunity to be at the forefront of a changing market, but at the moment they are at risk of falling behind more progressive thinking competitors.

So the financial & moral incentives are there, but brands don't know how to make the switch?

#### The Answer...

#### **AUTHENTICALLY**

While consumers are much more likely to support a brand that is environmentally and socially responsible, they are also much more likely to view corporations statements and promises with scepticism. The majority of consumers have doubts when companies say they are environmentally friendly, with 53% of Americans never or only sometimes believing such claims.

Modern consumers see right through acts of performative activism and disingenuous promises. If beauty and cosmetics corporations want their messages to be effective, they need to be authentic. They need to (1) clearly define their new goals and the path to reach that those goals, and (2) they need to actually follow through and make meaningful changes.



#### **Authentic Actions**

#### Support Global Legislative Bans on Microplastics in PCPs

The only way that we are going to be able to stop the flow of microplastics into the environment is with widespread legislative action. It is naive to think that one brand or even a group of brands could solve the world's microplastic problem on its own. However, if major brands were to use their voice to demand legislative action banning the use of microplastics in personal care products all together, then governmental agencies may just listen.

### Exploration of Alternative Business Models

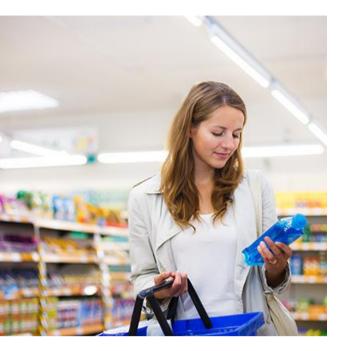
Similar to sustainable packaging.
Alternative business and product models exist in the beauty and cosmetics industry. They have not been scaled to the size of corporations like Unilever and L'Oreal, but with investment larger corporations could find ways to reduce the amount of plastic they use in their products. Some examples of potential investments include: shifting away from liquid products that require containers and exploring refill based products with sustainable containers.

#### Research & Development of Sustainable Packaging

Sustainable packaging exists. If big brands in the beauty and cosmetics industry were to follow the footsteps of smaller sustainable companies and invest in the research and development of sustainable packaging, that would make a meaningful difference towards phasing out single-use-plastics and reducing the amount of plastic that flows into our oceans on a daily basis. It would only take a couple of the major brands making a concerted effort to get the ball rolling.

### Explore Partnerships With Ocean Cleanup Innitiativs

The damage has already been done to our ocean environments, an authentic way that companies could acknowledge their role in the problem would be to support ocean cleanup initiatives and finance research projects focused on the removal of microplastics already in our oceans.







# The Role of The Consumer

Plastic isn't going to magically stop flowing into our environments and our oceans. It's on brands to change, but it is on consumers to demand that they change.

If consumers want to see change from corporations in the beauty and cosmetics industry, they need to start putting pressure on these brands to be better. Start buying from more sustainable companies. Buy local. Buy anything else until the industry leaders start to listen. Consumers can yell and scream about injustice and moral obligations all they want, big brands will listen to consumers when they speak with their wallets not their mouths.

So as the saying goes...
It's time for consumers
to put their money
where their mouth is!

### Conclusion

Wholistically removing plastic from the beauty and cosmetics industry is akin to curing cancer. It's going to be nearly impossible, but that doesn't mean it isn't worth trying. It's going to take a village. Brands, consumers, agencies, everyone involved in the beauty and cosmetics industry needs to make changes. That is the only way we'll see meaningful change. That is the only way we will save our planet. The time is now. Better yet, the time was 20 years ago. Now, it's time to catch up!

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