

Info graphic as Campaign to Reducing Single-Use Plastic Bottle

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ABSTRACT : *The growing rate of plastic usage raises problems in many countries. It's contributing to waste and pollution issues; it's impacting the earth and our health; and it's threatening our oceans and wildlife. Humans' current lack of environmental concern and fast-paced lifestyles generate more waste, particularly single-use plastic bottles, implying environmental damage. Indonesia ranks second in the world as a waste-producing country, reaching 64 million tons per year. We're supposed to use as little plastic as possible; one solution is to educate people through campaigns that include information about single-use plastic bottles that harm the environment. The campaign expected people to reduce single-use plastic bottles and switch to reusable drinking bottles. The main infographic is about the journey of a single-use plastic bottle from its raw material, which is petroleum, to ending up in the sea.*

KEYWORDS -Campaign, Environment, Plastic bottle, Reduce, Waste

I. INTRODUCTION

The problem of plastics has become a very frequently discussed thing in recent years. There are many problems with plastic and people's lifestyles that are all practical, one of which is being too lazy to bring their own drinking bottles, which have a high potential to increase the amount of plastic bottle waste. In addition to the increase in population, environmental problems are also increasing, for example, floods, environmental pollution, and so on. This happens because many people are less concerned about the environment, and practical community behavior tends to produce a lot of waste, causing environmental damage.

Disposable drinking bottles made of plastic are often used by members of our society who don't want to bother going anywhere and do not want to bring their own drinking bottles. The danger of plastic bottles if they are no longer used has a bad impact on the environment, namely the nature of plastic that is difficult to decompose by the soil and difficult to destroy, even though it has been buried in the ground for decades. The BBC found that every minute, there were one million plastic bottles sold in 2016. Then less than 50% of them are collected for recycling, and 7% are made into new bottles. It is estimated that about 10 million tons of plastic are carried into the ocean each year. Burned plastic will produce toxins; residual plastic in the air contains dioxin, which can trigger cancer.

Looking at the case above, we should all reduce the use of plastic because the impact is very detrimental to the environment. There should be education or campaigns about the importance of reducing the use of plastic bottles and replacing them with drinking bottles that can be used many times. The education used in this campaign is in the form of infographic posters containing facts about plastic bottle waste that harms the earth.

The campaign poster must be effective in the community because it emphasizes the public interest that seeks to instill awareness among the public about social issues that circulate in the community and are considered important and an effort to mobilize community solidarity with the problems they face, namely

conditions that can threaten survival. Based on the abovedescription, the author tried to create a campaign to reduce the use of plastic bottles aimed at urging people to get used to carrying reusable drinking bottles to reduce the use of single-use plastic bottles. The hope is that with this campaign, people will reduce their usage of disposable drinking bottles and switch to reusable ones.

II. LITERATURE REVIEW

2.1 Infographic

Infographic is a medium to visualize data or ideas that tries to convey complex information that can communicate to diverse audiences, and the meaning can be understood quickly. The popularization of infographics will also lead to more innovative solutions to increase the efficiency of the medium and further refine our critical framework for assessing their quality.

2.2 Campaign

A campaign is purposive to reach a large audience, occurs during a given time period, and involves an organized set of communication activities. At a minimum, it involves message production and distribution. (Rogers and Storey 1987:101).

2.3 Single-Use Plastic Bottle

Plastic bottles are plastic packaging containers that are easy to find everywhere. commonly used to store drinking water, shampoo, fragrance liquid holders, and much more. Please note that plastic has several types, each of which has its own function. Rewashing can harm the plastic layer and allow carcinogenic substances to enter the water in the drink. Meanwhile, in the community, there are still many people who reuse plastic bottles repeatedly. Plastic bottles of used mineral drinks or soft drinks measuring one liter, for example, are often used as drinking bottles.

III. METHODS

The research is carried out using qualitative methods, whose instrument is the researcher himself. As an instrument, researchers must have theory and broad insight to be able to ask, analyze, photograph, and construct the social situation under study for it to be clearer and more meaningful. In gathering data, there are three techniques that will be used: observation, literature study, and questionnaires that are distributed to respondents aged 15–40 years old in the DKI Jakarta area. The regional selection is based on the city with the second-highest annual waste generation in Indonesia.

IV. RESULT AND DISCUSSIONS

4.1 Waste in Indonesia

The following is data on the composition of waste by type and source from SIPSN, Indonesia's national waste management information system, under the Ministry of Environment and Forestry in 2021, taken from 242 regencies and cities throughout Indonesia.

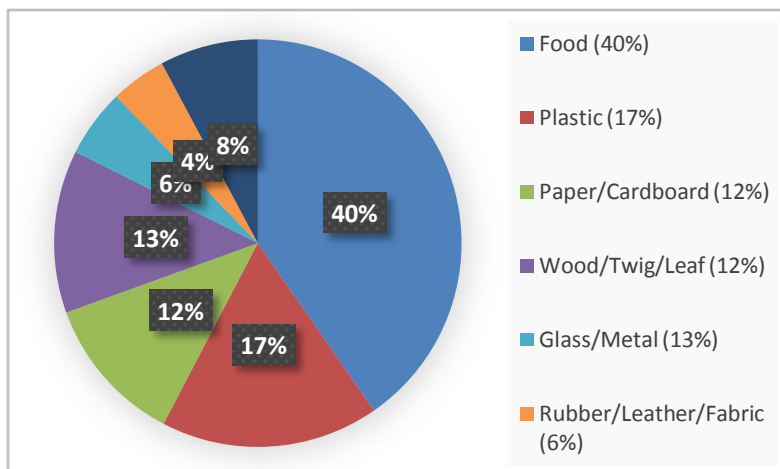
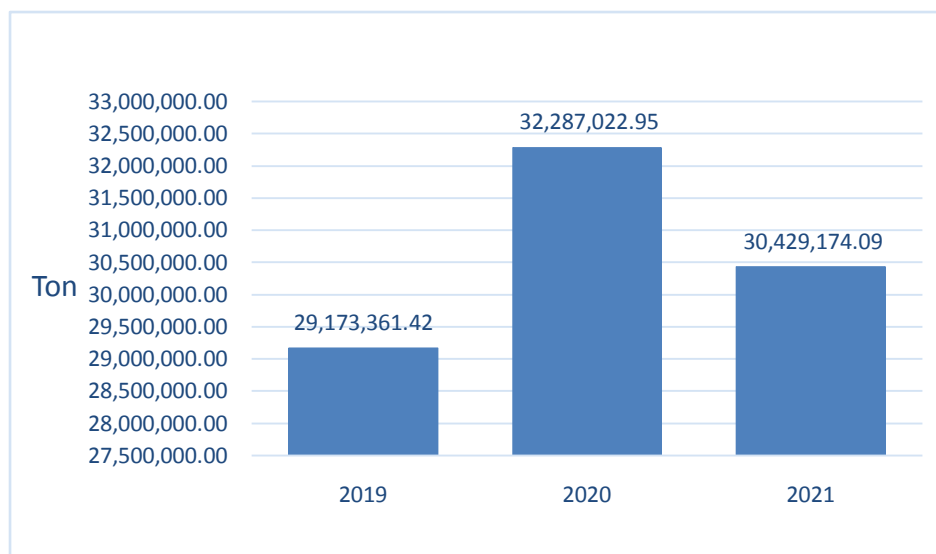


Figure 4.1.1. Waste Composition in Indonesia

Source: National Waste Management Information System (SIPSN 2021)

The data is calculated based on the total waste generation of 30,429,174.09 tons per year. The largest composition of waste comes from the type of food waste (as much as 40%), while the smallest is the type of rubber, leather, or fabric (as much as 4%). Plastic waste is the second-largest contributor to waste, accounting for up to 17% of total waste. Although food waste is the most common type of waste, this type of waste can decompose easily and quickly into organic fertilizer. The time required for food waste to decompose takes only 1–3 months. Plastic waste is very difficult to decompose; nature takes 50–100 years to decompose plastic.

The following is a comparison chart of the amount of waste generated in Indonesia from 2019–2021.



Tahun	Provinsi	Kabupaten/Kota	Timbulan Sampah Harian (ton)	Timbulan Sampah Tahunan (ton)
2021	Jawa Barat	Kota Bekasi	2,375.99	867,236.75
2021	DKI Jakarta	Kota Adm. Jakarta Timur	2,293.04	836,961.37
2021	DKI Jakarta	Kota Adm. Jakarta Barat	1,997.51	729,092.61
2021	DKI Jakarta	Kota Adm. Jakarta Selatan	1,937.54	707,201.35
2021	Sumatera Utara	Kota Medan	1,767.16	645,012.56

Figure 4.1.2. Indonesia's Total Annual Waste in Tons
 Source: National Waste Management Information System (SIPSN 2021)

Indonesia produced 30,429,174.09 tons of waste in 2021. Bekasi City, West Java, produces the most waste per day, namely 2,375.99 tons and 867,236.75 tons per year. At the second to fourth levels, the East, West, and South Jakarta regions produce waste, which, if accumulated, is 6,228.09 tons per day and 2,273,255.33 tons per year. DKI Jakarta residents are thus residents of Indonesia's capital with the most populous area, namely 15,978 people per square kilometer.

4.2 Questionnaire Results

Study was conducted based on data on the largest annual waste generation in Indonesia, which has the highest population density. As a result, the study was carried out at DKI Jakarta, with participants aged 15 to 40. The following are the survey results obtained:

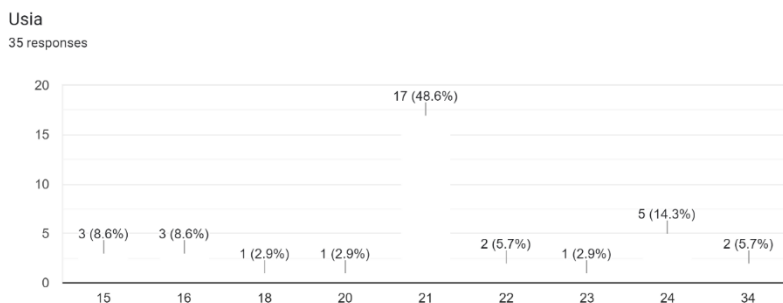


Figure 4.2.1. Respondent's Age
 Source: Personal Research Result

The age of the most respondents was 21 years old, with 17 out of 35 respondents.



Figure 4.2.2. Respondent's Lifestyle
 Source: Personal Research Result

Based on the lifestyle of respondents in consuming drinks packaged in single-use plastic bottles, it is known that:

- 57,1% (20 people) respondents were content and often consumed ready-to-eat drinks packaged in plastic bottles.
- 42,9% (15 orang) respondents rarely consumed ready-to-eat drinks packaged in plastic bottles.

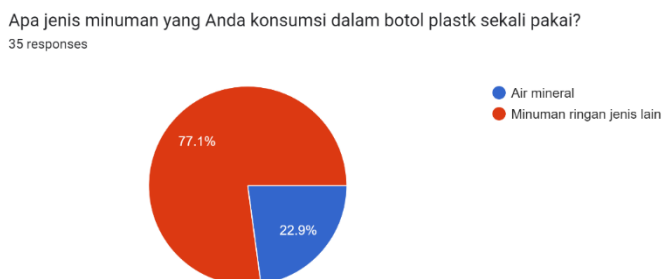


Figure 4.2.3. Respondent's Drink Type
 Source: Personal Research Result

Based on the type of drink consumed, it is known:

- 77,1% (27 orang) respondents consumed other types of soft drinks.
- 22,9% (8 orang) respondents consumed mineral water.

Apa yang Anda lakukan terhadap kemasan minuman setelah menghabiskannya?
35 responses

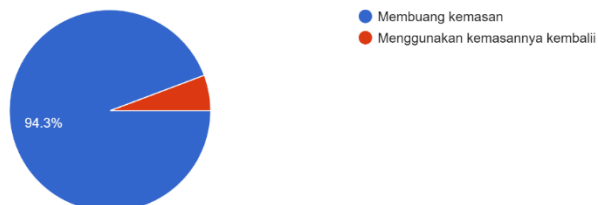


Figure 4.2.4. Respondent's Disposable Action
Source: Personal Research Result

Here are the respondents' actions on the packaging:

- 94,3% (33 orang) respondents disposed of their packaging.
- 5,7% (2 orang) respondents reuse the packaging.

Pemakaian botol plastik sekali pakai secara berulang dapat membahayakan kesehatan, apakah Anda sudah mengetahuinya?
35 responses

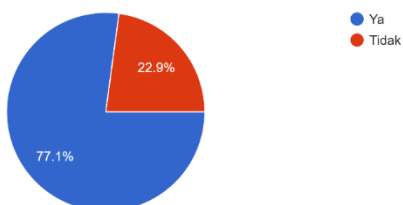


Figure 4.2.5. Respondent's Knowledge about Repeated Use of Plastic Bottles
Source: Personal Research Result

Results on respondents' knowledge of single-use and reusable plastic bottles can be harmful to health:

- 77,1% (27 orang) respondents aware.
- 22,9% (8 orang) respondents unaware.

Apakah Anda menyadari, bahwa plastik menjadi masalah krusial karena sulit terurai oleh alam?
35 responses

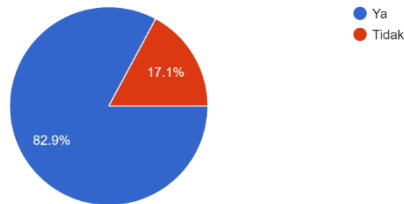


Figure 4.2.6. Respondent's Knowledge about Plastic is a Crucial Problem
Source: Personal Research Result

The findings regarding respondents' knowledge of plastic waste are critical because it is difficult for nature to decompose:

- 82,9% (29 orang) respondents aware.
- 17,1% (6 orang) respondentsunaware.

Apakah Anda berminat untuk menyelamatkan Bumi dengan mengurangi penggunaan botol plastik sekali pakai?
35 responses

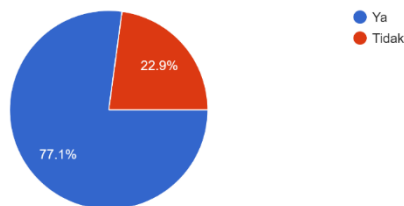


Figure 4.2.7. Respondent's Interest to Save the Earth by Reducing Single-Use Plastic Bottle Usage
Source: Personal Research Result

Responses to joining a campaign to save the earth by reducing the use of single-use plastic bottles:

- 77,1% (27 orang) respondents interested in taking part.
- 22,9% (8 orang) respondents were not interested in participating.

Apakah anda bersedia untuk membawa botol minum pribadi setiap saat?
35 responses

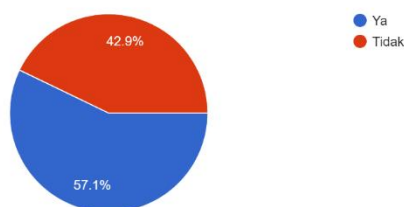


Figure 4.2.8. Respondent's Response on Bringning his/her Own Bottle
Source: Personal Research Result

Responses to always bringing a personal drinking bottle:

- 57,1% (20 orang) respondents willing to do so.
- 42,9% (15 orang) respondents refused.

4.3 Infographic Concept

This design uses the concept of a persuasive campaign with the type of "ideologically" or "cause-oriented" campaign, which is a campaign aimed at dealing with social problems through changes in attitudes and related public behaviors. This is very much in line with the purpose of the design, which is to provide awareness and education to the public about the dangers of using single-use plastic bottles, which can then foster public awareness and concern for waste management.

The infographic created is titled "Trip BotolPlastik". The title tells the story of the journey of plastic bottle waste from the production process until it ends up in the sea.

4.3.1 Typography

The arrangement of letters is designed so that the process of communication in the form of text is well conveyed through good legibility and slick aesthetics.

1) Futura

The Sans Serif typography used on headlines for major and supporting media needs is Futura; this type of font is solid, firm, and easy to read.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

a b c d e f g h i j k l m n o p q r s t u v w x y z

0 1 2 3 4 5 6 7 8 9 (. , : + - = / ! ?)

2) Open Sans

The Open Sans font is suitable for text and paragraphs because its characteristics—a combination of upright, open, and neutral letters make it an easy-to-read font that is often used on many websites today.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

a b c d e f g h i j k l m n o p q r s t u v w x y z

0 1 2 3 4 5 6 7 8 9 (. , : + - = / ! ?)

4.3.2 Color

This color scheme below will act as the major colors and be further refined to add variety and appeal to all graphical elements.



#2166B1



#ED2027



#1EA896



#FF715B



#523F38

Figure 4.3.2.1 Infographic Color Scheme

4.3.3 Illustration

The illustration style is isometric vector illustration. With an isometric projection, the perspective used is more versatile than flat. Therefore, it will be more attractive and appealing.



Figure 4.3.3.1 Infographic Illustration Style

4.3.4 Artwork



Figure 4.3.4.1 Infographic Artwork

V. CONCLUSION

The "Trip Botol Plastic" infographic is designed to educate Indonesians and make them more concerned about the environment by creating awareness of critical plastic issues. Campaigns that are already circulating using infographics are made interesting to read. But this infographic, which serves as a differentiator, also educates by explaining the process of producing single-use plastic bottles from raw materials such as petroleum until they reach the sea. The illustration style used is also different from infographics in general, namely with isometric projections that will make it more interesting and appealing. It is hoped that, with this infographic, the millennial generation until Z, the successor, pays more attention to the problem of plastics, which until now is still concerning.

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