

# Final report

# Study on Phasing Out Sachets and Introducing Refill and Bulkstore Business Models

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April 2022

#### DISCLAIMER:

This publication was produced with support of the 'Rethinking Plastics – Circular Economy Solutions to Marine Litter' project. The 'Rethinking Plastics' is funded by the European Union (EU) and the German Federal Ministry for Economic Cooperation and Development (BMZ) and implemented by GIZ and Expertise France. The contents of this publication are the sole responsibility of the authors and do not necessarily reflect the views of the European Union, the BMZ, GIZ or Expertise France.

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# **Executive Summary**

Multilayer plastic or sachets for various food and beverage products, personal care and home cleaning products measuring less than 50 mL or 50 gr are prohibited by the government from being used by manufacturers (manufacturing and retail) as of January 2030 through Regulation of the Minister of Environment and Forestry no. 75/2019 on Waste Reduction Roadmap by Manufacturers.

This research was conducted qualitatively in November 2021 – April 2022, with primary data obtained from interviews with 5 representatives of Ministries/Institutions, 1 manufacturer, 1 traditional retailer (traditional market), 1 modern retailer, 18 bulk/refill shops, 3 consumers, as well as field observations at 5 locations of bulk/refill stores and 3 retails. The research unit is covering all parts of the country.

Based on the environmental, economic, and social parameters previously determined by the researchers, it can be concluded that: bulk/refill stores have lower fewer potential as a long-term solution for reducing sachet waste for manufactures. However, it has significantly higher potential for the reduction of large plastic packaging (multilayer and plastic bottles).

Bulk/refill stores will have great potential for reducing sachet waste only if they are sold to sachet users (who are generally lower middle class) at the same or lower price than regular stores, practical and easy to obtain, and with purchase volume as much as the sachet volume.

The bulk/refill shop business model is a new phenomenon that is starting to extensively proliferate throughout Indonesia. Its existence since 2015 and its ever-increasing development need to be used as a momentum to gain critical mass for a more structured, systematic, and massive adoption, as suggested by Everett Rogers' Diffusion Theory of Innovation. The study found that there were at least 47 bulk/refill shops in Indonesia.

There is a wide variety of products and services, where they are sourced, the process of buying and using reusable containers, prices and promotions offered by the people behind this business, along with physical evidence that demonstrates the environmental and social motivations promoted by bulk/refill stores in Indonesia. However, they have something in common, namely alternative shopping solutions without packaging (single use) offered to consumers to contribute to the reduction of the waste problem in Indonesia.

To ensure that the elimination of sachets can be achieved by 2030, KLHK in collaboration with GIZ is recommended to coordinate with relevant Ministries/Agencies, FMCG, MSMEs, retail,

distributors, consumers, mass media, and academics to develop a supporting business ecosystem for selling bulk/refill products. Thus, the transition from sachets can be implemented incrementally and alternatives are prepared. There are technical and nontechnical obstacles that need to be jointly understood and the way out is identified.

Bulk/refill business ecosystems require regulation, guidance and standardization related to the supply of large-sized products by manufacturers, distribution of bulk/refill products by distributors and retailers (including bulk/refill shops), supply and use of product refill dispensers, supply and the use of reusable packaging, customer service, supervision, as well as incentives and disincentives. Regulations, guidelines and standardization of bulk/refill products can encourage manufacturers/producers to provide products with large packaging and refill dispensers. In the end, (new) bulk/refill distributors will grow to remote areas of Indonesia and reach the upper, middle and lower classes.

The performance of reducing single use packaging (both sachets and large sizes) by bulk/refill shops, manufacturers/producers, distributors, and retailers should be appreciated and taken into account in waste reduction at the national level to enhance their pride and motivation. The author recommends KLHK to develop a system to record the amount of plastic waste that can be avoided due to bulk/refill sales.

They should run a national campaign to introduce and spread this new shopping style. As social entrepreneurs, the bulk/refill shops have stronger environmental and social motivations than economic motivations. They need to be strengthened and supported by all pertinent parties, thus even with small profits they can continue to survive and develop.

Internally, bulk/refill shops are recommended to improve professionalism and service to ensure business legality and compliance with regulations and standards, product safety and hygiene, product authenticity and accuracy, and improve the ability to educate consumers. Bulk/refill shops are also advised to carry out more intensive communication among their peers, so they can learn and support each other. If necessary, they can establish an association to facilitate communication and have a better bargaining position when dealing with the government, producers, distributors, consumers, and other stakeholders. This bulk/refill shop association can, together with BPOM, develop SOPs supporting this business model. The results can be used as a reference for the preparation of regulations.

To ensure the safety of personal care products sold in bulk/refill shops, BPOM is currently developing relevant guidelines. Some suggestions from BPOM that need to be taken into account by bulk/refill shops are: 1) SOPs for personal hygiene and equipment cleaning should

be provided, 2) containers must be clean and dry, and have labels containing information on product name, net weight and production code; 3) perform microbiological testing and product inspection on a regular basis to ensure there is no contamination and the product is stable during distribution, 4) has risk mitigation; 5) provide trained staff for container filling; and 6) have a customer complaint service.

# List of Abbreviations

AC	Air Conditioner
BPOM	<i>Badan Pengawas Obat dan Makanan</i> /National Agency of Drug and Food Control
BPKN	<i>Badan Perlindungan Konsumen Nasional/</i> National Consumer Protection Agency
CSA	Community Supported Agriculture
DKI Jakarta	Daerah Khusus Ibukota/Jakarta Capital Special Region
FMCG	Fast-Moving Consumer Goods
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
gr	Gram
HP	Handphone
Kemendag	Kementerian Perdagangan/Ministry of Trade
Kemendagri	Kementerian Dalam Negeri/Ministry of Internal Affairs
Kemenkop UKM	<i>Kementerian Koperasi, Usaha Kecil dan Menengah</i> /Ministry of Cooperatives, Small and Medium Enterprises
Kemenperin	Kementerian Perindustrian/Ministry of Industry
K/L	Kementerian dan Lembaga/Ministries and Institutions
KLHK	<i>Kementerian Lingkungan Hidup dan Kehutanan</i> /Ministry of Environment and Forestry
L	Liter
NGO	Non-governmental organization
mL	Milli Liter
MRT	Mass Rapid Transportation
Perda	Peraturan Daerah/Local regulation
Pergub	Peraturan Gubernur/Governor's Regulation
Permen LHK	<i>Peraturan Menteri Lingkungan Hidup dan Kehutanan</i> /Minister of Environment and Forestry Regulation
Perumda	Perusahaan Umum Daerah/Local Government Owned Company
PP	Peraturan Pemerintah/Government regulations
QR code	Quick Response code
SK Direktur	Surat Keputusan Direktur/Board of Directors Decree
SOP	Standard Operating Procedure
SPG	Sales promotion girls
TPA	Tempat Pemrosesan Akhir/Final Processing Site (garbage)
UMKM/UKM	<i>Usaha Mikro, Kecil dan Menengah/Usaha Kecil Menengah/</i> Micro, Small and Medium Enterprises/Small and Medium Enterprises
UV-C	Ultraviolet C
ZWBC	Zero Waste Business Community



# **1** Introduction

# 1.1 Background

Driven by rapid urbanization, economic development and changing consumption and production patterns, the number of single-use packaging and plastic items is increasing rapidly in East and Southeast Asian countries. At the same time, the waste management system is still ineffective in terms of collection, sorting, recycling, energy recovery, and environmentally friendly disposal of packaging waste. This trend is significantly contributing to the dumping of marine debris – a growing local, national, regional and global threat to marine ecosystems and fisheries and tourism sector.

Government Regulation (PP) of the Republic of Indonesia No. 81/2012 concerning Management of Household Waste and Similar Household Waste requires producers to be responsible for reducing waste generation, especially from post-consumer products. In December 2019, Indonesia launched a Roadmap for Waste Reduction by Producers through the Minister of Environment and Forestry Regulation No. 75/2019 to operationalize the producer responsibility instrument regulated in PP no 81/2012.

Multilayer plastic or sachets are a type of packaging for various types of products; food and beverage, personal care and household care with a size of less than 50 mL or 50 gr. Greenpeace (2018) estimates 855 billion sachets are sold globally, of which nearly 50% are in the Southeast Asia region; with the same growth rate, the total global consumption of plastic sachets could reach 1.3 trillion by 2027. Considering this, the Ministry of Environment and Forestry through the Waste Reduction Roadmap by Manufacturers (Permen LHK No 75/2019) requires all producers by 2030 are prohibited from using flexible plastic for packaging (sachets), such as: sachets for food, soap or shampoo; with a size of less than 50 ml or 50 gr.

In addition to the initiative to remove the sachets, there are commercial initiatives carried out by concerned social entrepreneur groups, which provide alternative options for consumers to avoid plastic packaging including sachets. Bulk stores that sell unpackaged products, and mobile refill businesses such as *Siklus*, are now growing and easy to find in big cities like Jakarta. Several manufacturers of certain consumer products have also tested the establishment of refill stations for their products in bulk stores.

This study was conducted to understand the extent to which this business model can provide a long-term solution for producers to participate in the implementation of waste reduction; the need for policies to scale up this new business model; and understand the potential implications of the gradual phase-out of asset deletions and the emergence of this new business model.

# 1.2 Goals and Outputs

# 1.2.1 Objectives

The aims of this study are:

- 1. Conducting policy and technical analysis on the elimination of sachets, and how possible new business models (bulk stores and refill stations) can be a long-term solution for producers to reduce waste from post-consumption sachets.
- 2. Analyzing the potential implications of the elimination of sachets and the emergence of this new business model to replace sachets; against actors in the value chain.
- 3. Provide recommendations on the necessary policies for the improvement of bulk and refill stores, as well as to encourage manufacturers to participate in this new business model.

# 1.2.2 Output

The output of this study is a Study Report document containing findings, analysis and recommendations.

# 2 Approach and Methodology

The research flow is qualitative inductive in nature, starting from studying existing phenomena, collecting and analyzing data and information from as many bulk/refill shops in Indonesia as possible, collecting and analyzing existing related public policies and their implementation. Then, finding indicators and parameters that influence its success and implications for actors along the value chain. It leads to the conclusion whether or not there is a potential long-term solution for reducing sachet packaging waste; and ends with technical and policy recommendations.

# 2.1 Analysis Method

To assess whether bulk/refill stores have the potential to be a long-term solution for producers to reduce waste from post-consumption sachets, the following approach was used:

# 2.1.1 Definition of Bulk and Refill Shop

Bulk store is a store that provides household products in bulk and sells them in bulk or adjusted to the needs of buyers. A refill shop is a shop that sells household products without or with packaging that can be reused to buy these products at a later date.

The two terms are often used to describe the same thing. But basically, a bulk shop is not necessarily a refill shop and vice versa. If a bulk store uses single-use packaging, then it is not a refill store. If a refill store provides products in small quantities, then it is not a bulk store. If a bulk store sells products with packaging that can be reused to buy the same product, then the bulk store is also a refill shop.

In this study, the term "bulk/refill shop" is used which refers to the notion of "stores that provide household goods (both in large and small quantities) which are sold in bulk or adapted to the needs of buyers, without packaging or using reusable packaging.

# 2.1.2 Parameters of Potential Decrease in Sachet Waste in Bulk/Refill Stores

In this study, the approach used to assess whether the bulk/refill shop business model has the potential to be a long-term solution for producers (manufacturers and retailers) in reducing sachet waste (according to Ministry of Environment and Forestry Regulation 75/2019), are the following parameters:

1. Environmental parameters: proven bulk/refill shop business model:

- a. can reduce the use of sachets measuring less than 50 mL or 50 gr for food products, body care and household cleaning;
- b. the products sold are free from contamination and safe for consumers.
- 2. Economic parameters: proven bulk/refill shop business model:
  - a. acquire enough customers and profits to survive and thrive in the long term;
  - b. have access to manufacturing, suppliers, markets, finance, technology, and human resources.
- 3. Social parameters: proven bulk/refill shop business model:
  - a. High adoption rate;
  - b. Gaining trust and engagement from customers and other stakeholders;
  - c. In harmony with the culture and lifestyle of the community.

The analysis is carried out based on data and information regarding the practice of bulk/refill stores as well as the opportunities and challenges for manufacturers, retailers, bulk/refill stores, consumers, and the government.

# 2.1.3 Potential Implications of the Bulk/Refill Shop Business Model for Actors in the Value Chain

To analyze the potential implications for actors in the value chain, the multi-actor network approach used by Bor (2020) was adopted, namely mapping the relationship between producer networks; suppliers (suppliers of materials, components and machines); financial networks (financiers, insurance companies); user groups; research networks (universities, technical institutes); community groups; and public policy makers. From the relationship between these actors, opportunities and constraints can be mapped on the potential for reducing sachet waste through the bulk/refill shop business

# 2.1.4 Public Policy Analysis

Public policy is what governments do, why they do it and the differences that result from its implementation(Dye, 2017). Public policy studies are a subset of Political Science, which describes, analyzes and explains public policy. Political science is the study of who gets what,

when and how. Public policy studies describe and explain the causes and consequences of government actions, both desirable and undesirable, on various aspects of life in society.

In short, public policy studies three things, i.e., description (illustration), causes (cause and effect) and consequences (impact). It is a description of what the government does and how they do it. Causes are causes/determinants/factors that influence public policy. This can be in the form of the influence of certain institutions or actors and what they do (including interactions between actors) to influence policy makers. Meanwhile, the consequences are the analysis of the political, economic, social and cultural and environmental impacts of public policies.

In this study, the policy studies carried out focus on: the substance of public policies, the process of implementing public policies, and their implications for the sector and related actors. The public policies analyzed are related to reducing sachet waste and product sales at bulk/refill stores.

# 2.2 Method of collecting data

The data used to perform the analysis are primary and secondary data. The study begins by studying secondary data obtained from regulations, previous research, news in the mass media, and social media used by bulk/refill stores to communicate their products, services and activities.

Primary data were obtained through interviews with 5 representatives of ministries and institutions, 1 manufacturer, 1 traditional retailer (market), 1 modern retailer, 18 bulk/refill stores, 3 consumers, as well as field observations at 5 locations of bulk/refill stores and 3 retails. The primary data collection process was carried out for approximately two months. Interviews were conducted offline and/or online via Zoom platform (according to the situation and willingness of the respondents). The locations of respondents are spread throughout Indonesia.

The list of respondents and interview times during the data collection period (January – March 2022) is available in Appendix 1.

In addition, researchers made direct observations to 5 locations of bulk/refill stores (Saruga, Alami, BulkSource Kemang, BulkSource Menteng, Naked Inc), 2 retailers (Alfamart Petamburan, Jakarta and FoodHall Plaza Senayan, Jakarta), and 1 retail as well as manufacturer (The Body Shop Kota Casablanca, Jakarta). See Appendix 2.

# 3 Bulk/Refill Store Profile

In Indonesia, there are at least 47 bulk/refill stores, which are located in the cities of Jakarta, South Tangerang, Serpong, Bekasi, Bandung, Semarang, Yogyakarta, Surabaya, Malang, Bali, Bontang (East Kalimantan), Palu (Central Sulawesi), and Makassar (South Sulawesi).

This chapter describes the profiles of 18 bulk/refill store respondents who were successfully interviewed in the data collection period January – March 2022. Respondents are located in Jakarta (6 respondents), South Tangerang (1 respondent), Bandung (3 respondents), Semarang (1 respondent), Yogyakarta (1 respondent), Surabaya (3 respondents), Bali (2 respondents), and Makassar (1 respondent).

The bulk/refill shops respondents of this study have been in existence for 2-7 years (see Appendix 5). More than half (56%) are incorporated as Limited Liability Companies (PT), Limited Liability Companies (CV) and Foundations, while 44% are not legal entities (see Appendix 6). Almost all are managed by management or special teams, and some are managed by individuals.

# 3.1 Bulk/Refill Store Profiles Based on Marketing Mix

In order to be a long-term solution, business success is required by bulk/refill shops. To achieve business success involves complex skills. Not only having a quality product, many other factors also need to be considered. One of them is the marketing line. The implementation of a mature marketing strategy will affect the final result of the success of a business. No matter how good the product or service offered, if they don't know or fail to market it, it will be in vain.

*Marketing mix* is a set of marketing variables that are combined and controlled by a company to produce the desired response from the target market. This concept initially had 4 main elements, i.e., Product, Price, Place and Promotion. However, along with the development of marketing strategy, this concept was expanded to become 7Ps by adding People, Process, and Physical Evidence.

Understanding the bulk/refill store profile through this concept can give readers an idea of the potential success of this business model.

# 3.1.1 Product

Products are goods or services that have use value and are needed by consumers. The main key of a product is that the goods or services must be able to meet the needs or desires of consumers. Moreover, additional value is needed compared to other products so the product is more easily accepted by consumers.

Bulk/refill stores target consumers who care about the environment have various educational, occupational, gender and age backgrounds. They provide a variety of products 1) home cleaning (dish soap, detergent, floor cleaner, etc.), 2) body care (bath soap, shampoo, etc.), 3) food and beverage (processed food, fresh food, organic products, kitchen seasonings, etc.), as well as 4) various other zero waste products, such as diapers and reusable wipes. More than 55% of respondents provide these four types of products; while 45% only 1 to 3 types (see Appendix 7).

Not all bulk/refill shops sell branded products. Only a third of respondents sell products from Unilever, Wings, KAO, Lion Wings, Barco, Sinar Mas, Wilmar, P&G, Nestle, Reckitt, Godrej and others who are already well-known in the community. The rest sell new branded or unbranded products, which are self-produced or by MSMEs and local farmers. Some shops also sell imported products. Details of product brands can be seen in Appendix 8.

Several bulk/refill shops also provide plastic, paper, electronic and cooking oil collection services. Consumers can put these unused items into the dropbox for free. Other services offered are training to support an environmentally friendly lifestyle, such as soap making, mushroom cultivation, mixing skincare, etc.

# 3.1.2 Place of business

*Place* is where customers can find, use, access or purchase the provided products. For conventional businesses, this aspect is very important. Entrepreneurs need to pay attention to whether the location is strategic enough and easy for consumers to visit. However, with the development of modern businesses, apart from physical locations such as shops, elements of a place of business can also be in digital form such as social media, marketplaces, websites, and others.

The majority (78%) of the bulk/refill shops that are respondents in this study market their products in two ways, namely offline and online; 11% offline only, and 11% online only. Three (17%) respondents have more than one outlet (Zero Waste Bali 4 outlets, Bulksource 6 outlets,

Qyos 2 outlets), while four (22%) respondents do not have outlets (Hepi Circle, Kecipir, Siklus, Koinpack).

Some respondents who do not have outlets continue to sell offline, such as Hepi Circle in collaboration with *warungs* and communities; Siklus Refill is using a motorbike to go around area of their office in Tebet, South Jakarta; and Koinpack cooperates with waste banks, individual agents, and *warungs*. Other shops have physical outlets located in shop houses (*ruko*), shops, shopping malls, supermarkets, *warungs*, to offices, apartments and residential houses.

Detailed information on is available in Appendix 6 and Appendix 11. While, their social media link addresses is available in Appendix 4.

## 3.1.3 Process

Process is how a bulk/refill store product or service gets to the customer. This includes services and procedures, flows or mechanisms that customers need to do to obtain bulk/refill store products or services. In this aspect, it is important for bulk/refill stores to provide a satisfying service experience for consumers through various techniques so they feel satisfied.

To obtain bulk/refill products, consumers can directly come to the bulk/refill shop or to the nearest partner outlet. Before the pandemic, consumers took their own products and put them in the containers they carried (or provided by the store). However, since the pandemic, to maintain product hygiene and safety, product collection has been carried out by officers wearing masks and gloves. Consumers can buy as many products as they need. For the purchase of food products, respondents do not have a minimum limit; while for personal care products and home hygiene products, the average minimum purchase is 100 mL, except for the minimum 10 mL in the Siklus Refill.

Different procedures are applied by Hepi Circle and Koinpack. Hepi Circle consumers buy products just like buying drinking water products in gallons or LPG gas in cylinders. In the first transaction, the consumer buys the product and the container, then on the next purchase only buys the product by exchanging the empty container. Containers can also be resold by consumers and if damaged can be exchanged for new ones at no additional cost. All of this is done in a partner-owned restaurant, coffee shop or refill shop. At the partner's place, the refill process is not carried out, but only the empty bottles are exchanged with filled ones. With this concept, distributors who in fact are not people who care about the environment, have no difficulty in selling.

Koinpack sells branded products using special packaging that is produced in-house. Consumers cannot use their own containers. Consumers who buy offline at Koinpack partners (at 3 waste banks, 8 individual agents, 3 *warungs* and 1 kelurahan) can return the container to the same place, or request that it be taken back by Koinpack (when buying online).

Consumers who choose to buy bulk/refill products online, place orders through special applications or through social media belonging to bulk/reload shops, such as Instagram, WhatsApp, or marketplaces such as Tokopedia and Shopee. Stores will deliver products to customers' homes for free or for a fee a day later. Some respondents use internal teams to deliver products, while others use regular couriers, online motorcycle taxis, bicycle couriers, or couriers who can exchange containers with customers.

Siklus Refill sells online, but products are filled by motorists (sellers who use motorbikes) at the consumer's place (see Figure 1). Consumers order products through the Siklus Refill application or through WhatsApp. Ordered products will be delivered by motorists in 5 L



Figure1. Sales of Siklus refills to Customers' Homes (source: siklus.com)

jerrycan containers. At the consumer's place, the clerk fills the container brought by the consumer, according to the number of orders (starting from 10 mL). If they still have time, motorists can go around selling products to the surrounding community.

For household cleaning products, bulk/refill shops prepare the product in large (5-30L) packs. There are 4 ways to fill products into consumer containers, i.e., 1) manual hand pump, 2) manual faucet, 3) manual dispenser, and 4) automatic dispenser.

Qyos is a bulk/refill shop using a high-tech automatic dispenser, which can hold 30 L of product. The machine will automatically fill the product into an empty container according to

the digital setting previously set by the customer, between 100 mL to 1.5 L. Through this machine, the customer enters a mobile number to create an account. After filling in the desired volume, a QR code will appear for payment. To shop at Qyos, consumers can use their own containers or containers from Qyos.

To ensure product quality, bulk/refill shops pay attention to product hygiene and safety. Security measures are given on 1) products, 2) product containers in stores, 3) consumer product containers, and 4) dispensing machines. In general, the efforts made by respondents are by checking the product expiration time periodically; use premium quality, sealed and airtight containers (for food); and during the Covid-19 pandemic, only officers are allowed to collect products. The tools (spoon or claw) used are different for each product and are washed after use. Periodically (1-2 weeks) the product containers in the store are washed. Organic products are usually short-lived or easily damaged, prone to mold and lice, so they are checked regularly.

In particular, Peony Ecohouse conducts deep cleaning of the store 1-2x a month and checks for physical changes in food products (color, smell, taste). Bulksource maintains humidity by providing a dehumidifier machine and always turning on the air conditioner and controlling the weather and climate. Life and Co has SOPs for cleaning and drying bamboo materials every week. Hepi Circle applies factory standards, namely placing the product on a pallet, not on the floor and not touching the wall, not exposed to direct sunlight, and not using clear bottles (the consistency of the product is very sensitive to changes in temperature because it contains a chemical that functions to reduce the hardness of water, which usually contain heavy metals so the detergent in soap is more effective). Kecipir uses UV-C light to clean food products. Siklus requires officers in storage to always use headgear, gloves, masks, and special shoes/footwear. Koinpack refers to BPOM regulations in compiling internal regulations to prevent pollution in cosmetics.

All stores make efforts to maintain hygiene and product safety internally. In addition, Hepi Circle also obtains supervision from the product supplier factory; Kecipir conducts third-party lab tests for ready-to-drink products (fresh milk in glass bottles); YPBB Organic Stores hand over responsibility for the cleanliness of product containers to customers, while Unilever requires bulk/refill stores that sell their products to ensure that the products brought by customers are clean and dry. If the container brought by the customer does not meet these requirements, the officer has the right to refuse to use it. If the customer insists, the discrepancy will be recorded by the bulk/refill shop, so if there is a complaint from the customer at a later date, the store or manufacturer cannot be held responsible.

No stores have received complaints from consumers regarding hygiene and safety. Qyos explained, if a customer complaint occurs, then Qyos' responsibility is to arrive at the dispenser hose, paying attention to the date of filling and expiration date of the product. If

there is a change in color/scent while still at the refill station, it is the responsibility of the manufacturer.

Detailed information regarding product safety and hygiene is available in Appendix 7.

# 3.1.4 Price

Price is the money that consumers have to pay to get the goods or services sold. Price is a very important aspect because consumers generally make it the main consideration before buying. To get the product in store/bulk, the price component that must be paid by the consumer consists of the product price plus the packaging price, and for online purchases plus shipping costs.

Body care and home hygiene products with well-known brands can be obtained at lower prices at bulk/refill stores. Siklus claims their prices are 4-40% cheaper than the same products sold in supermarkets and stalls. Qyos products are up to 20% cheaper than conventional minimarkets.

Some bulk/refill shops allow consumers to use their own containers, but others require consumers to use the containers they provide. Some of the reusable containers provided by the store are free, some are paid. The Siklus Refill sells 100 - 5000 mL containers at a price of Rp. 10,000 - Rp. 25,000. Hepi Circle sells reusable HDPE/PET containers, glass/PET jars, and IKEA korken glass bottles, with prices for 30 mL-100 mL containers of IDR 1,000 (for food products) and 250 mL, 1 L, 5L for IDR 10,000, - (for other products). The purchase of this container is only made in the first transaction and then the consumer only needs to pay the price of the product, by exchanging the empty container. Hepi Circle guarantees a lifetime exchange guarantee even if it is damaged (due to normal use).

Koinpack provides branded products with specially designed reusable containers. The container can be reused up to 20 times. The product price includes the price of the container and the washing of the container (using a semi-automatic machine and special cleaning



Figure2. The amount of cashback is listed on the Coinpack Reusable Bottle

material that do not damage the packaging and product quality). Consumers who return the container will receive cashback of varying amounts, for example, for a dishwasher of IDR 39,000 (see Figure 2), they will get a cashback of IDR 5,000. The packaging is returned through the partner where one bought the product or use a free pick up service. The packaging sizes provided by Koinpack are between 100 – 1000 mL.

For product delivery, Siklus Refill does not charge any fees, while Alami Bulkshop will deliver orders to customers' homes free for a minimum transaction of IDR 50,000 and a radius of 3 Km from the store. Koinpack products cost IDR 15,000 (minimum purchase 50,000) or IDR 20,000 (purchase less than 50,000). Meanwhile, other stores that work with couriers, apply fees according to the courier's price.

#### 3.1.5 Promotion

Promotion is a business activity to make consumers more familiar and interested in the products provided by bulk/refill stores, thus generating sales. To promote products, bulk/refill stores use various methods, ranging from traditional methods such as distributing brochures and word of mouth marketing, to utilizing social media such as Instagram and organizing educational events such as webinars, bazaars, and storytelling at educational communities or environmentalists.

Other strategies to increase purchases and retain customers, for example creating a membership system with special discounts; make weekend promos; provide giveaways; create a bonus point collection system; giving vouchers, facilitating group buying, giving cashback; maintain product quality; make timely delivery of goods; provide free courier to a certain delivery area and a certain price; provide after-sales service; provide new product tester for loyal customers; making soap-making classes, mushroom cultivation, composing

skincare, etc. for customers; engage customers in discussions; carry out tree planting together on a regular basis; and create educational content on social media.

# 3.1.6 People

People are those who run marketing, including customer service, marketing staff, packaging and shipping staff, and others. Most bulk/refill shops are managed by a dedicated team, community or management. Some manage themselves individually. In running a bulk/refill shop, almost all of them cooperate with other parties, both directly related to the products sold, and those related to the environmental mission promoted in the respondent's shops.

Collaborations are carried out related to products, for example with local MSMEs, farmers, distributors, shopping bag manufacturers, and with cafes. Collaboration between bulk/refill stores took place between Hepi Circle and Mamaramah Bulkstore, Alang-alang Zero Waste, Koinpack, Qyos, and with several other outlets. Other collaborations related to products occurred between Warung 1000 Kebun with Green and Bean Café (product collaboration) and with Green Hope (packaging); Life and Co with the disability community (tote bag); Gracious Project with Yasmin Ida Bali (tools for skincare from bamboo and coconut). Refill technology collaboration is carried out by Qyos with Algramo. Collaboration related to product delivery was carried out by Alang-alang Zero Waste with bicycle courier Halo Ijo; and Siklus with Flexofast (storage and product distribution fleet from factory to storage).

Collaboration for the collection and transportation of waste is carried out by Alami Bulkshop with the Armada Kemasan; Saruga, Toko Nol Sampah with Ewaste RJ; Alang-Alang Zero Waste with the main waste bank Surabaya and Ewaste RJ; and Koinpack with bicycle courier (pick up empty bottles from customers).

Collaboration for increasing environmental awareness is carried out by Saruga with schools; Zero Waste Bali with educational institutions, NGOs, and mass media; Toko Nol Sampah with Tokopong (sharing related to sustainable environment and refill business model); Toko Nol Sampah with customers and friends (donate shopping bags and containers); Sustain Story with the Forum Komunitas Hijau (planting mangroves every 3-6 months), with Ruma Art Space (zero waste lifestyle education), Komunitas Rapo and Komunitas Kejar Mimpi (education and donation of plastic waste); Warung 1000 gardens with the Bhinneka Community (interfaith community); Bulksource with Zero Waste ID Community and Lyfe with Less; Kecipir with Ketumbar Workshop (mom organic content); Siklus with the Greeneration Foundation (environmental care activities); Coinpack with parentingiseasy.id.

# 3.1.7 Physical Evidence

Physical evidence is anything that customers can see when they interact with a bulk/refill store,



whether it be product packaging, shipping receipts, store interior design, website, logo, or the way staff work or dress. The completeness of the components in this physical evidence will convince customers to use bulk/refill store products so that they can generate more sales. In the marketing concept, product packaging is an important point that is designed in such a way to attract consumers' interest so they make purchasing decisions.

In contrast to the general concept of packaging, in bulk/refill stores, product packaging is something to be removed. This business model is competing to use

as little packaging as possible, especially single-use plastic packaging. Reusable containers are the hallmark of bulk/refill stores, both those brought by consumers themselves and those provided by the store, both free and paid, as described in the previous sub-chapter.

An example of a Koinpack invoice (Figure 3) shows a discount for containers (bottles) returned by consumers, and the number of plastic waste reduction conversions that have been made by consumers through these purchases. This kind of calculation is also done by Siklus Refill and Hepi Circle on Instagram and their website (see Appendix 13).

# 3.2 Motivation and Target of Bulk/Refill Stores

# 3.2.1 Environmental Aspect

All respondents have motivations based on concerns about environmental conditions, such as waste that continues to increase but has not been managed properly, the impact of pesticides on the environment, and flexible packaging (sachet, pouch, single use bottle) which have no economic value and are difficult to recycle. Most want to pass on their eco-friendly lifestyle to others. There are also those who want to prevent consumers from buying too many products so they are expired and wasted like they have experienced. Some other respondents saw that public enthusiasm and awareness were already high on environmental issues and single-use plastics, but there were no supporting facilities to implement a zero-waste lifestyle.

They then set up a bulk/refill shop with the aim of helping consumers reduce single-use plastic waste, extend the life of containers at home, obtain substitute food products and clarify their origins; obtain tools (appropriate technology) that can facilitate the application of an organic lifestyle, obtain products with the lowest possible ecological footprint, receive education about environmentally friendly lifestyles and as proof that organic products do not have to be expensive and can be reached by all people.

Peony Ecohouse and Toko Nol Sampah intentionally provide MSME and local farmers products to reduce carbon emissions. For the same reason, Alang-alang Zero Waste uses bicycle couriers to deliver consumer orders.

The motivation to reduce plastic packaging is also applied by deliberately purchasing products from suppliers in sacks or in the largest packaging owned by manufacturers, such as Bulksource.

With such motivation, some bulk/refill shops then provide dropboxes that can be used by customers to collect plastic, paper, electronic, and cooking oil waste. Life and Co even invited Semarang residents to jointly use secondhand goods on social media to establish the first bulk store in Central Java.

Although they have motivation and knowledge about environmentally friendly lifestyles, not all respondents have specific targets related to reducing sachet waste or other environmentally friendly behavior changes and measuring their achievements. Some admit that the targets and achievements are still at the stage of customer education. Some of the indicators they use to assess environmental performance are a decrease in the amount of store waste being disposed of in the landfill, an increase in the number of buyers bringing their own containers, an increase in the number of customers, and conversion of the volume of products sold to the number of sachets that can be saved/avoided.

Some bulk/refill shops have specific targets, such as Sustain Story, which targets a 10% reduction in single-use plastic use and to plant a minimum of 50 mangrove tree seedlings per 6 months. So far, they have succeeded in reducing more than 200 grams of plastic and paper waste which were then given to the Garbage Mall for management, as well as planting 100 mangrove tree seedlings in Karabba Village, Tallo Sub-district, Makassar City. YPBB Organic Stores targeting substitution of products sold to be 100% environmentally friendly and increasing stalls/supermarkets selling bulk/refill products; Alang-alang Zero Waste wants to

be an example that commercial areas and businesses can also have good intentions to provide needs and environmental sustainability.

Siklus wants to expand to other cities and reduce 200 million sachets. As of 2021, Siklus claims to have reduced 2,036,300 sachets. Koinpack targets to reduce sachets of more than 308 million pcs (equivalent to 2 tons) by 2029 and reduce CO2 emissions by around 334 tons, as well as increase the customer return rate. To date, Koinpack claims to have collected 129 thousand plastic sachets. Meanwhile, Hepi Circle on its website claims that consumer shopping at the store has reduced 85 kg of single-use plastic waste.

Saruga considers their ability to maintain product quality equal to factory quality is an achievement. They get this quality after using a refill machine. Previously, product quality could change when transferred from jerry cans to customer containers.

# 3.2.2 Economic Aspect

Of the 18 respondents, only 4 have business experience, and even then, in other fields, such as printing, culinary, retail and fashion. One respondent has parents who run a grocery shop business, so that experience is adopted in the bulk/refill shop he founded.

Their economic motivation in setting up bulk/refill shops is almost the same, namely making profit while protecting the environment, introducing an environmentally friendly lifestyle, and improve the welfare of local farmers and SMEs. Almost all realize and admit that the profits in this business are very slim, but consider this kind of business model according to their environmental and social motivations.

Their business target is to increase the number of customers, turnover, revenue and new locations; build community networks and franchises with an integrated system; cooperation with eco courier to create a more environmentally friendly ecosystem; as well as creating a circular and just economic business.

Almost all respondents experienced an increase in the number of consumers since its inception. It had decreased during the pandemic, but in the last year it has started to increase again. Around 26%-75% of consumers make repurchases. Some respondents have succeeded in growing by opening branches, outlets and partnerships. Respondents stated that their capital had returned within 1 - 3 years, but there were also those who had not returned because they were still developing. Some respondents do not want to disclose, and

some do not know whether they have returned their capital or not because they do not understand how to do business calculations.

## 3.2.3 Social Aspect

In addition to environmental motivation, the establishment of bulk/refill stores is based on strong social motivations, namely restoring the concept of bulk shopping in the past, providing convenience for consumers to access products that support lifestyle changes that are more environmentally friendly, inviting people to switch to local products, building a sustainable business ecosystem with the priority of providing a forum for local craftsmen and MSMEs who have difficulty accessing marketing, inviting more people to be involved in an environmentally friendly business ecosystem, creating products that can reduce the suffering of others, building a community that wants to learn gardening, and maintaining the system by boldly expelling people who commit fraud or are uncooperative with the existing system.

Several respondents managed to collaborate with direct farmers, and also succeeded in advocating for producers to provide products in larger packages, as experienced by Alami Bulkshop whose producers finally provided 500 gr (previously 250 gr) packaging. Saruga also managed to get products with larger packaging, after they provided large packages for use by manufacturers.

Changes in consumers, producers and other stakeholders recognized as achievements by respondents include establishing good relations with producers/farmers like a family, empowering farmers by buying their products, exchanging product information with other bulk/refill shops, getting the opportunity to be a speaker in academic and non-academic forums to inspire more people; succeeded in inviting mothers to shop; as well as cooperating with resellers, grocery shop owners, bulk stores, etc. that can create an ecosystem to protect the environment.

Specifically, Sustain Story has targeted sales of 100% authentic South Sulawesi products, and so far it has been successful for seasoning products from local South Sulawesi farmers. Mamaramah Bulkstore is targeting an oxymoron: how to do business while educating consumers to buy in moderation.

# 3.3 Bulk/Refill Shop Opportunities and Challenges

#### 3.3.1 Opportunities

Although the profits from this business model are slim, all respondents expressed their optimism about the sustainability of this bulk/refill shop business. The more bulk/refill shops there are, the more people will change their lifestyle, so more and more people need this kind of shop. This trend is also driven by the trend of implementing a circular economy as an effort to mitigate and adapt to climate change at the local, national and global levels. Although it will develop slowly, they think that is precisely what will make the bulk/refill shop last long and consistent.

Qyos has the ambition to reach all levels of society. Based on their experience so far, they conclude that Indonesian people are basically quite quick to develop new behaviors as long as there are solutions or facilities that are introduced to them. Developments will be even more significant if they get support from the government, producers, communities and other stakeholders.

Bulk/refill shops are also perceived as a business model that fits the character of Indonesians who like to gather and socialize. Educational and sharing events held here are a good way to introduce sustainable lifestyles and support each other. Many respondents do not consider other bulk/refill stores as competitors, because they support each other for the implementation of a more sustainable lifestyle. Competitors for them are e-commerce retailers with competitive prices and minimarkets that still use single-use plastic.

Many respondents are trying to eliminate dependence on FMCG for the supply of their products, such as Hepi Circle. Hepi Circle makes its own products using reusable packaging. In February 2022, they managed to get permission from the Ministry of Health for reusable packaging. Thus, they became the first refill shop with this concept. According to them, other stores have only received permission to use the packaging, but have not yet been given permission to reuse it. This is a strategy to improve the system and increase sales. Previously they could only sell in Surabaya, now with a reusable packaging permit, they have opened additional distribution networks in 5 other locations (Jakarta, Yogyakarta, Gresik, Bali, and Lombok).

Qyos is an example of a bulk/refill store that has successfully entered a large retail network, namely Alfamart in 3 locations in Serpong and Jakarta, in collaboration with an FMCG (Kao). Qyos supplies the refill machines, and the FMCG supplies the products and SPG (sales promotion girls) whose role is to explain to consumers and fill the products into packages.

## 3.3.2 Challenges

The challenges faced by bulk/refill shops are internal and external. Internally, their challenges are related to 1) stock management: ordering and storage so that products are not damaged or expired; 2) understanding of procedures and ability to maintain product authenticity, accuracy and hygiene; 3) the ability to educate consumers and the public; 4) understanding of regulations, procedures and standards; 5) ability and access to finance (with low profits, own capital and no business experience, respondents are vulnerable to shocks, for example some respondents cannot afford to pay rent for shops and employees when there is a decline in turnover during a pandemic); 6) location: store locations are far from consumers, while digital marketing technology capabilities are limited; and 7) the ability to change consumer habits to use containers/packaging for reuse and replace the purchase of packaged products (10 mL) with larger sizes.

YPBB Organic Stores and Hepi Circle once sold products that were filled in small bottles to stalls. On the second purchase and so on, consumers just exchange the empty bottle with a filled bottle. However, this model is not in great demand because the authenticity of the product is doubtful and consumers are reluctant to bring empty bottles back. Siklus Refill also used to sell in stalls, but the shopkeepers felt that it was a hassle when they had to fill bulk products using a pump into empty containers. The sale which was then carried out by the Siklus Refill using a motorbike was a promising effort, because consumers just had to wait at home and could buy in the same volume as the size of a sachet (10 mL). However, finding motorists that can represent the Siklus Cycle (having concern for environmental issues) is a challenge in itself.

External challenges faced by bulk/refill shops include 1) perception: people are not familiar with bulk/refill shops so they are considered to be able to kill the traditional *warung* business, and the product is questionable for legality, originality, hygiene, and price; 2) producers/suppliers: limited number of producers/suppliers who provide products in bulk (large volume) and who use reusable packaging, procurement of products from FMCG is very slow while they do not allow bulk/refill shops to cooperate with distributors; 3) logistics: safe delivery of bulk food products; 4) regulations and standards: regulations and standards are not yet clear; the cost of administering a BPOM permit is expensive; 5) government support: there is no support for the bulk/refill store ecosystem related to supply chain, legality, market absorption, and fees charged to local governments, etc.

# 4 The Potential of Bulk/Refill Stores as a Long-Term Solution for Reducing Sachet Waste for Manufacturers

# 4.1 Technical Analysis

# 4.1.1 Environmental Parameters

# 4.1.1.1 Reduced Use of Sachets

All respondents reported a reduction in packaging as an implication of consumer purchases using reusable containers at their respective bulk/refill stores. Hepi Circle succeeded in



Figure 4. Convert large container volumes with sachets on the Siklus Refill IG page

reducing 85 kg of single-use plastic; while Sustain Story 200 gr of plastic and paper waste. Specifically, Siklus Refill claims to have succeeded in reducing 2,036,300 sachets (2021) and Koinpack 129 thousand plastic sachets (2022). Researchers highlight how Siklus Refill and Koinpack count the number of sachets they claim to be the amount they managed to reduce. Judging from the Koinpack invoice (Figure 3) and the Instagram page of Siklus Cycle (Figure 4), they convert the volume of consumer purchases in large containers by the number of sachets. Logically, this calculation is not wrong, but when put in context, it becomes incorrect. It is true that 250 mL of shampoo in large packs = 25 x 10mL of shampoo in sachets. However, when the large pack of shampoo is purchased by consumers from the upper middle class, who incidentally have never bought sachets before, the purchase does not

actually avoid the use of sachets. A more appropriate conclusion from the purchase of reusable containers at Koinpack and Refill Cycle is "there is a reduction in the use of singleuse plastic packaging". To ensure that the number of sachet packaging is avoided from this kind of purchase, it is necessary to trace back the number of purchases with the equivalent volume of sachet packaging, or how many consumers switch from purchasing sachet-sized products to large-sized products. However, when the large pack of shampoo is purchased by consumers from the upper middle class, who incidentally have never bought sachets before, the purchase does not actually avoid the use of sachets. Siklus Refill may find it easier to track consumer data, because they allow a minimum of 10 mL of product purchases (equivalent to a sachet) and motorists visit consumers' homes directly. Before the data is collected, a tentative conclusion that can be made is that bulk/refill stores reduce product packaging plastic, but it has not been proven to reduce sachet packaging.

#### 4.1.1.2 Product Safety and Hygiene

All respondents reported various efforts to maintain the safety and hygiene of the products they sell in their respective stores. Neither the bulk/refill shops nor the K/L interviewed have heard of any complaints from consumers regarding the safety and hygiene of the products they buy there. Thus, it can be concluded that bulk/refill products are safe and hygienic products. To verify this, guidance from the relevant Ministries/Agencies is needed regarding the safety and hygiene of food and beverage products, household cleaning products, and personal care products in bulk/refill stores.

# 4.1.2 Economic Parameters

#### 4.1.2.1 Number of Customers and Profit

All bulk/refill shops reported an increase in customers since their establishment, although there had been a decline in the number of consumers during the pandemic. Although they have their own capital and no business experience, the respondents managed to increase sales turnover and profits, so all respondents are still optimistic to survive and develop. High environmental and social motivation makes them not only use financial capital but also social one in doing business. Some have already recovered their initial capital, while others are still investing in technology, packaging, distribution networks, and human resources. This investment is projected to bring profits in the future.

Thus, it can be concluded that bulk/refill stores are economically profitable and have the potential to continue to grow providing unpackaged products for their consumers. Their business model is more accurately called the social entrepreneurship business model, which is a business established to be a solution to environmental and/or social issues.

#### 4.1.2.2 Access to Manufacturing, Suppliers, Markets, Finance, Technology and HR

Respondents of bulk/refill shops have been in existence for 2-7 years. Those who do not have access to a well-known FMCG have found a way to provide their own products, either by

producing their own or using local products provided by MSMEs and local farmers. However, they still need a lot of products with large packaging that cannot be fulfilled by manufacturers.

Many respondents reported challenges in educating and penetrating the market, the ability of digital technology and dispensers, as well as the ability of competent and responsive human resources, as well as financially. Product quality and safety as well as compliance with the required regulations also still require further efforts.

Thus, it can be concluded that bulk/refill stores still face challenges in access to manufacturing, suppliers, markets, finance, technology, and human resources. Support from the government, FMCG, and related stakeholders is required.

## 4.1.3 Social Parameters

## 4.1.3.1 Bulk/refill store adoption rate

This study identified 47 bulk/refill stores across Indonesia. From the search results, this number has decreased because one in Jakarta has turned into a café, and two in Yogyakarta and one in Bali have been closed since the pandemic. On the other hand, two new stores were found in Jakarta and in Depok at the end of the study period, and based on other information there were also bulk/refill stores in Solo and other cities. Thus, it is estimated that the number of bulk/refill stores is much higher.

Judging from the year of establishment, there appears to be a significant trend of increasing the number of bulk/refill stores in 2018, some even being established during the 2020 pandemic (see Appendix 3). Bulk/refill stores do not only exist in Java, but also in Kalimantan and Sulawesi. According to the Diffusion Theory of Innovation from Everett Rogers, one of the characteristics that an innovation will succeed in society is when the rate of adoption is high at a certain time. Although it may still be too early to judge and conclude based on this theory, the current upward trend is a promising indication, especially if one look at the founder's background and motivation for its establishment, which they were founded by individuals and organizations that previously had no business experience. The spirit of the founders can inspire other environmentally concerned individuals/organizations who want to do more in order to be a part of the solution. Several shops located in shopping centers is expected to become storefronts that inspire lifestyle changes from the upper middle class so bulk/refill stores can proliferate more.

If this trend continues, it can be concluded that new bulk/refill shops will still appear in the future.

# 4.1.3.2 Engagement of customers and other stakeholders

Bulk/refill stores thrive with the involvement of all stakeholders along the value chain, from FMCG suppliers, MSME suppliers, local farmers and craftsmen; environmentalist communities, NGOs, mass media, and schools; stalls, cafes, restaurants, waste banks, and individuals as distribution agents; as well as other bulk/refill shops. Customers are also involved in discussions and informal joint events.

Thus, it can be concluded that bulk/refill stores are able to involve customers and other stakeholders. The government is a stakeholder who has not been much involved in the bulk/refill shop business.

# 4.1.3.3 Lifestyle and culture

Many doubt that the bulk/refill shop business model will be able to change consumers' lifestyles. However, the founders of bulk/refill stores actually think that basically Indonesian people are willing to act if they are given a way and solution, especially shopping by exchanging packaging is actually not a new thing, but a common practice in the past. In fact, most of the sales of food products are still being done in bulk in traditional markets and shops, but they don't use reusable containers.

Events organized by bulk/refill stores for/or with their customers feels more cohesive than similar practices carried out by modern stores. Practices with social capital like this are actually in accordance with Indonesian culture.

Thus, it can be concluded that bulk/refill shops are utilizing Indonesian culture to restore the zero-waste lifestyle that was once practiced by Indonesian people.

# 4.2 Public Policy Analysis

# 4.2.1 Policy Substance

Government Regulation (PP) of the Republic of Indonesia No. 81/2012 concerning Management of Household Waste and Similar Household Waste requires producers to be responsible for reducing waste generation, especially from post-consumer products through the promotion of packaging redesign, namely the use of secondary materials (recycled or reuse) or compost; and participate in the process of collecting and withdrawing packaging waste for further processing. In December 2019, Indonesia launched a Roadmap for Waste Reduction by Producers through the Minister of Environment and Forestry Regulation No. 75/2019 to operationalize the producer responsibility instrument regulated in PP no 81/2012.

The roadmap provides guidance to manufacturers, including manufacturing (food & beverage, consumer goods, home care products, and personal care products), food and beverage service vendors, and retail; to take responsibility and contribute to reducing their packaging waste at the post-consumer stage by 30% by 2029. Manufacturers are given 3 main options to do so: restrictions (redesign of packaging and elimination of certain types of plastic/packaging); encourage recycling (materials can be recycled and use recycled content) and reuse. Producers, namely business actors in manufacturing, food and beverage services, as well as retailers, asked to prepare and submit waste reduction planning documents and report their respective performances to the Ministry of Environment and Forestry (KLHK) and local authorities (governors and head of districts/mayors). The Roadmap also sets out a path to phase out several types of packaging including Polyvinylchloride (PVC), Polypropylene (PP) and Polystyrene (Styrofoam), starting January 2030.

The policy of prohibiting the use of flexible plastic (sachets) as product packaging with a size of less than 50 mL or 50 gr as of January 2030 is listed in Appendix 1 of Table B.1.1.d. This prohibition is relevant for both manufacturing and retail. Manufacturing consists of the food and beverage, consumer goods, and the cosmetic and personal care industry. While retail is a shopping center, modern store and traditional market (article 3).

# 4.2.2 Application

Until 2021, it is known that at least 25 manufacturers and 8 retailers have sent their waste reduction plan documents to the Ministry of Environment and Forestry. It is not known which companies include the plan to reduce the sachets in the document, because the data cannot be disclosed by the Ministry of Environment and Forestry to the researchers.

Perumda Pasar Jaya as the manager of the "Pasar Jaya" market already has a waste management roadmap based on the Decree of the Board of Directors of Perumda Pasar Jaya DKI Jakarta No. 310 of 2020, but has not referred to the Minister of Environment and Forestry Regulation No. 75/2019. DKI Pergub 96/2020 regarding the 2020-2022 Waste Management Roadmap which is used as a reference by Perumda has not referred to the Ministry of Environment and Forestry Regulation 75/2019. Thus, despite agreeing with the ban on sachets, the waste reduction strategy still focuses on banning the use of single-use shopping bags; waste sorting and waste processing; and restrictions on the use of single-use plastic

cutlery, plastic straws and stryrofoam. Perumda Pasar Jaya also manages Jakgrosir and Jakmart. Jakgrosir is a wholesale market that sells products in bulk or large volumes (but not refills).

Superindo, which is a leading supermarket in commitment to the environment and sustainability, has not opted for a reduction in sachets as part of its waste reduction plan. Although they agree on the prohibition of sachets, they still focus on reducing single-use shopping plastic waste and managing supermarket food waste; and conduct green campaigns to consumers. There are no outlets in Superindo that sell bulk/refill products. Superindo is still conducting a study on this matter.

The Body Shop is a retail that has long been known for its bring back bottles program. Consumers who bring empty bottles to the nearest outlet will earn points that can be



Figure 6. Refill Station at The Body Shop, Casablanca Mall. Jakarta

consumers to use 300 mL aluminum bottles which can be purchased for Rp. 99,000. For the next purchase, consumers bring empty bottles that have been washed and dried. The officer will fill the bulk product into the bottle. Refill products can also be purchased online. Within one year, it is hoped that this program can save two million packages from consumers so that it can avoid 25 million tons Figure 5. Refillable aluminium bottles for The of plastic that has the potential to become waste.

exchanged for products. The Body Shop has more than 145 outlets throughout Indonesia. Since August 2021, its four outlets in Jakarta, Bandung, Yogyakarta and Bali provide refill products. Researchers visited its outlet at Mal Casablanca, Jakarta. Refill counters are placed in a strategic part of the outlet, namely in front of the entrance. For the purchase of refill products, The Body Shop only allows



**Body Shop products (source:** https://www.thebodyshop.co.id)

Refillable products are still limited. There are only a few variants of body wash, hand wash, shampoo, and conditioner products, which are usually sold in 60 mL and 250-400 mL bottle sizes. This means that this refill program will reduce the packaging of same-sized plastic bottles instead of their smaller products. It is not yet known how many bottles were used for repurchase as well as the frequency of consumer purchases.

Unilever Indonesia as a manufacturer engaged in the food and beverage industry, consumer goods industry, as well as the cosmetic and personal care industry has prepared a waste reduction plan document, by applying three principles in innovation, namely the use of less plastic, better plastic, and no plastic. To study the potential for selling products without packaging (no plastic), Unilever has collaborated with two bulk/refill shops, namely Saruga (Bintaro, Jakarta) since 2020 and Qyos (Kalibata, Jakarta).

In the pilot project, Unilever sells home cleaning products, food and personal care products in large packages, then fills them into consumer containers using manual dispenser machines (at Saruga) and automatic dispensers (at Qyos). In particular, the sale of refills for body care products is monitored by BPOM because basically these products are not allowed to be sold in bulk (must be packaged to reach consumers). BPOM monitors the possibility of contaminated products, as well as differences in product stability in the original packaging and in the refilled packaging. After the pilot project ended, body care products were no longer sold in bulk, pending the guidelines that were being prepared by BPOM.

During the pilot project, Unilever carried out supervision to ensure that the label requirements in Bahasa Indonesia (according to the regulations of the Ministry of Trade) were met as well as product hygiene and safety. Saruga prints and puts a sticker on every bottle that consumers bring. They also ensure that the bottles brought by consumers are clean and dry. Unilever also oversees the cleanliness of the machine and the washing process so that there is no product deposition.

#### 4.2.3 Policy Implication

The manufacturer is the most responsible party for the large number of plastic sachets circulating in the market. The Ministry of Environment and Forestry and some other respondents think the sachet product is only a marketing strategy for the producers so when the producer does not provide sachets anymore, consumers will automatically switch. However, Unilever argues that the size of the sachet is a consumer need that producer should provide. Besides being practical and inexpensive, sachet packaging can reach remote parts of Indonesia because it is the most resistant to the logistics system outside Java, which is still

full of challenges. There is no substitute for efficient, economical and durable packaging such as multilayer plastic packaging.

Several studies support this. A research (Faisyal & Murwani, 2008) concluded that the consumer's decision to buy a product is influenced by, among others, the attributes of ease of access (61%), affordable prices (56%) and available in sachets (53%). Another study states that packaging size has a very large role in making purchasing decisions in low-income residents (Rachmawati & Muflikhati, 2017). Research conducted in Bogor in rural and urban communities concluded that consumers choose sachets because they are influenced by perceptions of 1) price: small products are perceived as cheap so they are affordable; 2) usability: they are considered more practical because they are easier to store, sufficient to meet family needs, and easy to dispose of without the need for a big place; 3) availability: easy to get at stalls around the house; and 4) risk: more people think sachets are not harmful to the environment.

Unilever admits that the pilot project results are still too small to conclude that bulk/refill shops are a business model that this multinational company can adopt. Unilever still needs a deeper study on product safety and consumer enthusiasm and behavior in purchasing refill products. Prices in bulk/refill stores are cheaper than regular stores, because the price of products in large packs is cheaper. However, the pilot project proves that the shop's consumers come from the upper middle class who care about the environment, not the lower middle class who originally used sachets.

Basically, manufacturers prefer large packaging because it is easier, but to answer consumer needs, the packaging is made various according to the needs and ability of consumers to buy. To provide body care products in large sizes, Unilever is still waiting for the guidelines prepared by BPOM. The existence of government regulations will provide legal certainty and guidance for bulk/refill stores as well as general retailers, so manufacturers dare to produce products with large packages.

In addition, Unilever as a producer never sells its products directly to consumers, but through the distributor. Thus, Unilever does not sell at bulk/refill stores, or in other words, bulk/refill stores do not belong to Unilever. They are partners who sell Unilever products. To make selling products in bulk/refill as Unilever's new business model, they need partners who are able to manage sales and refills throughout Indonesia. So far, no partner has agreed.

During the pilot project, Unilever supervised bulk/refill shop partners to ensure product safety and hygiene. Unilever admits that this kind of monitoring process is impossible for them to carry out continuously as a producer, especially if there are more and more bulk/refill shops cooperating with each other. They see that this role should be carried out by distributors or retailers. Unilever is also concerned that sticking stickers and keeping bottles clean like this will make it difficult for SME-scale bulk/refill shops. However, the analysis on PP 29/2021 concerning the Implementation of the Trade Sector demonstrates this provision does not apply to bulk goods that are packaged and traded directly in front of consumers, or goods produced by micro-enterprises and small-scale business actors.

Based on Unilever's communication with retailers, retail analysis on consumers concluded consumers are not sure about refill products, so retailers are not convinced enough to provide them in supermarkets. Moreover, there are additional investments that need to be made by retail, namely a special room for refill machines, dispenser technology, and special staff to serve.

Although they agree and are ready to support the sachet ban, several respondents from the ministries/institutions are concerned that changes in packaging size will increase prices, thus affecting the affordability of middle to lower class consumers. The purchasing power of the Indonesian people is dominated by the lower middle class so that changes in product prices are feared to cause inflation. People also still need packaging/containers that are neat, clean and don't change when they get home, and are practical. Respondents are also worried about contamination when changing containers so that it has the potential to reduce product quality so the product life cannot be as long as the factory packaging product.

Therefore, the transition from sachets needs to be implemented slowly and alternatives such as bulk/refill shops should be prepared. Thus, it is not only the industry that must move to make changes, but the understanding of consumers also needs to be improved by collaborating between the central and regional governments and producers. To be successful, bulk/refill products need to have more advantages over sachets. And this requires the role of all parties.

The Ministry of Environment and Forestry is expected not only to make regulations, but also to facilitate discussions among ministries/agencies regarding solutions to problems faced by producers and bulk/refill shops. The Ministry of Environment and Forestry needs to convey holistically not only to producers but also related ministries/agencies, retail associations, and consumers.

#### 4.2.4 Policy Implications on Bulk/Refill Stores

The reduction in packaging and/or container waste in bulk/refill stores is estimated to be very significant because many of these retailers sell 100% or almost all of their products in reusable packaging. Thus, it would be interesting if the reduction in packaging waste as an implication of the use of reusable containers/packaging in bulk/refill stores could be included in the calculation of the national waste reduction achievement by producers. However, the existence of bulk/refill shops has not been accommodated in PermenLHK 75/2010.

Based on the Profile of Bulk/refill shops in Chapter 3, it can be concluded that some bulk/refill shops produce their own bulk/refill products that they sell, thus they are also producers/manufacturers, which is the legal subject of PermenLHK no. 75/2019. Most of other bulk/refill stores only act as retail, but they are not included in the retail category in articles 1 and 4 of the Minister of Environment and Forestry because they are not shopping centers, modern stores (minimarkets, supermarkets, department stores, hypermarkets or wholesalers) and the traditional market.

Bulk/refill stores are retail stores which from the beginning of their establishment were intended to reduce the use of packaging containers that are difficult to decompose by natural processes, cannot be recycled and/or cannot be reused, in the form of plastic, aluminum cans, glass and paper (article 4). Bulk/refill shops reduce waste by limiting waste generation (article 6 paragraph 1a), but not in the way stated in article 6 paragraph 2. These retailers still use packaging/containers that are difficult to decompose by natural processes, but are used repeatedly. For each reusable package/container, there will be the same size disposable packaging/container that will not appear.

Bulk/refill shops also reduce waste by reusing waste (article 6, paragraph 1c), but in this case not by using reusable production raw materials (article 6 paragraph 4), but by utilizing packaging and/or receptacle. Article 6 does not accommodate the existence of a bulk/refill shop business model, although Article 7 states that reuse is accompanied by the withdrawal of waste from packaging/containers (as is the practice of bulk/refill shops). For bulk/refill stores, the term "garbage" here is more appropriately replaced with "assets" because the reusable packaging/container is something that can generate cash flow, reduce expenses, or increase sales.

Monitoring (article 13) can be carried out by bulk/refill shops by recording the type and number of packaging/containers that are reused in their business/activities. Evaluation of implementation (article 14) is not by calculating the difference between the baseline waste generation and the waste generation that is achieved later, but by converting the volume of refilled products sold to the volume of containers/packages that can be avoided (such as calculating 'avoidable GHG emissions' in the MRT mode of transportation for example). Siklus Refill and Koinpack have practiced this kind of calculation.

To ensure the safety of personal care products sold in bulk/refill at bulk/refill shops, BPOM is currently developing related guidelines. Some suggestions from BPOM that need to be taken into account by bulk/refill shops are: 1) SOPs for personal hygiene and equipment cleaning should be provided, 2) containers must be clean and dry, and have labels containing information on product name, net weight and production code; 3) perform microbiological testing and product inspection on a regular basis to ensure there is no contamination and the product is stable during distribution, 4) has risk mitigation; 5) provide trained staff for container filling; and 6) have a customer complaint service.

Bulk/refill shops that are established with the principle of social entrepreneurship require support from various Ministries/Agencies and local governments. As retailers, they need to receive guidance from the Ministry of Trade. The Ministry of Trade can also encourage modern retailers to provide space for refill products. To ensure product quality and safety, they need to receive guidance and guidance from BPOM and the Ministry of Health. As small and medium businesses, they need to obtain guidance and guidance from the Ministry of Cooperatives and SMEs. As producers of their own products, they need to receive guidance from the Ministry. As a retailer that helps reduce plastic packaging, they need to receive guidance from the Ministry of Environment and Forestry.

# 5 Implications of the Bulk/Refill Shop Business Model for Actors in the Value Chain

Based on the research, the value chain of bulk/refill stores is as shown in Figure 7 below. Bulk stores obtain supplies of large packaged products from FMCG, farmers, MSMEs, and other bulk/refill stores. The types of products sold are food and drink, as well as body care and home cleaning products. The packaging/container is brought by consumers themselves or provided by the store for free or for a fee, and can be returned or reused for the next product purchase. In addition, bulk/refill shops also provide trash dropbox services, training, and organize other activities such as bazaars, discussions, and sharing with consumers, communities, and other stakeholders.

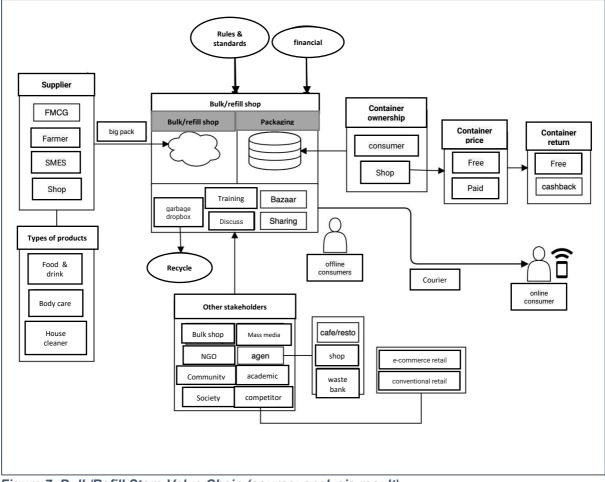


Figure 7. Bulk/Refill Store Value Chain (source: analysis result)

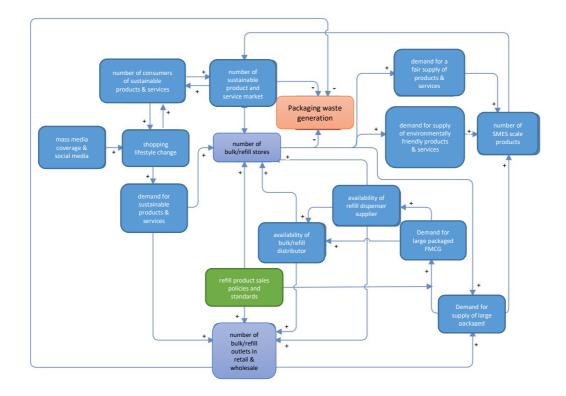


Figure 8. Implications of bulk/refill stores (Source: results analysis)

The presence of bulk/refill stores has implications for manufacturers (FMCG) and suppliers, distributors and retailers, sales agents, consumers, and other stakeholders as illustrated in Figure 8 above.

### 5.1 Manufacturers and Suppliers

Bulk/refill stores are the right business model to provide a solution to the problem of postconsumption sachet packaging waste. Consumers can still buy products in small and affordable quantities, but by using reusable containers. If all consumers of sachets are able to shop at bulk/refill stores, then the sachets are no longer needed, so producers do not need to produce one any longer.

To meet these needs, bulk/refill stores require products in large packages to then be sold at retail in refillable containers according to consumer needs. However, FMCG such as Unilever only have large size products for food (Bango 6 kg) and cleaning/homecare products (such as Rinso, Molto, Sunlight 5 L). Apart from the fact that these products already have existing consumers from the laundry, hotel and restaurant industries who can finish the product before

the expiration date, also because personal care products such as Lux soap and Clear Shampoo are required by BPOM to be sold in closed packages to consumers. Thus, selling body care products in bulk/refill is a violation of the law.

The results of the no plastic pilot project carried out by Unilever, in collaboration with Saruga and Qyos, admitted that it is still too small to conclude that bulk/refill stores are a business model that can be adopted by this multinational company, and to provide body care products in large sizes. Unilever is still waiting for the guidelines prepared by BPOM. The existence of government regulations will provide legal certainty and guidance for bulk/refill stores as well as general retailers, so that manufacturers dare to produce products with large packages.

FMCG's skepticism did not deter the bulk/refill shop founders. It is proven that only 6 out of 18 respondents in bulk/refill shops sell products with well-known brands. The rest use this opportunity as an opportunity to sell their own products or local MSME products. Hepi Circle not only makes their own products, but also makes products with special reusable packaging which currently has obtained a permit from the Ministry of Health. With this permit obtained, they are now ready to distribute their products to 6 regions (Surabaya, Jakarta, Yogyakarta, Gresik, Bali, Lombok).

For food products, YPBB Organic Shop has built a CSA (Community-Supported Agriculture), which is a supply chain with fair trade awareness that aims to eliminate profit inequality in each production chain so that farmers' welfare can increase. Some bulk/refill shops have also succeeded in educating their suppliers to use larger packs.

If this trend continues, local producers that provide bulk products will expand, so consumer choices will be diversified and dependence on large FMCGs will be reduced. FMCG will also be encouraged to provide more products with larger sizes because they are needed by bulk/refill shops.

### 5.2 Distributor and Retail

Unilever believes that reducing multilayer plastic packaging with a bulk/refill business model is more appropriate to be the responsibility of retail as part of the distribution network of sales of goods. Bulk/refill sales that have been initiated by bulk/refill shops will become massive if followed by supermarkets and traditional markets. However, based on interviews with Super Indo supermarket and Pasar Jaya traditional market, this possibility is unlikely to happen in the near future. The more bulk/refill stores, the more consumers will have an environmentally friendly lifestyle. This is likely to have implications for increasing consumer demand for modern retail to provide bulk/refill products. The presence of bulk/refill shops in several shopping centers can be a good example.

Qyos Refill and PT KAO Indonesia launched refill machines in 4 locations in Serpong (Alfamart BSD) and Jakarta (Alfamart Petamburan, Alfamart Muwardi, and Diamond Artha Gading). Qyos provides refill machines, while KAO provides Liquid detergent brand Easy and SPG (sales promotion girls). SPG's job is to help consumers do refills, order refilled product gallons,



Figure 9. Liquid detergent refill machine at Alfamart

and make sales reports. For the second purchase and so on, the consumer is asked to use the first bottle given to be refilled. According to an interview with SPG at Alfamart Muwardi, refills sold 4-15 bottles per day. In a month, 3-5 times the filling of gallons with a capacity of 20 L is carried out. Constraints in the operation of this machine are leaks and machine errors. When this happens, the product being sold is the product with the usual multilayer packaging (see Figure 9). It is not yet known whether this effort is a temporary product promotion idea or a new business model being developed by FMCG.

Another example that can be adopted by retail is to increase the number of bulk/refill outlets such as Bulksource at the

Lippo Village Kemang shopping center and the FoodHall Supermarket located in the Plaza Senayan shopping center, Jakarta (See Figures 10 and 11).



Figure 11. Bulksource at Lippo Village Kemang Mall, Jakarta



Figure 10. Officers weigh bulk products at the Bulksource outlet at FoodHall, Plaza Senayan, Jakarta

According to PP 20/2021 concerning the Implementation of the Trade Sector, a Distributor is a distribution business actor acting on own behalf and/or upon the appointment of a producer or supplier or importer based on an agreement to carry out goods marketing activities. Included in the distributors are wholesalers, retailers, as well as distributors who are between suppliers/FMCG and retailers. These business actors still go unnoticed although they have a very important role. They are the ones who have the network so they can market to remote parts of Indonesia. If they are involved in distributing large-sized packaged products provided by FMCG to be sold in bulk/refill to consumers from the upper to lower classes, the implications will be huge. Especially when there is a dispenser industry that makes it easier to sell. So far, wholesalers/grocers have been selling products in large packages. They generally have a large shop and allow refill sales to be made.

### 5.3 Agent

Agent is a distribution business actor who acts as an intermediary for and on behalf of the party who appoints him/her based on an agreement in return for a commission to carry out marketing activities for goods without owning and/or controlling the goods being marketed (PP29/2021). Examples of bulk/refill shops that use agents are Hepi Circle and Koinpack. Their agents are individuals, restaurants, coffee shops, waste banks, *warungs*, urban villages, and other bulk/refill shops.

Siklus Refill and YPBB's Organic Shop also once had an agent, namely a small shop (Bor, 2020). However, if Hepi Circle and Koinpack are quite successful with their partnership and

provide benefits for their agents, Siklus and YPBB choose to stop it. The difference lies in how agents have to play a role in distributing goods. Siklus agents feel burdened by having to fill the customers' containers themselves using a pump. Koinpack, Hepi Circle and YPBB agents don't need to do any refill. They only exchanged empty bottles for filled bottles. However, the originality of YPBB's store products is doubtful because they are sold without a brand, while Koinpack and Hepi Circle have clear labels so they are trusted by consumers and make it easier for agents to sell.

The agent's role was critical to spread the new lifestyle that bulk/refill shop founders wanted to transmit. The advantage that the agent gets is getting a commission on sales and also a good reputation. This is very important, especially for agents in the form of cafes or restaurants.

### 5.4 Consumer

Bulk/refill stores provide consumers with more options to contribute as a solution to environmental and social problems, with higher quality, fairer and more affordable products. This is in accordance with the facts obtained by the researcher from interviews with three consumers met in bulk/refill stores. All three are female employees, with a bachelor's degree in education. One respondent has never shopped at a bulk/refill store, another 1 respondent has shopped 3 times since August 2021, and the last one has shopped at this store more often than supermarkets and traditional markets since 2019. All three are interested in shopping here because they want to participate in reducing the use of plastic in order to help prevent global warming. In addition, it is considered to have become a lifestyle trend today and also because products can be purchased online. During the interview, they brought their own containers from home (except the new customer).

The products purchased are food, beverages, and household needs, both branded and unbranded. They recognize quality and competitive prices with conventional stores; and the most pleasant experience is being able to buy products with the volume as needed. Respondents intend to continue shopping at bulk/refill stores and will invite others to shop here. For improvement, they suggest bulk/refill shops to diversify products and provide dropboxes for various types of waste; on producers to be more environmentally friendly and increase product variants; and to the government to increase natural product campaigns and support such stores.

With the increasing number of options, consumers are also required to be critical of the products being sold, both in terms of originality, accuracy of container filling, as well as quality and safety. In the future, bulk/refill shops need to further improve their quality.

Consumers who are accustomed to buying sachet packaging will most easily change their habits through the Siklus Refill business model. This consumer group chooses sachets because they are easy to obtain, affordable prices, and practical to use (besides because they do not understand the dangers to the environment). In order to change to another package, this group needs to feel that the new packaging is also easy to obtain, affordable, and practical to use. Selling Siklus Refill directly to consumers' homes and allowing purchases starting from 10 mL (equivalent to the volume of a sachet) will make consumers feel easy to obtain and affordable prices. Furthermore, consumers will feel that the use of products in bottles is not just as practical as a sachet, but it is better than a sachet because the product does not spill like when using a sachet that cannot be closed again if the product has not been used up. Unfortunately, body care products such as shampoos and soaps, which are often sold in sachets, are currently unavailable, according to researcher observation at Siklus Application.

### 5.5 Other Stakeholders

Bulk/refill stores also have implications for:

- Garbage collectors/recyclers: collectors/recyclers have left dropboxes for the collection of plastic, paper, electronic and cooking oil waste in bulk/refill shops. With the increasing number of bulk/refill shops, it is estimated that there will be more waste collection points so the garbage collectors/recyclers will benefit.
- 2. Communities care about environmental, social and sustainability issues: more and more communities will be formed and it will be easier to carry out activities together because there is a place that can be used. One example of the community being formed is the Zero Waste Business Community (ZWBC) facilitated by YPBB. This community was formed in April 2021 and has 81 members. ZWBC was formed to bring together entrepreneurs who care about the environment implementing an alternative refill or delivery system as a substitute for single-use packaging.
- 3. Mass media: mass media will get interesting and quality news about environmental, social and sustainability from bulk/refill shops and the communities that support them. The mass media can also participate in campaigning for bulk/refill stores as a new lifestyle that is relevant to the times, especially after the COVID-19 pandemic, awareness and demand

for sustainable products has increased. The mass media need to disseminate the existence of bulk/refill stores to help people who want to find alternative products that are more sustainable and easier to reach (both location and price).

### 6 Conclusions and Recommendations

### 6.1 Conclusion

### 6.1.1 General

The definition of "Bulk/refill shop" used in this study is "a shop that provides household goods (both in large and small quantities) which are sold in bulk or adapted to the needs of the buyer, without packaging or using used/reusable packaging.

There is a wide variety of products and services, where they are sourced, the process of buying and using reusable containers, prices and promotions offered by the people behind this business, along with physical evidence that demonstrates the environmental and social motivations promoted by bulk/refill stores in Indonesia. However, they have something in common, namely alternative shopping solutions offered to consumers to contribute to reducing the waste problem in Indonesia.

#### 6.1.2 Bulk/Refill shop business model potential

Based on the environmental, economic, and social parameters previously determined by the researchers, it can be concluded that: bulk/refill stores have less potential as a long-term solution for reducing sachet waste for producers; however, it has enormous potential to reduce bulk plastic packaging (multilayer and plastic bottles).

Bulk/refill shops will have the potential to reduce sachet waste if and only if they are sold to sachet users, who are generally middle to lower class consumers; at the same or lower prices than regular stores; practical and easy to get; with the volume of purchases as much as the volume of sachets.

The pattern that is closest to the condition is carried out by the Siklus Refill. Consumers can buy products (house cleaning) of at least 10 m, using any container as long as it is dry and clean, at a lower price. Consumers just have to wait in their respective homes, because the motorist will come. However, the implementation of this pattern is still quite challenging.

Bulk/refill shops have also made their best efforts to maintain product safety and hygiene. There have been no complaints from consumers regarding product safety and hygiene issues.

Based on the profiles of 18 bulk/refill shop respondents of this study, it can be concluded that all of them were founded with stronger environmental and social motivations than economic

ones. Thus, it can be concluded that the business model used is social entrepreneurship with the target market being all people who have environmental and social concerns. Although the benefits are limited and there are constraints in access to manufacturing, suppliers, markets, finance, technology, and human resources, it is estimated this business model will continue to survive and thrive.

### 6.1.3 Policy Analysis

As of 2021, 25 manufacturers and 8 retailers have complied with the PermenLHK by submitting their waste reduction plan documents to KLHK. Only Unilever is known to include a plan to reduce sachets, namely by conducting a pilot project with a bulk/refill shop.

The results of the pilot project are not convincing enough to make bulk/refill sales a new business model and eliminate sachet packaging altogether. This happens because: 1) the buyers of sachets are the lower middle class who are sensitive to price and location of purchase, while the consumers of bulk/refill stores are the upper middle class; 2) sales are not a business carried out by manufactures; 3) sales of body care products in bulk/refill stores are still waiting for regulations/guidance from BPOM.

Ministry of Environment and Forestry Regulation 75/2019 has not yet become a reference in the regional level. At least DKI Pergub 96/2020 regarding the 2020-2022 waste management roadmap has not referred to the Ministerial Regulation.

#### 6.1.4 Implications of the bulk/refill shop business model

The bulk/refill shop business model has implications for manufacturers/suppliers, distributors, retailers, agents, consumers, and other stakeholders.

Its existence has implications for increasing demand for large-sized products to manufacturers/suppliers. For SME producers, local craftsmen and farmers, its presence helps them break the long distribution chain so that they are more profitable.

An increase in the number of bulk/refill stores has implications for an increase in the number of consumers with an eco-friendly shopping lifestyle. This will increase the demand for products or outlets that sell bulk/refill products in shopping centers, modern shops, and traditional markets. This is expected to encourage distributors to be able to distribute/sell bulk/refill products to remote areas of Indonesia. The pattern of cooperation between bulk/refill shops with individuals, stalls, cafes, restaurants, waste banks, urban villages, and other bulk/refill shops as their agents has positive implications for both parties. To obtain mutual benefits, both parties need to find a pattern that suits their respective characters.

Garbage collectors/recyclers, communities, mass media and others get a forum to share and develop together.

### 6.2 Recommendations

#### 6.2.1 Technical recommendations

The bulk/refill shop business model is a new phenomenon that is starting to proliferate throughout Indonesia. Its existence since 2015 and its ever-increasing development need to be used as a momentum to gain critical mass for a more structured, systematic, and massive adoption, as suggested by Everret Rogers' Diffusion Theory of Innovation. Founded with a social entrepreneurship pattern, this business has militancy because it was built with strong environmental and social motivations, but is rather weak on the business/economic side. With the principle of selling unpackaged (single-use) products, bulk/refill shops clearly contribute to the reduction of packaging waste. The cooperation of all parties is very much needed to develop a conducive business ecosystem, so this business model can survive and grow bigger, to change consumer shopping lifestyles and the way producers and distributors do business, so that in the end they can significantly reduce packaging waste. Regulation and standardization of sales of bulk/refill products are believed to be able to encourage manufacturers to provide products with large packaging and refill dispensers. In the end, bulk/refill distributors will grow to remote areas of Indonesia, and reach the upper, middle and lower classes.

Manufacturers need to provide more products with large packaging and dispensers that make it easier to fill products in reusable containers. The existence of bulk/refill shops helps FMCG reduce their plastic packaging. It is recommended to the Ministry of Environment and Forestry to establish a system that can record the amount of manufacturing plastic waste that can be avoided due to sales by bulk/refill shops. This figure can then be claimed by manufacturers as part of their waste reduction performance.

With such benefits for manufacturers, it is hoped that FMCG will be motivated to make a positive contribution to the development of bulk/refill stores, both those selling their products, and bulk/refill stores in general. The support that can be provided by FMCG includes, among

others, making public campaigns at the national level to introduce bulk/refill shopping styles to the public; and/or provide direct support to bulk/refill shops, either financial support or technical assistance.

Internally, bulk/refill shops are recommended to improve professionalism and service to ensure business legality and compliance with regulations and standards, product safety and hygiene, product authenticity and accuracy, and improve the ability to educate consumers. Bulk/refill shops are also advised to carry out more intensive communication between them so they can learn and support each other. If necessary, they can create an association to facilitate communication and have a better bargaining position when dealing with the government, producers, consumers, and other stakeholders. This bulk/refill shop association can together with BPOM develop SOPs that support this business model. The results can be used as a reference for the preparation of regulations.

The social entrepreneurship business model does not yet have a clear legal basis in Indonesia. These business models generally do not have large returns, or if they do exist, they are usually re-invested in order to contribute to solving larger environmental and social issues. Businesses like this need to be supported, among others, with smaller tax breaks and easier access to permits, obtaining certification (e.g., Halal certification or other certifications required by the government), increasing human resource capacity and access to finance. The chairperson of the Indonesian Chamber of Commerce and Industry has stated that he wants to push regulations related to this matter. It is recommended to the Indonesian Chamber of Commerce and Industry to immediately complete the formulation of social entrepreneurship regulations so that more bulk/refill shops can grow throughout Indonesia, especially those serving lower-middle consumers.

Discussions about bulk/refill shops as a solution for reducing packaging waste (and solutions for other environmental and social issues) have not been widely discussed. This study by GIZ is an excellent first step. It is recommended for GIZ to convey and oversee the implementation of recommendations aimed at bulk/refill stores, producers/manufacturers, distributors, retailers, Indonesian Chamber of Commerce and Industry, KLHK, and related Ministries/Agencies.

### 6.2.2 Policy Recommendations

To ensure that the elimination of sachets can occur in 2030, the Ministry of Environment and Forestry as a policy maker needs to discuss and coordinate with manufacturers as sachet product manufacturers, distributors, retailers (including bulk/refill stores) as sachet product

sellers, consumers using sachets; and related Ministries/Institutions (Ministry of Industry, Ministry of Trade, Ministry of Health, Ministry of Cooperative and SMEs, Ministry of Home Affairs, BPOM), and Local Governments so the transition from sachets can be implemented incrementally and alternatives are prepared. There are technical and non-technical obstacles that need to be jointly understood and find a way out.

Bulk/refill shops as social entrepreneurship, have environmental and social motivations that are stronger than economic motivations, so they need to be encouraged, fostered, appreciated, and campaigned for to the wider community, as an alternative that supports the enforcement of PermenLHK no. 75/2019. Thus, with small profits they can continue to survive and develop. Included in this support is the development of legal, hygienic and safe regulations, guidelines and sales standards for bulk/refill products.

Bulk/refill business ecosystems require regulation, guidance and standardization related to the supply of large-sized products by manufacturers, distribution of bulk/refill products by distributors and retailers (including bulk/refill shops), supply and use of product refill dispensers, supply and the use of reusable packaging, customer service, supervision, as well as incentives and disincentives.

The performance of reducing single use packaging (both sachets and large sizes) by bulk/refill shops, manufacturers, distributors, and retailers should be appreciated and taken into account in waste reduction at the national level to increase their pride and motivation.

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- DKI Jakarta Governor Regulation no. 96/2020 concerning Waste Management Roadmap for 2020-2022

Government Regulation No. 29/2021 concerning the Implementation of the Trade Sector

- Minister of Trade Regulation No. 23/2021 concerning Guidelines for the Development of Arrangements, and Development of Shopping Centers and Supermarkets
- Decree of the Board of Directors of Perumda Pasar Jaya DKI Jakarta No. 310 of 2020 regarding the Waste Management Roadmap for the Pasar Jaya Regional Public Company from 2020 to 2022
- BPOM, 2020. Guidelines for Implementing POM Agency Regulations No. 20/2019 about Food Packaging

### 8 Attachment

### Attachment1. List of Respondents Interviewed

No	Institution	Name & Position	Intervi	
			Time	Location
A		GOVERNMENT		
1	Directorate General of Waste Management, Hazardous and Toxic Waste and Materials, (DJPSLB3) KLHK	Agus Supriyanto Young Expert Environmental Counselor,	January 21, 2022. 10.00-11.30 WIB	KLHK Jakarta Office
E	Ministry of Industry, Green Industry Center	Andriati Cahyaningsih Policy Analyst and Green Industry Coordinator	January 28, 2022. 09.00–100.00 WIB	Zoominar
3	National Consumer Protection Agency (BPKN) RI	Primasetya Teguh Jatmiko, Head of Consumer Protection Division	January 28, 2022. 13.00–14.10 WIB	BPKN Jakarta Office
4	Indonesian Food and Drug Supervisory Agency (BPOM), Directorate of Standardization of Traditional Medicines, Health Supplements and Cosmetics	Yurita Amarya, Cosmetics Standardization Coordinator	February 21, 2022 10.00–11.00 WIB	Zoominar
5	Ministry of Industry, Directorate General of Chemical, Pharmaceutical and Textile Industries	Murboyudho Joyosuyono, Functional Young Expert Industry Supervisor	March 10, 2022. 14.00–15.10 WIB	Zoominar
В		MANUFACTURE		
1	UNILEVER	Maya Tamimi, Head of Sustainable Environment Unilever Indonesia Foundation Silvi Tirawaty, Noisy Tri Purwanti	February 18, 2022. 08.30–10.00 WIB	Zoominar
С		TRADITIONAL RETAIL		
1	PERUMDA Pasar Jaya DKI Jakarta	Maulidha Aulia B. Licensing and Technical Audit Manager	February 28, 2022. 13.00-14.00 WIB	Zoominar
D		MODERN RETAIL		
1	SUPERINDO	Arya Kusumo, Sustainability & Corporate Communication	23 February 2022 16.30–17.30 WIB	Zoominar
E		BULK/REfill shop		
1	Alami Bulkshop	Efi Femiliyah, owner	27 February 2022 13.00–16.30 WIB	Outlet
2	SARUGA	Gina Sahira, Business Development Manager	January 26, 2022	Outlet

No	Institution	Name & Position	Intervi	
			Time	Location
			12.30-13.30 WIB	
3	Toko Nol Sampah	Siska Nirmala, owner	January 31, 2022 15.30–16.45 WIB	Zoominar
4	Peony Ecohouse	Dwi and Tyo, owners	January 26, 2022 09.30–10.45 WIB	Zoominar
5	Sustain Story Bulk Store	Dio, owner	January 21, 2022 13.00–13.45 WIB	Zoominar
6	Mamaramah Bulkstore	Ogi, owner	January 26, 2022 09.00–10.30 WIB	Zoominar
7	Warung 1000 kebun	Ali Abdullah, owner	01 February 2022 10.00-11.30 WIB	Zoominar
8	Toko Organis YPBB	Fatchur, store manager	January 25, 2022 13.00–14.30 WIB	Zoominar
9	Zero Waste Bali	Silvija, owner	February 16, 2022 10.00–10.45 WIB	Zoominar
10	Alang-Alang Zero Waste	Lydia, owner	January 31, 2022 09.00–10.30 WIB	Zoominar
11	BulkSource	Princess Arif Febrila, CEO & Marketing	17 February 2022 10.00–11.00 WIB	Zoominar
12	Life and Co	Falasifah, CEO	January 30, 2022 19.30–20.45 WIB	Zoominar
13	Gracious Project	Gracia Chandra, owner	22 February 2022 09.00–09.45 WIB	Zoominar
14	Hepi Circle	Kumala Susanto, Founder	January 31, 2022 13.00–14.45 WIB	Zoominar
15	Kecipir	Tantyo Bangun, CEO	03 February 2022 09.00 – 10.00 WIB	Zoominar

No	Institution	Name & Position	Intervie	ew
			Time	Location
16	Qyos	Darina and Firman, CMO & COO	10 February 2022 18.30–20.00 WIB	Zoominar
17	Siklus	Brenda Chintya Atmaja, PR & Partnership	February 16, 2022. 16.30–18.00 WIB	Zoominar
18	Koinpack	Ekananda Star, CEO and Director	February 21, 2022. 10.00–11.15 WIB	Zoominar
Е		CONSUMER SHOP BULK/REf	ill	
1	Helena Pangaribuan	Consumer	January 26, 2022 13.45-14.15 WIB	Saruga
2	Indira Pramundita S	Consumer	January 26, 2022 13.45-14.15 WIB	Saruga
3	Madame	Consumer (new)	February 17, 2022 16.10-16.15 WIB	Bulksource Kemang Viilage

Source: Research results

### Attachment2. List of Bulk/Refill/Retail Stores Directly Observed

No	Bulk/Refill Shop	Location	Observation time
1	Saruga	Jl. Bintaro Park, Sector 1, Bintaro Village, Pasanggarahan District, South Jakarta City	January 26, 2022
2	Alami	Jl. Srengseng Sawah No. 54 RT 02/ RW 07 Srengseng Sawah Village, Jagakarsa District, South Jakarta City	27 February 2022
3	BulkSource Kemang Village	Lippo Mall Kemang, Jl. Prince Antasari No 36, RT 12/ RW 05 Bangka Village, Mampang Prapatan District, South Jakarta City	February 17, 2022
4	BulkSource Menteng	Jl. Wahid Hasyim No. 47 RT 01/ RW 04 Gondangdia Village, Menteng District, Central Jakarta City	March 1, 2022
5	Naked Inc	Jl. East Kemang No. 998 RT 01/ RW 03, Bangka sub-district, Mampang Prapatan sub-district. South Jakarta City	February 23, 2022
6	Qyos and KAO Alfamart Muwardi	JI Muwardi II no 25, Kel Grogol, Kec Grogol Petamburan, West Jakarta	26 February 2022
7	FoodHall Plaza Senayan	JI. MH Thamrin RT 09/ RW 05 Gondangdia Village, Menteng District. Central Jakarta	March 2, 2022
8	The BodyShop Kota Casablanca	Jl. Kasablanka Raya Kav 88 Menteng Dalam Village, Tebet District. South Jakarta	March 16, 2022

Source: Research results

### Attachment3. List of Key Questions for Respondents

No	List of questions
	Government
1	<ul> <li>Regarding the ban on the use of flexible plastic (sachets) as product packaging with a size of less than 50ml or 50gr since January 1, 2030 (MOEF Ministerial Regulation No. 75/2019)</li> <li>a. What is the opinion of your agency regarding the Ministry of Environment and Forestry Ministerial Regulation No. 75/2019?</li> </ul>
	b. What are the opportunities and obstacles faced in the implementation of the Ministry of Environment and Forestry Regulation No. 75/ by consumers, producers, retailers, and bulkstores/refill stations?
2	a. How many companies have created roadmaps to reduce plastic waste?
	<ul> <li>b. From a company that has created a plastic waste reduction roadmap: <ol> <li>Which manufacturers and retailers have activities related to bulk stores or refill stations to reduce flexible plastic (PP/polypropylene) packaging waste in the form of sachets?</li> <li>What are their plans? Can we get the road map document?</li> <li>What percentage of multilayer packaging waste can be reduced through bulkstore/refill stations?</li> </ol></li></ul>
	c. Are there complaints from consumers or the public regarding plastic waste? What problems do consumers complain about?
3	<ul> <li>Currently, the establishment of bulkstores/refill stations in the regions is starting to rise</li> <li>a. Does it have the potential to reduce plastic packaging waste in the long term? Or is it just a temporary trend?</li> <li>b. Does it have the potential to change consumer behavior to reduce sachet waste in the long term?</li> <li>c. Will it have a negative impact on product quality and safety when purchasing bulk/refill?</li> <li>d. Are there any regulations or programs from the government (ministry/institution/agencies) to ensure the safety of processed food sold as bulk/refill products in bulk stores/refill stations?</li> <li>e. What should producers, owners, and consumers or other parties pay attention to in terms of environmental safety?</li> <li>f. Will it have a negative impact on business and product quality and safety?</li> </ul>
4	Suggestions and feedback
	Producer
1	<ul> <li>Regarding the ban on the use of flexible plastic (sachets) as product packaging with a size of less than 50ml or 50gr since January 1, 2030 (MOEF Ministerial Regulation No. 75/2019)</li> <li>a. What is the opinion of your agency regarding the Ministry of Environment and Forestry Ministerial Regulation No. 75/2019?</li> <li>b. What plans does Unilever have to comply with these regulations</li> </ul>
2	<ul> <li>Currently, the establishment of bulkstores/refill stations in the regions is starting to rise</li> <li>a. Does it have the potential to help producers in reducing sachet waste in the long term? Or is it just a momentary new trend?</li> <li>b. Will it have an impact on manufacturers, in terms of business, product quality and safety, customer convenience, etc.?</li> <li>c. What efforts have been made by producers in order to open/encourage the establishment of bulkstores/refill stations?</li> </ul>
3	Bulk/refill products manufacturer a. How to maintain the quality and safety of bulk/refill products?

	h Will all Unitever products he available in bulk/rafill form?
	b. Will all Unilever products be available in bulk/refill form?
	c. Will Unilever products in bulk/refill form also be available in supermarkets and traditional
	markets?
4	Constraints and opportunities to sell products in bulk/refill?
5	Suggestions and inputs for the government, other manufacturers, bulkstore/ refill stations, customers, and other stakeholders
	Retail (Traditional and Modern)
1	Regarding the prohibition on the use of flexible plastic (sachets) as product packaging with
	size less than 50 mL or 50 gr since January 1, 2030 (MoEF Ministerial Regulation no. 75/2019):
	a. What is the opinion of retailers on the Ministry of Environment and Forestry Ministerial
	Decree no. 75/2019?
	b. What opportunities and obstacles will Superindo as a retailer face?
2	Currently, the establishment of Bulkstore/Refill Station is starting to bloom.
	a. Does it have the potential to help retailers reduce sachet waste in the long term? Or is it
	just a temporary trend?
	b. Will it have a negative impact on the modern retail business; product quality and safety;
	customer convenience, etc.?
	c. Are traditional/modern retailers interested in:
	1. open and/or encourage Bulkstore/Refill stations at Superindo Supermarket
	locations to reduce sachet waste?
	2. encourage manufacturers to provide bulk/refill products for sale at retail
3	Suggestions and feedback
-	Bulk and Refill Shop
1	Bulkstore/Refill Station data:
	a. Respondent
	b. Outlet Name
	c. Business type
	d. Owner
	e. Manager
	f. Number of outlets
	g. Outlet location
	h. Outlet size
	i. Operated since
	j. Business model: where is the product obtained from, how is the product provided, how
	does the customer obtain the product, is it online/offline, etc.)
	k. Previous experience
2	Product Type & Customer:
-	a. Product type for sale
	b. Number of types of products sold
	c. Product brands for sale
	d. Reasons for choosing the type of product & brand
	e. Target market
	f. Number of customers
	<b>o</b>
2	h. Product safety & hygiene
3	Environmental Aspects of bulkstore/refill station:
	a. Environmental motivation in establishing bulkstore/refill station
	<ul> <li>b. Environmental targets to be achieved</li> <li>c. Achievements to date</li> </ul>
1	c. Achievements to date

-	-	
	d.	Environmental constraints (contamination & product safety, health, environmental
		awareness, etc.)
4	Ec	onomic aspects of bulkstore/refill station:
	a.	Business motivation in establishing bulkstore/refill station
	b.	Business targets to be achieved (number of customers, sales volume, revenue, etc.)
	C.	Current achievements
	d.	Business constraints & risks (price, product quality, customers, technology, human
		resources, finance, suppliers, logistics, competitors, licensing, etc.)
	e.	What products should also be sold in bulk store/refill station
	f.	What manufacturers/brands do customers want but haven't sold them in bulkstores/refill
		stations?
5	So	cial aspects of bulkstore/refill station:
	a.	Bulkstore/refill station social motivation
	b.	Social targets to be achieved
	C.	Achievements to date.
	d.	Social constraints (government regulations, stakeholder support, culture, beliefs, etc.)
6	Pro	ojections, Plans, Tips and Advice:
	a.	Is bulk store/refill stationstill considered a good idea that is profitable & will continue to
		work? or just a momentary trend
	b.	How many years the capital is expected to return
	C.	What is your BS/RS plan for the next 5-10 years
	d.	Should bulk or refill products also be sold in modern and traditional retail?
	e.	Is there any advocacy to manufacturers and retailers to provide bulk/refill products?
	f.	Feedback and Suggestions for manufacturers, customers, governments, bulkstore/refill
		station, modern retail, traditional retail, and others
J	1	

N 0.	Store Name	Address & contact	Description and Method	Copy Social Media Links
1.	Alami Bulkshop	Jalan Srengseng Sawah No. 54 RT 2 / RW 7, Srengseng Sawah, Jagakarsa District, South Jakarta City, 12630 Efi Femiliyah (Owner) 081911035xxx	Offline Interview & Visit	https://instagram.com /alami.bulkshop?utm _medium=copy_link
2.	Curah Bulkstore	Casamora Jagakarsa 085776264xxx	Did not participate, because there were no offline buying and selling activities and did not find time with shop owners to make visits.	https://instagram.com /curahbulkstore?utm _medium=copy_link
3.	Bulkstore by Team Darlings	Jalan Ciniru 1 No. 1 , RW 3, Rawa Barat, Kebayoran Baru, South Jakarta, 12180 085813122xxx	Not participating, because there was no response from the various kinds of information we contacted	https://instagram.com /thestore_idn?utm_m edium=copy_link
4.	Saruga Package Free Shopping Store	Jalan Taman Bintaro, Sector 1, No.1, RT 7/ RW 11, Bintaro, Pesanggrahan District, Jakarta City South 12330 Ghina Sahirah (Business Development Manager) 085946472xxx	Offline interview & visit	https://instagram.com /sarugaindonesia?ut m_medium=copy_lin k
5.	Naked Inc	Como Park, East Kemang No. 998, RT 1/ RW 3, Bangka, Mampang District, Kota South Jakarta, 12730 08118088xxx	Visit	https://instagram.com /nakedincjkt?utm_me dium=copy_link
6.	The Daily Needs	Pancoran Barat XI A No.1 RT 4/ RW 3, Pancoran District, Jakarta City South 12780 081380099xxx	Not participating, because the shop has changed to a cafe	-
7.	BulkSource Eco Grocer	Lippo Mall Kemang UG Floor 30. Jln. Prince Antasari No.36, PRC 12/ RW 5, Bangka, Mampang Prapatan, South Jakarta, 12150 081287919xxx	Visit	https://instagram.com /bulksource?utm_me dium=copy_link
8.	BulkSource Eco Grocer	Bintaro 08111188xxx	-	https://instagram.com /bulksource?utm_me dium=copy_link

### Attachment4. Data on Bulk/Refill Stores in Indonesia as of March 2022

N 0.	Store Name	Address & contact	Description and Method	Copy Social Media Links
9.	BulkSource Eco Grocer	Cipete, Jakarta 08111329xxx	-	https://instagram.com /bulksource?utm_me dium=copy_link
10	Koin Pack	Melawai Jakarta Bintang Ekananda (CEO & Director) 081318880xxx	Online interview via zoom	https://instagram.com /koinpack?utm_medi um=copy_link
11	WasteLess Bulkstore	Jln Kemang Selatan IX No 12 B RT01/02, Bangka, Kec Mampang Prapatan 081291430xxx	Did not participate, because there was no response from the management	https://instagram.com /wasteless_jakarta?u tm_medium=copy_lin k
12	Qyos (Refill Station)	Kalibata City Kiosk Indah Bazaar, Tower Ebony Unit 9AT, Jakarta Darina Maulana (CMO) Firman Kurnia (Daily Operation) 082122067xxx	Online interview via zoom	https://instagram.com /qyos_id?utm_mediu m=copy_link
13	Siklus Refill (Refill Station)	Tebet, South Jakarta Brenda Chintya Atmaja (PR & Partnership) 087776201410	Online interview via zoom	https://instagram.com /siklusrefill?utm_med ium=copy_link
	The Body Shop	Casablanca City Mall, Jakarta	There is no approval from the management	https://instagram.com /thebodyshopindo?ut m_medium=copy_lin k_(Official The Body Shop Indonesia) https://instagram.com /thebodyshopindo.im pact?utm_medium=c opy_link(The_Body Shop Impact)
15	Ezy. ld	Petamburan, Jakarta Abigail 0851 62680xxx	Did not participate, because there was no confirmation from the management	https://instagram.com /ezy_id?utm_medium =copy_link
16	BulkSource Eco Grocer Menteng (Pusat)	Jalan Wahid Hasyim No.47, rt 1 rw 4, Gondangdia, Menteng, Central Jakarta Putri Arif Febrila (CEO & Marketing) 08111121xxx	Online interview via zoom	https://instagram.com /bulksource?utm_me dium=copy_link
17	BulkSource Eco Grocer	The Breeze BSD 08111188xxx	-	https://instagram.com /bulksource?utm_me dium=copy_link

N 0.	Store Name	Address & contact	Description and Method	Copy Social Media Links
18	Kecipir (Local Organic Circular)	JL. H. Muri Sallim III No. 11 Banana, Kec. East Ciputat, Tangsel 15419 Tantyo Bangun (Founder & CEO) 085642715xxx	Online interview via zoom	https://instagram.com /kecipir?utm_medium =copy_link
19	Jingga Grocer	Jl. Pondok Timur Indah No.5, RT 001 RW 004, Mustika Jaya, Bekasi 17158 081287753xxx	Not participating, because there is no response	https://instagram.com /jingga.grocer?utm medium=copy_link
20	Toko Nol Sampah	Bandung Siska Nirmala (Owner) <u>0852-2140-2xxx</u>	Online interview via zoom	https://instagram.com /tokonolsampah?utm _medium=copy_link
21	Warung 1000 Kebun	Bandung Ali Abdullah (Coordinator) <u>0812-9558-9xxx</u>	Online Interview Via Zoom	https://instagram.com /warung1000kebun? utm_medium=copy_li nk
22	Cetana Low- Impact Living	Jl. Ranggamalela 8, Bandung women 081316551xxx	Have established communication, but because of an emergency (child is sick) so it is cancelled or unable to participate.	https://instagram.com /cetana.liv?utm_medi um=copy_link
23	Life & Co.	Semarang Philosophy (CEO) <u>0882-2690-7xxx</u>	Online interview via zoom	https://instagram.com /lifeandco.store?utm 
24	Takir Kios Bluk	Bantul, Yogyakarta 0811-2653-xxx	Did not participate, because the shop was closed during the pandemic last year (2020)	https://instagram.com /takir_kios.bulk?utm medium=copy_link
25	Samara Eco House	Sorosutan, Yogyakarta <u>0878-7890-8xxx</u>	Not participating, because there is no response	-
26	Aromatics Jogja (nama sekarang : Mediterranea Store)	Mantrijeron, Yogyakarta 02744221xxx	Did not participate, because there was no response from the management	https://instagram.com /mediterranea.store? utm_medium=copy_li nk
27	Ranah Bhumi Jogjakarta	Brontokusuman, Yogyakarta <u>0821-3166-6xxx</u>	Not participating, because there is no reconfirmation communication	https://instagram.com /ranahbhumi?utm_m edium=copy_link
28	Peony Ecohouse Zerowaste Store	Sleman, Yogyakarta Tyo (Co-Founder) <u>0857-4703-4xxx</u>	Online interview via zoom	https://instagram.com /peonyecohouse?ut m_medium=copy_lin k
29	Vert. Erre	Sleman, Yogyakarta <u>0877-3914-9xxx</u>	Not participating, for not finding the right time	https://instagram.com /vert.erre?utm_mediu m=copy_link

N 0.	Store Name	Address & contact	Description and Method	Copy Social Media Links
30	Mamaramah Ecobulk	Surabaya Ogi (Owner) 0857 0610 6xxx	Online interview via zoom	https://instagram.com /mamaramah.ecobul k?utm_medium=copy _link
31	Alang-Alang Zerowaste	Surabaya Lydia (Owner) 0878 5413 0xxx	Online interview via zoom	https://instagram.com /alangalang_zerowas te?utm_medium=cop y_link
32	Hepi Circle	Surabaya Kumala Susanto (Co- Founder) 081317178xxx	Online interview via zoom	https://instagram.com /hepicircle?utm_medi um=copy_link
33	Estri Bulk Store	Poor 0858 2016 3xxx	Not participating, because there is no confirmation again	https://instagram.com /estri.ecobulk?utm_m edium=copy_link
34	Bali Buda	Badung, Nusa Dua, Ubud, Kerobokan, Gianyar ( <u>0361) 8445xxx</u> (Bandung)	Did not participate, due to difficulty contacting management directly	https://instagram.com /balibuda?utm_medi um=copy_link
35	Zero Waste Bali Bulk Food Store	Badung Silvija Ruhima (Owner) <u>0812-3930-3xxx</u>	Online interview via zoom	https://instagram.com /zerowastebali?utm medium=copy_link
36	From the Farm Bali	Badung <u>0859-4342-0xxx</u>	Did not participate, did not get a response from the management	https://instagram.com /fromthefarmbali?utm _medium=copy_link
37	Little Gardenyk	Jl. Plagrak, Kiyaran, Wukirsari, Cangkringan, Kregen, Kec. Depok, Sleman Regency, DI Yogyakarta 55281 0812 2906 5xxx	There is no personal response, the Whats App chat application answers regarding reservations at Little Garden	https://instagram.com /littlegardenyk?utm medium=copy_link
38	Omah Lor Project	Bali	No response and other contacts	https://instagram.com /omahlorprojects?ut m_medium=copy_lin k
39	Kula Tresna	Ds. Krebet rt 001, Kabrokan Wetan, Sendangsari, Display, Bantul Regency, DI Yogyakarta 55751 0818 433 xxx	Bulkstore is no longer operating	https://instagram.com /kulatresna?utm_me dium=copy_link
40	Club Sehat Bali	Bali 08999996xxx	No response	https://instagram.com /clubsehatbali?utm_ medium=copy_link

Ν	Store Name	Address & contact	Description and	Copy Social Media
ο.			Method	Links
41	BYO bali	Bali 0817 816 xxx	Not participating, because the Bulkstore is no longer operating	https://instagram.com /byo_bali?utm_mediu m=copy_link
42	Gracious Project	Renon, Bali Gracia Chandra (Owner) 0878 8054 4xxx	Online interview via zoom	https://instagram.com /gracious.project?ut m_medium=copy_lin k
43	Beningnurani Eco Grocery	JL. HM Ardans No. 18 Pisangan, Bontang, East Kalimantan, Indonesia, 75324 082136301xxx	Not willing to participate, because we are having a series of events in the neighbourhood	https://instagram.com /bulkstore_bontang? utm_medium=copy_li nk
44	Poviana Bulkstore	Palu, Central Sulawesi DM By Instagram	Not participating, because there is no response	https://instagram.com /povianabulkstore?ut m_medium=copy_lin k
45	Bulkstore Artani	Makassar 0811512xxx	Not participating, because there is no response	https://instagram.com /artani.id?utm_mediu m=copy_link
46	Sustain Story Bulk Sore	Jl. Datuk Ditiro 2 No. 42, Makassar, 90211 Dio (Owner) 0856 9632 4xxx	Online interview via zoom	https://instagram.com /sustainstory?utm_m edium=copy_link
47	Toko Organis YPBB	Jalan Batik Uwit No.1, Sukaluyu, Cibeunying Kaler, Bandung Satu, West Java, Indonesia, 40123 Muhammad Fatchur Rohman (Shop Manager) 0812 2333 1xxx	Online interview via zoom	https://instagram.com /tokoorganisypbb?ut m_medium=copy_lin k

Attachment5. Bulk/Refill Shops Established



Attachment6. Time of Establishment, Number of Outlets, Type of Legal Entity and Sales Model at Respondents' Bulk/Refill Stores

Na	D0/0D		Number	Legal	Sales	Model
No.	BS/SR	Standing time	of Outlets	entity	Offline	On line
1.	Alami Bulkshop	October 2019	1	-	$\checkmark$	~
2.	Saruga	November 2018	1	PT	$\checkmark$	√
3.	Toko Nol Sampah	September 2020	1	-	$\checkmark$	G
4.	Peony Ecohouse	June 2019	1	-	$\checkmark$	~
5.	Sustain Story Bulkstore	August 2020	1	-	$\checkmark$	√
6.	Mamaramah Bulkstore	April 2019	1	-	$\checkmark$	√
7.	Warung 1000 Kebun	December 2017	1	-	$\checkmark$	√
8.	Toko Organis YPBB	2015	1	Foundation	$\checkmark$	√
9.	Zero Waste Bali	2018	4	PT	$\checkmark$	✓
10.	Alang-alang Zero Waste	January 2019	1	CV	$\checkmark$	√
11.	Bulksource	May 2019	6	PT	$\checkmark$	~

No.	BS/SR	Standing time	Number of	Legal	Sales	Model
NO.	B3/3K	Standing time	Outlets	entity	Offline	On line
12.	Life and Co	May 2020	1	cz	√	✓
13.	Gracious Project	June 2020	1	୯୫	$\checkmark$	~
14.	Hepi Circle	November 2017	0	PT	✓	~
15.	Kecipir	2015	0	PT	୯୫	~
16.	Qyos	July 2020	2	PT	$\checkmark$	CS
17.	Siklus	2019	0	PT	$\checkmark$	~
18.	Koinpack	July 2020	0	PT	ଔ	~

### Attachment7. Types of Products Sold in Bulk/Refill Shops

No.	Bulk/Refill Store Name	House cleaner	Body care	Food & drink	Zero Waste Kit
1.	Alami Bulkshop	$\checkmark$	✓	$\checkmark$	✓
2.	Saruga	$\checkmark$	✓	$\checkmark$	~
3.	Toko Nol Sampah	~	✓	$\checkmark$	✓
4.	Peony Ecohouse	~	✓	$\checkmark$	✓
5.	Sustain Story Bulkstore	~	✓	$\checkmark$	✓
6.	Mamaramah Bulkstore	~	✓	✓	✓
7.	Warung 1000 Kebun	-	-	✓	✓
8.	Toko Organis YPBB	~	✓	✓	✓
9.	Zero Waste Bali	~	✓	✓	✓
10.	Alang-alang Zero Waste	-	✓	✓	✓
11.	Bulksource	~	✓	✓	✓
12.	Life and Co	$\checkmark$	✓	$\checkmark$	✓
13.	Gracious Project		✓	-	-
14.	Hepi Circle	$\checkmark$	-	-	-
15.	Kecipir	-	-	$\checkmark$	-
16.	Qyos	✓	✓	-	-
17.	Siklus	√	✓	-	-
18.	Koinpack	$\checkmark$	✓	-	-

No.	Bulk/Reissue	Existing Brand	Brand New	No Brand
	Store Name			
1.	Alami Bulkshop	C3	Lingkar Organik, Ladang Lima, iumi moringa, Soghie Klin, OrganiCup, Rumah Organik, Gemah Grocery	Local products, family farm products, Import products
2.	Saruga	Unilever	Java Rice (Private Label) Cahaya, Papel, Uray, Jinawi,Mars & marion, Heal!, Demi Bumi, OrganiCup, BEI, Kind by Kami, Ullo, Kiyo+, daily lab, Doque,Scentottage, Soothesensory, dr soap, Kelana, Aridiri	Local products
3.	Toko Nol Sampah	63	Rumah karung goni, Lilypads, SEGALA by Emaks	Local products
4.	Peony Ecohouse	63	Organicup, Akuna, Sekartaji, Moonrise, Biyunng, GM, Temukini	Local products
5.	Sustain Story Bulkstore	Lifebuoy	Jinawi, Menspad Baby Oz, Halobaba, Casagrata,	Local products
6.	Mamaramah Bulkstore	63	Hepi Circle, Enchanteu, Segara naturals, OrganiCup	Local products
7.	Warung 1000 Kebun	C3	Ladang Lima, Re Fruit, Uray, Lingkar Organik, GulaKong, Jika Coklat, Padusi34,	Garden produce, local produce
8.	Toko Organis YPBB	Unilever, Wings, Shuma	Arizona, Sedari kini	Local products
9.	Zero Waste Bali	C3	Lestari	Local products, imported products, local craftsman products
10.	Alang-alang Zero Waste	63	OrganiCup, Green Orient, Jiva, GulaKong	Local products
11.	Bulksource	C3	Kind kain, Cahaya, OrganiCup, Eliv, amore, Keirra Essence, Demi Bumi, Gumi Bamboo, Uray, Delicyo, heal!, Green Rebel	Local products, imported products
12.	Life and Co	C3	OrganiCup, Demi Bumi, Moktika Honey	Tote bag for children with disabilities
13.	Gracious Project	C3	03	Formula / blend of natural ingredients
14.	Hepi Circle	ശ	Hepi Circle	୯୪

### Attachment8. Product Brands Sold in Respondents' Bulk/Refill Shops

No.	Bulk/Reissue Store Name	Existing Brand	Brand New	No Brand
15.	Kecipir	C33	Green Rebel, Heal!, Cmooz Banduri, Madu Pak Lebah, Rumah Fermentasi, Sapapua, Hakko, Cassabi, Nam, Benih Beta, Berlia SAE, Efata, Coco Milagro, Watu Honey Kapuas Hulu, Bionic Farm	Local farmers harvest
16.	Qyos	Mamalime, Nuvo family, So klin liquid, Attack easy, Sunlight, Rinso liquid,	C3	C3
17.	Siklus	Wipol, SoKlin Floor, Rapika, Sanitary, Dettol, Endcov, Sunlight, Mamaline, Rinso Barco, Film, Bimoli, Kuncimas, Fortune,	Pureco	CO3
18.	Koinpack	Rinso, SomKlin, Teressme, Clear, Zinc, Lux, Mamalime, Sunlight, So klin, Dove, Setra ramos, Japonica, Economy	C3	C3

### Attachment9. Efforts Made to Maintain Product Safety & Hygiene in Bulk/Refill Stores

		Product safety and hygiene	
No.	Store Name	Efforts made by bulk/refill shops	Person responsible
1.	Alami Bulkshop	The container for the product is tightly closed, airtight; using different clamps for each type of product; always check the expiration time	Internal
2.	Saruga	Premium quality containers; using different clamps for each type of product; once a week check the quality and expiration date and clean the jars and jerry cans. Before the pandemic, customers could pick up their own orders, but during the pandemic, pick-ups were assisted by officers.	Internal
3.	Toko Nol Sampah	Product collection by employees and managers; using different clamps for each type of product; every two weeks check and clean the container	Internal

		Product safety and hygiene	
No.	Store Name	Efforts made by bulk/refill shops	Person responsible
4.	Peony Ecohouse	Check the expiration once every 1-2 weeks, and check for physical changes (color, new, and taste); clean the jar after empty; deep cleaning shop 2 weeks – once a month	Internal
5.	Sustain Story Bulkstore	Store staff are required to use masks and hand sanitizers before and after interacting with customers; for seasoning products and so on, consumers ask for help from shop staff to get their products; containers and spoons that have been used to weigh products are washed after use.	Internal (store manager)
6.	Mamaramah Bulkstore	Initially consumers take their own food products to be purchased. Now it's done by store managers, even though consumers are disappointed because they have lost their own refill sensation; quality control and stock taking 1-2x a month, check products, especially organic ones that are prone to mold and fleas	Internal
7.	Warung 1000 Kebun	Every week to check product quality (organic products are usually short-lived or perishable); during the pandemic, bulk product collection by officers	Internal
8.	Toko Organis YPBB	Consumers are responsible for the primary packaging that they bring themselves; stores maintain secondary and tertiary packaging for products by storing them dry, if necessary cleaning, simply with water.	The Organic Store and the customer
9.	Zero Waste Bali	No data obtained	No data obtained
10.	Alang-alang Zero Waste	Stockings in small quantities but often; double seal using a box and put in a cupboard; the product is not exposed to direct sunlight; air-tight; 1x a week stock taking	Internal
11.	Bulksource	During the pandemic, self-service is discontinued to maintain progress; maintain humidity by providing a dehumidifier machine and air conditioner always on; control over weather and climate	Internal (store supervisor)

		Product safety and hygiene	
No.	Store Name	Efforts made by bulk/refill shops	Person responsible
12.	Life and Co	Every week check the product: ticks and expiration date; product literacy; maintain store temperature and humidity; cleaning SOPs; drying bamboo materials every week	Internal
13.	Gracious Project	The product is stored in a tightly closed glass jar; product pick- up by staff	Internal
14.	Hepi Circle	Implement factory standards: some products must not be placed on the floor or touch the wall (must be on pallets); should not be exposed to direct sunlight; do not use clear bottles; The consistency of the product is very sensitive to changes in temperature, because it contains a chemical that functions to reduce the hardness of water which usually contains heavy metals so that the detergent in soap is more effective. Product expires in 2 years.	Internal and factory
15.	Kecipir	Cleaning food products to be sold in 3 stages: washing, drying, and irradiating with UVC rays; conduct lab tests for ready-to- drink products (fresh milk in glass bottles)	Internal External: lab test
16.	Qyos	Routine washing and sanitizing of machines; Wash the bottle with warm water, the foam is removed. When there is residue in the bottle, the machine will not fill, the alarm will sound.	Internal
17.	Siklus	For officers in storage always use headgear, gloves, masks and PPE (Personal Protective Equipment), starting from special shoes/footwear; the transfer of product contents from large jerry cans to small bottles still uses a manual system, by officers	Internal
18.	Koinpack	Using cleaning standards internally according to the closest government regulations, for example the BPOM rules regarding pollution in cosmetics	Internal

No.	Store Name	Customer Profile	
1.	Alami Bulkshop	Female, housewife, 25-24 years old. The majority of customers from online and relations. Difficulty getting customers from around the store environment.	
2.	Saruga	The majority are women, 20-30 years old, with a minimum education of high school. At the beginning of the establishment, there were more housewives who did monthly shopping. After the change in management, more students aged 20-30 years old	
3.	Toko Nol Sampah	Majority of women, 23-35 years old,Segmented social classes make up the ecosystem	
4.	Peony Ecohouse	men and women; 30% students and 70% housewives with 1-2 children; purchasing power IDR 80,000 – 200,000/transaction	
5.	Sustain Story Bulkstore	Female, 17-25 years old, high school education – college, income 3 million/month; domiciled in Makassar and its surroundings	
6.	Mamaramah Bulkstore	Women, Housewives and Students; 30-45 years old	
7.	Warung 1000 Kebun	Boys and girls, but the majority of mothers are young and old	
8.	Toko Organis YPBB	Not really looking at demographics, but behavior (people who have a tendency to consume environmentally friendly goods) and psychology (have an ideology related to environmental issues), which geographically do not necessarily live around the store	
9.	Zero Waste Bali	Male and female, no age limit, community focused	
10.	Alang-alang Zero Waste	Majority of women, productive age	
11.	Bulksource	Young mothers who shop with their children, who are looking for healthy and eco-friendly food	
12.	Life and Co	Average female, 17-35 years old, middle to upper income who have been educated	
13.	Gracious Project	80% female, 25-45 years old, majority of friends or relations	
14.	Hepi Circle	Women, starting at the age of students, people who want to shop and have decision making power for shopping; not people who are environmentally conscious, but people who want to gift with quality goods	
15.	Kecipir	Not targeting special segments because we hope that organic food can be accessed by all people	
16.	Qyos	Men and women, the general public of socio-economic type B in traditional markets. Currently, we have not been able to reach the target market, but we are quite satisfied because many small traders / MSMEs around the Kalibata area are customers.	
17.	Siklus	Male and female, 18-50 years old; Housewives, SMEs, students	
18.	Koinpack	Male and female, lower-middle income (offline), and upper-middle income (online)	

### Attachment10. Customer Profile of Respondent's Bulk/Refill Store

No.	Store Name	Address	Location / place
1.	Alami Bulkshop	Jl. Srengseng Sawah RT 02 RW 07. No.54, Jagakarsa, Jakarta, Indonesia, 12640	Store
2.	Saruga	Jalan Taman Bintaro 1 Sector 1, RT 7 RW 11, Bintaro, Pesanggrahan District, South Jakarta City 12330	Shophouse
3.	Toko Nol Sampah	Bima Street No. 40, Bandung (at the owner's residence)	Home
4.	Peony Ecohouse	Jl. New Pogung A2 No.1, Mlati-Sleman, Dl Yogyakarta	Store
5.	Sustain Story Bulkstore	JI. Datuk Ditiro 2 No. 42 Makassar City	Store
6.	Mamaramah Bulkstore	South Kelintang IX Block AD No. 8, Surabaya, Indonesia 60232 (Ogi's garage)	Home
7.	Warung 1000 Kebun	Next to Mr. Ali Abdullah's house (Coordinator), Jl. Bowling No. 26 Arcamanik, Bandung, 40293	Home
8.	Toko Organis YPBB	Jalan Batik Uwit No.1, Sukaluyu, Cibeunying Kaler, Bandung Satu, West Java, Indonesia, 40123 (next to the YPBB office)	Office
9.	Zero Waste Bali	Jalan Rata Anyar No. 30, Kerobokan Bali	Shophouse
		Jalan By Pass Tanah Lot, Munggu, Bali 80351	
10.	Alang-alang Zero Waste	Ruko Este Square A2, JL. Dr. Ir Soekarno (MERR) 56-58, Surabaya, Indonesia 60258	Shophouse
11.	Bulksource	Center in Menteng, Jl. Wahid Hasyim no. 47, Menteng, Jakarta, Indonesia, 10350	Shopping mall, Shophouse, Store
		Kemang : at Lippo Mall Kemang UG floor	
		BSD : JI. BSD Green Office Park No.21	
		Foodhall Plaza Senayan, Jakarta	
		Cipete, Jakarta	
		Bintaro, Jakarta	
12.	Life and Co	Jalan Bendo no. 19 Banyumanik, Semarang	Office
13.	Gracious Project	Small shop beside the house (Renon, Bali)	Home
14.	Hepi Circle	No outlet, all online. Even if there is a place, it is a partnership.	Shop
15.	Kecipir	There is no physical store, all online with a distribution center. Storage is in Sentul, West Java	Office, Storage
16.	Qyos	Kalibata Apartment, Bintaro Modern Market,Diamond Artha Gading, Alfamart BSD, Alfamart Peramburan, Alfamart Muwardi	Supermarkets, apartments,

### Attachment11. Location of Respondent's Bulk/Refill Shop

No.	Store Name	Address	Location / place
17.	Siklus	Head office in Tebet, South Jakarta, online sales by motorbike delivered to the ordering address	Office, Storage
18.	Koinpack	There isn't any	Office

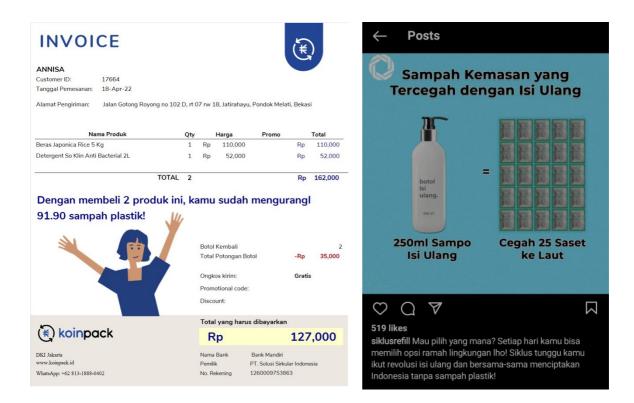
### Attachment12. Number of Customers of Bulk/Refill Stores

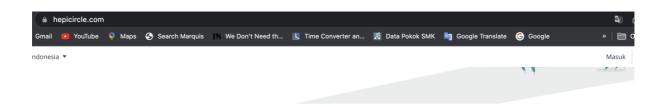
No.	BS / SR		Number of C	ustomers	
		When opened	Currently	Repurchase	Instagram followers
1.	Alami Bulkshop	200 people	250 people	almost 75% of loyal customers return, although not many but there are new customers every day	2,032 followers on Instagram as of March 20, 2022
2.	Saruga		At the beginning of the pandemic, there was a decline in the number of customers, but in the last year the number of Saruga customers has increased again		16.8K as of April 24, 2022
3.	Toko Nol Sampah			50 fixed	3,194 Followers on Instagram as of March 11, 2022
4.	Peony Ecohouse	0 but 200 subscribers/members in the first year	600 members	50-75 customers per month	8,478 followers as of April 42, 2022
5.	Sustain Story Bulkstore	about 20-50 customers	+100 Subscribers	about 20 customers Hundreds of customers in their 20s and girls Source of awareness: Environmental community and literacy community in Makassar	633 followers as of April 24, 2022]

No.	o. BS / SR Number of Customers				
		When opened	Currently	Repurchase	Instagram
<u> </u>	Managerah		700 m a a m la		followers
6.	Mamaramah Bulkstore		700 people		5,651 IG followers As of
	Duikstore				March 10,
					2022
7.	Warung 1000	50 people	750 people	60% return	24.3K
	Kebun			customers	Followers on
					Instagram as
					of March 10,
					2022
8.	Toko Organis			50 regular	3,251
	YPBB			customers	Followers on
				(members) and +- 50 visitors per	Instagram as of March 10,
				month	2022
9.	Zero Waste				39.4K
	Bali				Followers on
					Instagram as
					of March 20,
					2022
10.	Alang-alang				7,756
	Zero Waste				Instagram followers as of
					March 9, 2022
11.	Bulksource				35.3K
	Builtoouroo				Instagram
					Followers as of
					March 10,
					2022
12.	Life and Co				1,396
					Instagram followers as of
					April 24, 2022
13.	Gracious				1,005 followers
	Project				on Instagram
	,				as of March 9,
					2022
14.	Hepi Circle		Not up to 50	Customers who	931 followers
			people,	have been from	as of April 24,
			deliberately not	2018 (when	2022
			expanding as	launching) are still	
			long as the product is not	repeating orders until now.	
			licensed (don't	Moreover, they	
			want to take	have packaging	
			the risk)	so they are tied to	
			/	the packaging with	
				a buying and	
				selling system	
				(feeling that they	
				have the 'I already	
				have it, so just use	
				this' packaging)	
	1		1	L	

No.	BS / SR	Number of Customers			
		When opened	Currently	Repurchase	Instagram followers
15.	Kecipir	Do not remember	30,000 people	20% of 30,000	19.9K Followers on Instagram as of March 10, 2022
16.	Qyos	150 people	2,700 people	61% make returns	6,085 Instagram Followers as of March 15, 2022
17.	Siklus	30.000 user registration by application	15,000 people		105K Followers on Instagram as of March 17, 2022
18.	Koinpack		1,000 people	40-45% repeat order, 70% return packaging	3,474 followers on Instagram as of April 24, 2022

### Attachment13. Photo





### **BUMI BERSIH, KITA HEPI**

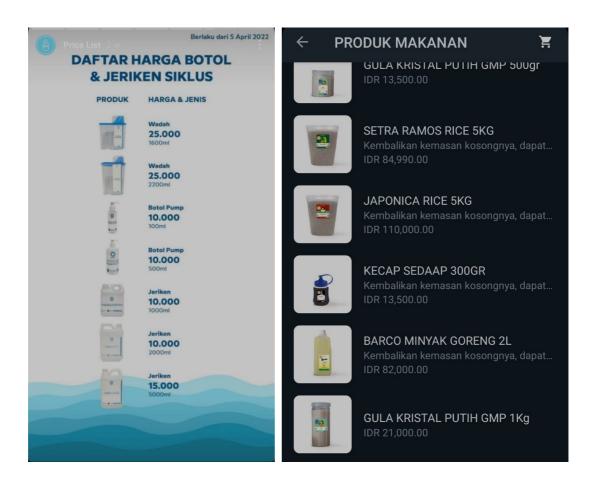
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sampah plastik telah berkurang dari hasil belanja kita semua.

Terima kasih telah bersama Hepi Circle dalam mengurangi pemakaian kemasan plastik sekali pakai. Tetap semangat dan hepi dalam mengurangi sampah ya :)

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Attachment14. List of Producers that Have Submitted Waste Reduction Plan Documents by 2021

No	Manufacturer Name	No	Manufacturer Name
1	PT Lasallefood Indonesia	14	PT HM Sampoerna
2	PT Tirta Investama (danone-aqua)	15	PT L'oreal Indonesia
3	PT Unilever	16	PT Heinz ABC Indonesia
4	PT Nestle	17	PT Indofood (Bogasari division)
5	PT Softex Indonesia	18	PT Anugrah Indofood Barokah Makmur
6	PT Paragon Technology and Innovation (Wardah)	19	PT Salim Invomas Pratama
7	PT Jhonson Home Hygiene Products	20	PT Indolakto (Indomilk)
8	PT SC Johnson Manufacturing Surabaya (PT SCJMS)	21	PT Tirta Fresindo
9	PT Procter & Gamble Home Products Indonesia (P&G)	22	PT Ajinamoto Indonesia
10	PT Millennium Single Age	23	PT Perfetti Van Melle Indonesia
11	PT Yakult Indonesia	24	PT Reckitt Benckiser Indonesia
12	PT Mandom Indonesia	25	PT Modelez Indonesia
13	PT Coca-Cola Indonesia		

Source: Ministry of Environment and Forestry (KLHK)

## Attachment15. List of Retailers that have Submitted Waste Reduction Plan Documents Until 2021

No	Retail Name	No	Retail Name
1	PT Begawan Inti Kharisma (Solo Grand Mall)	5	Palembang Square Mall
2	PT Matahari Department Store, Tbk	6	Palembang Square Extension
3	PT Griya Inti Sejahtera Insani/ Palembang Icon Mall	7	PT Lion Superindo
4	PT Ciputra Semarang	8	PT Body Shop Indonesia

Source: Ministry of Environment and Forestry (KLHK)

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### Imprint

The analysis and reporting were by the consultants hired under the project 'Rethinking Plastics - Circular Economy Solutions to Marine Litter', a project that supports the transition towards a circular economy and contributes to the reduction of plastic waste and marine litter in East and Southeast Asia.

The 'Rethinking Plastics' is funded by the European Union and German Federal Ministry for Economic Cooperation and Development (BMZ) and implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and Expertise France. More information: <u>https://rethinkingplastics.eu</u>

Published by: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Registered offices: Bonn and Eschborn, Germany

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Jakarta, April 2022