

**Forum:** Sustainable Development Committee 1

**Issue:** Tackling plastic waste pollution: the development of circular economy

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## Introduction

Plastic pollution remains a pertinent and consequential issue, threatening the stability of our ecosystems and the well-being of the human population. This issue is in line with the United Nation's 12th Sustainable Development Goal, "Responsible Consumption and Production," which advocates for the reduction and prevention of "hazardous waste and greenhouse gas emissions." The startling statistics emphasizing the urgency to address the aforementioned SDG are the following: "Every minute, one garbage truck of plastic is dumped into our ocean, and yearly, 19-23 million tonnes of plastic waste leaks into aquatic ecosystems, polluting lakes, rivers, and seas. If nothing is done about this, by 2040, the equivalent of 50 kg of plastic per meter of coastline worldwide is projected to flow into the ocean yearly." (UNEP)

Plastic pollution manifests in various manners, such as: "Throwing plastic in the bin when it could be recycled, littering, and products that end up in the drain" (WWF UK) These erroneous habits critically add to the surge of plastic waste located in our bodies of water. Deciding to throw plastic away, rather than recycle results in plastic ending up in piles of landfills, where light-weight plastic will inevitably be blown away during its transportation, making it prone to getting stuck within drains, increasing its possibility of entering streams. Littering is also weighty as the plastic discarded onto streets can be effortlessly swept by the wind and rainwater, and into drains, where it can once again enter rivers.

The consequences plastic waste pollution poses for humans are "serious health issues such as endocrine disruption, weight gain, insulin resistance, decreased reproductive health, and cancer." (UNDP) This is due to the permeation of microplastics into the soil, oceans, and air we inhale, which exposes humans to microplastics in the very beverages and seafood we consume daily. Unfortunately, our animal species pay the price of the ensuing plastic waste pollution crisis. According to the Earth Organization, "Wildlife can easily get trapped and entangled in plastics, preventing them from being mobile to hunt for food or become more vulnerable to nearby prey. If they accidentally get their head stuck in plastic food containers, animals will suffer from overheating, suffocation, dehydration, starvation, and eventual death."

Additionally, "Millions of animals are killed by plastics every year, from birds to fish to other marine organisms. Nearly 700 species, including endangered ones, are known to have been affected by plastics." (National Geographic) The devastation animal species are subject to is heart-wrenching

considering that the ingestion of plastics is widespread, and is not solely limited to aquatic ecosystems. Plastic waste pollution has been responsible for several fatalities of land-based animals such as elephants, zebras, camels, cattle, etc. In a society that advocates for less animal cruelty, animals suffer immensely from plastic waste pollution, seeing as their overwhelmed stomachs filled with plastics prevent their urge to eat, which is often followed by starvation, when their digestive tracts are being obstructed, and their organs punctured. Microplastics have been identified in over 100 aquatic species, and it has been discovered that every seabird species practically ingests plastics. To follow through with our promise to minimize the endangerment of beloved animal friends, and to restore deeply affected biomes before their destruction becomes irreversible, plastic waste pollution must be minimized for the benefit of all species that coexist on this planet. The main articles of plastic that are mistakenly consumed by animals are plastic bags, balloons, and food wrappers, among many others, as outlined by Oceana's 2020 November report "Choked, Strangled, Drowned: THE PLASTICS CRISIS UNFOLDING IN OUR OCEANS"

Comprehending the ever-lasting impacts of plastic waste pollution is critical in fostering change, and instilling a sense hope for a promising future for future generations that can live in tandem with our planet's momentous biodiversity, ensuring safety, stability, and harmony for all. To eradicate and tackle the issue of plastic waste adequately, the paradigm of the circular economy possesses an ideology that redefines humans' interactions with finite materials, by fundamentally altering the design of resources and materials that maximize their durability, and recyclability, whilst minimizing the waste and the harmful chemicals they produce.

## Definition of Key Terms

### Plastic Waste Pollution

Is when plastic objects accumulate on Earth's environment, resulting in detrimental health issues for humans, ecosystems, and habitats when left alone. According to the United Nations, "On average, the world is producing 430 million tonnes of plastic per year. 15 percent of plastic waste is collected for recycling, with less than 9 percent recycled after losses." Without any government intervention or solutions that eradicate plastic waste pollution is predicted to triple by 2060. Two-thirds of plastic that is produced has a substantially small lifespan, such as chocolate bar wrappers, and lunchtime utensils, which tend to be of single-use.

### Circular Economy

"is a new and inclusive economic paradigm that aims to minimize pollution and waste, extend product life cycles, and enable broad sharing of physical and natural assets. It strives for a competitive economy that creates green and decent jobs and keeps resource use within planetary boundaries." (United Nations Economic Commission for Europe)

### Fossil Fuels

“a generic term for non-renewable energy sources such as coal, coal products, natural gas, derived gas, crude oil, petroleum products, and non-renewable wastes. These fuels originate from plants and animals that existed in the geological past (for example, millions of years ago).” (European Commission) Fossil fuels are not solely naturally produced, they can also be generated as a byproduct of industrial processes such as the transfiguration of crude oil into gasoline.

### **Greenhouse Gas Emissions**

“A gas that contributes to the natural greenhouse effect. There are six greenhouse gasses (GHGs) produced by human activities and they are measured in terms of carbon dioxide equivalents based on the gases' global warming potential.” (European Environment Agency) Greenhouse Gas Emissions specifically explore the frequency in which greenhouse gasses such as carbon dioxide and methane are elicited.

### **Sustainability**

“of, relating to, or being a method of harvesting or using a resource so that the resource is not depleted or permanently damaged” (Merriam Webster Dictionary) The intention behind the concept of sustainability is to prevent environmental deterioration and ensure that future generations will be able to meet their needs, without excessively relying only on finite resources.

### **Microplastics**

“tiny particles of plastic less than 5 millimeters in size”. (UNDP) They are produced through the degradation of larger plastics, and the manufacturing process of commercial products.

## **Background Information**

### **Promoting the implementation of policies and regulations**

As stated by the UNDP, a million plastic bottles are used every minute, whilst 40 percent of plastic is thrown away after one use. The consequences of humanity's overconsumption of plastics are that plastics emit chemicals and harmful substances, over time disintegrating into microplastics and nano-plastics, harming human health and killing wild animals.

It has already been established that this issue is severe and must be eradicated as soon as possible, however, to address this issue, the cause behind this crisis must be acknowledged. According to National Geographic, “Plastics made from fossil fuels are just over a century old. Production and development of thousands of new plastic products accelerated after World War II, so transforming the modern age that life without plastics would be unrecognizable today.” It is surreal to imagine that half of the plastics ever produced, have solely been manufactured in the past 15 years; yet what is even more difficult to fathom is that these plastics gravely endanger our health and the number of animal species we continue to preserve.

Although the majority of plastics produced have single-use purposes or a lifespan of a few minutes or hours at most; the degradation process of plastics can take several centuries. The unfortunate reality of plastic waste pollution is the rapidly adopted throw-away culture that seems to be predominantly embedded in the subconscious of our society. The convenience of throwing plastics away without any reflection, or questioning such as what occurs to those plastics after they are thrown away, rather than recycled, raises a question as to what can be done to eradicate such fallacies in consumer behavior, which is a major stimulant of the plastic waste pollution crisis.

Policies facilitate the establishment of standards for responsible plastic production, consumption, and disposal, especially because Governments can participate in international agreements to provide harmonious legal frameworks that enforce the compliance of businesses and citizens to adopt more sustainable and transparent practices. Ineffective policies will lead to inadequate management of plastic waste, thus exacerbating the pollution and harm felt by ecosystems, and their vibrant biodiversity, as well as the health consequences felt by communities contaminated by the mass infiltration of microplastics.

Additionally, the lack of satisfactory policies means that humans continue to emit a concerning amount of greenhouse gas emissions and be reliant on finite resources until their depletion, meanwhile, policies promoting the circular economy will encourage the recycling and reuse of such resources, thus preventing their permanent destruction. Circular economy policies will substantially reduce environmental injustices and inequalities associated with the repercussions of pollution, often felt by the most susceptible inhabitants. The economic implications of sound policies must also be taken into consideration, seeing as the implementation of efficient policies will decrease the cost of cleaning up and retrieving waste in habitats and public, as well as increase the economic value of scrap plastics, which would be reintroduced to the economy, and create profit for ingenious companies that choose to reuse such resources with a sustainable agenda in mind.

The benefits of functional and durable policies that proficiently address this issue are an increase in innovation, public education, global cooperation, monitoring of sustainable practices, well-being and stability of ecosystems, along with the health of human populations and landscapes through the regulation of toxic chemicals found in products made out of harmful and perishable resources.

### **Fostering corporate responsibility**

Corporate responsibility refers to businesses taking into account the moral implications of their actions on humans, and the environment; being utilitarian, and philanthropic. This means not solely prioritizing the exaltation of profits. Taking on the lens of plastic waste, corporate responsibility in the context of this issue suggests the transparency of companies as to the recyclability, durability, utility and lifespan of their products, as well as the diminution of consumer waste in tandem with the consequential

impacts of plastic throughout their production and consumption processes. Currently, corporate responsibility can be felt in the uprising of consumer awareness demanding companies to minimize their packaging, companies' waste reduction campaigns and government bans enforcing regulation on plastic waste and promoting recycling.

Between 2000 and 2019, the rate of raw materials being consumed in a country's production process skyrocketed by 66 percent. This statistic tripled in the 1970s, reaching 95.1 billion metric tons. The United Nations highlights that "Reporting has increased on corporate sustainability and public procurement policies, but has fallen when it comes to sustainable consumption and monitoring sustainable tourism." But to encourage more corporations to own up to their unsustainable practices, the root of this issue must be debunked. The Plastic Soup Foundation shares that "The use of plastic has grown immensely since the 1950s. From this point in time onwards, large multinational companies like Coca-Cola invested in public information campaigns with mottos such as "Packages don't litter, people do." Such campaigns exhibited how consumers needed to dispose of their litter, thus blaming their consumers for the end of a plastic product's life phase, when firms could have decided to employ less packaging or use environmentally friendly materials from the start, that do not harm others when not disposed of properly.

The implementation of responsible practices in tandem with informing consumers on the plastic waste pollution crisis will support a shift in consumer behavior toward purchasing and consuming sustainable products, thus contributing to the success and effectiveness of the circular economy. Additionally, companies that incorporate the principles of a circular economy into their business models not only support environmental preservation but also become more efficient in overcoming harm to their esteem, and resource scarcity risks as a result of interferences in the supply chain.

### **Sub-topic 3: Consumer awareness and behavior toward plastic waste pollution and the development of a circular economy**

Consumer awareness and behavior toward environmentally friendly initiatives such as the circular economy that tackle environmental issues such as plastic waste pollution is crucial in ensuring that corporate practices are influenced, through the promotion of recycling practices, and increased demand for sustainable products. Recycling is imperative in addressing this issue as it is not only a great system to alleviate the disposal of waste, but it also decreases the magnitude of plastic waste found in landfills. Additionally, recycling is one of the circular economy's principles, seeing as it advocates that materials are utilized for a prolonged time.

Recycling will also help consumers comprehend the benefits of pursuing eco-friendly behaviors due to recycling's undeniable and prominent role in the life cycle of a product. Informed consumers will shift their purchasing toward companies that pursue circular economy practices, advocate for policy changes, and educate future generations about plastic waste pollution and the circular economy.

Similarly to corporations, the current tendencies and behaviors of consumers indicate that they prioritize and take into account their convenience, over the detrimental effects their purchasing and consumption patterns have on the environment, animals, and health of those who are at a larger risk of bearing the burden of plastic waste pollution; and its poorly executed management, and reduction.

The collective behavioral shift of consumers toward sustainability will result in a significant and smoother transition into the circular economy. This sense of responsibility consumers will adopt concerning practices that are in harmony with the principles of the circular economy can be enhanced by companies who advertise recycling in a positive light, by emphasizing how their choice as consumers is what determines the global transition into sustainability and the undeniable value this will transition will bring in restoring and increasing the overall well-being of the environment, animal species, and human populations. The esteemed Ellen MacArthur Foundation outlines the principle of the circular economy: [it] “is a system where materials never become waste and nature is regenerated. In a circular economy, products and materials are kept in circulation through processes like maintenance, reuse, refurbishment, remanufacture, recycling, and composting.”

Removing economic activity from the consumption of finite resources is what fosters the circular economy to tackle poignant challenges such as pollution, biodiversity loss, mass waste, and climate change. The implementation of the circular economy is believed to be beneficial in reducing our greenhouse gas emissions and the excessive use of packaging, by promoting recycling and reusing initiatives. Such initiatives would mean that products become reusable, upgradable, and repairable, whilst minimizing their packaging. The European Parliament supports this statement as: “moving towards a more circular economy could increase competitiveness, stimulate innovation, boost economic growth, and create jobs (700,000 jobs in the EU alone by 2030). Consumers will be provided with more durable and innovative products that will increase the quality of life and save them money in the long term.”

## Major Countries and Organizations Involved

### China

In January 2020, The Guardian published an article titled “China moves to phase out single-use plastics: Plastic bags to be banned in all major cities by end of 2020, says state planner”. The article highlights the policy issued by the National Development and Reform Commission and the Ministry of Ecology and Environment stating that the markets selling fresh produce were to remain exempt from this ban until 2025. The state planner also shared that the restaurant industry would face a ban on the consumption of single-use straws by the end of 2020 while the import of all plastic waste and the use of medical plastic waste in plastic production would also be banned. The goal made for the year 2025 was that towns and cities throughout the nation were mandated to accomplish a 30% reduction in the utilization of plastic items that are thrown out after a single use in the restaurant industry.

## The Netherlands

The Dutch government has created a timeline for its transition into the circular economy dating from 2016 to 2050. The program underwent an update a year later, to exhibit its latest developments. Following this program, a new program titled “New National Programme on Circular Economy Implementation Programme (2023-2030)” was unveiled in 2023. This new program illustrates a plethora of measures that intend to promote the efficient use of raw materials and products by implementing strict pricing incentives, stricter norms, specific targets for product groups, achieving high-value retention for products and raw materials, and discovering new interventions. The government of the Netherlands's ambitious goal of establishing a circular economy by 2050 entails the frequent use of renewable and sustainable raw materials, minimizing waste generation, and implementing the concept of circularity when designing new products and materials.

## Scotland

On June 14, 2023, a new legislation was published, titled the “Circular Economy Bill” which enables Ministers to “set local recycling targets to reduce waste and the nation’s carbon footprint.” As well as “place charges on single-use items like coffee cups to encourage the move to reusable alternatives”. The bill grants local authorities enhanced enforcement powers to tackle littering from vehicles and for the Scottish Government to design alongside local authorities a national Code of Practice on household waste recycling to improve the quality and quantity of the recycling that is collected. The aforementioned bill is Scotland’s response to the fact that “evidence estimates around four-fifths of Scotland’s carbon footprint comes from the products and services we manufacture, use, and throw away. Material consumption and waste are the primary drivers of nearly every environmental problem we currently face, from water scarcity to habitat and species loss. (Zero Waste Scotland) Implementing the legal frameworks proposed by Scotland’s bill will stimulate the nation’s transition into a zero-waste and circular economy.

## Japan

“Outside the EU, Japan has also moved towards a highly efficient circular economy thanks primarily to the pioneering Law for the Promotion of Efficient Utilization of Resources, passed in 2000. The law, which treats materials as circular goods, covers products’ entire lifespans.” (The Guardian) Thus, manufacturers are obligated by the law to operate disassembly plants and recover materials, encouraging companies to reuse materials in their production process. Japan has impressively achieved the milestone of reclaiming 98% of metals through this product disposal, which can now be perceived as a valuable asset and advantage for companies.

In 2020, the government of Japan declared its goal of becoming carbon neutral by 2050 through its release of the Circular Economy Vision 2020. “In 2021, the world's first government-led disclosure and dialogue guidance specifically for the circular economy was developed by METI. This guidance was designed to help companies engage in a smooth dialogue with investors and financial institutions and

attract investments and loans based on appropriate assessments. (World Economic Forum) A pivotal milestone that supported the significant transformation in Japan's landscape of the circular economy is the enactment of The Plastic Resource Circulation Act in April 2022, which strides towards executing regulations that take into account the entire life cycle of plastic, thus eradicating Japan's rank as being the second country globally with the highest single-use plastic waste per capita, and encouraging Japan to pursue productive tendencies that prioritize the wellbeing of the environment.

### Chile

Chile is subject to a pressing and pronounced waste and pollution crisis. "While important progress has been made to ensure waste is disposed of properly, municipal solid waste is rising rapidly and official landfills in Chile only have 12 years of useful life left. Recycling and separate collection rates remain low, and thousands of illegal waste disposal sites are causing serious problems for the health and quality of life of residents." (Ellen MacArthur Foundation) In response, Chile has crafted an extensive circular economy roadmap in collaboration with over 100 stakeholders from the public and private sectors, NGOs, academia, and citizens. The roadmap was published in 2021 and structures a plan that aims to create an equitable, and regenerative circular economy by 2040. The roadmap is comprised of 27 initiatives, in tandem with timelines for their completion, and explicit actions that must be put into action. All of the 27 initiatives are created to achieve the roadmap's seven goals such as facilitating the separation and recovery of waste, extending producer responsibility schemes, promoting sustainable rural production, etc.

### Saudi Arabia

"In a major step towards addressing plastic waste in the Kingdom of Saudi Arabia (KSA), the Saudi Investment Recycling Company (SIRC), a wholly-owned subsidiary of the Public Investment Fund (PIF) of Saudi Arabia and the Alliance to End Plastic Waste (the "Alliance") have signed a Memorandum of Understanding (MoU) on December 2nd, of 2023." (Alliance to End Plastic Waste) The main objectives of this partnership are to support KSA's ambition of attaining a 94 percent diversion from landfills by 2035, establish an irrepressible circular economy, and investigate effective waste management initiatives in KSA, specifically by distinguishing the issues posed by plastic waste. To eradicate this issue, open and transparent discourse on optimal solutions that take into account the entire value chain of plastic waste during every step of its lifecycle must occur.

### United Nations Conference on Trade and Development (UNCTAD)

"UNCTAD's work on the circular economy started in 2015 with a collaboration with the Ellen MacArthur Foundation on resource-circularity potentials in large economies like India and China. UNCTAD works on the circular economy by encouraging discussions and activities seeking to bring value out of waste streams, by encouraging discussions around collaborative economy sectors, by the examination of innovative business models and encouragement of consumer awareness and behavioral shifts." (UNCTAD) One of the UNCTAD beliefs is that although companies have made notable progress



in minimizing their societal and environmental consequences, the privatization of public policy through corporate social responsibility, and sustainability standards has fallen short. To acknowledge this fallacy, international rules on global resource circularity, collaboration, and educated individual consumers are quintessential. A few notable UNCTAD initiatives in promoting the circular economy concept include the encouragement of discussions about “removing value from streams of waste”, critiquing existing business models, and collaborating with various renowned international organizations.

### Ellen MacArthur Foundation

The Ellen MacArthur Foundation is a non-profit organization that “creates evidence-based original research on the benefits of a circular economy, resources for teachers and academics, whilst supporting organizations and individuals with formal learning opportunities through circular economy courses.” Lastly, the foundation publishes reports and tools “that help set effective policies, find new ways to do business and design better products.” The foundation explores opportunities across sectors and stakeholders to identify how the principles of the circular economy are being intentionally used today. The foundation collaborates with a range of businesses, universities, non-governmental organizations, international institutions, and innovators to produce, develop circular products, and enhance innovative business practices. The main ambitions of the foundation are to pilot the circular economy, as well as supplement its capacity, and confront the frequently met barriers hindering the transition into sustainability. The foundation has officially proposed the initiation of a treaty that would stimulate the investment and innovation needed to strengthen measures such as redesigning plastic packaging throughout its lifecycle fundamentally, promoting the reuse of materials, and substantially decreasing the consumption of plastics. The formal diplomatic discussions surrounding the UN treaty that aims to combat plastic pollution commenced in November 2022, and was followed by additional negotiations in May of 2023.

### Timeline of Events

Date (start - end)	Name	Description
October 2018	The New Plastics Economy Global Commitment was launched in collaboration with the UN Environment Programme (UNEP)	The commitment united “more than 450 organizations behind a common vision and an ambitious set of targets to address plastic waste and pollution at its source, by 2025. Signatories include companies representing over 20% of all plastic packaging produced globally, as well as governments, NGOs, universities, industry associations, investors, and other organizations.” (Ellen MacArthur Organization)
December 2015	European Commission adopted the first circular economy action plan	“It included measures to help stimulate Europe's transition towards a circular economy, boost global competitiveness, foster sustainable economic growth

		and generate new jobs. The action plan established concrete and ambitious actions, with measures covering the whole life cycle: from production and consumption to waste management and the market for secondary raw materials and a revised legislative proposal on waste.” (European Commission)
March 2019	European Commission adopted a report on the implementation of the first circular economy action plan	“The comprehensive report presents the main achievements and sketches out future challenges to shaping our economy and paving the way towards a climate-neutral, circular economy where pressure on natural and freshwater resources as well as ecosystems is minimized.” (European Commission)
June 2019	G20 progresses on tackling marine plastic pollution	“At its annual meeting in June 2019, the G20 group of the world’s largest established and emerging economies launched its Implementation Framework for Actions on Marine Plastic Litter. The framework outlines voluntary actions by countries towards reducing plastic waste generation, improving waste management and cleaning up litter that has already contaminated the ocean.” (The Economist) This meeting is fundamental, considering the upsurge in global GDP contributions from emerging economies such as India, China, and Brazil in tandem with the inveterate economies of the USA, UK, and Japan. The Japanese nation formerly held the presidency over the G20 forum in 2019, where it launched a platform that allows and encourages member nations to highlight weighty developments and knowledge about the global transition into the circular economy.
October 2019	Follow up on the New Plastics Economy Global Commitment: The first annual Global Commitment progress report was published	The report provides “an unprecedented level of transparency on how these signatories are reshaping the plastics system.” (Ellen MacArthur Organization)

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## Relevant UN Treaties and Events

- End plastic pollution: towards an international legally binding instrument, 7 March 2022 ([UNEP/EA.5/Res.14](#))
- Enhancing circular economy as a contribution to achieving sustainable consumption and production, 7 March 2022 ([UNEP/EA.5/Res.11](#))
- Sound management of chemicals and waste, 7 March 2022 ([UNEP/EA.5/Res.7](#))

## Previous Attempts to solve the Issue

### West Africa

In 2018, 17 West African countries collectively produced 6.9 million tons of plastic waste, where a substantial amount is located in the ocean. In response to this, the World Bank in tandem with its collaborators dispersed \$563 million for an initiative titled “Western African Coastal Areas Management Program” (WACA). Thus far, WACA has issued reports on the social, economic, and environmental impacts of plastic waste pollution, brought a life an e-book that educates others on the necessary resources needed to examine opportunities for the implementation of the circular economy, as manage the life cycle of Polyethylene terephthalate (PET) bottles in West Africa. The severe cost of West Africa’s marine plastic pollution can be felt not only environmentally, but also economically. It is estimated that marine plastic pollution is responsible for a loss of \$10,000 - \$33,000, considering that its repercussions include damage targeted toward fisheries, and marine-related tourism, among other significant sectors.

To address this issue, “The Kirène Group producing 700,000 liters of beverage per day, is orienting 88 % of its production toward large format water bottles of 1.5 or 10 liters to reduce the use of small plastic bags or bottles at the core of the problem: now essential in West Africa, they allow to the most vulnerable to have access to clean, inexpensive drinking water. In 2014, in Ghana with the use of plastic water containers, the predicted child mortality rate fell by 42 %” (World Bank) It is also believed that the Kirène Group is aiming to increase its participation in recycling efforts, by fostering new partnerships, such as with the Recuplast company.

It is imperative to keep in mind that while raising awareness and informing others on the issue of plastic waste pollution, this strategy is not efficient on its own in permanently witnessing the evolution of this challenge. Transitioning from a linear economy into a circular model implies that adequate effort is made, such as imposing legal frameworks, making consumers and companies more open-minded towards recycled plastics and their sustainable alternatives, as well as stimulating innovation and investment in the concept of eco-friendliness.

### EU Exporting Plastic to Asia

According to the European Environment Agency, “Annual global plastic production has increased from 2 to 380 million tonnes since 1950 and is projected to double by 2035 and almost quadruple by 2050. In early 2019, the EU exported around 150 000 tonnes of plastic waste per month.” This pressing issue is rooted in the poor management of plastic waste exports issued by the EU to China, for instance, which lacks substantial transparency, and detail; thus a limited amount of information is provided on the practices used on the plastic waste once it is imported from the EU. As stated by the EU law, European countries are prohibited from exporting plastic

waste to non-European nations, hence why the short-term strategy of cumulative exports backfired shortly after import restrictions were placed, as well as why repercussions such as escalations in landfilling and incineration will manifest. The reason for the EU nation's tendency to rely on exports is due to the EU's insufficiency in reusing, recycling, and recovering all plastic waste generated to its full potential.

## Possible Solutions

To tackle the vital issue of plastic waste pollution, there are many approaches such as promoting policies that advocate for the execution of the circular economy's principles, as well as creating mass media educational campaigns that urge for transparency on the consequences of plastic waste pollution, and suggest alternative resources to plastic that can be used in the fabrication process of products. It is important to take these measures as "The United Nations has identified single-use plastics as one of the world's biggest environmental challenges." (The Guardian)

### Promoting the implementation of policies and regulations

An idea for policies and regulations that could be advocated for would be banning or restricting the production of single-use plastics such as "plastic straws, drink stirrers, balloons, cotton buds, coffee cups, and lids" (WWF Australia), whilst encouraging the consumption of sustainable alternatives to single-use plastics such as compostable plant-based straws for plastic straws, flowers or paper lanterns for balloons, reusable glass or bamboo stirrers, or spoons for drink stirrers, bamboo cotton buds or organic cotton makeup pads for cotton buds, and reusable cups or porcelain mugs for coffee cups and lids. Another solution that could be ideated would be the creation of a reward system (through point systems), that incentivizes consumers to return products for recycling. Additionally, policies on improving and investing in recycling infrastructure that adequately recycles, separates, and retrieves plastic waste, (which also encourages firms to become more open-minded towards recycling), can be an initiative many nations can come to an agreement on and elaborate on as a collective.

### Sub-topic 2: Fostering corporate responsibility

Corporate responsibility can also be addressed through the implementation of policies that not only keep the manufacturers accountable and responsible for the product throughout its entire life cycle (this encompasses its design, manufacturing, and cautious disposal of any plastic waste that is emitted as a result) as well as stimulating the production of products that are biodegradable and easier to recycle. Furthermore, implementing waste reduction strategies within the company is also a means to increase responsibility in the corporate sphere. This can entail partnerships with recycling facilities for office and electronic waste as well as promoting the use of recycled materials in future productions. Another idea that stimulates corporate responsibility would be hiring individuals who are informed on the

principles of the circular economy, and are passionate about sharing transparently any evolutions, or drawbacks the company that is attempting to transition into sustainability is facing, as a means to create trust with other stakeholders and create a culture of collaboration when addressing this issue.

### Sub-topic 3: Consumer awareness and behavior toward plastic waste pollution and the development of a circular economy

Consumer behavior shifts can be altered through the marketing of eco-friendly products with minimal packaging, or made out of biodegradable or recycled materials. Another solution that addresses this sub-topic would be launching educational campaigns in public areas but also in schools on the detrimental effects of plastic waste pollution on our ecosystems and human health, as well as the environmental and economic benefits of working collectively and internationally toward a circular economy. The campaigns should also highlight alternatives to environmentally hazardous products, strategies to reduce plastic production and consumption thus preventing plastic waste pollution, increasing recycling and reusing of materials, educating consumers on the right way to dispose of plastic waste instead of littering, etc. A third solution that could alter the perception of consumers into preferring sustainable products is ensuring that clear and explicit labeling (similar to the certifications of products that are cruelty-free) is consistently implemented for products that are recyclable, biodegradable, made out of recycled resources, or is in line with the principles of the circular economy; whilst briefly reminding consumers through the image or content of the labels, as to why these products are beneficial in contrast to products made out of finite resources.

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