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Published under responsibility of Greenpeace Indonesia - Urban People Power Campaign Mega Plaza Building 5th Floor, Jalan HR. Rasuna Said C3, Jakarta, Indonesia <a href="https://www.greenpeace.or.id/">https://www.greenpeace.or.id/</a>

## EXECUTIVE SUMMARY



## Plastic is now becoming a global pollution that needs an integrated management to handle.

This report is aimed at examining the issue of single use plastic in Indonesia. The public's behavior, the role of manufacturers and governmental policies will all be considered. Plastic has now become a global issue which requires and integrated management system to find a solution. While the public are united in their opposition to the harm that single used plastic causes to the environment, they are still highly dependent on this material. Plastic is the most convenient, cost effective and readily available packaging on the market.

Many believe companies are responsible in this matter as public can only choose based on availability in the market. The public is still dissatisfied by corporation's sustainability programs regarding plastic

waste reduction, especially in FMCG industry. They expect manufacturers to be more proactive in handling the environmental issues related to single-use plastic packaging. In fact, the public perceives brands better when they care more about the issue of plastic waste.

Even when they have implemented several initiatives for sustainability, companies in FMCG industry are not open and clear on their plastic reduction programs and other environmentally friendly activities. The public do not actively search for different brands or products, rather they follow what the market dictates them to do.

Ways of reducing plastic waste by using alternate system are being developed for a sustainable world.

Unpackaged products with a refill and reuse system is still rare, however the public is still open to the idea of switching to these alternative delivery models, when available. This leaves companies with immediate action to inform the public and include more non-plastic alternative delivery systems.

In this report, Greenpeace Indonesia wants to show that the public have a demand for all parties, especially corporations to take immediate real action to deal with the plastic pollution crisis. Major changes to the corporate bussiness model have been the main demand. This could be realize by reducing the single use plastic packaging production and managing their plastic waste which has polluted the environment.



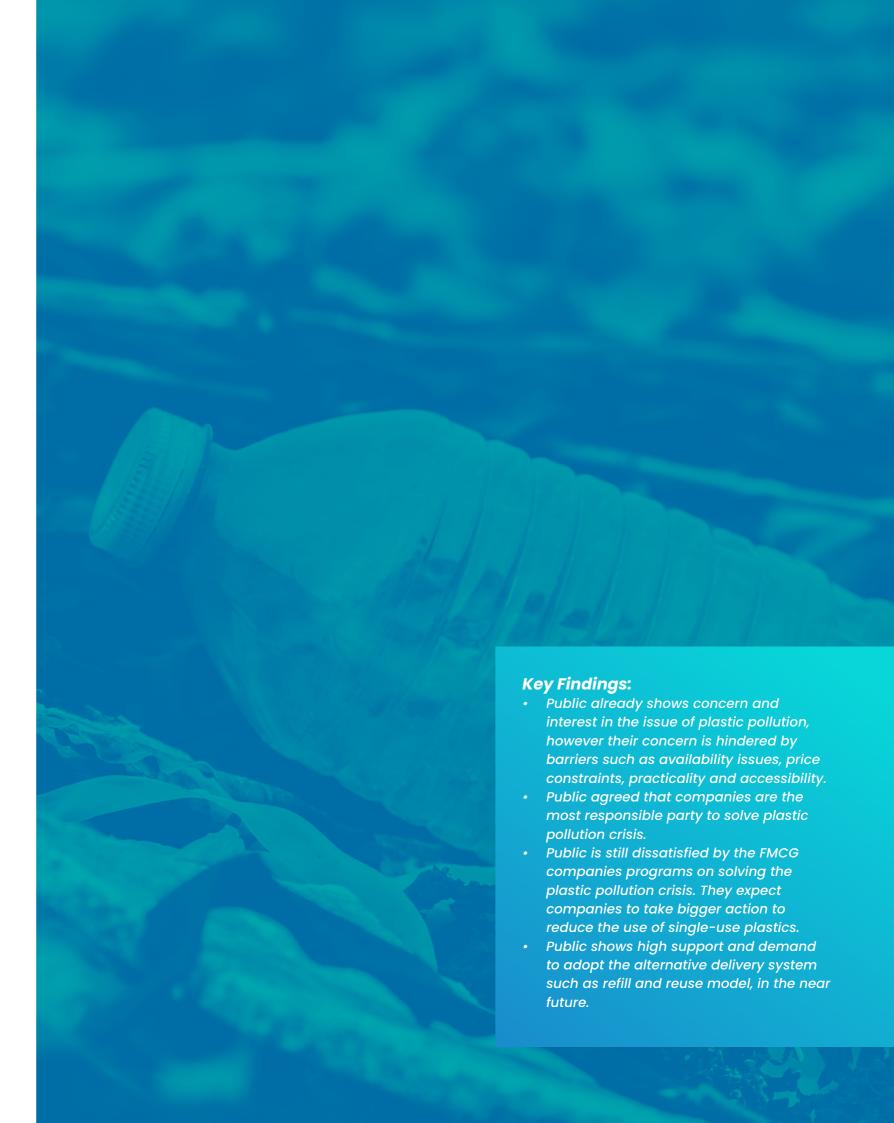
# CALL TO ACTION FOR COMPANIES AND GOVERNMENT

### **FOR COMPANIES**

- Take a the lead to break the public's barriers on solving the plastic pollution crisis by phasing out single-use plastics immediately.
- 2. Be transparent about the company's roadmap program to reduce plastic waste, and report the progress and achievements regularly.
- 3. Be responsible to monitor and manage the company's plastic product which has polluted the environment.
- 4. Reinvent the product's delivery systems in order to avoid creating more plastic pollution. Prioritize investment into the delivery of refill and reuse options that are affordable, accessible, durable and convenient for public to use.

### FOR GOVERNMENT

- Strengthen the implementation of ministry regulation on companies and their roadmap plan to reduce plastic waste. Including, the government must be strict to adhere to the timeline on the roadmap which targeted several goals on by 2030.
- Develop transparency by making companies goals and reports about the current and planned plastic reductions program to be accessible to the public where they can also give feedbacks or criticism.
- 3. Be firm in applying sanctions for any violations committed by companies which are against the national plastic reduction plan.
- Formulate policies that support alternative delivery system, that includes time-bounded goals.





Greenpeace acts as an international nonprofit environmental organization that ensures the ability of Earth to nurture life in all its diversity.

At the heart of Greenpeace's campaigns is the tradition of non-violent, direct action against environmental abuse and destruction.

Considering the systemic problems and limitations of plastic reduction options in the society, Greenpeace conducted a comprehensive study to better understand public knowledge, behavior, constraints, expectations, and demands of the community for corporation accountability in breaking the chain of dependence on single-use plastic packaging.



Concerns towards single-use plastic product

Public motivation in incorporating plastic product

Public expectation for corporate involvement to reduce the problem

Public willingness to adopt alternative delivery system

## Methodology



The survey is conducted on: October November

2020

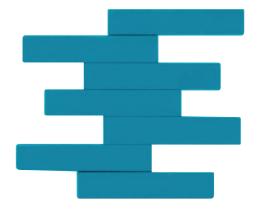
2020

Held several major cities as representative, which are:

- Jakarta
- Medan
- Makassar

This research uses a mix-method approach to obtain holistic insight from analyzing the depth of information and answer the research objectives.





### **OUALITATIVE APPROACH**

During research, qualitative approach was used to explore public motivation in utilizing single-use plastics and their perception of the impact on the environment. The main purpose in applying this method is to dig deeper, identify and diagnose the triggers in using single-use plastic and barriers to reducing it.

In addition, qualitative approach could help in a better understanding of public perception on corporate responsibility to overcome this issue.



Data collection for qualitative research was performed by gathering respondents to different Online Focus Group Discussions.

The respondents were:



Mix of male and female Aged 18-45 yo



Live in Jakarta with middle to upper social class standing.



A specific criteria was given to gain more precise insight for this research, such as:

- Different degree of environmental
- Purchasing single-use plastics during the past month
- and all use single-use plastics.

### **QUANTITATIVE APPROACH**

A quantitative approach is used to quantify the problem by way of generating numerical data that can be transformed into usable insight. So that the approach is expected to discover patterns in the bigger picture and deep dive into the differences of behaviour across demographic breakdown.

Where measurable numerical data to formulate facts and allow us to get the size or incidence on predefined topic/attributes such as (how big, how often, how important, etc.) which of course it can be projected on the population.

Data collection for quantitative methodology was completed by exercising a mixed method of:



Self-completion Online Survey using Panel and an assisted Phone Interview that required a time maximum of 30 minutes.

Respondents are selected randomly from chosen PSUs. Through phone interview, the interviewer will conduct screening as stated on the questionnaire to make sure the eligibility / fit with the criteria.

For this specific survey, the subject's criterion were:



Male and female Aged 18-55 yo



Live in Jakarta / Medan / Makassar

A total of 623 respondents were surveyed which represent respective cities population.



## Public Concern Related to Environmental Issues

The waste problem serves as the main concern related to nature and environmental issue in Indonesia, followed by global warming, air pollution, and flood respectively. Based on the survey, most of the respondents are aware of at least one environmental issue, which displays a sufficient level of understanding regarding environmental problems in society. More environmental issues are

related to plastic waste, such as flooding, overpackaging, water pollution, and land pollution. From the survey, the problem of overpackaging emerges as one major concern in environmental issues, being in the top 5 on the survey list. Public is well-informed on the impact of plastic waste to the environment, which indicates the urgency to eliminate this situation for a better environment.

Public is well-informed on the impact of plastic waste to the environment, which indicates the urgency to eliminate this situation for a better environment.

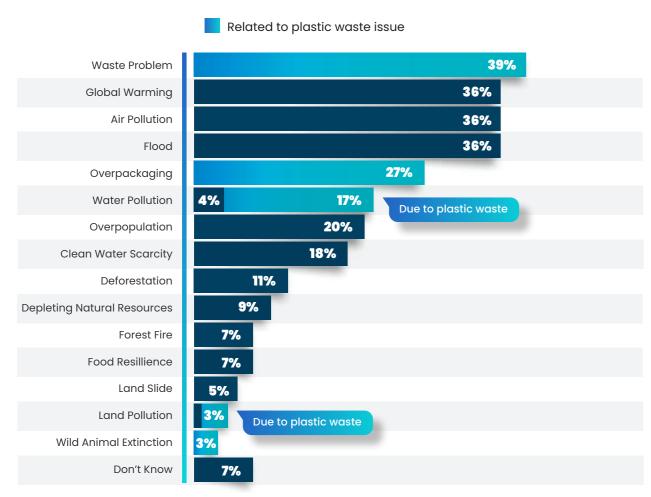


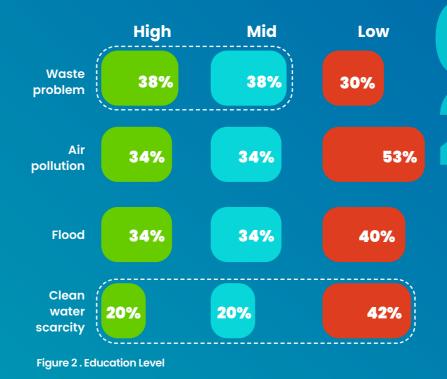
Figure 1 - The Main Problems of Nature and Environment in Indonesia

## Factors that Affect Environmental Issues

### Demographic Areas

The waste problem might become the most prominent environmental issue in Indonesia, however different areas express variant issues. In Jakarta, for example, waste problem is perceived as the most prominent environmental issue, followed by global warming, and floods. In Medan, separate issues occur, such as air pollution and deforestation. Flooding, air pollution, and water scarcity concerns emerge in Makassar.





### Educational Background

Education plays an important role in people's viewpoint on environmental issues. People with higher education background demonstrates an increase concern of waste problems compared to lower level of education. Groups of lower education level put more concerns on air pollution and scarcity of clean water. Almost half of respondents with mid to high education level chose waste problem as their main environmental problem, while only a third with low education were concerned about waste problem. In contrast, low-educated respondents chose air pollution, clean water scarcity, and flood as their main issues, with percentage of 53%, 42%, and 40% respectively

## Public Understanding of the Plastic Waste

Plastic waste is one of the foremost issues attached to waste problem. Most people are conscious that plastic is hard to decompose and show familiarity with the long-term impact which contributes to sea / river / land pollution. They are also aware of the effect of plastic waste to flooding.

With regards to the impact of plastic waste and its contributors, public has enough level of awareness of single-use plastic. They understand the impact of this material fairly well. Despite the medium level of awareness towards single-use plastic, they agreed on the harm plastic waste brings to the environment. They consider single-use plastic as dangerous to the environment, and they have the intention to reduce it if possible.

However, their perception on this issue still needs some adjustment. As at present, public comprehends that varied types of plastic are associated with different levels of environmental damage. For example, they perceive plastic bags as more harmful than plastic packaging. In reality, plastic packaging is just as harmful to the environment as plastic bags. Educational background plays a big part on their understanding. People with better education have better understanding on the harm plastic packaging causes to the environment, compared to the less educated.

PLASTIC WASTE IS ONE OF THE FOREMOST ISSUES ATTACHED TO WASTE PROBLEM.



## The Impact Caused by Single Use Plastic on the Environment

The high volume of plastic waste creates complex problems for the environment. Plastic waste has massively damaged the ecosystem. Its destructive power to the environment is mainly caused by the prolonged time it needs to decompose. A study states that plastic bags take thousands of years to decompose.

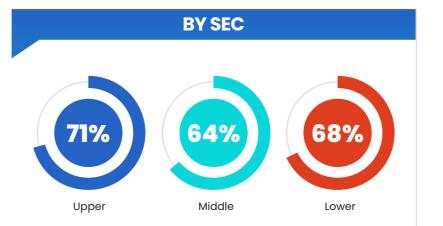
Over time, the existence of plastic waste is increasingly abundant and has now become a pollutant to our environment. According to the Indonesian Association of Aromatic Olefins and Plastics Industry (INAPLAS), 65% of national plastic consumption is still

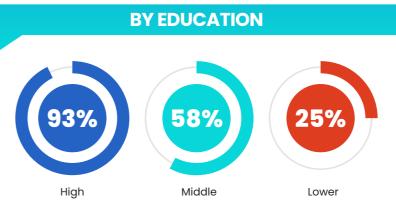
dominated by plastic packaging. The World Economic Forum also estimates that more than 32% of plastic waste is not caught or handled and becomes trash that ends up littering the land and oceans.

Educational background contributes to public awareness of the impact of single-use plastic to environment. More than 90% of highly educated public are aware of the effect of single-use plastics on the environment, and only 25% of lower educated public are aware of it. As the education level declines, the awareness

level of single-use plastic impact decreases as well.

The finding in qualitative studies shows that people link the long-term impact of single-use plastic waste to flooding and pollution. They find single-use plastic as damaging to the ecosystem because the material is difficult to decompose, and Indonesa still lacks of recycling centers to repurpose its waste. Public point out the contribution of single-use plastic waste to the flooding that regularly occurs in big cities, as seen in Figure 4.





### Figure 3 - Consumer Awareness of the Impact of Single-Use Plastic on the Environment



### Contributes to Flooding

Consumers point out the contribution of single-use plastic waste to the flooding that regularly occurs in big cities.



### Difficult to Decompose

Many consumers mention the difficulty to decompose single-use plastic and the lack of recycling to repurpose its waste.



## Air, Land, and Water Pollution

Pollution to air, land, and water are mentioned by consumers as one of the impact of single-use plastic which would also result in damaged ecosystem.

Figure 4 - The Top of Mind Environmental Impact Mentioned By Respondents

## Public Dilemma

Although public realizes the harm single-use plastic causes to the environment, however they are still highly dependent on this product. Many members of the public emphasize the necessity of plastic in their daily lives.



Figure 5 - Current Stages of Consumers Who Are Aware Of the Impact

The survey found out that only 7% of respondents are ignorant about the impact of plastic waste to the environment. This means the public have concerns about the impact plastic waste brings. They either have reduced the use of plastic or even advocating others to stop using it.

However, single-use plastic is still a fundamental part of their life. Most still acknowledge plastic as an indispensable part of their life due to the sheer convenience, availability, and affordability. Many members of the public consider it to be crucial since the majority of their daily essentials use single-use plastic packaging, such as food, beverages, toiletries, cooking ingredients, etc. Many perceive that these products are cheaper compared to their alternatives in eco-friendly packaging. In addition, it comes in various sizes including the smaller package.

## Current State of Public Behaviour in Plastic Use

Public desires to reduce their plastic usage and maintain a clean environment. There are several types of people based on their awareness of plastic waste impact.

70/o IGNORANTS

Simply do not care or have no problem in using plastic

35% CONFUSED

Want to reduce their plastic waste but unable to act as they are unaware of how

**21%** 

Have done a few things to reduce plastic

**2**00 IDEALISTS

Have stopped using single-use plastic

2% ADVOCATES

Actively persuade others to stop using plastic

99

The high dependency of single-use plastic also arises due to limited alternatives available on the market that could act as its replacement.

## How Possible to be Reduced / Replaced With Non Plastic Materials?

	USAGE			POSSIBILITY TO REDUCE / REPLACED	% CLAIM HAVE REDUCE
Plastic Cutlery		Not possible to be replaced	Possible to be replaced		
Plastic container for food	72%	23%	49%	68%	22%
Plastic straw	56%	18% 389	<b>%</b>	67%	32%
Plastic cup	55%	11% 45%	6	80%	35%
Plastic wrap	42%	11% 30%	-	73%	13%
Plastic fork and spoon	40%	8% 32%		80%	60%
Plastic Bag					
Plastic bag for shopping	83%	27%	56%	68%	53%
Plastic wrap for fruits and vegetables	50%	11% 39%		77%	31%
Plastic Bottle / sachet for F&B					
Cooking ingredients / sauce in bottles	97%	42%	55%	57%	4%
Package food	94%	42%	52%	55%	6%
RTD drinks	84%	31%	54%	63%	13%
Cooking ingredients / sauce in sachet	84%	32%	52%	62%	8%
Personal / HH products					
Plastic tootbrush	99%	5	8% 41%	41%	7%
Shampoo soap lotion in plastic bottle	90%	36%	54%	60%	5%
Detergent in plastic packaging	85%	36%	49%	58%	9%
Cleaning products in plastic bottle	78%	35%	43%	56%	7%
Shampoo soap lotion in sachet	63%	26%	37%	59%	11%
Plastic garbage bag	62%	20%	42%	68%	26%
Baby diapers	41%	18% 23%		56%	6%

Among different categories that utilize single-use plastic packaging, personal or household products such as toothbrush and shampoo, and plastic bottle for food and beverages such as sauces and packaged foods contribute as products with extremely high consumption. This is contrast to plastic cutlery category where usage is more moderate.



Public shows a greater intent to reduce the use of plastic bags and plastic cutlery.





Public are even less confident about plastic packaging, such as plastic bottle, sachet, or personal household items.

More than 70% of respondents are optimistic about minimizing its usage and switch to alternatives in the



However, their current action to reduce these products is still far from ideal, only less than half of the respondents claimed to have reduced their plastic usage in these categories.

Less people agree to the possibility of reducing plastic usage in these categories, and even less act upon their beliefs.

In reality, less than 10% of respondents have already minimized their plastic packaging usage

This low level of occurrence might be caused by the lack of alternative delivery systems from manufacturers.

The survey shows the most difficult waste reduction constraint comes from the categories with the most massive public consumption.

Public shows greater intent to replace / reduce singleuse plastic on categories with less usage because they could easily find substitutes, yet there is only few who translate this into action. Joint cooperation to find ways in reducing single-use plastic is becoming more urgent.

Still, public action has been made to fight against this hazardous environmental issue.

## **Current Actions** that Have Been **Made to Reduce** Single Use Plastic

A moderate effort has been done to reduce the usage of Single-use Plastic. Their effort and actions differ from one to another, such as:



Public who regularly buy snacks buy them in bigger packaging to reduce plastic usage and buying frequency.



Some bring their own cutlery, especially for those who are working in an office.



Bringing tumbler is also an alternative adopted to reduce their purchase of plastic bottled mineral water.



They also opt to bring their own metal straws since many restaurants and cafes do not offer plastic straws with every beverage purchase.



They sort their waste at home. Some also send out their plastic waste to recycling centers nearby their residential area.



While many retail stores do not provide plastic bag anymore, public resort to bringing their own shopping bags.

There's a need to trigger motivation, while reducing barrier towards action.

Based on the survey, most towards environment. It gives social media, news portals, them moderate reason as their motivation to reduce decrease plastic usage vary according to public interest. plastic waste as the new trend creating the best strategy for people with mid - higher educational background. Awareness could be built

by providing information

For those who are still to decrease plastic usage





## Understanding the Barriers of Reducing Single Use Plastic

## Single-Use Plastic Packaging

From a public point of view, it is undeniable that purchasing daily needs in a form of single-use plastic packaging is very convenient, aside from the fact that there is still a lack of alternative options. Plastic packaging reaps several benefits, such as:



It gives them a sense of relief by not having to worry about how to treat the packaging. The widely available products give assurance that they can easily find the products.



The cheaper price and smaller package options enable them to manage their spending. These smaller packages usually came in sachet / plastic bottle packaging.

While they are unable to remove single-use plastic from their life, society agrees that the usage of single-use plastic needs to be diminished. The survey shows that, among 623 respondents, around 75% agreed to reduce or even stop the use of SUP for packaging, and only 20% perceived single-use plastic packaging as harmless.



Agreed to reduce or even stop the use of Single-use plastic for packaging



Perceived Single-use plastic Packaging as harmless.



Can not decide

Even though public are aware of the environmental impact caused by single-use plastic on the environment, there are some barriers that hinder them from being able to completely stop using them.

## The Lack of Alternatives (Availability Issue)

Most of the essential products such as food and beverage (instant noodle, mineral water, snacks), personal care (soap, shampoo, make-up) or home care (cooking ingredients, detergent) come with a plastic packaging and currently there is no alternative substitute to plastic packaging.

Many members of the public are aware of products with alternative sustainable packaging. However, these products are hard to find in markets that they frequent during their daily commute.

### **Price Constraints**

There is a perceived concern that products with eco-friendly packaging is relatively more expensive. It certainly serves as a big burden especially to lower income level in the context of daily essentials.

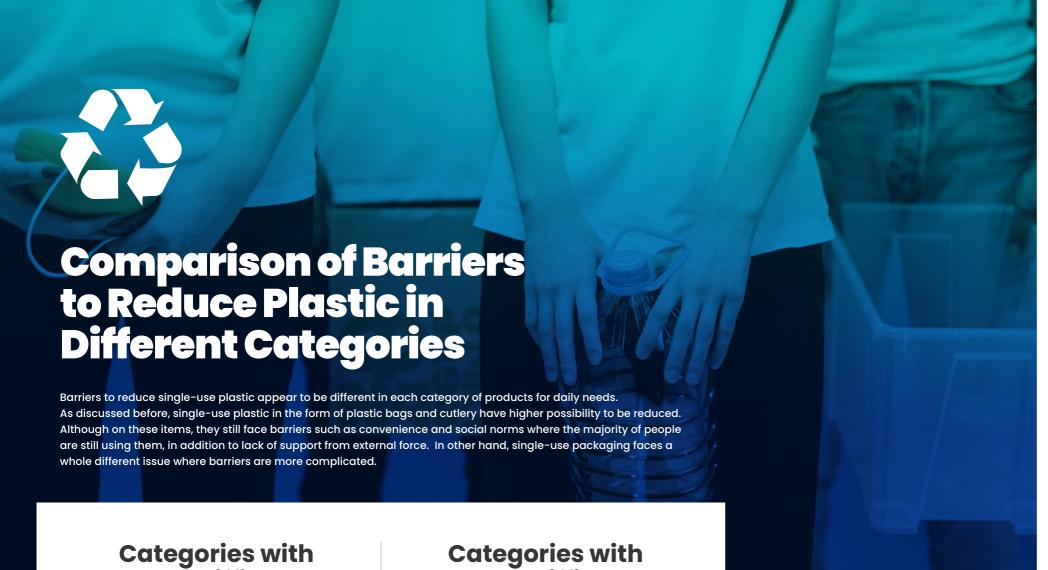


**Accessibility** 

Many daily products are consumed and disposed of straight after consumption. This has become a very standard practice for most of the public and it may be challenge to break these habits.



22 2:



### Categories with Less Difficult Barriers to Reduce



Convenience is still the biggest factor stopping people from reducing the usage of plastic in these categories.



The majority of the respondents find plastic shopping bags and cutlery to be available everywhere, in addition to being light.



Moreover, as many people in their environment are still using it, it might seem to be the acceptable norm.



Stores that still supply public with plastic bags and cutlery might encourage increased consumption of plastic.

### Categories with More Difficult Barriers to Reduce



Reducing plastic packaging for F&B or personal hygiene products appears to have been limited due to the absence of alternative materials



It is inevitable that most people are still using plastic since it is the only available material for the brands or the whole category itself.



The lack of social pressure, as well as unenforced regulation from the government to ban plastic use in the form of bottles or sachets justifies the consumption of products with single-use plastic packaging.

## Comparisson Summary

Households face various challenges in attempting to reduce single-use plastic usage for different category. When it comes to plastic shopping bag and cutlery, both products are generally more possible to substitute.

However, the lack of social pressure removes the motivation to reduce plastic and becomes the main barrier to switch for alternatives.

Partnering with retailers to educate public on the harmful nature of plastic cutlery will be key. Incentive from retailers to stop offering plastic cutlery will give the opportunity and social pressure needed by public to reduce plastic usage.

Meanwhile, single-use plastic for household products is harder to be replaced, as alternative packaging is not available.

Reducing plastic packaging for such products requires extensive research and development to consumer-centric product innovation from manufacturers.

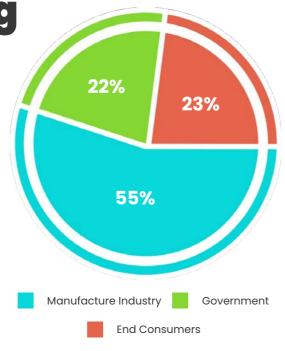




The Most Responsible Party for Reducing Single Use

Plastic Packaging

Government and corporations play an important role in advancing the reduction of plastic consumption. While it is true that public should actively lessen their own plastic usage, government and corporate contributions would accelerate the desired outcome of environmental improvement. According to the survey of 623 respondents, more than half of the respondents view manufacturers or distributors as the most responsible party to reduce single-use plastic packaging. Many believe companies are responsible in this matter as public can only choose based on availability in the market. They expect manufacturers to be more proactive in handling the environmental issues related to single-use plastic packaging.



End consumers come second (23%) as the most responsible party for plastic reduction. They acknowledge themselves as contributors to plastic waste. Most believe they lack sufficient knowledge surrounding the issue or are deterred by lack of choices to make a positive action to tackle on the issue. Information channels to bridge the current knowledge gap and accessibility of alternatives to single-use plastic would help to encourage the public to act responsibly.

In addition to companies and end public, the government is also held accountable for plastic issue. One out of five respondents consider the government as the most liable party for plastic reduction. They see the government as failing to establish strict regulations. Most believe that an imposed regulation from the government around this issue will push corporations to an alternative distribution model that does not incorporate single-use plastic.

I think we are also responsible since if we don't have any awareness for environmental issues then any kind of regulations applied would never be effective.

Middle, 25-35 YO

99

If corporations are able to provide consumers with plastic alternatives that are affordable and environmentally-friendly, then we all would certainly follow.

Middle, 36-45 YO



## Public Expectation for Corporations

In relation to single-use plastic packaging, public expects corporations to reduce plastic and provide alternatives packaging.



According to the survey, almost 90% of the total respondents agreed that companies should be responsible in reducing plastic packaging and turn to alternative non-plastic packaging.

In addition, they deem managing production waste or post-consumer waste as essential for companies to create improvement around this environmental issue.



Public demands a further action of corporate social responsibility regarding plastic usage. Only 57% of respondents agree that corporations have done enough to reduce Single-use Plastic Packaging, and this translates to even less on consumer goods industry. Less than 15% of respondents are aware of activities done by FMCG corporations. There is still room for improvement for these companies to take the initiative on this issue.

## Public Measure if the Manufacturers Did Not Provide Alternatives to Single-Use Packaging

The survey finds that the public perceives brands better when they care about plastic waste.



Around 80% of people value brands better when they show concern about plastic waste more than other brands. Public highly view the importance of environmentally friendly materials on brand products. Corporations have the ability to promote their brand while sustaining the environment, improving their overall brand image.

Limitations to alternative delivery systems from corporations remains as a major problem for public to reduce plastic waste.



According to the survey, three out of ten will still be purchasing products with any form of plastic packaging in the future because they could not find better products in the market, while two out of ten will still be purchasing plastic packaging because they have no other options. Although public realizes the negative effect of plastic waste to the environment, their wish to support plastic waste reduction is hindered by corporations' lack of packaging selection. Providing the delivery of reuse and refill would help companies to improve their brand image.

## Public Awareness of Corporate Initiatives to Reduce Single-Use Plastic

While some companies are already contributing to this issue, most of the public uninformed of the actions from companies to reduce the use of single-use plastic



From the survey, one of the most recognized initiatives is plastic bag reduction by switching to an eco-friendlier type of bags in modern retail trade.

Only a limited number of respondents are familiar with corporate activities that have been implemented to reduce plastic usage on other packaging, such as refill system. This leaves companies with tremendous opportunities to include more non-plastic alternative delivery systems.



## Switching to Alternative Delivery System

The issue of plastic reduction has been widely discussed for years. The topic has been brought up as one of the main environmental issues. However, alternative solutions to this matter are still scarce. Public do not actively search for different selections, rather they passively follow what the market dictates. Among the options available on the market, reusable shopping bags, tumblers, biodegradable and recycled plastic bags are some ongoing initiatives to reduce plastic packaging.

Alternative delivery system are still rare. However, the public is still open to the idea of switching to alternatives.



Almost 70% of respondents in the survey are willing to switch to unpackaged products with refill and reuse system.



Educational background plays a part in their willingness. The higher their educational background is, the more supportive they are towards the idea.

Several factors are taken into consideration when people are switching packaging.

For those people who have higher intention to switch to unpackaged products with refill and reuse system, product accessibility becomes the foremost reason.



Corporations need to supply the products in places with easy to reach and ensure convenience for end public since it becomes the determining factor.



Price serves as another essential factor to consider.

Public will be more likely to switch to unpackaged products with refill and reuse systems if the price is the same or cheaper than current plastic packaging.



Only 6% of the respondents are willing to pay the alternative with much higher price.



More than half of the respondents are still constrained with price when considering alternative delivery systems.

To better understand this segment, we need to explore further the range of acceptable price for them, should there be any price increase due to the change in packaging material.

For those who have low intention to substitute to unpackaged products with refill and reuse system, social pressure becomes the determining factor for them to switch

They would only shift when the majority of people moves towards that direction.

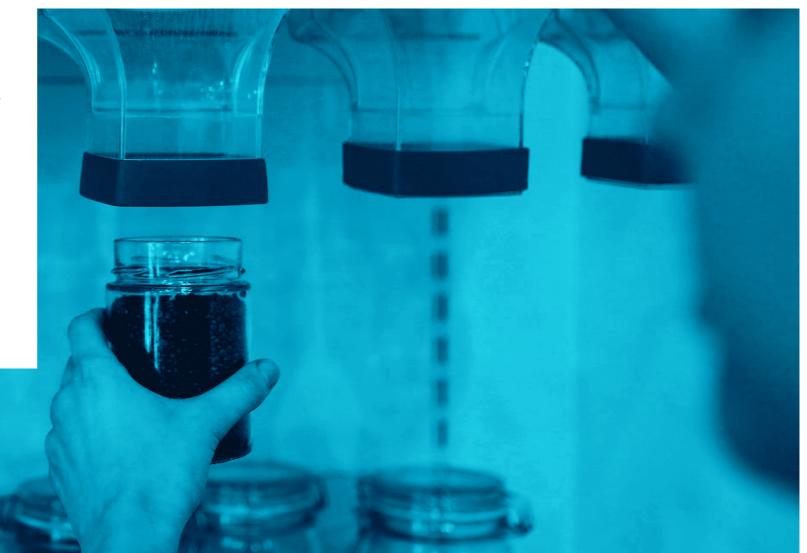
## In Summary

Most public are unaware of initiatives implemented by corporations for plastic reduction. They find that various stakeholders hold the responsibility to solve plastic waste, from the corporation, government, even to end public. However, public still consider corporations as the most responsible entity to tackle on this issue.

Several corporations claim have conducted several activities to resolve this issue. However, public are still demanding for more actions, as corporations are not open and clear on their plastic waste management programs.



Lack of knowledge and unclear programs from corporations causes public to demand companies to carry out better initiatives in order to reduce the use of single-use plastic.





## **Perception Towards Alternative Delivery System**



## **Delivery**

When proposed, 65% of respondents liked the overall concept of home delivery service. Most of the public felt that the concept could make life easier for them since they can simply order daily essentials by phone and it would be delivered to their doors.

Public appreciate the practical aspect of both concepts as they reduce the effort required to purchase daily essentials at retailers. These delivery services to some extent reduce their transportation fee, and can also reduce their plastic consumption.

### **Take Back** The Packaging

When proposed, 61% of respondents thought the concept is interesting/very interesting for them. Public considers the concept to be effective in reducing plastic waste on their household since the same containers could be used more than once.

It could also reduce cost of them since they perceive the price for the items would be cheaper than usual. However, a few consider it inconvenient as they need to visit a retail store to make their exchange.

This concept would be suitable for mid-to-lower class people, although introducing environmental awareness would be a critical first step to drive consideration of the concept. Many also consider housewives to be the likely target to adopt this concept as they do the grocery shopping in small retailers, with close proximity to home.



## Container

When proposed, 60% of respondents found the concept to be interesting/very interesting. Public appreciate the efficiency of the concept. However, they still find the concept slightly irrelevant with their daily life and needs, hence the intention to purchase drops significantly compared to the overall liking.

Public find it efficient to buy in bulk, as they can minimize the frequency of shopping. However, with the current product shelving and storage, public thought the product would be prone to exposure and contamination because customers would touch the products hence concerns around hygiene stems up.

Public agreed that the concept would be suitable for everyone, especially if it is widely available in accessible places from small retailers to supermarkets. Many public also designated the concept for business owners, especially to restaurants who often buy their products in bulk.

### Refill Vending **Machine**

Similar to other concepts, the liking rate of this concept is moderately high. The vending machine format along with the digital payment utilization triggers spontaneous interest, especially from the youngers member of the public. However, there are concerns from public regarding the functionality and reliability of the machine since it would require constant maintenance and might be prone to damage.

Public picked up the convenient aspect of the concept to refill their daily essentials from the refilling station machine. Many members of the public also appreciate the cashless feature to conduct digital payments.

Public consider middle to upper class people as the most suitable target for this concept since its availability would mostly be in secluded and well-organized area. Many of the participants also consider millennials as the target market due to their adaptability with technology and the usage of digital payments.

## Willingness and **Consideration to Adopt Alternative Delivery System**



## **Home Delivery**

**473** out of **623** 

participants have high / very high intention to adopt this delivery concept in the future.

This medium to high likelihood of adopting this service is mainly driven by convenience and practicality.

Still there are some considerations that need to be addressed in the future so the adoption rate could accelerate. As the need for daily essentials are diverse, having a substantial range of produce could make the service more appealing. The punctuality of these deliveries, arriving on time as scheduled is imperative to



## **Self Container**

Those who consider to incorporate this concept find it to be efficient, as it reduces the frequency of shopping trips. Furthermore, they perceive buying in bulk to be

However, unlike previous concepts, this concept has a lower adoption rate. Less than half of respondents intend to implement it in the near future. To make sure a smooth adoption, sellers also need to raise public motivation to purchase in bulk, since they are currently not accustomed to this concept. Some incentives that exceed the additional effort to make deposits for product containers might also be able to increase their intent.



Hygiene might become a prominent issue to be addressed in the future, especially after the Covid-19 pandemic.

As this concept requires self-service method, it is essential to find ways to ensure hygiene so the public feels safe to use the system. ways to ensure hygiene so public feels safe might accelerate adoption.



**Take Back** The Packaging



Out of 623 respondents, more than half have high/ very high intention to use this concept in the future. The medium high likelihood to adopt the concept is driven by cost-saving benefit as they think that they will get cheaper price as an incentive.

If this concept would be implemented in the future, there are some considerations to be made. As public are required to travel and carry their empty containers, convenience might be an issue that delays their adoption. An incentive or extra benefit that outweighs this factor might accommodate their intention to adopt.



## Refill Vending Machine

More than half of public surveyed are willing to adopt this concept. This shows a high intention rate to incorporate this program in the future.



Many public consider the concept to be suitable for them since it allows them to adjust their needs accordingly while also providing convenience and practicality in purchasing their daily essentials.

Regular checks upon the machine's outside appearance and inside's cleanliness is something to be considered in the future to secure this concept. Ensuring a vast variety of brand selections also becomes a priority in gaining better adoption, as currently public think that this concept could only offer limited selection in comparison to other place of purchase.

## Stakeholders Call to Action

Public demand to reconsider and rethink single-use plastic is at an all time high. Stakeholders get full support from the public to take a big chance and fundamentally redefine their relationship with plastic.

Actions and choices made by companies today will determine the sustainability of marine ecosystems and all living creatures that depend on them.

Greenpeace encourage stakeholders; both the companies and government to be responsible by accomodating and pioneering a sustainable business system to reduce the single-use plastic footprint in all their business activities.

A key recommendations is provided below.

## Recommendation for Corporations

To overcome the plastic pollution crisis, it is necessary to prioritize solving problems directly at its core sources. Public concern on the plastic issues and their desire to solve this problem needs support from the market. Public are expecting corporations to take further measures in regard to supporting the reduction of plastic waste, by providing alternative solutions which are easily accessible and convenient to their daily life. Aside from that, public is demanding for corporations to

be more transparent of their plastic production and reduction program.

For these reasons, Greenpeace calls to companies to prioritize the following actions: first, to be more transparent for their plastic footprint and responsible for the pollution caused by the plastic packaging they produced; second, to rethink how products are delivered to consumers by developing a strategy to phase out from single-use plastics and moving into sustainable business practice which relies on refill and reuse system; and third, to publish their plastic reduction action plan/road maps with certain time bound-measurement so that the progress towards goals can be clearly monitored.

## Recommendation for Government

The government plays an important role in mitigating the plastic crisis in Indonesia. As depicted in the survey, there are still some portion of respondents who demands government's contribution to single-use plastic issue. Some called out for additional action to be made, such as a collaboration with corporations to limit the production of single-use plastic. They believe that government has the ability to impose corporations in following certain set of rules that will help to improve the environment.

Greenpeace calls on the government to support the transition to the plastic-free future by reforming regulation focusing on controlling the production and distribution of single-use plastic at the sources. Specifically, these actions are in the form of strict monitoring of plan and implementation of the road map for waste reduction by producers to be oriented towards the most ideal solution: a reduction in plastic production instead of recycling. Besides, the scope of single-use plastic restriction should be extended to target the reduction to all types of plastics, as well as imposing sanctions for companies which are being irresponsible for their plastic waste. These actions need to be designed to reduce and even to end the consumption of single-use plastic and encourage the companies to provide a refill and reusable system. Policymakers also highly encouraged to pay attention to the public demand implied and described in this study.

