

# Analysis of Differences in the Cement, Ceramic, and Food and Beverages Industry in Support of Sustainable Development Goals

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## Abstract:

**Background:** As the increasing of Greenhouse Gas (GHG) emissions is becoming an issue, one of the efforts made by the Indonesian government to overcome it is to issue a regulation for companies to do the Corporate Social Responsibility (CSR). Many references are used in disclosing environmental and social performance. One of the required disclosure references is to support the Sustainable Development Goals (SDGs).

**Materials and Methods:** This study uses a quantitative approach with content analysis research methods. The population in this study are the 3 largest GHG emitting companies in the cement, ceramics, and food and beverage industries in Indonesia which are listed on the Indonesia Stock Exchange (IDX) from 2017 to 2020 with a total of 49 companies.

**Results:** The results of this study found that there was still little support from companies operating in the three sectors in supporting TPB. Overall, the most widely supported SDGs by the three sectors were SDG 3 "Good Health and Well Being", SDG 12 "Responsible Consumption and Production" and SDG 13 "Climate Action".

**Conclusion:** There is a difference in the level of disclosure of the Sustainable Development Goals between companies operating in the cement, ceramics, and food and beverage sectors for four (4) years.

**Key Word:** Sustainable Development Goals; annual report; sustainability report

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## I. Introduction

The issue of increasing greenhouse gas (GHG) emissions has now become an important issue for major countries in the world, including Indonesia (Nurbaya, 2021). This was confirmed by the Paris Agreement in 2015. The Paris Agreement was ratified by almost all countries to give responsibility to state parties to form a Nationally Determined Contribution (NDC) which is a commitment of countries to develop plans for reducing greenhouse gas (GHG) emissions. Greenhouse gases (GHG) are gases in the atmosphere that come from sunlight. Greenhouse gases have the property of absorbing and emitting infrared radiation. The increase in the earth's surface temperature occurs due to the heat contained in the infrared captured by greenhouse gases and causes climate change (Wahyudi, 2016).

Based on data from the World Research Institute (WRI) (2020), in 2017 it was recorded that ten countries in the world contributed more than half of GHG emissions. China was the largest emitter of Greenhouse Gases until early 2018 by producing 12,399.6 million metric tons of carbon dioxide equivalent (MtCO<sub>2</sub>e) or 26.1% of total global emissions. Meanwhile, Indonesia is the eighth largest emitter of greenhouse gases in the world. In 2017, Indonesia recorded 965.3 MtCO<sub>2</sub>e of greenhouse gas emissions, equivalent to 2% of world emissions.

Seeing this, the Socialization meeting of the Final Report of the Study of Compilation of Profile and Baseline of Greenhouse Gas Emissions (GHG) in the Industrial Sector was organized by the Partnership for Market Readiness (PMR) with the Center for Research and Development of Green Industry and the Environment (Puslitbang IHLH) of the Ministry of Industry (Kemenperin). and the Technical Directorate of the Ministry and institutions as supervisors of the industrial sector to see the sources of Greenhouse Gas emissions in industries engaged in energy, Industrial Processes and Product Use (IPPU), agriculture, forestry and peat fires, and waste. On this basis, it is very interesting to conduct research by taking a sample of companies that are considered as GHG emitters.

This study uses samples of Annual Reports and Sustainability Reports from companies engaged in the cement, ceramics and food and beverage industry sectors listed on the Indonesia Stock Exchange for the period 2017 to 2020. This sample selection is based on the Greenhouse Gas Inventory Report (GHG) and Monitoring, Reporting, Verification (MPV) issued by the Ministry of Environment and Forestry together with the Directorate General of Climate Change Control and the Directorate of GHG and MPV Inventory (2020), the

Nationally Determined Contribution (NDC) which has been determined by Indonesia as a contribution to the gas emission reduction target Greenhouse (GHG). Indonesia's NDC is applied to 5 sectors, one of which is the Industrial Process and Product Use (IPPU) sector and the agricultural sector.

From the results of calculating greenhouse gas emissions in 2021, in the IPPU sector, it is known that the cement industry sub-sector that produces the largest greenhouse gas emissions is 31,545 Gg CO<sub>2</sub>e or half of the total greenhouse gas emissions in the IPPU sector, which is 60,175 Gg CO<sub>2</sub>e, while The sub-sectors of the ceramics and food and beverage industry contributed the smallest greenhouse gas emissions to the IPPU sector, namely 5 Gg CO<sub>2</sub>e and 1 Gg CO<sub>2</sub>e.

To overcome the issue of environmental damage caused by global warming due to Greenhouse Gas (GHG) emissions, one of the efforts made by the Indonesian government is to issue Law Number 40 of 2007 in Article 74 Paragraph (1), namely "Companies that run its business activities in the field of and/or related to natural resources are obliged to carry out Social and Environmental Responsibilities". According to the International Standard ISO 26000, Corporate Social Responsibility (CSR) is "the responsibility of an organization as a result of social and environmental decisions and activities. That responsibility can be through transparent and ethical behavior that contributes to sustainable development, public health and well-being. The Company's responsibility must also consider the expectations of stakeholders in accordance with applicable law and consistent with international norms, integrated throughout the organization and practiced in a relationship. Information regarding Corporate Social Responsibility (CSR) can be disclosed in the company's annual report or a separate company social report which is published annually."

Disclosure of social environmental performance in annual reports or sustainability reports is done to convey the company's accountability, responsibility and transparency to investors and other stakeholders (Martha et al., 2015). This disclosure aims to establish a good and effective communication relationship between the company and the public and other stakeholders about how the company has carried out Corporate Social Responsibility (CSR) activities in each of its operations.

The recommendation to disclose Corporate Social Responsibility (CSR) activities carried out by companies is also expressed through POJK No. 51/POJK.03/2017 concerning the Implementation of Sustainable Finance for Financial Service Institutions, Issuers, and Public Companies. In the context of implementing Sustainable Finance, companies can gradually and according to their respective financial conditions, structures, and complexities make organizational adjustments, risk management, governance, and/or standard operating procedures (SOPs) to respond to market demands/needs, and support relevant government policies.

Many references are used in disclosing environmental and social performance. One of the required disclosure references is to show the goals to be achieved by the company, especially support for the Sustainable Development Goals (SDGs). The Sustainable Development Goals (SDGs) are an agenda that was ratified at the 70th annual meeting of the United Nations (UN) in September 2015. The agenda contains 17 Sustainable Development Goals that serve as a guide for addressing the world's most pressing challenges (Kestin et al., 2017).

According to the Ministry of National Development Planning of the Republic of Indonesia/National Development Planning Agency (Ministry of PPN/Bappenas), the Sustainable Development Goals are a refinement of the more comprehensive Millennium Development Goals (MDGs) by involving more countries, both developed and developing countries, expanding sources of funding, emphasizing on human rights, inclusive with the involvement of community organizations (Ormas) and the media, philanthropy and business actors, as well as academics and experts.

The company's obligation to assist the implementation of the Sustainable Development Goals is stated in Presidential Regulation of the Republic of Indonesia Number 59 of 2017 concerning Implementation of the Achievement of Development Goals as a reference for community organizations, philanthropy, business actors, academics, and other stakeholders who will prepare planning, implementation and monitoring as well as evaluation of the Sustainable Development Goals.

In contrast to previous research conducted by Candra (2018), this research focuses on disclosing the Sustainable Development Goals in State-Owned Enterprises and Non-State-Owned Enterprises. However, this study focuses on three sector companies that emit GHG emissions, namely the cement, ceramics, and food and beverage industries listed on the Indonesia Stock Exchange (IDX) to better illustrate the support for the sector that is considered the largest GHG producer. According to Aggarwal (2014), companies that have a negative impact on the environment, need to show greater efforts at reducing these impacts.

Based on the importance of analyzing support for the Sustainable Development Goals through the disclosure of sustainability reports and annual reports for the greenhouse gas (GHG) emitting sector, namely cement, ceramics, and food and beverages, this research has the title "Greenhouse Gas Producing Industry Support in Sustainable Development Goals". This research is expected to provide empirical evidence on the level of disclosure of sustainability reports and annual reports of companies producing greenhouse gas emissions based on the Sustainable Development Goals (SDGs).

## **II. Literature Review**

### **Stakeholder Theory**

Stakeholder theory was originally conceptualized by Freeman (1984) which addresses the issue of considering the interests of various stakeholders (e.g. competitors, communities, customers, employees, financiers, political groups, suppliers, trade associations, and trade unions) when managing a business. According to Strand & Freeman (2015) stakeholder theory talks about the main purpose of the company which is basically to create added value for its stakeholders. The theory requires the creation of more value in the company which leads to increased stakeholder participation in decision making.

This study uses stakeholder theory to explain the role of stakeholders in putting pressure on companies operating in the cement, ceramics, and food and beverage industries. The three industries are expected to develop initiatives in support of the Sustainable Development Goals as a form of response to meeting the needs of their stakeholders.

### **Sustainable Development Goals (SDGs)**

In September 2015, the United Nations (UN) established the Sustainable Development Goals (SDGs) also known as the Global Goals or the 2030 Agenda. The Sustainable Development Goals (SDGS) aim to end poverty, protect the planet, and ensure prosperity for all (Schramade, 2017). The creation of the Sustainable Development Goals has revived the focus on finding long-term solutions to the “big challenges” (George et al., 2016) facing the world. Partnerships between government, business, civil society, financial institutions, and the academic sector are increasingly being suggested as the basis for achieving the Sustainable Development Goals (Clarke and MacDonald, 2019; MacDonald et al., 2019; Pattberg and Widerberg, 2016).

### **Annual report**

According to POJK Number 29 /POJK.04/2016 concerning Annual Reports of Issuers and Public Companies, an annual report is a report on the accountability of the Board of Directors and the Board of Commissioners in managing and supervising Issuers or Public Companies within 1 (one) financial year through the General Meeting Shareholders are arranged based on the provisions in the POJK.

The annual report is prepared to provide information about the state of a company that will be useful to most users of the annual report. The annual report is prepared and presented for one year to meet the needs of the company's internal and external parties. The parties with an interest in the development of a company are very different and have the right to obtain information about the company. The annual report can be used by top management to be able to make plans for the following year and also make decisions that are beneficial for the development of the company, while for investors financial statements are also useful in making decisions.

### **Sustainability Report**

According to the Global Reporting Initiative (2016), a sustainability report is an organization's report to publicly report on its economic, environmental, and/or social impacts, and their contribution – positive or negative – to the Sustainable Development Goals. The sustainability report also presents the values and model of corporate governance, and shows the relationship between the strategy and its commitment to a sustainable global economy. Thus, report disclosure can provide additional information to investors to assess the company (Kaspereit & Lopatta, 2016; Landrum & Ohsowski, 2018; Uyar, 2017).

In Indonesia, sustainability reports are mandatory or are fully supported by the government's efforts to reduce environmental problems with the issuance of POJK Number 51/POJK.03/2017 concerning the Implementation of Sustainable Finance for Financial Service Institutions, Issuers, and Public Companies which in the contents describes the outline and the contents of the Sustainability Report.

## **III. Material And Methods**

This study uses a quantitative descriptive method using content analysis techniques. According to Asfar (2017), content analysis is research that is an in-depth discussion of the contents of written or printed information in the mass media. In this study, the content analysis method was used to evaluate information about the support of companies engaged in the cement, ceramics, and food and beverage industries to the Sustainable Development Goals in the 2017-2020 annual reports and sustainability reports.

The measurement of the data in this study was carried out by giving the weight or value of the disclosure of each Sustainable Development Goal in the annual report or sustainability report for the 2017-2020 period. The amount of weight or value is to use a dummy code by giving the number "1" if there is information from the disclosure of the Sustainable Development Goals and the number "0" if the information is not available in the annual report or sustainability report (Gunawan et al., 2019). In addition to conducting analysis tests, a descriptive statistic test and difference test was also conducted to strengthen the data.

The population in this study are the 3 largest GHG emitting companies in the cement, ceramics, and food and beverage industries in Indonesia which are listed on the Indonesia Stock Exchange (IDX) from 2017 to 2020 with a total of 49 companies. There are no criteria in selecting the sample so this study uses a saturated sample. The unit of analysis used in this study is the annual report or sustainability report for the years 2017 to 2020, totaling 156 reports.

#### IV. Result

##### Statistical analysis

Data was analyzed using SPSS version 24 and Microsoft Excel 2019. Descriptive tests are used to identify important sensory characteristics of a product and provide information about the intensity of these characteristics. Such descriptive information can assist in identifying the material or process variables that are responsible for certain characteristics.

**Table no 1: SDGs Disclosure Descriptive Statistic Results**

Year	Sector	N	Minimum	Maximum	Mean	Standar Deviasi
2017	Ceramic	17	0,00	0,00	0,0000	0,0000
	Cement	17	0,00	3,00	2,0000	1,11803
	Food and Beverages	17	0,00	2,00	0,8235	0,80896
	Valid N (listwise)	17				
2018	Ceramic	17	0,00	0,00	0,0000	0,0000
	Cement	17	0,00	3,00	2,2941	0,91956
	Food and Beverages	17	0,00	2,00	0,8235	0,88284
	Valid N (listwise)	17				
2019	Ceramic	17	0,00	0,00	0,0000	0,0000
	Cement	17	0,00	5,00	3,8235	1,46799
	Food and Beverages	17	0,00	2,00	0,8235	0,88284
	Valid N (listwise)	17				
2020	Ceramic	17	0,00	0,00	0,0000	0,0000
	Cement	17	0,00	5,00	3,3529	1,57881
	Food and Beverages	17	0,00	4,00	1,8235	1,50977
	Valid N (listwise)	17				
2017-2020	Ceramic	68	0,00	0,00	0,0000	0,0000
	Cement	68	0,00	5,00	2,8676	1,47521
	Food and Beverages	68	0,00	4,00	1,0735	1,12391
	Valid N (listwise)	68				

The table above illustrates the descriptive statistics of the data that has been collected. The number of objects studied in the disclosure of SDGs in the three sectors is 17 (N) per year and 68 (N) in 4 periods (2017-2020). From the table above, it can be seen that the average (mean), maximum, and minimum values of SDGs disclosures for each sector per year and in four years.

1. Ceramic Sector

The results of the descriptive statistical test in table no 1 show that for four (4) years (2017-2020), the minimum, maximum, average, and standard deviation values of SDGs disclosure in the ceramic sector are showing the same number, namely zero (0) . This means that there is absolutely no information regarding support for SDGs from companies engaged in the ceramic sector even though they have disclosed their Social and Environmental Responsibility activities through annual reports and/or sustainability reports.

2. Cement Sector

Based on the results of the descriptive statistical test in table no. 1, in 2017, the disclosure of SDGs in the cement sector shows that the minimum value is 0 and the maximum value is 3, which means that there are three companies that express their support for SDGS. The average value obtained from the results of the 2017 descriptive statistical test in the cement sector is 2.00 and the standard deviation obtained is 1.11.

In 2018, the minimum value obtained was 0 and the maximum value was the same as the previous year, which was three. This means that the number of companies that support SDGs is still the same as the previous year, namely three companies expressing their support for SDGs. There was an increase in the disclosure of SDGs support in 2018 when compared to the previous year. The average value obtained for SDGs disclosure in the cement sector in 2018 was 2.29 with a standard deviation of 9.91. This means that there is an increase in the number of SDGS disclosed compared to the previous year.

In 2019, the minimum value obtained is 0 and the maximum value is 5. This means that there has been an increase in the number of companies expressing their support for SDGs, namely the number of companies supporting SDGs has changed from three to five. This shows that many companies engaged in the cement sector have begun to raise awareness of the importance of supporting SDGs. The average value obtained in 2019 was 3.82 and the standard deviation was 1.46.

In 2020, the minimum value obtained is 0 and the maximum value is the same as the previous year, namely five. This means that the number of companies that support SDGs is still the same as the previous year, namely five companies. From the results of descriptive statistics on SDGs disclosure in the cement sector in 2020, the average value is 3.35 and the standard deviation is 1.57.

When viewed over four periods, the maximum score obtained is five, which means that five out of eight companies have expressed their support for the Sustainable Development Goals. Meanwhile, the average value obtained is 2.86 and the standard deviation is 1.47.

3. Food and Beverages Sector

The results obtained from descriptive statistical tests in the food and beverage sector in 2017 show that the minimum value is 0 and the maximum value is 2, which means that there are two companies that express their support for SDGs. The average value obtained for 2017 is 0.82 with a standard deviation of 0.80.

In 2018, the minimum value obtained is 0 and the maximum value is the same as the previous year, namely two. This means that the number of companies that support SDGs is still the same as the previous year, namely two companies. The average value obtained from the descriptive statistical test this year is still the same as the previous year, namely 0.82 and the standard deviation is 0.88.

In 2019, the minimum value obtained is 0 and the maximum value is 2. This means that the number of companies expressing their support for SDGs is still the same as in the previous two years, namely two companies. The average value obtained is 1.82 and the standard deviation is 1.50.

In 2020, the minimum value obtained is 0 and the maximum value is four. This means that the number of companies that support SDGs has increased from the previous year, from two to four. The average value obtained this year is 1.07 with a standard deviation of 1.12.

When viewed over four periods, the maximum score obtained is four, which means that four (4) out of 33 companies have expressed their support for the Sustainable Development Goals. The average value obtained for four years is 1.07 with a standard deviation of 1.12.

**Table no 2: SDGs Disclosure Normality Test Results**

	Sector	Shapiro-Wilk		
		Statistic	df	Sig.
SDGs 2017	Cement	.787	17	.001
	Food and Beverages	.797	17	.002
SDGs 2018	Cement	.768	17	.001

	Food and Beverages	.760	17	.001
SDGs 2019	Cement	.781	17	.001
	Food and Beverages	.760	17	.001
SDGs 2020	Cement	.849	17	.010
	Food and Beverages	.869	17	.021
SDGs 2017-2020	Cement	.841	17	.008
	Food and Beverages	.866	17	.019

The normality test method used in this study is the Kolmogorov-Smirnov method. The hypotheses used in this study are:

Ho: The research sample data is normally distributed

H1: The research sample data is not normally distributed

The basis for making normality test decisions in this study is to look at the significance value, namely:

- Data is said to be normally distributed if it has a Sig value. > 0.05

- Data is said to be not normally distributed if it has a Sig value. < 0.05

If the sample data used in this study is normally distributed, then the data is included in parametric statistics and if not, then the data is included in non-parametric statistics.

Based on table 4.6, the value of Sig. for all variables < 0.05 so it can be concluded that the data is not normally distributed. The ceramic sector is not in the test because it has a constant value. So that non-parametric statistics are used with the Kruskal-Wallis test.

**Table no 3: SDGs Disclosure Difference Test Results**

	2017	2018	2019	2020	2017-2020
Chi-Square	26.398	32.461	35.600	31.293	38.473
df	2	2	2	2	2
Asymp. Sig.	.000	.000	.000	.000	.000

The different test conducted in this study was using the Kruskal-Wallis method because the results of the normality test showed that the data were not normally distributed.

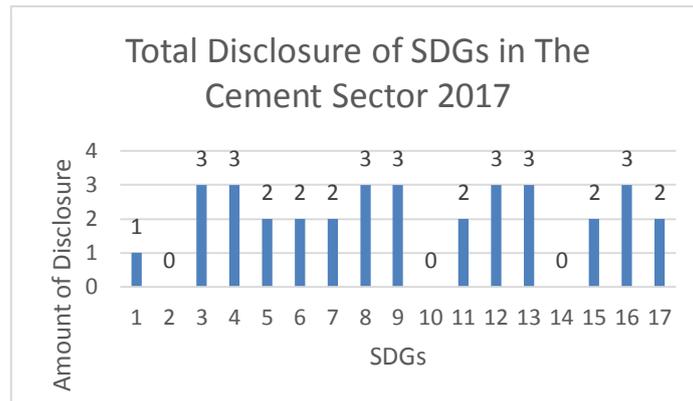
Based on the table above, the value of Sig. for SDGs 2017 to 2018 is 0.00 which is smaller than 0.05. The final result of the Kruskal-Wallis test is the P value, which means that if the value is <0.05, statistical conclusions can be drawn which means that there are differences in the level of disclosure of the Sustainable Development Goals between companies engaged in the cement, ceramics, and food and beverage sectors every year.

## V. Result and Discussion

### Disclosure of SDGs in The Ceramic Sector

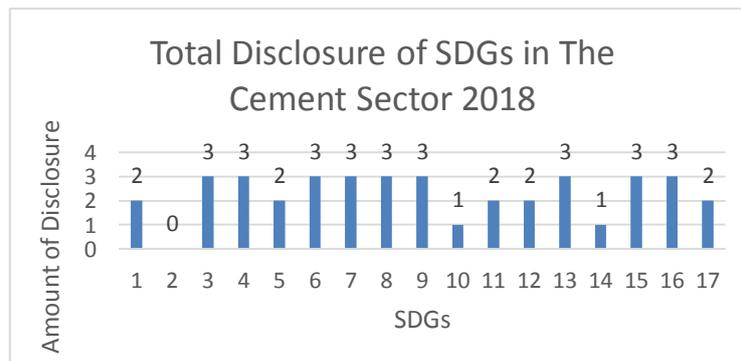
The absence of disclosure of SDGs in the ceramics sector for four (4) years is likely a lack of awareness and knowledge of the Sustainable Development Goals. However, not expressing support for SDGs does not mean that companies engaged in the ceramics sector do not carry out Corporate Social Responsibility (CSR) activities at all. Judging from the annual reports published by the eight companies, all companies have carried out CSR activities well but have not been linked to SDGs so that the companies actually support SDGs indirectly.

**Disclosure of SDGs in The Cement Sector**

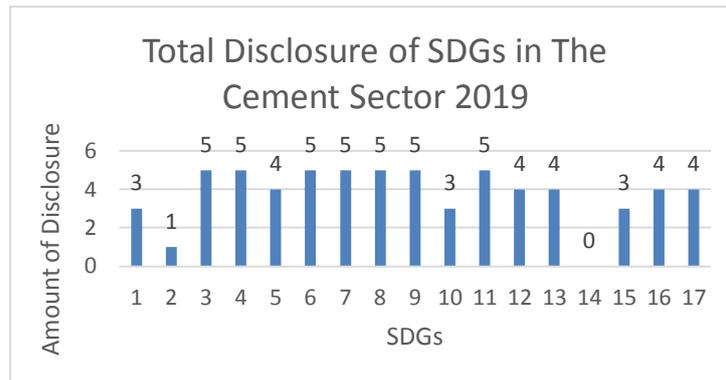


This year, not many companies in the cement sector have expressed their support for SDGs, but the three companies that have expressed their support for SDGs have shown their support very well. The most widely supported SDGs in 2017 were SDG 3 “Good Health and Well Being”, SDGS 4 “Quality Education”, SDG 8 “Decent Work and Economic Growth”, SDG 9 “Industry, Innovation and Infrastructure”, SDG 12 “Responsible Consumption and Production”, SDG 13 “Climate Action”, and SDG 16 “Peace, Justice and Strong Institutions”. Meanwhile, the SDG that did not receive support in 2017 were SDG 2 “Zero Hunger”, SDG 10 “Reduced Inequalities” and SDG 14 “Life below Water”.

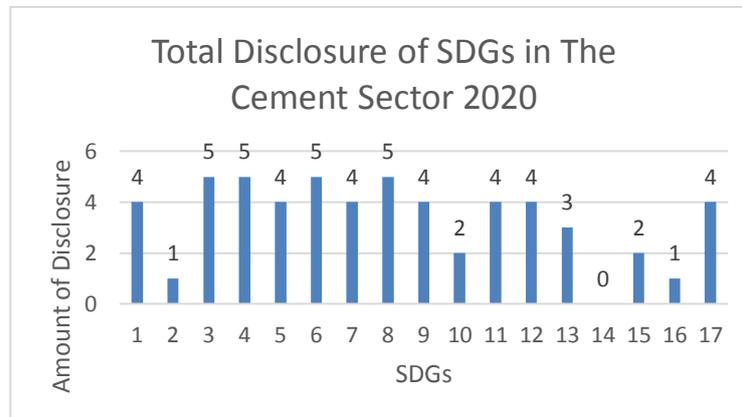
This year, SDGs, which is supported by companies in the cement sector, is in line with the line of business the company runs. The least number of companies that expressed their support for SDGs in 2017 was possible because SDGs was only launched in 2015 and regulations for making mandatory sustainability reports for new companies were launched in 2017, namely POJK 51. This year, the company is still in the stage of studying and developing competencies to understand function and content of sustainability reports, including SDGs.



The most widely supported SDGs in 2018 were SDG 3 “Good Health and Well Being”, SDG 4 “Quality Education”, SDGS 6 “Clear Water and Sanitation”, SDGS 7 “Affordable and Clean Energy”, SDG 8 “Decent Work and Economic Growth”, SDG 9 “Industry, Innovation and Infrastructure”, SDG 13 “Climate Action”, SDG 15 “Life on Land”, and SDG 16 “Peace, Justice and Strong Institutions”. SDGs that did not receive support decreased in 2018 to only one, namely SDGS 2 “Zero Hunger”, meanwhile SDG 10 “Reduced Inequalities” and SDG 14 “Life below Water” had received one support.



The most widely supported SDGs in 2019 were SDG 3 “Good Health and Well Being”, SDG 4 “Quality Education”, SDG 6 “Clear Water and Sanitation”, SDG 7 “Affordable and Clean Energy”, SDG 8 “Decent Work and Economic Growth”, SDG 9 “Industry, Innovation and Infrastructure”, and SDG 11 “Sustainable Cities and Communities”. This year, SDG 2 “Zero Hunger” received support from 1 company and SDG 14 “Life below Water” again did not receive support, meanwhile support for SDG 10 “Reducing Inequalities” received support from 3 companies, this number increased from the previous year, that is one (1).



The most widely supported SDGs in 2020 are SDG 3 “Good Health and Well Being”, SDG 4 “Quality Education”, SDG 6 “Clear Water and Sanitation” and SDG 8 “Decent Work and Economic Growth”. SDG, which still received little support in 2020, was the same as the previous year, namely SDG 2 "Zero Hunger" and SDG 14 "Life below Water". When compared with the disclosures of the previous year, the number of the most SDGs disclosed slightly reduced from seven (7) SDGS to four (4) SDGS.

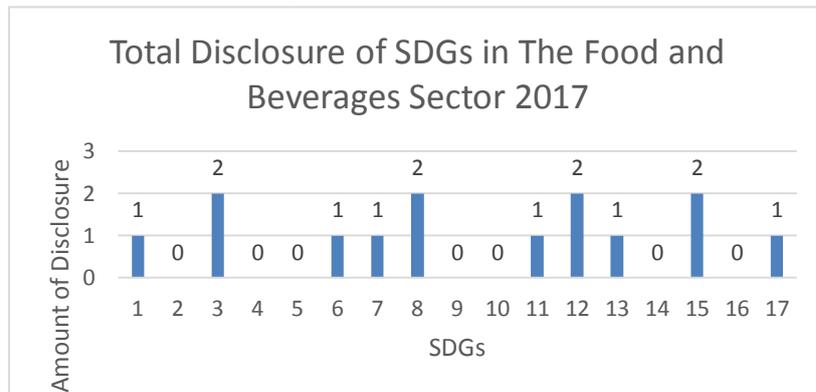


In four years, five out of eight companies have expressed their support for the SDGs, but although the other three companies have not shown their support for SDGS, they have disclosed their CSR activities in annual reports and/or sustainability reports, but they have not yet been linked to SDGS.

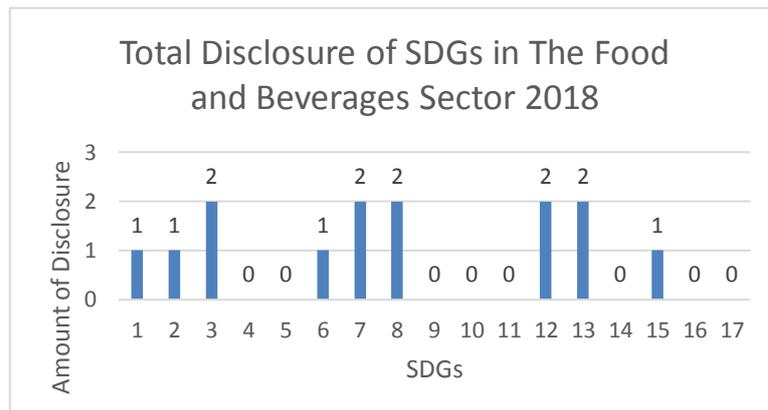
The SDGs most supported by companies operating in the cement sector over the past four years are SDG 3 “Good Health and Well Being”, SDG 4 “Quality Education”, and SDG 8 “Decent Work and Economic Growth” which received support from 16 companies that followed by SDG 6 “Clear Water and Sanitation” and SDG 9 “Industry, Innovation and Infrastructure” supported by 15 companies. Meanwhile, the least supported SDGs were SDG 2 “Zero Hunger” and SDG 14 “Life below Water”.

When viewed from the disclosure of SDGs’ support to companies engaged in the cement industry sector, the SDGs supported by the company is in accordance with the line of business run by the company. However, as the sector indicated as the largest emitter of Greenhouse Gases (GHG), the SDGs that should be disclosed the most is SDG 7 “Affordable and Clean Energy” and also SDG 13 “Climate Action”.

**Disclosure of SDGs in The Food and Beverages Sector**

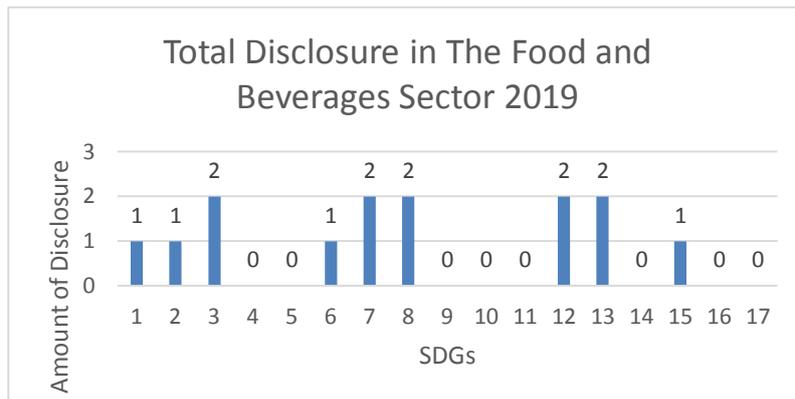


The most widely supported SDGs in 2017 were SDG 3 “Good Health and Well Being”, SDG 8 “Decent Work and Economic Growth”, SDG 12 “Responsible Consumption and Production”, and SDG 15 “Life on Land”. Meanwhile, SDGs that did not receive support were SDG 2 “Zero Hunger”, SDG 4 “Quality Education”, SDG 5 “Gender Equality”, SDG 9 “Industry, Innovation and Infrastructure”, SDG 10 “Reducing Inequalities”, SDG 14 “Life below Water”, and SDG 16 “Peace, Justice and Strong Institutions”.



The most widely supported SDGSs in 2018 were SDG 3 “Good Health and Well Being”, SDG 7 “Affordable and Clean Energy”, SDG 8 “Decent Work and Economic Growth”, SDG 12 “Responsible Consumption and Production”, and SDGS 13 “Climate Action”.

This year, SDG 2 “Zero Hunger” received one support after the previous year did not receive support. Meanwhile, SDG 4 “Quality Education”, SDG 5 “Gender Equality”, SDG 9 “Industry, Innovation and Infrastructure”, SDG 10 “Reducing Inequalities”, SDG 14 “Life below Water”, and SDG 16 “Peace, Justice and Institutions” is still not getting support this year. Compared to the previous year which received one support, SDG 11 “Sustainable Cities and Communities” and SDG 17 “Partnerships for The Goals” did not receive any support at all.

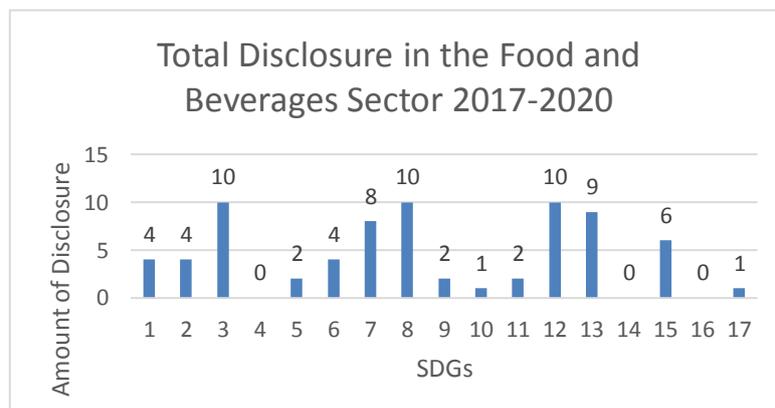


The most widely supported SDGs in 2019 is also the same as the previous year, namely SDG 3 “Good Health and Well Being”, SDG 7 “Affordable and Clean Energy”, SDG 8 “Decent Work and Economic Growth”, SDG 12 “Consumption and production responsible”, and SDG 13 “Climate Action”. The activities carried out by the company to support SDG this year are also the same as the previous year.

Meanwhile, SDG 4 “Quality Education”, SDG 5 “Gender Equality”, SDG 9 “Industry, Innovation and Infrastructure”, SDG 10 “Reducing Inequalities”, SDG 14 “Life below Water”, and SDG 16 “Peace, Justice and Institutions” is still not getting support this year.



The most widely supported SDGs in 2020 were SDG 3 “Good Health and Well Being”, SDG 8 “Decent Work and Economic Growth”, SDG 12 “Responsible Consumption and Production”, and SDG 13 “Climate Action” which received support of four (4) companies. The SDGs that did not receive support in 2020 were SDG 4 “Quality Education”, SDG 14 “Life below Water”, SDG 16 “Peace, Justice and Strong Institutions” and SDG 17 “Partnerships for The Goals”.

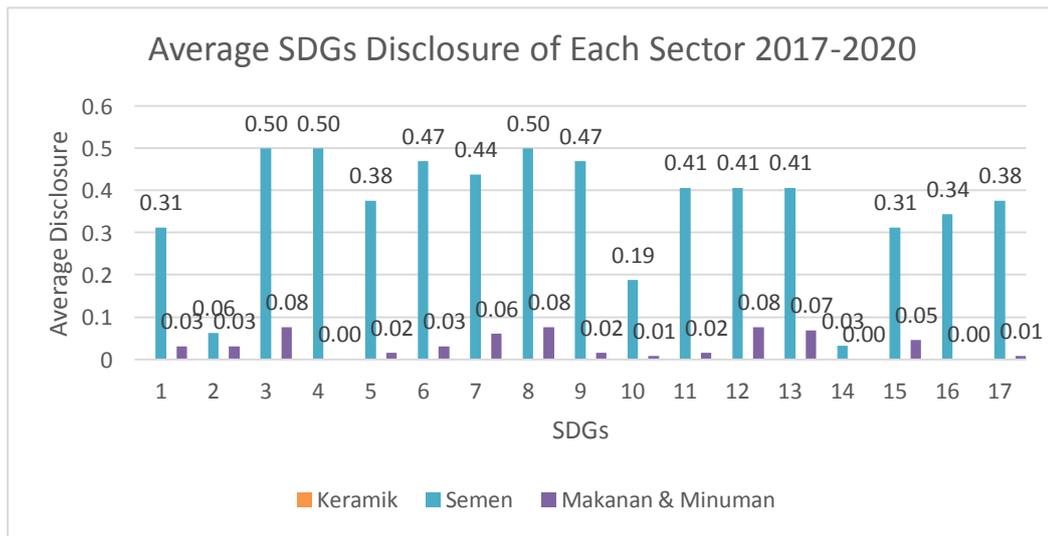


If viewed over a period of four (4) years, only four (4) out of 33 companies have shown their support for SDGs, companies that have not shown their support for SDGs have disclosed their CSR activities in annual reports and/or sustainability reports, but have not yet been linked to SDGs.

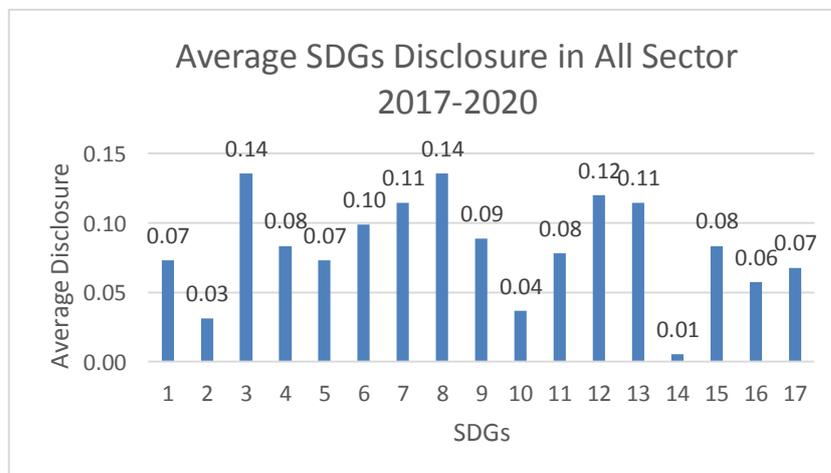
The SDGs most supported by companies operating in the cement sector over the past four years are SDG 3 “Good Health and Well Being”, SDG 8 “Decent Work and Economic Growth”, and SDG 12 “Responsible Consumption and Production”. Meanwhile, SDGs which did not receive any support for four periods were SDG 4 “Quality Education”, SDG 14 “Life below Water” and SDG 16 “Peace, Justice and Strong Institutions”.

SDGs supported by companies in the food and beverage sector is still not in line with the line of business run by the company. As a company that produces food and beverages, SDGs 2 “No hunger” should be expressed more support by companies and the food and beverage sector is indicated as the sector with the largest GHG emission contributor, so SDGs 7 “Affordable and Clean Energy” and SDGs 13 “Climate Action” could be said more.

**SDGs Disclosure in All Sector for 4 Years**



Based on the chart above, overall in 2017-2020, SDGs disclosure in the cement sector is always greater than SDGS disclosure in the food and beverage sector, while the ceramics sector is always worth 0. The difference is very clear that the disclosure of SDGs in the cement sector is always greater than the disclosure of SDGs in the food and beverage sector, therefore the difference test is not needed. But if a difference test is carried out, the results will be real.



The SDGs most supported by all sectors in the four periods were SDG 3 “Good Health and Well Being” and SDG 8 “Decent Work and Economic Growth” which were expressed by 14% of companies from the ceramics, cement, and food and beverage sectors. The second most widely supported SDGs was SDG 12

“Responsible Consumption and Production” expressed by 12% of companies and followed by SDG 13 “Climate Action” expressed by 11% of companies. For SDG 2 “Zero Hunger” and SDG 14 “Life below Water” were only disclosed by 3% of companies and 1% of companies, respectively.

SDG 7 “Affordable and Clean Energy” and SDG 13 “Climate Action” were disclosed as much as 11%. As the three sectors indicated as GHG emitters, SDG 7 and SDG 13 can be the SDGs which is most widely expressed as company support for SDGs as well as GHG emission reduction.

## VI. Conclusion

Based on the results of the test analysis and discussion regarding the disclosure of support for SDGs in the ceramics, cement, food and beverage sector, the following results were obtained:

1. Companies engaged in the ceramic industry sector show indirect support for the Sustainable Development Goals (SDGs) in four (4) periods (2017-2020) by conducting CSR activities.
2. There are five (5) out of eight (8) companies engaged in the cement industry sector that have directly expressed their support for the Sustainable Development Goals (SDGs). SDGs which received the most support in the cement industry sector for 4 periods (2017-2020) were SDG 3 "Good Health and Well Being", SDG 4 "Quality Education", SDG 6 "Clear Water and Sanitation", and SDG 8 "Decent Work and Economic Growth" which received support from 16 companies. Meanwhile, the least supported SDGs were SDG 2 “Zero Hunger” and SDGs 14 “Life below Water”.
3. There are four (4) out of 33 companies engaged in the food and beverage industry sector that have directly expressed their support for the Sustainable Development Goals (SDGs). The SDGs that received the most support in this sector for 4 periods (2017-2020) were SDG 3 “Good Health and Well Being”, SDG 8 “Decent Work and Economic Growth”, and SDG 12 “Responsible Consumption and Production”. Meanwhile, SDGs which did not receive any support for four periods were SDG 4 “Quality Education”, SDG 14 “Life below Water” and SDG 16 “Peace, Justice and Strong Institutions”.
4. There is a difference in the level of disclosure of the Sustainable Development Goals between companies operating in the cement, ceramics, and food and beverage sectors for four (4) years (2017-2021) with the Asymp value. Sig. 0.00 ( $0.00 < 0.05$ ).

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