

## The Role of Greenpeace Indonesia in Managing Air Pollution in Jakarta Through 2017-2019

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### Abstract

*One of the various environmental problems that often occur in big cities is air pollution. This problem occurs because of the increasing volume of pollutant substances produced from daily activities. The air that has been polluted by pollutant substances not only affects human health, but also affects living things and the environment which will also be damaged by the pollution. Therefore, various solutions, especially the role of international organizations, are certainly needed to deal with these problems. Greenpeace is one of the non-Governmental organizations. This environmental organization focuses on research related to pollution and air pollution in the city of Jakarta based on the argument that the air in Jakarta, which has been contaminated by various chemicals, is very dangerous if it is continuously inhaled by human. Air pollution certainly has a big impact on human health and other living things. For example, the emergence of diseases that occur due to lack of clean air that is inhaled resulting in a lack of oxygen in humans and other living things. Greenpeace monitoring of environmental problems that occur in the city of Jakarta has shown that Air pollution is at the health threshold level issued by WHO and exceeds the threshold level of the National Ambient Air Quality Standard. The role of Greenpeace is very important in dealing with pollution and air pollution in the city of Jakarta.*

### Keywords

greenpeace; health; pollutants, air pollution.



## I. Introduction

As a result of technology and science developments, as well as the increasing number of human activities that require technology, it causes air pollution problems. The existing technological advances come from industrial plants, power plants, and two- or four-wheeled vehicles that pollute the air every day by releasing air pollutants. As the source of respiration for all organism, clean air will eventually be polluted and this will endanger our health and the ecosystem. Air pollution is caused by air pollutants. Many types of airborne substances can cause clean air contamination, such as Carbon Dioxide (CO<sub>2</sub>), Carbon Monoxide (CO), Nitrogen Dioxide (NO<sub>2</sub>), Hydrocarbons (HC) and many other substances. Pollutants in the air have various forms (Hadiwijoyo, 2019).

Air pollution majorly impacts the health of human and other organism. For example, the emergence of diseases that occur due to the lack of clean air that is inhaled, can result in the lack of oxygen in the human body and in another organism. It can also reduce visibility, in which thick smoke caused by air pollution can interfere with our vision, which is very dangerous for driving. It also causes global warming, where air pollution will increase the earth's temperature and the rise sea levels. Air pollution will also interfere with plant productivity and survival.

Greenpeace is a Non-Governmental Organization (NGO) that focuses on protecting nature and the environment. Greenpeace conducts participatory and innovative environmental actions in Indonesia and works to ensure that Indonesians care about the changes and destructions happening the environment. Greenpeace can solve global environmental problems and provide solutions for a better future in a peaceful and green phase. The purpose of this organization is to ensure that the earth's ability to survive with all its diversity. In addition, Greenpeace also focuses on the issue of air pollution. In this case, Greenpeace plays a role in tackling air pollution because this is something that has an impact on our health and the environment. Air pollution can be described as the change of air composition caused by foreign materials or substances in the air and its presence will reduce air quality. Air pollution is a problem that often occurs in big cities. One example is in Jakarta, the capital city of Indonesia. Jakarta is one of the big cities with an alarming level of air pollution. Organization must have a goal to be achieved by the organizational members (Niati et al., 2021). The success of leadership is partly determined by the ability of leaders to develop their organizational culture. (Arif, 2019).

Greenpeace's monitoring of environmental problems that occur in Jakarta, in this case air pollution, is on the verge of the health level issued by WHO. Air pollution in Jakarta often occurs in the dry season, because it rarely rains during the dry season, causing pollutants to accumulate. Air pollution in Jakarta must be addressed immediately because it has an impact on health problems. Air pollution can be a trigger for diseases such as cancer, acute respiratory infections, and cardiovascular. In addition, air pollution can also harm age groups who are susceptible to diseases.

The role of Greenpeace is very much needed in facing environmental problems that occur in Jakarta because this organization is able to offer updates through information and communication technology, where the internet has become a new force to spread and expand ideas. The use of social media can effectively become one of Greenpeace's ways to socialize with the community to maintain the environment and to avoid the negative impacts of pollution. Therefore, this organization carries out activities to reduce air pollution in Jakarta by conducting scientific research on the city's air and its community. With the worsening of air pollution in Jakarta, especially in 2017 to 2019, and the role of Greenpeace as an NGO that focuses on the environment, it invites an important question. The question, which will be discussed in this research, is regarding Greenpeace Indonesia's role in dealing with Jakarta's air pollution in 2017 to 2019.

## II. Review of Literature

This article will use the theories and concepts of Non-Governmental Organization and Green Politics which will be explained in more detail below

### - Non-Government Organization (NGO)

Regarding the international organizations, based on the membership system, the law that governs the organization's activities, as well as is the arrangements based on public law or based on civil law, international organizations are classified into two parts, Inter-Government Organizations (IGOs) and Non-Government Organizations (NGO / INGO) (Rudy, 2009). IGO is defined as an organization consisting of the government or agencies that officially represent the government of a country, where the administration of the organization is regulated under applicable public law. Meanwhile, NGO is defined as a Non-Government Organization which has an international scope as well as a domestic scope (Rudy, 2009). The NGO is applied to organizations that are founded and implemented independently by civil society with the aim of dealing with a social problem,

such as corruption, human rights violations, gender equality, and other issues. NGOs are also a forum for civil society to be able to advocate and fight for important social issues (Djohan, 2017). NGOs are not the organizations that come from the government, bureaucracy or the state. Among the things that characterize NGOs and distinguish them from others are: (a) Not a part of the government, bureaucracy or state's organizations, (b) A non-profit organizations that is not profit-oriented in carrying out its activities, (c) Performing legitimate for the benefit of the general public, and not for the benefit of its members like other organizations (Madya & Muktiali, 2013).

### **III. Research Method**

In conducting the following research, the author uses qualitative research method with the aim of exploring and understanding the responses of an individual or group associated to a particular problem (Creswell, 2009). In addition, the author also uses a descriptive method in explaining the analysis of this research, namely by describing various problems caused by poor air quality in Indonesia, especially in Jakarta. It is accompanied by factual data from various government institutions, with specific details ranging from environmental situations, negative impacts, the social conditions of the community, to the active role of Greenpeace Indonesia in responding to these problems. The research is then continued with an explanation of the Greenpeace International organization and specifically Greenpeace Indonesia, as a non-profit international organization engaged in the environmental field. Furthermore, the research is followed by an analysis of the role of Greenpeace in dealing with air pollution in Jakarta. In order to achieve maximum results in writing this research, the authors collected the data from various sources, such as books, journals, reports, and various national and international articles.

### **IV. Result and Discussion**

#### **4.1 Jakarta Air Pollution in 2017-2019**

The air pollution problem in urban areas is one of the important problems that requires special attention from the government. Based on the data obtained by Statistics Indonesia (BPS), the volume of vehicles operating in 2011 amounted to 68,839,341 units (Jati, 2016). Moving on to 2016, the volume of these vehicles increased in number, reaching up to 124,215 million units, where the number increase by 10-15% from the previous year and was observed to increase to 6 million units every year (Ardani, 2016).

This aligns with the statement of the Ministry of Environment and Forestry (KLHK) regarding the main cause of air pollution problems that occur in big cities, including Jakarta, which is the intensity and the excessive use of motorized vehicles. In connection with the issue of air pollution, WHO revealed that air pollution is the world's highest cause for health risk problems. According to circulating data, there are about 4.2 million people who die each year due to air pollution exposure in 2016 (WHO, 2021). The same case also happened in Indonesia, where air pollution has resulted in around 16,000 deaths every year. Furthermore, it is estimated that 1 in 10 Indonesians suffer from acute respiratory problem and 1 in 10 Indonesian children suffer from asthma (Rohmatullah, 2016).

Regarding the problem of controlling the air pollution, the Government Regulation No. 41 year 1999 has determined the normal level of air pollution. The regulation stipulates that the national air quality standard for carbon monoxide (CO) is 15,000 g/Nm<sup>3</sup>, as for the standard for nitrogen dioxide (NO<sub>2</sub>) is 316µg/Nm<sup>3</sup>, and the quality standard for

sulphur dioxide (SO<sub>2</sub>) is 632 g/Nm<sup>3</sup>.6. The air pollution problem is indeed influenced by a number of factors. In addition to the staggering number of operating motorized vehicles, one other factor which climate (Nisa, 2019).

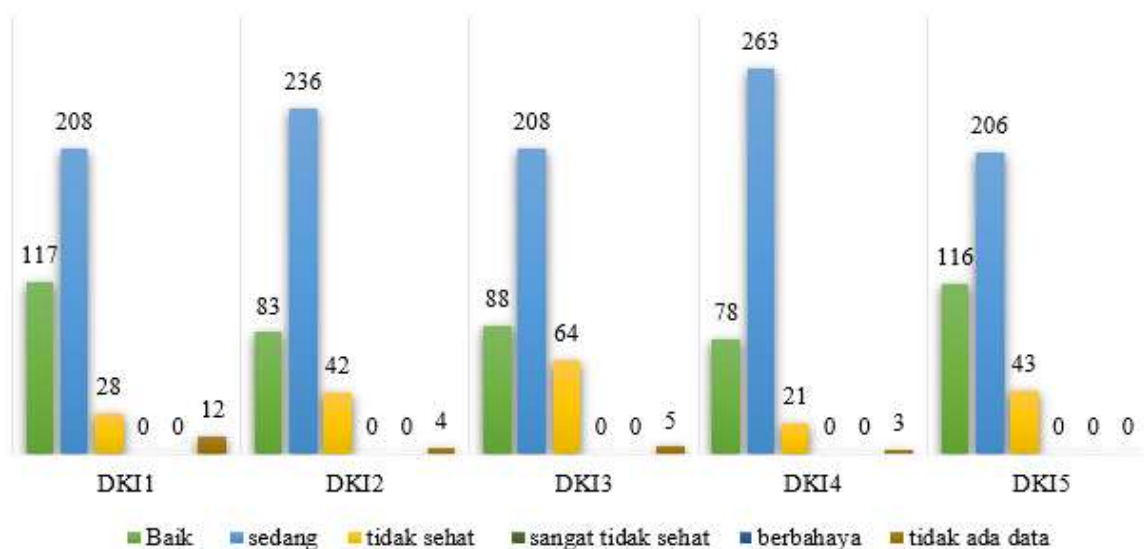
With the percentage of air pollution that increases every year, Jakarta Environment Agency finally operates an Air Quality Monitoring Station (SPKU) with the aim of monitoring Jakarta's daily air quality. The air quality monitoring equipment is positioned at five points and were later named DKI1, DKI2, DKI3, DKI4 and DKI5. The five locations for the placement of the equipment are evenly distributed in five areas of Jakarta. The five locations are in Bundaran HI, Central Jakarta (DKI1); Kelapa Gading, North Jakarta (DKI2); Jagakarsa, South Jakarta (DKI3); Lubang Buaya, East Jakarta (DKI4); and Kebon Jeruk, West Jakarta (DKI5) (Nisa, 2019).

The way this air pollution monitor works is that it will produce data related to the parameters of pollutant compounds in the air, such as Dust Particles (PM<sub>10</sub>), Sulphur Dioxide (SO<sub>2</sub>), Carbon Monoxide (CO), Surface Ozone (O<sub>3</sub>), and Nitrogen Dioxide (NO<sub>2</sub>). The data is then processed by a server located at the Jakarta's Regional Environmental Laboratory (LLHD) to be further informed as the Air Pollution Index (API) (Nisa, 2019).

API	Air Pollution Level	Health Implications
0–50	Good	The level of air quality that has no effect on human or animal health and has no effect on plants, buildings or aesthetic value
51–100	Moderate	Air quality that does not affect human or animal health but affects sensitive plants and aesthetic values
101–199	Unhealthy	The level of air quality that is harmful to humans or a sensitive group of animals or can cause damage to plants or aesthetic value
200–299	Very Unhealthy	The level of air quality that could be detrimental to health for an exposed segment of the population
300–500	Hazardous	A hazardous air quality level that, in general, can seriously harm the health of the population

Source: *kualitas.udara.menlhk.go.id* (2019)

**Jumlah Hari Berdasarkan Kualitas Udara Di Wilayah DKI Jakarta  
(Januari-Desember Tahun 2017)**



*Source: Dinas Lingkungan Hidup (2017)*

According the Environment Agency's data obtained from data.jakarta.go.id, the air quality in Jakarta throughout 2017 was fairly good, with an average of 225 days of moderate air and 97 days of good air quality. However, from this amount, it can be said that Jakarta's air quality in the unhealthy category still exists. Where the highest number of days with unhealthy air quality is in the DKI3 area, which is 64 days in only just a year. The highest score of API with air quality categorized as unhealthy is in DKI5 with 168 which occurred on October 20, 2017 (Nisa, 2019).

Region	Date	Max API	Critical (API parameter)	Critical Category
DKI1	11/11/2017	150	O <sub>3</sub>	Unhealthy
DKI2	9/08/2017	153	O <sub>3</sub>	Unhealthy
DKI3	27/05/2017	164	O <sub>3</sub>	Unhealthy
DKI4	17/11/2017	126	O <sub>3</sub>	Unhealthy
DKI5	20/10/2017	168	O <sub>3</sub>	Unhealthy

*Source: Statistik.jakarta.go.id (2019)*

In addition, the air quality in Jakarta throughout 2018 became quite worrying and this was because the number of days with air quality categorized as unhealthy increased in several areas, thus there were days where the air quality is categorized as very unhealthy.



From the previous year, the number of days with unhealthy air quality on the DKI2 and DKI3 monitoring equipment increased to 106 and 78 days. Meanwhile, DKI5 recorded the number of days with the highest category of unhealthy air quality was 164 days. Not only that, DKI5 also recorded the most days with the air quality being categorized as very unhealthy, which was 19 days (Nisa, 2019).

<b>Region</b>	<b>Date</b>	<b>Max API</b>	<b><i>Critical</i>(API parameter)</b>	<b><i>critical</i> Category</b>
DKI1	20/03/2018	133	O3	Unhealthy
DKI2	16/11/2018	234	O3	Very Unhealthy
DKI3	10/06/2018	181	O3	Unhealthy
DKI4	28/07/2018	118	O3	Very Unhealthy
DKI5	28/07/2018	234	O3	Very Unhealthy

*Source: Statistik.jakarta.go.id (2019)*

The highest API scores with the air quality categorized as very unhealthy are in DKI2 and DKI5, with both areas having the same index of 234. This happened on November 16, 2018 for DKI2 and July 28, 2018 for DKI5 (Nisa, 2019).

In January 2019, the average API number taken from Jakarta's five areas was 59.4. This figure continued to increase until it reached an average of 88.9 in August. However, despite the increasing number, the air quality in Jakarta throughout 2019 was still in the moderate category (API of 51-100). It was recorded that until August 2019, DKI1 recorded the number of days with the highest good air quality, which was 65 days. It also recorded the number of days with the least unhealthy air quality, which was 13 days. In contrast to DKI1, DKI3 recorded the number of days with the least good air quality, which was 12 days. DKI3 also recorded the number of days with the unhealthiest air quality, which was 60 days. So it can be concluded that the best air quality is in DKI1's coverage area. On the other hand, the worst air quality is in DKI3's coverage area, although in the recording there are 5 days in which DKI5's area had a very unhealthy air quality. Meanwhile, when referring to data recorded in July and August, there has been an increase in the number of days with unhealthy air quality (API of 101-199) around DKI3, DKI4 and DKI5 areas. This is indicated by DKI3 that recorded an increase of 8 days, DKI4 recorded an increase of 4 days, and DKI5 recorded an increase of 7 days, with the report of 2 days in which the category is very unhealthy (API of 200-299) around DKI5's coverage area (Akbar, 2019). This unhealthy air condition has attracted the attention of many parties, including environmental organizations like Greenpeace.

#### 4.2 Greenpeace as an Organization Advocating for Environmental Issues in Indonesia

Greenpeace is an organization that emerged in mid-1969. This organization is promoted by environmental groups based in Vancouver-Canada. Most of the members of this environmental group are also members of the Sierra Club-British Columbia Chapter. These members then agreed to create a committee called "Don't Make a Wave Committee", which aims as a forum to express the dissatisfaction of the members of the Sierra Club organization over the organization's refusal to protest against the process of nuclear power experiment (Lee, 1995). The refusal was due to the fact that at that time, most environmental groups, including the Sierra Club, were in the process of implementing a strategy to achieve a more moderate goal.

Subsequently, Greenpeace decided to adopt a tactic to stop confrontational and violent acts in the oceans. Based on its journey from 1972 to the early 1990s, Greenpeace, which initially only had one office in Vancouver, has rapidly grown into ownership of personnel offices spread across more than thirty countries. This development is also complemented by ownership of the base in the Antarctic polar region (Wapner, 1995). The Greenpeace organization, which has now started to develop, has finally changed its campaign strategy from initially implementing a civil disobedience strategy. Now, Greenpeace has changed its strategy to become more moderate. This is carried out by conducting researches that discuss various issues, media campaign activities, to implementing strategies to attract the masses, etc. (Susanto, 2007).

As for in Indonesia, the organization has started to exist in early 2005 with its main mission of stopping the environmental damage that is happening in country. One of Greenpeace's most visible goals is to stop the rapid rate of forest destruction in Indonesia. Aside deforestation, Greenpeace also aims to fix the issue of environmental damages such as water, air, and other pollution issues. In focusing on handling cases in the capital city, Greenpeace specifically focuses its attention on the issue of air pollution. Therefore, in order to achieve this goal, Greenpeace has launched several strategies that are considered effective to overcome air pollution problems in Jakarta.

Greenpeace Indonesia realizes that in order to achieve their goal in reducing air pollution levels in Jakarta, prior scientific research is needed so as to prove the truth of their assumptions over time. This is based on a design carried out by McCormick on the strategy of environmental NGOs, where there is a plan called "Undertaking Research". Greenpeace Indonesia sees how important it is to focus their studies on Jakarta's air pollution. Environmental NGOs themselves were focusing on researches related to Jakarta's pollution and air pollution. Based on the argument, Jakarta's air is very dangerous if it is continuously inhaled by humans because it has been contaminated by various chemicals. Not only hazardous chemicals, the use of coal as Steam-electric Power Station's main raw material is also one of the biggest causes of the phenomenon of pollution and air pollution in the city of Jakarta.

In carrying out their activities, Greenpeace stated that the steam power plant and the basic material for its manufacture, namely coal, had become the biggest cause of the phenomenon of pollution and air pollution in Jakarta. Then, in order to gain the trust of various parties on these allegations, Greenpeace finally carried out a study to provide scientific evidence for their previous assumptions. Finally, in October 2017, the results of the research conducted by Greenpeace was published with the title "Pembunuhan Senyap di Jakarta: Bagaimana Tingkat Polusi Udara Berbahaya di Kota Jakarta Akan Semakin Memburuk". This research was carried out by Greenpeace Southeast Asia and Greenpeace Indonesia, launched free of charge to the general public.

In the results of their research, Greenpeace stated that Steam-electric Power Station (PLTU) contributed towards Jakarta's pollution and air pollution problems. It was stated that on Java Island, there are several Steam-electric Power Stations with large capacities, especially around Jakarta. There are also two Combined Cycle Gas Turbine Plants (PLTGU) located in Muara Karang and Tanjung Priok, Jakarta. The power plant has been proven to cause pollution which makes the air in Greater Jakarta area very dangerous for the residents. This research was also supported by Universitas Indonesia's study in which they found out that 60% of the people living in Jakarta experienced acute respiratory problems caused by the poor air quality (Renaldi, 2017).

In their operation, both Combined Cycle Gas Turbine Plants that are already operating and those that are still planning to operate can cause emissions that pose a risk to public health in the Greater Jakarta area. Among the worst risks that arise is that around 7.8 million minors can be exposed to PM 2.5 where this value is way higher than the WHO standard. It is estimated that this can cause around 2,800 births with below-average birth weights and 10,600 premature deaths per year of which almost fifty percent of the effect is in the Greater Jakarta area. Greenpeace then also emphasized that this was due to the weak implementation of emission standards and regulations relating to major pollutants such as PM 2.5, SO<sub>2</sub>, NO<sub>2</sub> and dust in Indonesia compared to what has been implemented in other countries. As an illustration, a new Combined Cycle Gas Turbine Plant operating in Indonesia is allowed to produce SO<sub>2</sub> emissions 20 times higher than that of a new Combined Cycle Gas Turbine Plants in China, and 7 times than that of a new Combined Cycle Gas Turbine Plants in India. Thus, through the data above it can be predicted that in the future, air pollution in Indonesia can worsened (Greenpeace Indonesia, 2017).

In addition to the excessive use of motorized vehicles and climate factors, another major cause of air pollution problem is the use of Steam-electric Power Station (PLTU) in Jakarta. According to the mapping of the area by Walhi with Greenpeace Indonesia, it was found that in 2017 there were at least 10 PLTUs that were reported to have contributed to pollution around Jakarta. Among them are PLTU Lestari Banten with an energy capacity of 670 MW, PLTU Labuan units 1-2 with a capacity of 600 MW, PLTU Suralaya unit 8 with a capacity of 625 MW, PLTU Suralaya units 1-7 with a capacity of 3400 MW, and PLTU Merak Power Station unit 1- 2 with a capacity of 120 MW. There were also PLTU Babelan units 1-2 with a capacity of 280 MW, PLTU Lontar Exp with a capacity of 315 MW, PLTU Pindo Deli and Paper Mill II with a capacity of 50 MW, PLTU Lontar units 1-3 with a capacity of 945 MW, and PLTU Pelabuhan Ratu unit 1-3 with a capacity of 1050 MW (CNN, 2019). The Governor of Jakarta, Mr. Anies Rasyid Baswedan, also stated that one of the biggest contributors to air pollution in Jakarta is Coal-fired Power Plants. He also mentioned that the Jakarta's Provincial Government already has data related to the main sources of air pollution and will announce the related data after the 2019 Eid holiday. The Governor also invites all parties to start familiarizing themselves with environmentally friendly behavior so that the cleanliness of the capital city's air can always be maintained. Because according to him, the climate damage that occurs is not only the responsibility of the government but also private companies and the community (Mimi, 2019).

In an effort to strengthen their argument regarding the dangers of utilizing coal in the operation of the PLTU, Greenpeace then began to conduct a collaborative study with other parties with the same focus which is the negative risks and dangers of using coal. The study has been published and named "Kita, Batubara & Polusi Udara" which was carried out by Greenpeace in collaboration with the research team from Harvard University. In its research, Greenpeace tries to conduct a more detailed study regarding the adverse effects caused by coal as the raw material for power plants. This also reinforces the argument that



coal is one of the biggest causes of pollution and air pollution in various cities in Indonesia. Regarding the issue of air pollution, Greenpeace tries to take advantage of the power of information and data as the basis of their campaign. They also use the help of experts to base the legitimacy of the issue they are working on to hopefully influence the decision-making (Hass, 1992).

In the end, Greenpeace's argument about the dangers of using coal, which is also the main cause of air pollution problems, is supported by the research conducted with Harvard University on the dangers of coal to our health and the environment. Especially in the capital city of Jakarta, Greenpeace is continuously committed to improving its research strategy for their efforts to gain the trust of the public as well as government actors. The results of the study on the negative impacts of using coal further strengthen the research on poor air quality in Jakarta. Air pollution in Jakarta is also believed to be the result of the operation of Coal-fired Power Plant. This plan continues to be developed by Greenpeace for its efforts to strengthen their arguments on various issues. This is because every argument that is supported by evidence from scientific researches will be more believable to everyone, whether it is the general public or government actors (Greenpeace Indonesia, 2015).

#### **4.3 Greenpeace Indonesia's Role in Addressing Air Pollution Problems in Jakarta**

Various ways have been conducted by Greenpeace for the purpose of handling air pollution problems in Jakarta. Greenpeace has carried out a number of campaigns which is one of their strategies in raising and disseminating an issue they are fighting for. Campaigning itself has been one of Greenpeace's strategies since its inception in 1971. During the time they carried out campaigns in many industrialized countries and succeeded in increasing local awareness on the importance of the issue. The following is a campaign carried out by Greenpeace in solving the problem of air pollution in Jakarta from 2017 to 2019.

Greenpeace did concrete actions in handling the air pollution case in Jakarta, as what they did in September 2017. At that time, activists campaigned in front of the Ministry of Health building while promoting the idea of the dangers of air pollution. In their action, various activists were seen wearing various unique costumes that resembled the anatomy of the human body. These costumes were also equipped with lungs that had been blackened due to PM 2.5 exposure which was stated to be one of the effects of harmful pollutants. Not only that, the activists also held signs that read #JakartaUnderPollution. The campaign was carried out as a form of protest against the government's performance as well as a warning about the dangers of air pollution that spread across Jakarta. Meanwhile, according to a research data by Greenpeace, the air quality in Jakarta since the beginning of 2017 has entered an unhealthy level. It is up to PM 2.5 daily and happened at a few different spots, where this value has exceeded the WHO standard of (25µg/m<sup>3</sup>) and the National Ambient Air Quality Standards.



Greenpeace Indonesia activists held a theatrical action that voiced the dangers of air pollution at the Ministry of Health, Jakarta, 28<sup>th</sup> September 2017 TEMPO/Dhemas Reviyanto

These actions were in the form of protests against the government for their lack of response regarding the issue of air pollution. The proof is that the government and other related institutions only monitor PM 10 pollutant particles, without monitoring PM 2.5, which is also important, considering the risk of disease that can arise from it. Therefore, Greenpeace finally launched a campaign that carried a mission to convey a message to the government, in particular the Ministry of Health, to pay more attention to the issue of air quality in Jakarta, which was very closely related to public health. In this regard, Greenpeace considered that the Ministry of Health plays an important role in promoting a guideline or early warning system when the air quality has started to enter an unhealthy level and can pose a danger to public health. In addition, Greenpeace also hoped that the Ministry of Health can recommend reducing emissions from thermal power plants in Indonesia, whose regulatory values are quite weak compared to other countries. All action and campaign efforts launched by Greenpeace were essentially only focused on public health goals so that they can continue to live a decent life.

Greenpeace resumed the operation in 2018 after conducting their 2017 campaign in front of the Ministry of Health. In 2018, one of Greenpeace's campaigns in Indonesia was to put up billboards containing the message they wanted to convey, which were posted on Jendral Gatot Subroto Street. A billboard that reads #WeBreatheTheSameAir has been posted by several Greenpeace activists. The event was a response to Greenpeace's previous research on air conditions in Jakarta. This study is based on about 5 monitoring results from air quality measuring devices owned by various agencies, including the US Embassy in Central Jakarta and South Jakarta, Meteorology, Climatology, and Geophysical Agency (BMKG) Kemayoran and 3 other Greenpeace devices placed on West Pejateng, Rawamangun and South Mangga Dua (Greenpeace Indonesia, 2018). The air pollution issue has become a hereditary problem that can't be solved. Greenpeace itself has stated how poor the air quality in Jakarta was, thus for the common good, Greenpeace carried out campaigns aimed at sensitizing various groups of people and not leaving government actors behind.

Through this campaign, Greenpeace hoped that the problem of poor air quality will attract serious attention from all parties. Regarding the issue of air pollution, awareness from all the community is also very much needed because air pollution has a bad effect,

especially on public health if it is not resolved. Greenpeace also asked the government to make every effort to reduce air pollution due to the Asian Games, especially in August because for 22 days, the air quality was categorized as unhealthy (Hadi, 2018).

In March 2019, Greenpeace carried out its latest action by campaigning in front of the Ministry of Environment and Forestry (KLHK) building. In this year's campaign, a number of activists wore a set of black costumes equipped with colour-matching masks, with decorations all over their costumes and masks with "PM 2.5" written on them. Not only that, they also held up signs with the words "Jakarta Butuh Udara Bersih", "Jakarta Under Pollution", and "#WeBreatheTheSameAir". This campaign was the fruit of Greenpeace's response to the results of their research that was carried out by Greenpeace Southeast Asia together with IQ AirVisual regarding the level of air cleanliness in several big cities in various parts of the world. The research report revealed that Jakarta was ranked first (with PM 2.5) for the worst air quality in Southeast Asia region throughout 2018. Furthermore, apart from having passed the WHO limit, PM 2.5 in Jakarta had also passed the Indonesian state government's quality standards, which was basically below the level of quality standards that have been allocated by the WHO (Greenpeace Indonesia, 2019).

As an NGO, Greenpeace is constantly trying to engage all parties to have more concerns about the air pollution problem, especially with the current status of Jakarta as the city with the worst air pollution level in Southeast Asia. Greenpeace also demands action from the government so that it can focus more on monitoring and enforcing applicable laws, as well as actively creating and updating programs to control air pollution. Furthermore, the government is also expected to be able to collaborate with various institutes, both from central and the province, because collaboration with various parties is considered very necessary given how wide and complex this problem is if it is handled alone.

## V. Conclusion

The air pollution case in Indonesia, especially in Jakarta, which gets worse from time to time, is one of the problems that is still unresolved. Based on the research of experts, in the future, Indonesia's air pollution is predicted to worsen and will cause various health problems that are increasingly complex. Another study stated that the poor air quality in Jakarta is an effect of using coal as a raw material for steam-electric power plants. The power plants which are widely spread on the island of Java, especially in Jakarta, are proven to cause pollution which can produce air that is very dangerous for our health, especially in the Greater Jakarta area.

One party that places great attention on the problem of air pollution in Jakarta is Greenpeace. Greenpeace is an international NGO (Non-Governmental Organization) that focuses on protecting nature and the environment, with the target of ensuring the earth's proper for the survival of all its inhabitants. Greenpeace itself has carried out various participatory and innovative activities in environmental issues that have occurred in Indonesia since 2005, particularly related to pollution and air pollution issues. Greenpeace, which aims to fix the issue of environmental damages to water, air, and other pollution issues, had launched several strategies that are considered effective to overcome the air pollution problem in Jakarta. Greenpeace Indonesia realizes that in order to achieve their goal in reducing air pollution levels in Jakarta, prior scientific researches are needed so that they can prove the truth of their assumptions over time. In addition to conducting a research as to prove about how worrying the pollution issue in Jakarta is, Greenpeace

Indonesia also carries out various campaigns as a response to the results of various researches that Greenpeace has conducted previously regarding air conditions in Jakarta. In the results of their research, Greenpeace said that the Steam-electric power plants (PLTU) has the biggest contribution to the problem of pollution and air pollution in Jakarta.

Greenpeace has carried out a number of campaigns as their strategy in raising and disseminating an issue they are fighting for. The campaigns carried out by Greenpeace to overcome air pollution problems in Jakarta includes the Greenpeace Indonesia Campaign in 2017. The 2017 campaign had the mission of delivering a message to the government, particularly to the Ministry of Health, regarding how they need to pay more attention to air quality issues in Jakarta, which are very closely related to public health. In the 2018 Greenpeace Indonesia campaign, their mission was to make various groups of people and government actors to be more conscious regarding the issue of air pollution. Moreover, in the 2019 Greenpeace Indonesia campaign, they carried a mission of bringing a direct message to government actors so that they can quickly take concrete actions regarding the problem of air pollution. The Greenpeace Indonesia campaign proves that air pollution is no longer something that can be taken lightly in environmental problems, especially in Jakarta. Greenpeace's campaign for healthier air is likely to face considerable obstacles considering Jakarta being one of the largest consumers of electrical energy for the needs of its residents, offices, industries and other essential sectors. Steam-electric power plant (PLTU) in Cilegon, which uses coal as the main fuel for their power generation, is a supplier of electrical energy for Jakarta, thus this makes the campaign that has been carried out by Greenpeace clashes with the public's interest in energy consumption.

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