

Review Article

# Environmental Sustainability: How Greenpeace Id Conducts Campaigns Regarding Plastic Waste Management Through Social Media in Indonesia

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## Abstract

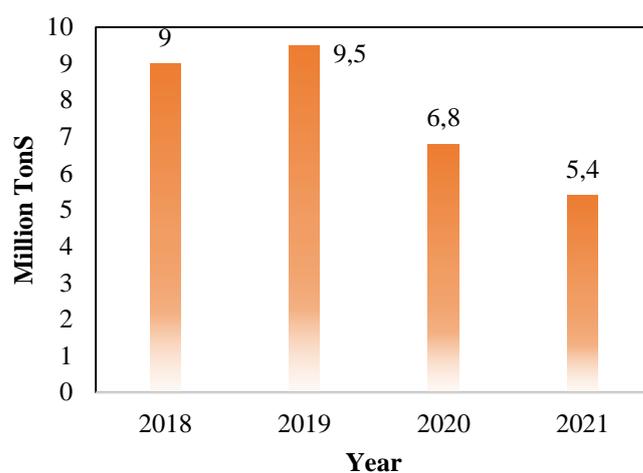
Indonesia is estimated to be one of the largest plastic-producing countries in the world. The high use of plastic will cause people to become dependent on plastic. However, dependence on plastic has a destructive impact, which makes plastic potentially harmful to human health and the environment; Greenpeace shares this concern and makes it the basis for organizing a campaign. This study aims to analyze and see how the Greenpeaceid account interacts with Twitter social media accounts through mentions and hashtags used to drive for handling plastic waste in Indonesia. This study uses qualitative research, which uses Q-DAS (Qualitative Data Analysis Software) to analyze the data; the software used is Nvivo 12 Plus. The result of this research is that Greenpeaceid uses social media as a media campaign related to the issue of plastic waste pollution. The social media used by Greenpeace is twitter; on this social media, the form of a campaign is carried out by using #Pantangplastik and #Breakfreefromplastic, which contains various documentation related to suitable actions in managing plastic waste so that the environment is not polluted again. The existence of the #Pantangplastik Campaign will gradually reduce the use of plastic waste.

**Keywords:** Greenpeace id; campaign; handling plastic waste; social media

## 1. Introduction

In the current era of globalization, environmental problems and plastic waste have become global issues. One of the causes of environmental damage is environmental pollution caused by human-generated plastic waste (Dewi, 2018). The use of plastics and plastic-based products is increasing along with the development of technology, industry, and the human population (Pamungkas et al., 2021). Since its discovery, plastic has occupied a central position in our daily lives (Thiounn & Smith, 2020). Although initially conceived as inert and relatively harmless waste, plastic waste has resulted in various significant environmental problems (Smith & Brisman, 2021). Various products humans use in their daily lives often come from plastic (Arwini, 2022). With their extraordinary properties, plastic has become a significant commodity globally and is now present in almost all commercial products (Geyer, 2020). However, the use of plastics also brings about adverse environmental impacts related to their production and disposal (Liang et al., 2021). Plastic products are discarded after use, creating massive plastic waste, increasing daily (Saxena & Maiti, 2021).

Indonesia is one of the largest plastic-producing countries globally (Honingh et al., 2020). Primarily through densely populated areas with mismanaged amounts of plastic waste. As a global problem, this plastic waste must be taken seriously at every level and corner of the world. This plastic waste causes land, sea, and air pollution due to the uncontrolled burning of plastic waste (Alfitri et al., 2020). Destruction in Indonesia increases by 38 million tons annually, and 30% of this waste is plastic waste (Anindyntha et al., 2021). In Indonesia, the problem of plastic waste is getting real due to piles of plastic waste (Prisandani & Amanda, 2020). The data relating to the accumulation of debris in Indonesia reaches 64 million tons yearly, of which 3.2 million tons are plastic waste dumped into the sea. According to the same source, 10 billion pieces of plastic bags are disposed of in the environment annually or as many as 85,000 tons of plastic bags (Rahmi & Selvi, 2021).



**Figure 1.** Plastic waste pollution in Indonesia

Source: Databoks 2022

The high use of plastic will cause people to become dependent on plastic. However, dependence on plastics has a negative impact, making plastics potentially harmful to human health and the environment (Wahyudin, 2020). The high level of plastic waste emissions is due to Indonesia's high population density in coastal areas, improper waste management, and inadequate service coverage (Vriend et al., 2021). According to the Ministry of Environment and Forestry (KLHK) records, the average Indonesian population produces 2.5 litres of waste per day. Assuming that Indonesia's current population reaches 268 million people, the resulting waste output is estimated at 670 million litres per day. Of this amount, 14 per cent is plastic waste (Lestari et al., 2019).

The use of social media amid the industrial revolution 4.0 is the mainstream in disseminating information (Yaakop et al., 2019). Most countries have used social media to help governments communicate and coordinate with all relevant parties (Salahudin et al., 2020). Social media has become inseparable from people's communication patterns in the digital era (Zahra et al., 2020). Social media encourages people to participate in government programs (Chen et al., 2020). Social media is a place for interactive communication. Therefore, the government must be responsive in communicating policy formulations that prioritize the community's wishes (Kim & Xu, 2019). The use of social media in Indonesia continues to experience a significant increase from the previous year, which was only 170 million in 2020, increasing to 191 million in January 2022, which means an increase of 21 million (Anisa & Marlana, 2022). When viewed from the use of social media, it is undeniable that people are so active in various public issues on social media. From another point of view, social media platforms such as Twitter and Facebook can accumulate social power by connecting people with activists for online campaigns and utilizing social media as a platform for collective communication (Wu, 2021). Twitter is a social media widely used by individuals, organizations, and governments (Sari et al., 2021). Twitter is a

popular social networking platform where people can interact and discuss a topic (Xiong et al., 2020). Twitter has become a campaign platform for something considered significant (Purnomo et al., 2021). The high intensity of social media Twitter in social movements, socialization, and the rapid dissemination of information is essential for the government to utilize and optimize its work programs.

By looking at the problems related to plastic waste that cause environmental issues, various efforts are made to handle them so that multiple communities, such as NGOs, are concerned about the problems that occur in the world environment due to plastic waste. The district or organization handles plastic waste through campaigns. A campaign is an activity to overcome society's problems in the world (Andriyansyah et al., 2020). In running the campaign, of course, the role of the community is very much needed because they are the object of environmental problems related to plastic waste. Community participation in the campaign is to educate the public about the importance of changing behaviour related to excessive use and indiscriminate disposal of plastic waste.

The media's efforts towards developing environmental issues have become a fundamental problem in our lives as people in the world; all activities carried out by the community will impact the environment. Related problems as well as influencing the formation of public opinion. It can be said that the media is not just a passive and neutral party, but the media chooses certain things to highlight and minimizes others. The three sides put forward by the media in reporting the problem of plastic waste can lead to various interpretations for the audience who consumes it. In addition to the website, it also requires public feedback to assess its performance. One way to get feedback from the public is to use social media, where the social media used is Twitter.

This time, the handling of environmental issues as a result of plastic waste is in the form of a campaign from one of the NGOs (non-government organization), namely Greenpeace, which is carried out through Twitter media, namely hashtags such as #Pantangplastik, #Kurangisampahplastik, #breakfreefromplastic, and #greenpeace. Greenpeace is a global campaign organization to protect and preserve the environment. Therefore, this study describes how social media, especially Twitter, is a media campaign related to actions to handle plastic waste pollution in Indonesia by Greenpeace.

This study aims to analyze how GreenpeaceID campaigns for environmental conservation using Twitter as a social media to convey information to the public. Twitter quality assessment is measured through four aspects: tweets, followers, lists, and Likes. The focus of this research is to see the intensity of information dissemination on Twitter @GreenpeaceID. Next, look at how @GreenpeaceID interacts with the community. Finally, look at the hashtags used by @GreenpeaceID in campaigning for environmental conservation.

## **2. Methods**

This study uses a qualitative approach using Qualitative Data Analysis Software (Q-DAS) to analyse social media data (Salahudin et al., 2020). The software used to analyse the data is Nvivo 12 Plus (Salahudin et al., 2020). This study uses two different analyses: graphic and word cloud. All data in this study is social media data. This study uses trending hashtags on Twitter relevant to the campaign for handling plastic waste.

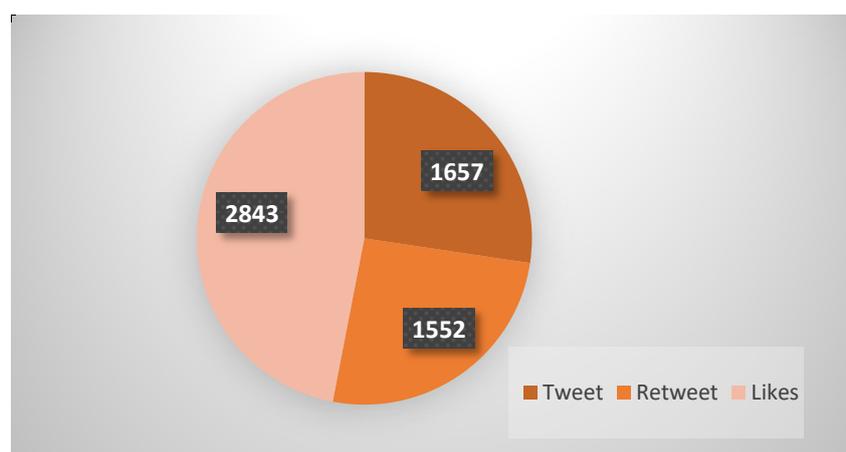
Furthermore, the author uses the NCapture feature to capture content from social media. The captures that can be included are the captures that the NCapture part generates as the default Nvivo app that is automatically installed in Google Chrome when installing NVivo. NCapture makes it easy to obtain research data related to social media content analysis without reading and analysing individual posts. N-capture application is used to download hashtag content. Graph the Nvivo 12 Plus analysis using the hashtags #Pantangplastik and #Breakfreefromplastik. Because both are applied to prevent the spread of plastic waste, at the same time, the world cloud is used to find out the topics discussed related to the campaign for handling plastic waste.

### 3. Result and Discussion

#### 3.1. Analysis of the Quality of Social Media Accounts (Twitter) Greenpeace Indonesia

We are talking about environmental issues that have become global, namely related plastic waste pollution, which is challenging to overcome and is still being handled. Plastic waste pollution attacks land areas and waters or oceans, so there are 11.6 tons of plastic waste that the Indonesian government has not resolved. These problems have made one of the NGOs that have become globalized intervene in handling the issue of plastic waste pollution, in which the NGO or NGO is named Greenpeace. Greenpeace is an independent global campaigning organization that acts to change attitudes and behaviour, protect, preserve the environment, and promote peace. Known to use direct action without violence, but instead uses peaceful confrontation by conducting campaigns to stop various acts of environmental destruction.

In handling the issue of plastic waste pollution, Greenpeace is, of course conducting a campaign on social media in the form of Twitter. The campaign is done on social media because we know that the media has become a current trend for disseminating information related to anything, such as issues that need attention. Many people for handling it, such as the issue of plastic waste pollution in Indonesia. Based on the assessment and research on the Twitter account @GreenpeaceId, three types are displayed: tweets, retweets, and likes. In this account, it was found that the number of likes was more than the number of Tweets and Retweets:



**Figure 2.** Quality of greenpeace Indonesia twitter account

The Twitter account @GreenpeaceId found 2843 likes, while the number of tweets was 1657, and retweets were 1552 over the past year. The Twitter account proves that the account is an informant who always conveys information. In the data on the use of Twitter social media, it can also be concluded that a campaign carried out by Greenpeace can be carried out well because the interest in social media users is high. Media use in social movements is an effective tool for mobilizing audiences, communicating, networking, or building a network aimed at online petitions by collecting petitions from the public. This petition aims to encourage the Indonesian government to improve policies regarding plastic waste management and enforce policies for producers to take responsible action for the impacts caused by plastic waste that pollutes the environment. Greenpeace invites people to change their habit of using single-use plastic products by starting to use other alternative products that can be reused or reused. In the campaign carried out by Greenpeace, it hopes that this activity can educate the public and care more about the surrounding environment.

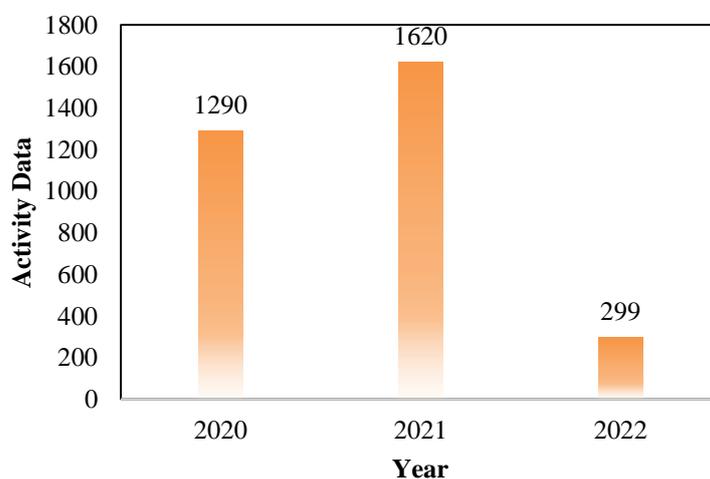
Previous research related to the topic of this research was conducted by (Krisyantia et al., 2020) "Pengaruh Kampanye #PantangPlastik terhadap Sikap Ramah Lingkungan (Survei pada Pengikut Instagram @GreenpeaceID)." This study uses followers of the Instagram account @GreenpeaceID as the research subject. The Instagram account also shows that Greenpeace campaign research is novel

because it uses followers of the Twitter account @Greenpeaceid as research subjects, where Twitter is recognized as the most popular social media.

### 3.2. Use of Social Media (Twitter Account)

One of the popular types of social media that supports uploading and sharing photos and videos is Twitter. Twitter is a website owned and operated by Twitter Inc., which offers a social network in the form of microblogging that allows its users to send and read messages called tweets. A tweet is a text of up to 140 characters displayed on a user's profile page. Tweets can be viewed externally, but senders can only limit sending messages to their friend's list. Users can see the tweets of other known users only through Twitter social media. Twitter can also save files in the form of photos and videos.

Twitter has been used as a medium for contact and interaction with the broader community in conveying news related to the problem of plastic waste in Indonesia. Twitter is a social media platform for obtaining the latest information related to issues or trending things in the world. Indonesia is the 5th most Twitter user country in the world. There are 18.45 million recorded, which proves that Twitter can be a medium or a container in handling the issue of plastic waste pollution in Indonesia to the public, who, of course, obtain this information.



**Figure 3.** Greenpeace account activity by year

According to figure 3, the activity data of the @Greenpeace Indonesia account from 2020 has increased in 2021; that is because, in the dissemination of information, communication, and socialization, the @Greenpeace Indonesia account is very active in disseminating various information including campaigning for the problem of plastic waste in Indonesia. Indonesia. Meanwhile, in 2022 information activity is still stable.

In this case, we can see the use of Twitter as a social media to obtain the latest information, whether related to issues or trending things in the world. Indonesia has the highest number of Twitter users at 64%, which proves that Twitter can be a medium or a forum for delivering messages. The handling of plastic waste pollution in Indonesia to the public, which of course obtain this information. The campaign carried out by Greenpeace through Twitter is more accessible to realize by reflecting on the data obtained above. Many users spread the latest information through the hashtag (#) so that it becomes trending everywhere, like #Pantangplastic, so that other people who use social media can quickly obtain information to participate in the campaign carried out by Greenpeace. Next, see the frequently used hashtags in Figure 1.

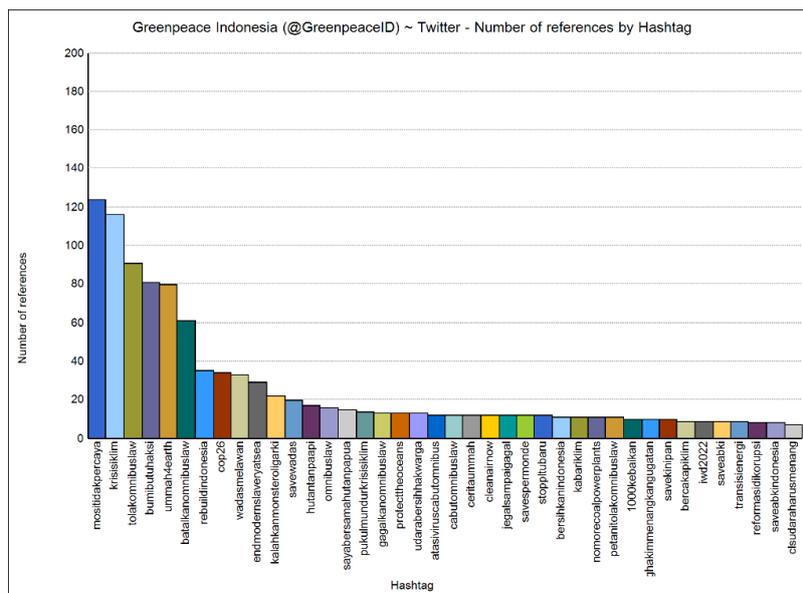


Figure 4. Hashtag of Greenpeace Indonesia twitter account regarding plastic waste

Through the results of Coding word frequency, you can see hashtags that @greenpeace Indonesia often uses; some of the accounts that are often used include #Motidakpercaya, #krisisiklim, and #bumibutuhaksi. The hashtag #krisisiklim identifies that the climate crisis is a crisis experienced by people worldwide due to climate change. Talking about the climate crisis, we cannot escape the plastic waste problem, which we have often heard about; recent research has stated that in the 'life' of plastic, from production to disposal, plastic accounts for 3.8% of the total carbon emissions that caused the climate crisis.

From issues related to the problem of plastic waste pollution, both in community settlements and in water or marine areas, this issue is critical to pay attention to and follow up. The Greenpeace campaign through Twitter social media with the hashtags #Pantangplastik and #Breakfreetfromplastic was carried out to emphasize or set targets for social media users to work together to solve the plastic waste problem, which is one-time use and is difficult to describe. The campaign, carried out through Twitter social media using #Pantangplastik, was filled with various documentation, such as implementing clean-up field activities in coastal areas—conducting brand audits to find out what brands or products contributed the most plastic, and carrying out activities or movements. Related global free from plastic or what is called #Breakfreetfromplastic.

On Twitter, social media data related to the campaign for handling the issue of plastic waste pollution (#PantangPlastik), each social media has participated in more than 5 thousand participants. Seeing the enthusiasm of the public or social media users enlivening the hashtag and the support for reducing plastic pollution data in 2021 in Indonesia proves that the campaign carried out or implemented by Greenpeace through social media can be said to be successful. However, not entirely because we know the issue will be a success. It will take a long time to complete because we have to invite the public as actors in the use of plastic to reduce its use, especially considering that it is difficult not to relate to plastic waste in people's daily lives.



The tools available on Nvivo 12 Plus through word cloud analysis show several words that often appear from the twitter @GreenpeaceID account. It can be seen in the picture that shows famous words seen in the media using word cloud analysis with a word limit that appears is 50 words, wherein the image it can be seen that the name Greenpeace dominates with 275 counts. On the other hand, there is also the environment, followed by plastic, Indonesia and the campaign. To address the handling of plastic waste in Indonesia. In this case, it can be seen that The Greenpeace campaign through Twitter social media was carried out to emphasize or set targets for social media users. It works together to solve the plastic waste problem, which is one-time use and challenging to describe. The campaign carried out through Twitter social media is filled with various documentation such as the implementation of clean-up field activities carried out in coastal areas, conducting brand audits to find out what brands or products contribute the most plastic, and carrying out activities or global movements related to being free from pollution plastic.

Campaigns can be a practical step in helping to make people aware of the importance of managing plastic waste. People aware of managing plastic waste must remain optimistic in providing continuous information. It is necessary to disseminate information to the community to reduce the use of plastic waste. The government also has an essential role in this; with the law governing plastic waste strengthening, the public is expected to become more aware of the importance of protecting the environment. In the end, it is hoped that it will increase people's knowledge, change people's perceptions, and then slowly, there is awareness from the whole community to change environmental conditions for the better.

The activity carried out by Greenpeace is a campaign to handle plastic waste in Indonesia. This activity was carried out to inform the public about the problem of plastic waste and solutions to taking single-use plastic waste through Twitter social media. The ability of social media Twitter as a service to exchange messages between users has changed the interaction patterns of individuals in communicating by uploading photos and videos to other users. Twitter is a medium that can play an essential role in information and education in the campaign movement for handling plastic waste with the hashtags #Pantangplastik and #Breakfreetfromplastic. The strategy developed by Greenpeace through social media, Twitter, is a path taken to build public opinion regarding the problem of single-use plastic waste, which is still not getting enough attention from the public, especially young people. This social media network is also used to mobilize the masses to participate in protecting and preserving the environment, in this case, by using single-use plastic wisely.

From that point of view, we can see the tendency of social media to campaign against plastic waste. Using single words and hashtags and making the narrative spread on social media can impact netizens to participate in handling plastic waste. Social media hashtags also show a strong enough relationship to be seen and that these hashtags are related to the same goal of campaigning for managing plastic waste.

#### **4. Conclusions**

Environmental issues caused by plastic waste have become a global concern. Therefore the problem of plastic waste needs serious handling by every country in the world. This plastic waste or waste causes environmental pollution on land or at sea and in the air, which is pollution. Plastic waste is a worrying global ecological issue due to the high increase in its user population. Various alternative solutions have been carried out by the Indonesian government, such as implementing 6R in every region in Indonesia. Still, it does not promise that the plastic waste data will decrease until NGOs or NGOs that care about environmental issues participates, such as Greenpeace, one of the NGOs. Who cares about global environmental problems such as the problem of plastic waste in Indonesia.

On this issue, Greenpeace innovated by following the times or technology, such as using social media as their campaign media regarding plastic waste pollution. The social media Greenpeace uses is

Twitter, a medium of information often used in this modern era. In this social media, a campaign is carried out using #Pantangplastik and #Breakfreefromplastic, which contains various documentation related to suitable actions in managing plastic waste so that the environment is not polluted again. The existence of this campaign impacts the handling of plastic waste in Indonesia because we see the data on plastic waste, which results from our use as consumptives, has decreased after the campaign through social media by Greenpeace.

## References

- Alfitri, Helmi, Raharjo, S. & Afrizal, 2020. Sampah plastik sebagai konsekuensi modernitas dan upaya penanggulangannya. *Jurnal Sosiologi Andalas*, 6(2), 52-60.
- Andriyansyah, M. F., R, D. A., Margarettha, V. & M, M. I., 2020. Kampanye pentingnya himbauan mencuci tangan melalui media pamflet di masa pandemi Covid-19. *Jurnal Pembelajaran Pemberdayaan Masyarakat*, 1(4), 294-299.
- Anindyntha, F. A., Susilowati, D. & Sulistyono, S. W., 2021. Peningkatan sadar lingkungan melalui penghematan sampah plastik. *Jurnal Inovasi Hasil Pengabdian Masyarakat (JIPEMAS)*, 4(3), 351-361.
- Anisa, D. K. & Marlana, N., 2022. The influence of user generated content and e-wom on the tiktok application on the ppurchase intention of fashion products. *Jurnal Sinar Manajemen*, 9(2), 207-218.
- Arwini, N. P. D., 2022. Sampah plastik dan upaya pengurangan timbulan sampah plastik. *Vastuwidya*, 5(1), 72-82.
- Chen, Q., Min, M., Zhang, W., Wang, G., Ma, X., Evans, 2020. Unpacking the black box: How to promote citizen engagement through government social media during the COVID-19 crisis. *Computers in Human Behavior*, 110(3), 106380.
- Dewi, I. G. A. A. Y., 2018. Peran generasi milenial dalam pengelolaan sampah plastik di desa penatih dangin puri kecamatan denpasar timur kota denpasar. *public inspiration : Jurnal Administrasi Publik*, 3(2), 84-92.
- Geyer, R., 2020. Production, use, and fate of synthetic polymers. United States, *Plastic Waste and Recycling*.
- Honingh, D., Emmerik, T.V., Uijttewaal, W., Kardhana, H., Hoes, O., Giesen, N.V.D., 2020. Urban river water level increase through plastic waste accumulation at a rack structure. *Frontiers in Earth Science*, 8(2), 1-8.
- Kim, H. & Xu, H., 2019. Exploring the effects of social media features on the publics' responses to decreased usage CSR messages. *Corporate Communications*, 24(2), 287-302.
- Krisyantia, VOS, I. & Priliantini, A., 2020. Pengaruh Kampanye #PantangPlastik terhadap Sikap Ramah Lingkungan (Survei pada Pengikut Instagram @GreenpeaceID). *Jurnal Komunika : Jurnal Komunikasi, Media dan Informatika*, 9(1), 40-51.
- Lestari, T., Indriastuti, N., Noviatun, A., Hikmawati, L., Margana, 2019. Lentera: inovasi pengolahan sampah plastik di indonesia. *Prosiding SENDU\_U\_2019*, 99(3), 978-979.
- Liang, Y., Tan, Q., Song, Q. & Li, J., 2021. An analysis of the plastic waste trade and management in Asia. *Waste Management, Volume 119*, 242-253.
- Pamungkas, B., Taryono, Kurnia, R. & Riani, E., 2021. Potential plastic waste input from citarum river, indonesia. *AAACL Bioflux*, 14(1), 103-110.
- Prisandani, U. Y. & Amanda, A. L., 2020. The importance of regulating plastic marine pollution for the protection of indonesian marine environment. *Yuridika*, 53(1), 171-185.
- Purnomo, E. P., Nurmandi, A., Loilatu, M. J. & Qodir, z., 2021. How public transportation use social media platform during Covid-19: study on jakarta public transportations' twitter accounts?. *Webology*, 18(1), 1-19.

- Rahmi, N. & Selvi, 2021. Faktor-Faktor Penggunaan wadah styrofoam pada penjual makanan di bangkinang kota. *Jurnal Pajak Vokasi (JUPASI)*, 2(1), 66-69.
- Salahudin, Nurmandi, A. & Loilatu, M. J., 2020. How to design qualitative research with nvivo 12 plus for local government corruption issues in indonesia?. *Jurnal Studi Pemerintahan*, 11(3), 369-398.
- Salahudin, Nurmandi, A., Sulistyaningsih, T., Lutfi, M., Sihidi, I.T., 2020. Analysis of government official twitters during Covid-19 crisis in indonesia analysis of government official twitters during covid-19 crisis in indonesia. *Talent Development & Excellence*, 12(1), 3899 -3915.
- Sari, M. M., Kusumasari, B. & Hadi, M. P., 2021. Twitter untuk komunikasi tanggap darurat erupsi gunung agung 2017. *Jurnal Ilmu Komunikasi*, 18(2), 201-218.
- Saxena, D. & Maiti, P., 2021. Utilization of ABS from plastic waste through single-step reactive extrusion of LDPE/ABS blends of improved properties. *Polymer*, 221(2), 123626.
- Smith, O. & Brisman, A., 2021. Plastic Waste and the Environmental Crisis Industry. *Critical Criminology*, 29(2), 289-309.
- Thiunn, T. & Smith, R. C., 2020. Advances and approaches for chemical recycling of plastic waste. *Journal of Polymer Science*, 58(10), 1-18.
- Vriend, P. et al., 2021. Plastic pollution research in indonesia: state of science and future research directions to reduce impacts. *Frontiers in Environmental Science*, 9(6), 1-12.
- Wahyudin, G. D., 2020. Penanggulangan pencemaran sampah plastik di laut berdasarkan hukum internasional. *Jurnal IUS Kajian Hukum dan Keadilan*, 8(3), 530-550.
- Wu, S., 2021. As Mainstream and Alternative Media Converge?: Critical Perspectives from Asia on Online Media Development. *Journalism Practice*, 1-17.
- Xiong, J., Hswen, Y. & Naslund, J. A., 2020. Digital surveillance for monitoring environmental health threats: A case study capturing public opinion from twitter about the 2019 Chennai water crisis. *International Journal of Environmental Research and Public Health*, 17(7), 1-15.
- Yaakop, A. Y., Ismail, S. A. & Ariffin, Z. Z., 2019. Breaking through Clutter: Analysis of Mobile Political Advertising in Malaysia. *International Journal of Social Science and Humanity*, 9(2), pp. 26-30.
- Zahra, A. A., Purnomo, E. P. & Kasiwi, A. N., 2020. New democracy in digital era through social media and news online. *Humaniora*, 11(1), 13-19.