

# CHAPTER I

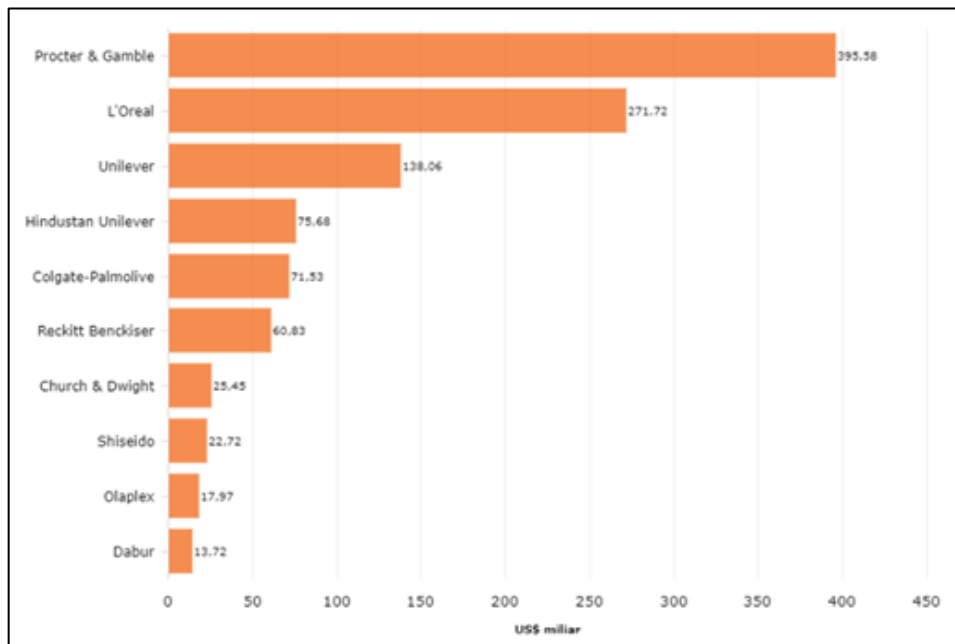
## INTRODUCTION

### 1.1 Research Background

Modernization and technology development that spread throughout the world affects various aspects of human life and create a huge impact on human life (Wardynski, 2019). Community behavior patterns are increasingly developing in accordance with changes and developments that occur around them (Wardynski, 2019). Ease, convenience, practicality, and efficiency are always attached to the behavior patterns of today's society, not least in terms of meeting their needs. Various industries are built to meet the needs of the world community. Along with the development of industrialization, natural resources are running low, fossil fuel emissions increase pollution levels, and industrial waste is also increasing in large quantities, thus creating global warming and climate change (Wardynski, 2019). From a large number of industries in the world, it is noted that the industries that pollute the world the most are the energy industry, transportation industry, agriculture industry, fashion industry, and food retail industry (Omondi, 2021).

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**Figure 1. 1 Top 10 Consumer Products Companies with the Largest Market Capitalization, 2021**

Source: Pahlevi (2022)

Daily necessities with relatively fast consumption periods, commonly known as “fast-moving consumer goods” (FMCGs), are sold at the retail store in plastic packaging or containers to give a "practical" impression and have the “right” size to be consumed. Food retail that produces fast food and beverages is included in the category of fast-moving consumer goods (FMCGs). In addition, products for personal care, cleaning and household equipment, to cooking equipment are also included as fast-moving consumer goods (FMCGs). According to data held by Companies Market Cap in Figure 1.1, the market capitalization of the consumer products industry in early 2022 reached US\$1.13 trillion (Pahlevi, 2022). The consumer products industry market is dominated by fast-moving consumer products from world giant companies which are distributed to various countries, including Indonesia.



**Figure 1. 2 The 10 Most Purchased Consumer Product Brands by Indonesian People**

Source: Kantar Worldpanel (2021) in Luthfi (2021)

The level of consumer goods imports in Indonesia alone in 2020 reached 5,205 thousand tonnes (Badan Pusat Statistik, 2021) and in 2021 it increased by 38.28 percent, which was dominated by non-durable consumer goods and processed food and beverages (PDSI Kementerian Perdagangan, 2022). Non-durable consumer goods refer to consumer products that run out quickly and have a relatively fast purchase frequency. In addition to imports, the Indonesian people also have a high level of consumption of fast-moving consumer products from local companies. This is proved by the results of the Kantar Worldpanel survey published in June 2021 (in Figure 1.2) showed that the highest penetration rate and frequency of FMCGs purchasing for Indonesians were achieved by brands from local companies (Luthfi, 2021). The General Director of Domestic Trade, Oke Nurwan, also said that the sale of consumer goods (grocery products) has the opportunity to

grow continuously considering that these consumer goods are continuously needed by the community to meet their daily needs (Timorria, 2021).

**Tabel 4 PDB Atas Dasar Harga Berlaku dan Harga Konstan 2010 Menurut Pengeluaran (triliun rupiah)**

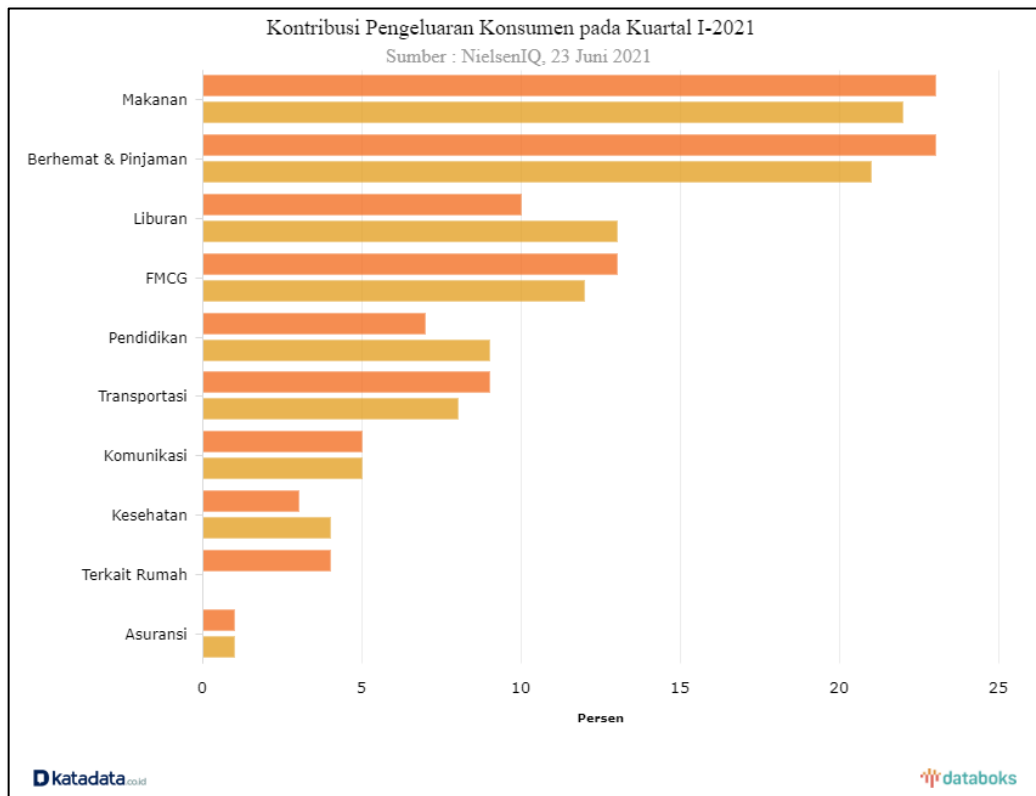
Komponen	Harga Berlaku			Harga Konstan 2010		
	2019	2020	2021	2019	2020	2021
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Pengeluaran Konsumsi Rumah Tangga	8.965,8	8.899,9	9.236,0	5.936,4	5.780,2	5.896,7
2. Pengeluaran Konsumsi LNPRT	206,1	201,4	207,8	136,0	130,2	132,3
3. Pengeluaran Konsumsi Pemerintah	1.394,6	1.474,1	1.551,7	856,0	872,8	909,2
4. Pembentukan Modal Tetap Bruto	5.121,4	4.897,0	5.227,9	3.597,7	3.419,2	3.549,2
5. Perubahan Inventori	226,9	97,9	111,1	130,0	51,3	62,7
6. Ekspor Barang dan Jasa	2.943,5	2.666,4	3.659,0	2.275,5	2.090,3	2.592,7
7. Dikurangi Impor Barang dan Jasa	3.013,9	2.424,4	3.201,0	2.046,2	1.704,2	2.101,4
Diskrepansi Statistik <sup>1)</sup>	- 11,7	- 374,3	178,3	63,8	83,3	77,5
<b>Produk Domestik Bruto (PDB)</b>	<b>15.832,7</b>	<b>15.438,0</b>	<b>16.970,8</b>	<b>10.949,2</b>	<b>10.723,1</b>	<b>11.118,9</b>

Keterangan: <sup>1)</sup> Selisih PDB Lapangan Usaha dan PDB Pengeluaran

**Figure 1. 3 Indonesia's GDP at Current Prices and 2010 Constant Prices by Expenditure (in trillion rupiah)**

Source: Badan Pusat Statistik (2022)

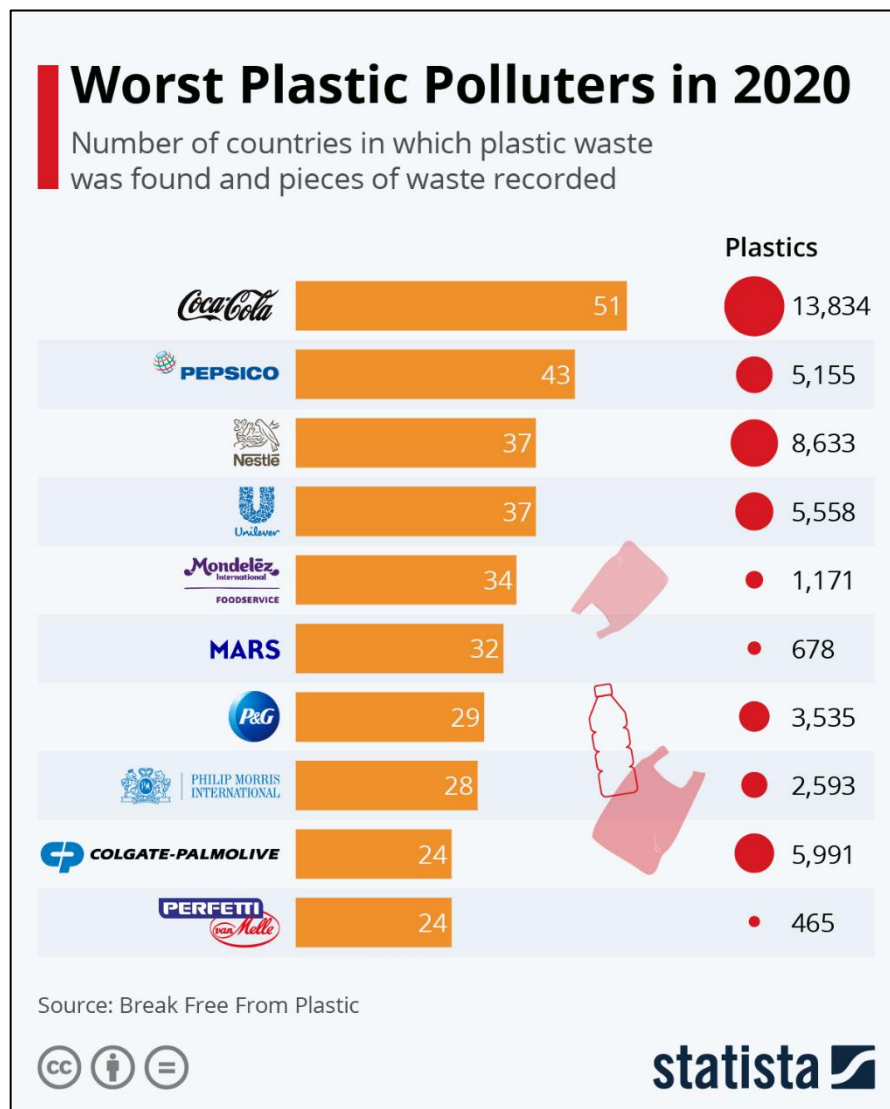
The level of FMCG products consumption shows that FMCG products also have an important role in Indonesian national economics. We can see from Figure 1.3 that until the end of 2021, the component of household consumption expenditure is still one of the components with the largest contribution, even the coverage of its share reached more than half of Indonesia's GDP based on expenditures at current prices, which is 54.42 percent (Badan Pusat Statistik, 2022). This figure shows 2.02 percent growth, even though at that time the economic condition of the community was still being affected by the Covid-19 pandemic.



**Figure 1. 4 Contributions of Indonesian Consumer Expenditure in Q1-2021**  
 Source: Annur (2021)

Based on the survey result conducted by consumer survey agency NielsenIQ in the first quarter of 2021 (Figure 1.4), it is known that FMCG itself contributed 12 percent of the total consumption expenditure of Indonesian consumers (Annur, 2021). Apart from the national economic figures, the FMCG industry also plays a role in other related industries' growths. This was also conveyed by Junaedi Purnomo, Sales Manager of PT Lawangmas Primapack Indonesia, which is one of the plastic packaging producers in Indonesia, that consumer goods (FMCGs) become an important factor in encouraging the growth of the plastic packaging business (Hidayat, 2019).

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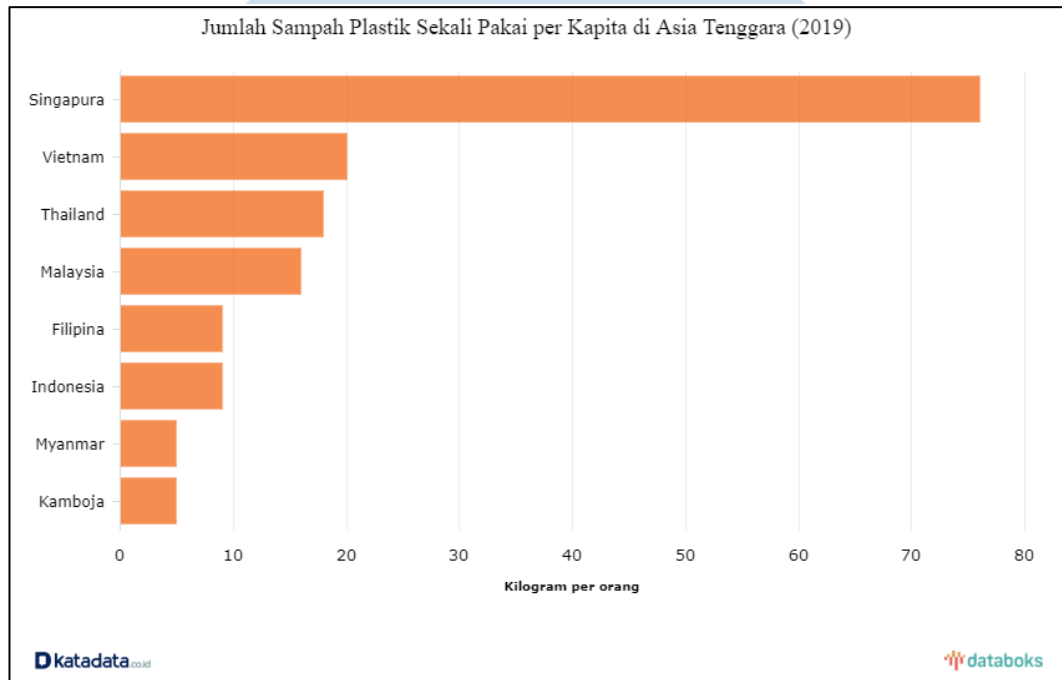


**Figure 1. 5 World's Worst Plastic Polluters in 2020**

Source: Statista (2020)

Unfortunately, amidst the positive impacts presented by the growth of production and consumption of FMCG products, it also brings negative impacts caused by plastic waste disposal. The consumption of FMCG products leaves single-use plastic packaging that ultimately ends up as plastic waste that accumulates on earth. In 2020, Statista announced a list of the world's largest plastic polluting companies as shown in Figure 1.5, whose entire list is dominated by companies that produce FMCGs products (Statista, 2020). With such large data, this statement supports Greenpeace International's statement that the production of

daily necessities is the dominant driving factor in the plastic waste crisis (Cobbing, 2018).



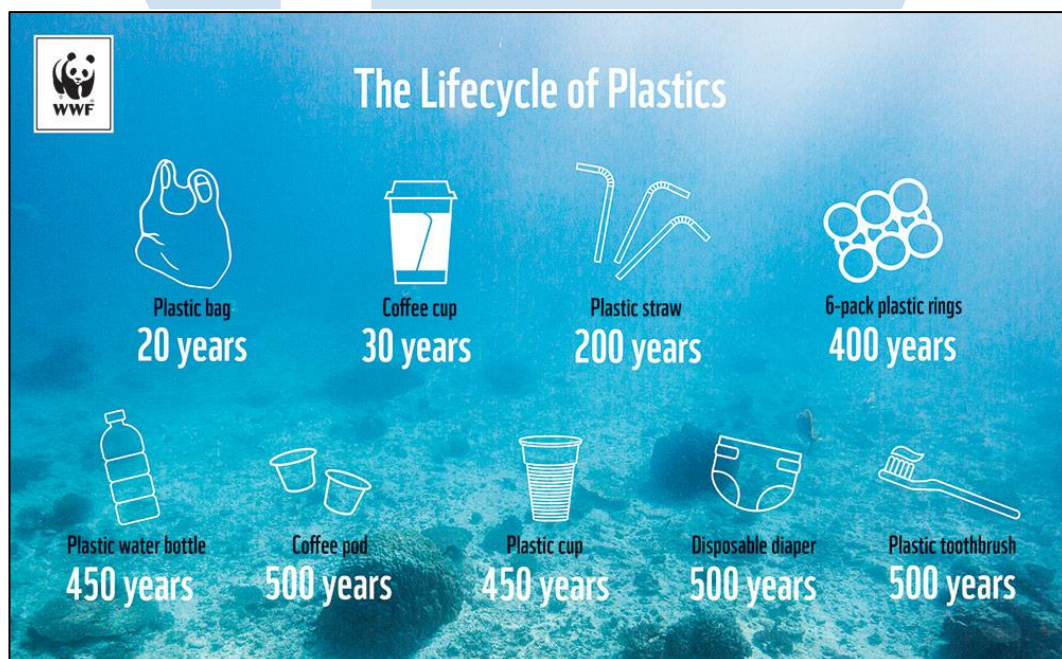
**Figure 1. 6 Number of Single-use Plastics per Capita in Southeast Asia in 2019**

Source: Pusparisa (2021)

In Figure 1.6, The Minderoo Foundation reported that in Indonesia itself, every citizen is able to produce single-use plastic waste of 9 kilograms per capita in 2019 (Pusparisa, 2021). This is expected to be a result of the tendency of the Indonesian people to buy retail products that are packaged in small sizes and wrapped in single-use plastic. Indeed, waste from daily necessities (*fast-moving consumer goods* or FMCG) was the most commonly found waste in the branded waste category during 2016 to 2019 (Greenpeace Indonesia, 2019b). In 2018, Greenpeace Indonesia together with local communities managed to collect 10,594 plastic packaging with 797 brands from three beaches in Indonesia, of which the brands are dominated by food and beverage brands, personal care products, and household necessities (Greenpeace Indonesia, 2018). A similar thing was also reported by the environmental cleaning organization, Sungai Watch, that around 46

percent of the 333 tonnes of plastic waste that were collected in Bali's rivers from October 2020 to 2021 was plastic packaging and sachets (CNN Indonesia, 2022).

The large share of household product consumption in today's life has been the cause of up to one-third of the environmental impact, mainly due to packaging materials (Prakash & Pathak, 2017). The generation of waste from product packaging is a serious side effect of public consumption (Ketelsen et al., 2020). Even the negative impact on the environment from the household sector is considered worse when compared to the industrial sector (Naing, 2020). Therefore, FMCG is considered special because of the large impact due to the habit of buying and consuming these products frequently and regularly in the daily lives of consumers (Niedermeier et al., 2021).



**Figure 1. 7 The Lifecycle of Plastics**

Source: WWF Australia (2021)

In fact, plastic takes a very long time to decompose. Based on Figure 1.7 from WWF Australia (2021), a plastic bag takes about 20 years to decompose, and if the plastic is in the form of a bottle or glass, it can take about 400 to 500 years to decompose. The lack of efforts to reduce disposable plastic waste from packaging



and sachets means that the amount of plastic waste will continue to grow. This is also exacerbated by the lack of efforts to sort and process plastic waste by the Indonesian people themselves, causing plastic waste to be accumulated together with other types of waste. Bantargebang, one of the main final landfills in Jakarta, was once expected to be full in 2021 if the amount of waste produced continues to increase because it has accommodated around 80 percent of its total capacity, which is 39 million tons of waste in 2020 (Geken, 2021). According to Lidwina & Pusparisa (2020), the accumulation of waste will lead to environmental damage, such as air pollution, water pollution, soil pollution, and damage to housing, and can be a threat to life on earth due to the emergence of health problems, natural disasters, and even potential death. The detrimental effects of garbage accumulation, such as air, soil, and clean water pollution, have also been proven by residents living around the Bantargebang area (Arbi, 2021).



**Figure 1. 8 Indonesia's Plastic Waste Problem**

Source: The ASEAN Post (2018)

In 2021, the Indonesian Central Statistics Agency released data that plastic waste produced in Indonesia alone reached 66 million tonnes per year (Liputan6.com, 2021). The University of Georgia estimates that around 3.22 million tonnes of plastic waste from the total plastic waste produced by Indonesia flows into the ocean (The ASEAN Post, 2018). Because of this, as shown in Figure 1.8, Indonesia is second-ranked on the list of top plastic waste-producing countries which is the biggest cause of marine pollution in the world. Four rivers in Indonesia are also included in the top 20 most polluted rivers in the world (The ASEAN Post, 2018). This further emphasizes that plastic waste does not only accumulate inland areas but has also penetrated into water areas.



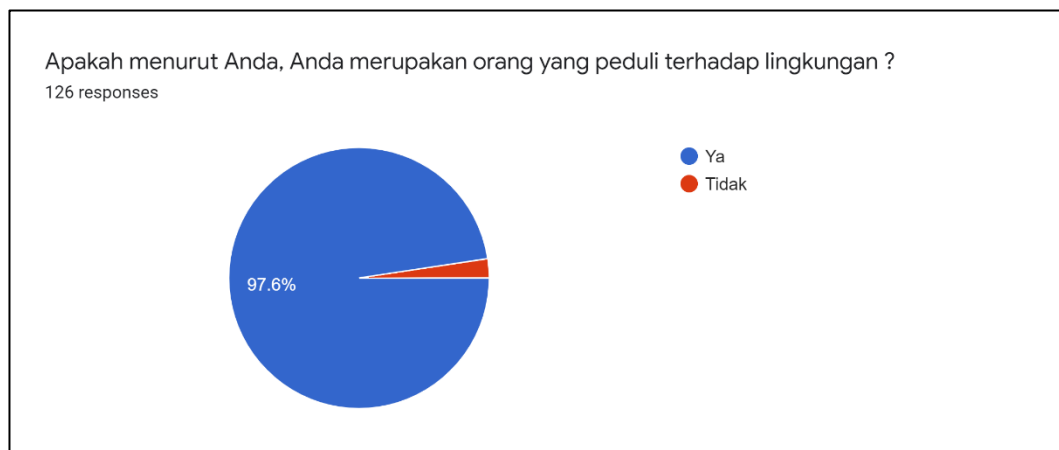
**Figure 1. 9 Hundreds of Plastic Waste Found Inside the Body of A 9.5-meter Sperm Whale on Wakatobi Island, Indonesia**

Source: Sumolang (2018) in BBC News (2018b)

The existence of plastic waste in the waters of course begins to threaten the sustainability of the ecosystem in it, especially as the largest area of the earth. On

28 May 2018, a pilot whale died in the sea in southern Thailand from ingesting about 8 kilograms of plastic (BBC News, 2018a). In the same year, a few months later, the carcass of a sperm whale (*Physeter macrocephalus*), commonly known as a cachalot, was found on Kapota Island, Wakatobi National Park, Southeast Sulawesi, Indonesia, with 5.9 kilograms of plastic waste inside its body (BBC News, 2018b). As can be seen from the image of the findings in Figure 1.9, the plastic waste found is dominated by single-use plastic packaging. The results of the United Nations Convention on Biological Diversity research state that plastic waste in the oceans endangers at least 800 species and has caused the death of at least 1 million seabirds, 100,000 marine mammals, sea turtles, and a large number of fish every year (A. Setiawan, 2021). The Ellen MacArthur Foundation released a statement that by 2050 it is estimated that there will be more plastic waste than fish in the oceans (Gatehouse, 2019).

Although it can no longer be seen by the naked eye, actually plastic waste is still not completely decomposed. Plastic waste will be degraded into small pieces and end up as microplastics, measuring less than 5 millimeters, or nanoplastics, which are less than 100 nanometers in size or equivalent to 1/10,000 millimeters (Orayeva, 2020). The results of studies estimate that until 2019, around 24.4 trillion pieces or about 82,000 to 578,000 tonnes of microplastic were floating on the surface of the world's oceans, with the possibility of an even greater number (Isobe et al., 2021). According to the International Atomic Energy Agency (IAEA), microplastics or nanoplastics in the ocean can be accidentally eaten or absorbed into the body of marine biotas (Orayeva, 2020). Dr.rer.nat. Dwi Amanda Utami, a researcher from the Geotechnology Research Center, the Indonesian National Research and Innovation Agency, said that the content of microplastics and nanoplastics in the bodies of marine biota that is consumed, the waters that are being as water sources, and the air that is inhaled can cause various of detrimental, such as health problems, damage to internal organs, serious diseases such as tumors, to the threat of death for animals and humans (Permana, 2021).



**Figure 1. 10 About 97.6% of Respondents are Care About the Environmental**  
Source: Researcher's personal survey results (2022)



**Figure 1. 11 About 97.6% of Respondents are Aware of Environmental Damage Caused by Plastic Wastes**  
Source: Researcher's personal survey results (2022)

Awareness and concern of the world community are needed to overcome this problem and prevent the worsening of the condition of the earth due to plastic waste. In Indonesia itself, the government has set a national target to reduce plastic waste in the ocean by 70 percent by 2025 (Anggraeni, 2021). The Indonesian government takes three approaches to achieve its targets, namely through the approach to limiting and reducing plastic waste, the waste recycling movement approach, and the technology and service from the waste processing approach (Rofiah, 2019). The Indonesian government has also appealed and engaged the public to reduce plastic

waste (Setiawan & Tobing, 2020). Not only government, public awareness and concern have also begun to emerge in addressing this environmental issue. The Indonesian people have positively welcomed the rules for banning plastic bags implemented by the government and have begun to reduce the use of plastic by using shopping bags that are more environmentally friendly when shopping conventionally (Jelita, 2020). The community is also quite actively involved in collaborating with the government in terms of implementing the regulation and it is known that the use of single-use shopping bags in DKI Jakarta has decreased by 82 percent (Rochman, 2021). This statement regarding community involvement is supported based on the results of a survey conducted by the researcher, in which 97.6% of respondents claimed to be people who care about the environment and are aware of environmental damage caused by plastic wastes (in Figure 1.10 and Figure 1.11), around 91% of them also support government programs by using shopping bags made from cloth.

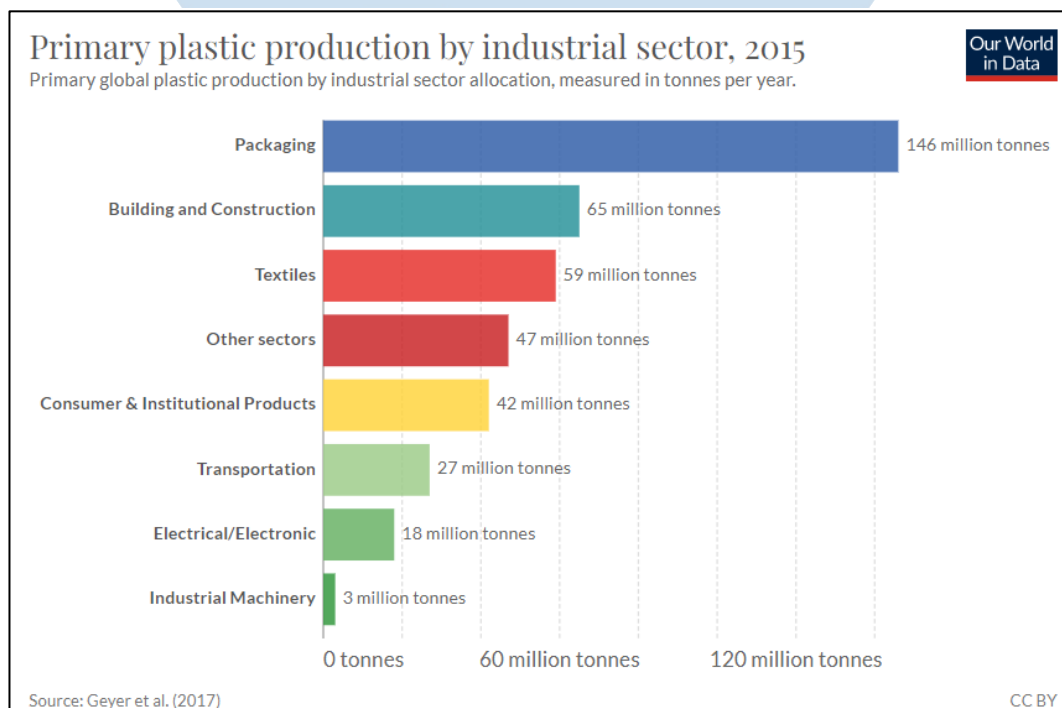


**Figure 1. 12 Unilever Uses 100% Recycled Plastic as Packaging**

Source: Unilever (n.d.)

Several companies have also begun to follow existing government regulations and voiced their concerns through various concrete actions, such as reducing the use of plastic, using biodegradable plastics and recycled plastics for their product packaging, driving several programs that support plastic waste management such

as establishing a waste bank and recycling, and so on. Coca-Cola, as one of the largest producers of FMCG beverage products in the world, has started producing their products in recyclable packaging and reducing the use of plastic by reducing their product size since 2017 (Dinnata, 2017). Unilever, the world's largest producer of FMCG products, has also issued several programs to improve the environment, such as urging the public to sort out plastic waste, use recycled plastic as packaging, operate plastic waste processing facilities, run a waste-free factory, and various other campaigns (Unilever, n.d.). Procter and Gamble or P&G, which is also a major producer of FMCG products in the world, has also carried out various programs in the P&G Sustainability Goals by issuing products that are more environmentally friendly, using plastic packaging that can be recycled, reducing greenhouse gases, efficient use of water, and so on (Procter & Gamble, n.d.).



**Figure 1. 13 Primary Plastic Production by Industrial Sector, 2015**

Source: Geyer et al. (2017) in Our World in Data (2017)

However, the previous efforts are still not able to tackle with plastic waste in the world. The use of biodegradable plastic or recycled plastic is not an attempt to

reduce the amount of plastic. The truth is plastic packaging that is claimed as *biodegradable* is still intact even though they have been floated in the ocean for three years or buried underground (Thomlinson, 2019), so the plastic waste is still will keep piling up. As well as the theory of demand and supply, as long as there is a high demand for plastic, plastic production will still run-in huge numbers. The problem is, the entire life cycle of plastic can cause other damage to the earth, namely the tremendous producing greenhouse gases that can threaten life on earth (Greenpeace Indonesia, 2019a). Based on the report "Plastic & Climate: The Hidden Costs of a Plastic Planet", plastic production itself can increase the production of greenhouse gases by the manufacturing of plastic, both from the electricity used and the smoke produced, also vehicle emissions in the distribution process (Hamilton et al., 2019). Stacking or burning to reduce plastic waste is also the same as adding the effect of greenhouse gases into the atmosphere that can increase the temperature on earth. Based on data recorded in 2015 as shown in Figure 1.13, the enormous plastic production came from the needs of the packaging industry (Our World in Data, 2017).

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Strategies	Greenhouse Gas Emissions Reduces greenhouse gases or limits emissions growth	Impact Lifecycle approach	Non-Climate Benefits Will it have +/- impacts on SDGs	Feasibility/Deployability Feasibility/ Is it ready for implementation	Scalability & Affordability Can it be implemented cost-effectively at scale
<b>High-Impact Interventions to Reduce Greenhouse Gas Emissions from the Plastic Lifecycle</b>					
Stop the production and use of single-use, disposable plastic products	High	High	High	High	High
Stop new and expanded petrochemical and plastic production infrastructure	High	High	High	High	High
Zero-waste communities	High	High	High	High	High
Extended producer responsibility for circular economy	Moderate	High	High	High	Moderate
Set and enforce meaningful emissions limits and monitoring requirements for point sources	High	Moderate	High	High	Moderate
<b>Medium-Impact Interventions that May Benefit Climate or Sustainable Development Goals but Not Both</b>					
Reduce construction of new petrochemical and plastic manufacturing infrastructure	Moderate	Moderate	High	High	Moderate
Reduce new pipeline and well pad construction	Moderate	Moderate	Moderate	High	Moderate
Identify and fix leaking pipes and tanks	Moderate	Moderate	Moderate	Moderate	Moderate
Beach cleanups	Low	Low	High	High	Moderate
River controls (catchment areas below artificial barriers)	Low	Moderate	High	High	Low
<b>Low-Impact Interventions that Do Little to Safeguard the Climate or the Planet</b>					
Mandate offsetting reforestation projects	High	Moderate	Low	Moderate	High
Use renewable energy sources throughout plastic supply chain	High	Low	Moderate	Moderate	Moderate
Ocean plastic recycling	Low	Low	High	Moderate	Low
Maximize energy efficiency throughout plastic supply chain	Low	Low	Moderate	High	Low
Modern landfill	Low	Low	Moderate	High	Low
Mandate capturing gas vs. loss (flaring/venting)	Low	Moderate	Moderate	Moderate	Low
<b>False Solutions</b>					
Biodegradable plastic	Low	Low	Moderate	Moderate	Low
Use bio-feedstocks in petrochemical and plastic manufacturing	Moderate	Low	Low	Moderate	Low
Plastic-eating organisms	Low	Low	Moderate	Moderate	Low
Ocean cleanup	Low	Low	Moderate	Low	Low
Use chemically recycled feedstocks in petrochemical and plastic manufacturing	Low	Low	Low	Moderate	Low
Further integrate petroleum refining, gas processing, petrochemical, and plastic manufacturing	Low	Low	Low	Moderate	Low
Waste-to-energy	Low	Low	Low	Moderate	Low

**Figure 1. 14 Strategies for Several Environmental Problems**

Source: Hamilton et al. (2019)

The only way that is most effective in tackling the problem of plastic waste is to get rid of the use of plastic itself. In the report "Plastic & Climate: The Hidden Costs of a Plastic Planet" (Hamilton et al., 2019), there is a table, as we can see in Figure 1.14, that explains the magnitude of the impact of each effort to tackle the issue of plastic waste. That table states that the best effort of all is to stop the production and the use of single-use plastics, as well as the expansion of the plastic



production infrastructure itself, and to develop the zero-waste community. Greenpeace also stated that reducing the production of single-use plastics is the main solution to the plastic crisis (Greenpeace Indonesia, 2019b).



**Figure 1. 15 Bulk Store: A Store with Zero-Waste Lifestyle Concept**  
Source: Utami (2020)

Currently, retailers with the concept of “zero-waste” are starting to become global. These retailers are commonly known as “Bulk stores” (Utami, 2020). They offer a variety of consumers' daily necessities that are served in containers, without plastic packaging, like usual retail. Shoppers will come to the store while bringing their own containers from home and the products will be loaded into the containers. The concept of this "packaging-free" store is a real sustainable action related to the handling of single-use plastic waste from packaging or sachets, most of which are not recycled and are allowed to accumulate (Klikhijau.com, 2021). In Indonesia, the bulk store concept has been implemented and now there are several bulk stores that have been established. Based on Zero Waste Indonesia's data collection until 2022, there are 39 bulk stores spread across Indonesia (Zero Waste Indonesia, 2022).



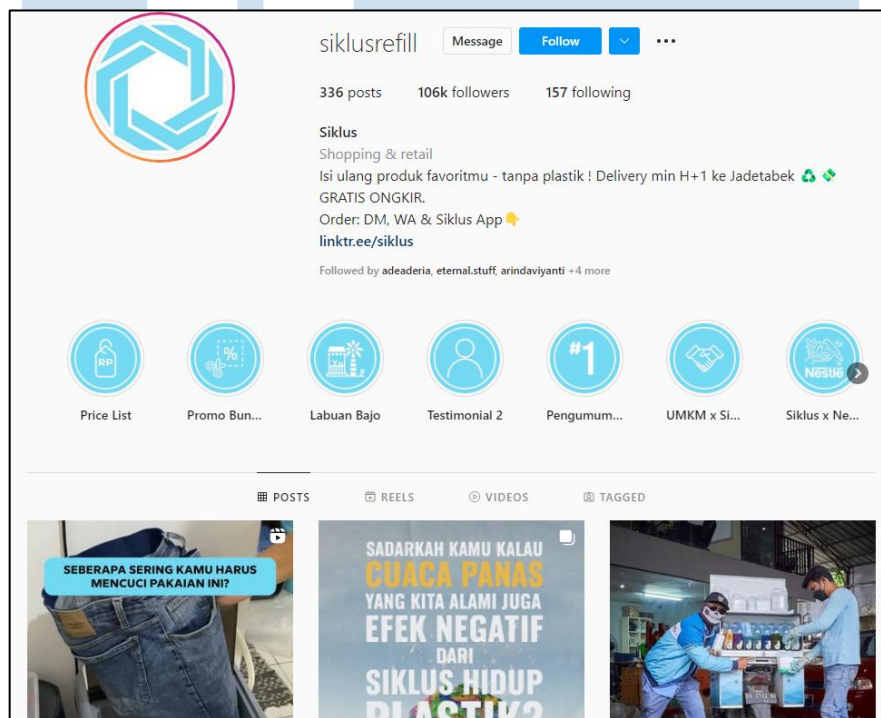
**Figure 1. 16 Siklus Refill Indonesia**

Source: Putri (2021)

Having the same concerns about the problem of waste and pollution from plastics, Siklus Refill Indonesia is present among the Indonesian society to help become a solution to these problems. Siklus Refill Indonesia applies the concept of a bulk store or packaging-free store that offers consumer needs products (FMCG) with refill technology without any single-use plastic packaging, which are delivered directly to consumers' homes. Not only their concern for plastic waste, but Siklus Refill Indonesia is also present as a solution to solve the daily economic problems of its consumers. Jane von Rabenau, Founder of Siklus Refill Indonesia, admits that Indonesians tend to buy products in small sachets rather than buying them in large sizes, and this can make plastic waste in Indonesia even more worrying and the cost per volume of the product will be higher (Bahraini, 2021).

Seeing the trend of internet-based shopping being popular in Indonesia and supported by the epidemic of the Covid-19 pandemic which limited people's movement to go around at that time, Siklus Refill Indonesia started its operations in June 2020 by utilizing internet technology and offering its services through an application-based platform. Siklus Refill Indonesia offers refills of consumer products, such as household cleaning products, personal care, cooking needs, and

other household needs, which are supplied by partners of leading FMCGs companies in Indonesia, such as P&G, Nestle, Wings, Mars, Total Chemindo Loka, Godrej, and Reckitt Benckiser. All products ordered have no minimum purchase and can be delivered without any delivery charge. Now, consumers in Jakarta city, Bogor city, Depok city, Tangerang city, and Bekasi city (Jabodetabek) areas can easily order and buy the products they need only through their mobile devices, either by downloading Siklus Refill Indonesia's application or through the WhatsApp and Instagram services (Wirawan, 2021).

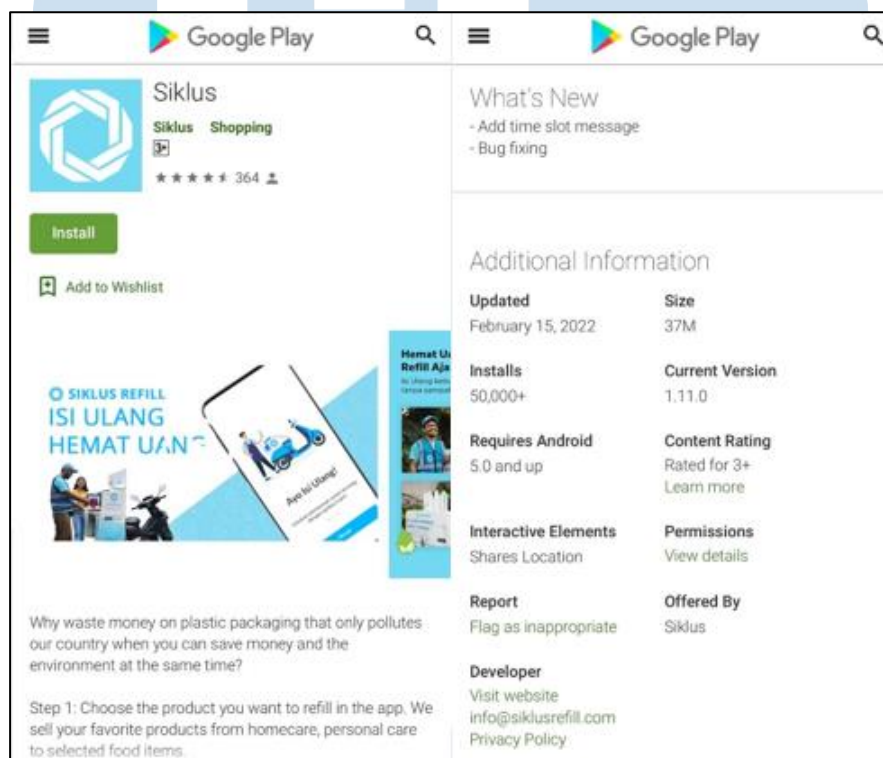


**Figure 1. 17 Siklus Refill Indonesia Has 106 thousand Followers on Instagram**

Source: Instagram (2022)

Siklus Refill Indonesia provides a relatively lower price, with an average of about 20% lower, compared to the market price of products sold in stores or conventional retailers. The prices set by Siklus Refill Indonesia may be lower because they are no longer combined with the packaging costs that producers usually charge to consumers. The various conveniences and benefits that Siklus Refill Indonesia offers are a distinct competitive advantage for it. Siklus Refill

Indonesia has also begun to be known by the wider society of Indonesia through various social media platforms, such as Instagram, TikTok, Youtube, Twitter, Facebook, LinkedIn, and so on, which market it. As shown in Figure 1.17, Siklus Refill Indonesia Instagram account (@siklusrefill) now has 106 thousand followers. Based on the results of a survey conducted by the researcher, it also shows that around 65.9 percent of respondents know about Siklus Refill Indonesia and 41 percent of the respondents know about them through Instagram.



**Figure 1. 18 Siklus Refill Indonesia Application Only Has 50,000+ Installers**

Source: Google Play Store (2022)



**Figure 1. 19 About 86.5% of Respondents Have Never Bought Products from Siklus Refill Indonesia**

Source: Researcher's personal survey results (2022)

In contrast to the number of Instagram followers and the number of respondents who claim to know about Siklus Refill Indonesia, Figure 1.18 shows that there are only more than 50 thousand users of the Siklus Refill application on the Google Play Store. From the survey results conducted by the researcher, even though most of the respondents know about Siklus Refill Indonesia, and considering that 97.6 percent of them claim to be people who care about the environment, it still does not affect the number of users of the Siklus Refill Indonesia's service, only 7.9 percent of them install the Siklus Refill application. And the other result from the researcher's survey in Figure 1.19 shows that 86.5 percent of the respondents have never used the Siklus Refill Indonesia's service from any platform.

From the phenomena that the researcher described above, the researcher wants to conduct research related to the factors that affect green purchase intention with the title "**Examining the Influence of Attitude, Subjective Norms, Perceived Behavioral Control, Willingness to Pay, and Environmental Consciousness on Consumers' Purchase Intention Toward Refill Products Without Single-Use Plastic Packaging from Siklus Refill Indonesia**".

## 1.2 Formulation of the Problems and Research Questions

Plastic which on the one hand is a solution that perfects the fulfilment of human needs, on the other hand, is a source of problems that in fact has a negative impact and directs the earth to more serious environmental problems. The use of plastic leads to the disposal of the plastic so that it becomes a pile of waste that takes a long time to decompose. Piles, even mountains, of plastic waste resulting from the use of plastic in human daily life, in fact, contribute as one of the causes of other environmental damage, such as global warming and pollution, which ranked first and second in the results of the Statista survey in 2020 (Jaganmohan, 2022) related to environmental issues that are considered the most worrying by the public globally. It is undeniable that plastic waste can bring far worse impacts than damage, namely destruction or even death.

The growing issues of environmental damage which are starting to lead to a worse level are now starting to feel more real. Various concerns and consciousness emerged and sparked public awareness and attention. Various real actions for the concern for the environment also began to emerge. Companies began to compete to create various innovations in order to help improve the state of the world. FMCGs industrial companies, as users of large amounts of plastic used for packaging their products, are now venturing into the use of plastics which are claimed to be more environmentally friendly.

Indonesia, as one of the largest plastic waste-producing countries in the world, is also no exception in terms of showing this real action. The government has begun to set targets to reduce plastic waste and make regulations regarding the use of plastic. The public also showed a positive attitude towards the actions of the government and companies related to the environmental saving. Around 97.6% of the people from researcher's personal survey data (as in Figure 1.11), admitted that they are aware that plastic waste is one of the causes of environmental damage to become increasingly severe. People are starting to reduce their use of plastic, especially in shopping, replacing plastic bags with cloth bags, and most of them are starting to pay attention to even using environmentally friendly products issued by a number of companies. The use of single-use shopping bags in the Indonesian

capital, DKI Jakarta, is also known to have decreased by 82 percent (Rochman, 2021).

But unfortunately, most people are still wrong about the correct plastic waste management efforts. In fact, switching to the use of shopping bags made of cloth is only part of a small-scale reduction in plastic waste, only from the side of plastic bags. It is the use of single-use plastic from the packaging of daily necessities that allocates a large amount of addition to the total amount of plastic waste. Plastic packaging that claims to be environmentally friendly, such as recycled plastic, bioplastic, biodegradable plastic, and others, is just an idea of the best way to reduce plastic waste issued by plastic companies and producers (Greenpeace, 2019). So that this is not the right action because the recycling system, in fact, cannot compensate for the large volume of plastic waste that has been produced and as long as there is plastic production, the amount of plastic waste will not decrease.

The most appropriate effort to reduce plastic waste is to eliminate the use of plastic itself. Shopping sustainably and trying a zero-waste lifestyle is another form of effort that can help reduce plastic waste significantly (UN Environment Programme, n.d.). Siklus Refill Indonesia understood this and decided to commit to helping Indonesia fight plastic waste for real. Siklus Refill Indonesia is here as a solution to the problem of plastic waste by offering an innovative shopping system for consumer needs that eliminates the use of plastic as single-use packaging, namely through reuse systems and refill technology. The innovation of the Siklus Refill Indonesia's service is facilitated by internet technology, as an application-based platform, which certainly makes it very easy for people to buy refills for their daily necessities. Siklus Refill Indonesia's service also provides benefits with product prices that are much lower than market prices and are equipped with free delivery.

Since starting its operation in June 2020, the Siklus Refill has become known among environmentalists and the general public in Indonesia. Various news portals, advertising, social media, to the power of word-of-mouth contributed to introducing and marketing the Siklus Refill Indonesia's service. Their Instagram media account (@siklusrefill) has now reached 106 thousand followers. Around 65.9

percent of the people from the data collection of the researcher also stated that they were aware of Siklus Refill Indonesia's services.

Although various benefits have been offered and even the attitude shown by the community towards the Siklus Refill Indonesia's service is quite positive, these things are inversely proportional to the actual action. The number of people who have used the Siklus Refill Indonesia's service is still relatively small. This is supported by the fact that the number of downloaders and users of the Siklus Refill Indonesia's application on the Google Play Store only reaches more than 50,000 users, which is still very far from the number of followers on their Instagram account. Based on independent data collected by the researcher (as in Figure 1.19), only about 13.5 percent have ever used the Siklus Refill Indonesia's service, although most claimed to know about the Siklus Refill Indonesia's service, claiming to be people who care about the environment who also buy other environmentally friendly products. In fact, according to Kim & Chung (2011), consumers' past experiences with purchasing green products may influence and are considered to be crucial in forming the consumers' perception that would lead to future purchase intentions toward other green products. This is also in line with the statement in the research of Joshi and Rahman (2016), that the attitudes and thoughts shown by consumers are sometimes inconsistent and have a weak relationship with their actual actions related to purchasing behavior regarding green purchasing.

The effect of environmental consciousness on refill consumer products from Siklus Refill Indonesia also needs to be investigated further. The high number of people who claim to be people who care about the environment, based on conditions and the high number in the researcher's survey statement, has not yet shown a high purchase intention towards purchase intention of Siklus Refill Indonesia products. Likewise with perceived behavioral control, perceived behavioral control, which is facilitated by a sense of self-efficacy, ability, or capacity, is considered to have a great ability to influence purchase intentions (Hasan & Suciarto, 2020). With the many advantages, benefits, and conveniences offered by Siklus Refill Indonesia,



there are still many people who have not purchased products from Siklus Refill Indonesia.

Collective culture embraced by the society tends to have subjective norms which will tend to influence how a person behaves. Individuals tend to feel the pressure from their surroundings and will carry out what is referenced to them (Bong Ko & Jin, 2017a; T. I. Han & Chung, 2014). Indonesia is one of the countries that embraced collective culture in society. Indonesians tend to listen to others' opinions and assessments about themselves or what they do. The large number of followers of Siklus Refill Indonesia should be an illustration of how much influence can be created as a form of subjective norms. However, this is still not seen in the real situation, which means that the influence of subjective norms needs to be investigated further in the context of purchasing environmentally friendly products from Siklus Refill Indonesia.

The public's willingness to pay for environmentally friendly products is also estimated to be one of the factors that influence the level of intensity of purchasing environmentally friendly products. The common negative mindset of people in developing countries, one of which is towards environmentally friendly products which consider environmentally friendly products to be of low quality, less aesthetic, and more expensive affects consumers' low purchases of environmentally friendly products (Syadzwin & Astuti, 2021). Consumers tend to be more sensitive to price when buying environmentally friendly products so when consumers do not have the desire to buy environmentally friendly products at a higher price then they may choose not to buy them (Kim & Chung, 2011). Therefore, consumers' willingness to pay is one of the influencing factors that need to be investigated further, especially on consumer refill products from Siklus Refill Indonesia.

Therefore, after seeing the gaps that occur related to the phenomena described previously, the researcher needs to analyze other factors apart from consumer attitudes that allow consumers to encourage green purchase intention as their real action. The researcher then formulates it into research questions that will later become a reference in the research hypothesis, namely as follows:

1. Will attitude positively influences consumers' purchase intention towards consumer products refill in Siklus Refill Indonesia's service?
2. Will subjective norms positively influence consumers' purchase intention toward consumer products refill in Siklus Refill Indonesia's service?
3. Will perceived behavioral control positively influences consumers' purchase intention towards consumer products refill in Siklus Refill Indonesia's service?
4. Will willingness to pay positively influences consumers' purchase intention towards consumer products refill in Siklus Refill Indonesia's service?
5. Will environmental consciousness positively influence consumers' purchase intention towards consumer products refill in Siklus Refill Indonesia's service?

### **1.3 Research Objectives**

Based on the description of the research questions in the formulation of the problems previously stated by the researcher, the objectives of this study include:

1. To analyze and find out that attitude positively influences consumers' purchase intention towards consumer products refill.
2. To analyze and find out that subjective norms positively influence consumers' purchase intention toward consumer products refill.
3. To analyze and find out that perceived behavioral control positively influences consumers' purchase intention towards consumer products refill.
4. To analyze and find out that willingness to pay positively influences consumers' purchase intention towards consumer products refill.
5. To analyze and find out that environmental consciousness positively influences consumers' purchase intention towards consumer products refill.

### **1.4 Research Benefits**

With this research, the researcher hope that the results of this research can provide benefits and uses, both academically and practically, in the future academic of expected:

1. Academic benefits

The results of this study are expected to provide useful benefits from an academic point of view for the education world in order to add and enrich insights that also contribute to the development of science, particularly related to business, management, and marketing regarding sustainability, green, and environmental practices. This research is also expected to be a reference source as well as a consideration for further research in the future.

2. Practical Benefits

Researcher hope that through this research, researcher can provide useful information for companies and society. The results of this research are also expected to become suggestions, inputs, sources of reference, as well as material for consideration for business actors, prospective business actors, or all parties in the business, management, and marketing fields, especially those related to the application of sustainability and green concepts in the present and future.

### **1.5 Research Limitations**

In this study, there are scope limits set by the researcher in accordance with the research topic in order to obtain a clearer and comprehensive picture so that it can be more focused on the research problems that have been formulated previously. The boundaries that will be examined in this research are as follows:

1. The object in this study is limited to the consumer product refill service platform, Siklus Refill Indonesia
2. This research is limited by the use of several variables according to previous literature reviews, including Attitude, Subjective Norms, Perceived Behavioral Control, Willingness to Pay, Environmental Consciousness, and Purchase Intention.
3. This research was conducted on respondents with the criteria of the residents of Jakarta city, Bogor city, Depok city, Tangerang city, and Bekasi city, in Indonesia, who are in the age range of 17 years and over, have awareness and

concern for environmental conditions, have purchased environmentally friendly products before, have relatives who have used environmentally friendly products, know or have heard about the Siklus Refill Indonesia's service but have never used it before.

4. The method used in this study related to data collection and processing to obtain results is by distributing online surveys and utilizing data processing software which will be listed more specifically in CHAPTER III of this study.

## **1.6 Research Writing Systematic**

This research is written in the form of a thesis report which consists of five main chapters. Each chapter contained in this research, from chapter 1 to chapter 5, has interrelationships and continuity between each other. The following is a systematic writing and preparation of each chapter in this research, including:

### **CHAPTER I INTRODUCTION**

In Chapter I, the researcher describes the phenomenon that is became the background of the research, the formulation of the problem to be studied, the purpose of this research, the benefits expected from the results of this study, research boundaries in order to maintain the focal point of the research, to the systematic writing and preparation of this research.

### **CHAPTER II LITERATURE**

In Chapter II, the researcher describes various theoretical foundations related to the concepts and bases used in this research. The theoretical basis concerns the definitions and relationships between variables sourced from experts on the basis of various journals, books, and previous research in order to support a deeper understanding and discussion related to research.

This chapter will also contain the development of hypothesis from the research as well as the theoretical framework that becomes the model of the research concept.

### **CHAPTER III RESEARCH METHODOLOGY**

In Chapter III, the researcher discusses the general description of the object, scope, and approach in this research. Then, this chapter will also contain various methods and techniques used in the research process, from measurement, collection, to data analysis.

### **CHAPTER IV ANALYSIS AND DISCUSSION**

Chapter IV is the essence of the research results which are formulated into the description, analysis, discussion, and interpretation of hypothesis along with the results of research data processing which are described in accordance with the concepts and methodologies used. This chapter is the main key of the answers to the research questions that have been described previously. Not only research results, this chapter also contains suggestions in the form of managerial implications based on theory and their development according to the results obtained.

### **CHAPTER V CONCLUSION AND SUGGESTION**

In Chapter V, the researcher will include conclusions from the overall results and discussion in this study. The researcher will then also put forward various suggestions aimed at the company, as the object of this research, as well as for further research. This suggestion is based on the results obtained from the research and is expected to be useful in helping and supporting companies and researchers in the future.

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