

# STRATEGIC SUSTAINABILITY REPORTING PRACTICES AMONG INDUSTRIAL PRODUCTS AND SERVICES COMPANIES: A COMPARATIVE ANALYSIS BEFORE AND DURING THE PANDEMIC CRISIS IN MALAYSIA

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## ABSTRACT

*During the COVID-19 pandemic, non-essential businesses of Industrial Products and Services faced operational restrictions due to lockdowns imposed by the Malaysian Government. Economic disruptions erupted as the main effect of the lockdown, causing a reduction in their revenues. Consequently, the affected companies start to prioritise and focus on their short-term survival over sustainability activities that may be costly to them. However, they were obligated to report their sustainability initiatives and should make use of this occasion to share with stakeholders the strategy they have chosen to carry out sustainability initiatives' engagement in spite of the crisis. Thus, the purpose of this study is to examine strategic sustainability reporting practices disclosures before and during the COVID-19 pandemic crisis. This study used a modified multidimensional sustainability checklist to analyse the type of strategies, quality, and quantity of sustainability disclosures for 60 public listed Industrial Products and Services companies in Bursa Malaysia in 2018 and 2021. The disclosures of strategic sustainability reporting practices prior to and throughout the crisis were assessed using related statistical tests. The results showed that the companies' sustainability reporting disclosure changed significantly over the two studied years. Companies predominantly favoured the information strategy when performing sustainability initiatives. Notably, the quality and quantity of reporting in 2021 surpassed those in 2018. These results can be an indicator for stakeholders to ascertain whether a company's stance remains committed to sustainability initiatives for the long-term benefits or if its primary concern is ensuring its immediate business survival amidst the crisis.*

**Keywords:** COVID-19, Crisis Response, Sustainability Reporting, Strategic Sustainability Reporting, Bursa Malaysia

## 1.0 INTRODUCTION

The world was struck by the pandemic outbreak due to Coronavirus Disease (COVID-19) in December 2019. As of 30 September 2021, at least 233 million cases had been reported worldwide, with at least 4.7 million fatalities (WHO, 2021). This pandemic crisis has caused severe impacts on humanity's lives, such as health, social and ultimately resulted in the worst global economic recession (International Monetary Fund , 2020).

Malaysia was not spared from being attacked by this disease. To curb the rapid spread among the people, the government had to start enforcing the Movement Control Order (MCO) on 18 March 2020, which had been extended a few times until 12 May 2020 (Kuriakose et al., 2020). During this period, various activities were put on hold or limited movement. Only 23 essential products and services businesses sectors can continue operations with restricted rules and regulations announced by the Malaysian National Security Council (NSC) an agency in the Prime Minister's Department. Other than mentioned, the non-essential businesses have been refrained from operating as usual, but the employees were allowed to work from home if the nature of the business allowed them to do so.

According to the first-round survey on the impacts of COVID-19 on firms in Malaysia by the World Bank Group in 2020, about 84% of companies were forced to totally or partially close their businesses during the MCO. This disruption in business operations caused them to suffer a reduction in revenue (Kuriakose et al., 2020). Consequently, the crisis caused most companies to be financially affected and tend to start making adjustments to their decision-making (He & Harris, 2020) as well as shifting their concern more to earning income to satisfy the need for business survival rather than other matters, such as involved with sustainability initiatives (Pinto et al., 2014). Involvement with sustainability activities may incur additional costs (Sprinkle & Maines, 2010) and worsen the companies' financial condition. Therefore, most Malaysian public listed companies hesitate to actively participate in sustainability activities, such as charitable works that aid those in need during a crisis (AWANI, 2021). As such, they have responded to crises cautiously, defensively, and selectively, especially when deciding which sustainability areas to focus on and how to report them to stakeholders (Karaibrahimoglu, 2010; Pinto et al., 2014). However, public listed companies in Malaysia are mandatory to prepare sustainability statements annually in accordance with the Bursa Malaysia Listing Requirement. These statements are commonly disclosed in annual reports or stand-alone sustainability reports according to economic, environmental, and social (EES) areas.

Sustainability reporting is a crucial platform for companies to convey their responsible efforts concerning sustainability issues during periods of crisis (PricewaterhouseCoopers, 2020; Zharfpeykan & Ng, 2021). From the reporting, stakeholders are able to determine how well companies have responded to any alterations or challenges in managing stakeholder perceptions (Shad et al., 2018). By implementing a proactive reporting strategy, companies can show their capabilities, dedication, and decent decisions on their involvement in sustainability initiatives throughout the challenging year (Mohd Zam et al., 2023). In fact, these good conducts suggest companies' capabilities to carry out their duty as good corporate citizens concerned with sustainability matters.

Prior literature focus mostly on examining sustainability reporting throughout stable economic conditions (Ardiana, 2019; Bakar et al., 2019; de Villiers & Alexander, 2014) and previous global financial crisis (Haji, 2013). Their area of attention is on the quantity and quality disclosure of the reporting. In contrast, there is inadequate information about the extent of companies' sustainability reporting when facing the COVID-19 crisis (García-Sánchez & García-Sánchez, 2020), particularly on how companies disclose sustainability efforts as a way of strategic crisis response (Mohd Zam et al., 2023). Thus, a study on rising markets like Malaysia would be considerably interesting. Therefore, this paper aims to fill the gap by examining the strategic sustainability reporting of Industrial Products and Services companies. Most of them fell under non-essential business and had to close operations during the beginning of the MCO restrictions. Reporting comparisons before and during the crisis can exhibit the disclosure patterns and types of strategy, quality, and quantity reporting that companies choose when confronted with an unstable economy. Are companies likely to ignore or continuously take part in sustainability matters reflected through reduction or increasing disclosure in reports? The study's findings might assist managers in making decisions on the best sustainability practices that may not degrade companies' ability to survive in the event of

future crises. It may serve as a useful instrument to ensure that businesses fulfil their obligations as responsible corporate citizens in times of forthcoming crises.

This paper is organised in the following way. Section 2 consists of the literature review regarding sustainability reporting and its potential to be a strategic crisis response mechanism. Next, Section 3 describes the research methodology. Subsequently, Section 4 provides more information about the results and discussion of the strategic sustainability reporting for Industrial Products and Services companies before and during the pandemic crisis. Lastly, the study is concluded in Section 5.

## **2.0 LITERATURE REVIEW**

### **2.1 Sustainability Reporting**

As the interdependence between financial and non-financial challenges increases, sustainability reporting provides greater transparency and accountability, allowing for more accurate information and realistic decision-making. According to the Global Reporting Initiative (2006, p.4), sustainability reporting is "the practice of measuring, disclosing, and being accountable to internal and external stakeholders for organisational performance towards the goal of sustainable developments." The reporting comprises disclosure of companies' activities, performance results, policies and strategies relating to sustainability matters (Amran & Ooi, 2014; Bursa Malaysia, 2018; Kamaliah, 2020). It is reported that 79% of the 5,800 global firms undertaking sustainability reporting based on a survey conducted by Klynveld Peat Marwick Goerdeler (KMPG) in 2022. Indirectly, the result indicates a high level of acceptance by companies in acknowledging the benefits of this reporting practice. It can act as a crucial mechanism for companies to communicate and disseminate information on their sustainability initiatives to a wide range of stakeholders (Benameur et al., 2024; Campa et al., 2020; Hsu et al., 2013; Monteiro et al., 2024; Stocker et al., 2020; Torelli et al., 2020).

Examining sustainability reporting may provide stakeholders with a valuable perspective on the extent of companies' efforts in achieving their corporate goals (Jamil et al., 2021) and illustrating firms' value on economic, social and environmental responsibilities concern (Al-Adeem, 2024; Monteiro et al., 2024). Prior literature has widely studied sustainability reporting in many parts of the world. For instance, Benameur et al. (2024) conducted bibliometric and content analyses examination on 1,053 Scopus articles to understand the evolution, trending concept and thematic development over the publication year 2000 to 2022. Among the themes under interest by prior literature was on the quality of reporting. Some assessed sustainability reporting by measuring the quality index and determining factors contributing to the quality disclosure.

In addition, Ali et al. (2022) investigated 71 empirical studies relating to sustainability disclosure in about 28 developing countries way back from 1983 until 2021. Their main objectives are to find out the determinants and motivations of the reporting undertaken by the authors when conducting their respective studies. Through a systematic evaluation and synthesis of relevant research, Ali et al. (2022) found evidence that the measurements used to assess the disclosure were based on examining the quantity and quality of the reports. Overall, the findings showed that 70.42% of this research under review focused on the extent of the sustainability disclosure using quantity measurement and only 29.58% measured the quality part.

A study by de Villiers and Alexander (2014) examined the sustainability reporting structure by comparing the disclosure between Australian and South African companies. The researchers count sentences to measure the quantity of the disclosure and seek for relevant information to determine the quality of the reports. The findings showed that most companies from both countries had the same disclosure patterns but differed in detailed contents. It can

be concluded that similar reporting templates are being used in both countries. However, companies remain to refer to their specific national rules and regulations that suit the surrounding communities.

Additionally, Ardiana (2019) focused on examining sustainability reporting by 219 companies listed in Fortune Global 500, which covers 34 countries from 21 business sectors. The study performed content analysis to determine the quantity and quality disclosure of the sustainability reporting. They found insufficient information reported, suggesting a low level of disclosure regarding stakeholder engagement. This finding is indicative of an inadequate understanding of transforming the sustainability practice into proper reporting. However, the researcher is only concerned with the determination of stakeholders and how companies engage them in sustainability activities.

There is an interesting study performed by García-Sánchez and García-Sánchez (2020). They aim to understand what kind of sustainability initiatives Spain companies deployed when facing the pandemic situation. From the content analysis method, they measure the reporting from quantitative and qualitative aspects. Further analysis indicates that the majority of the companies focused on economic activities, but some also tended to provide great assistance to society to ease the COVID-19 effects.

Meanwhile, Bakar et al. (2019) examined whether the issuance of the Sustainability Framework and Reporting Guide and Toolkits in 2015 affected the extent and quality of sustainability reporting of companies listed in Bursa Malaysia. Through content analysis, the findings posit that Malaysian companies' sustainability reporting disclosure is still at a low level and focus on reporting more on economic matters. The reports appear to include more qualitative information instead of quantitative evidence on the sustainable activities conducted by the companies.

A study by Haji (2013) assessed sustainability disclosures by Malaysian public listed companies over the years of financial crisis and relevant regulatory changes. The study used a self-constructed checklist to compare two selected years under investigation. The results revealed that the extent and quality of sustainability reports significantly increased. The result implies that companies respond to the crisis and changes by increasing relevant sustainability activities to avoid threats to companies' existence. Nonetheless, the study uses a self-constructed checklist for 23 items, which does not cover EES sustainability areas comprehensively.

Overall, the above prior studies have similar research contexts. All of them emphasise both quantity and quality aspects of sustainability reporting in which the majority of research was conducted in the stable and non-crisis moments. Conversely, Haji (2013) and García-Sánchez and García-Sánchez (2020) were taking into consideration previous economic recessions and pandemic crisis times. These indicate the usage of standard sustainability reporting measurement by prior literature and less study conducted during a crisis, especially in unstable economic conditions such as the COVID-19 outbreak.

## **2.2 Strategic Sustainability Reporting: A Mechanism for Crisis Response**

Several crises have shaken the world. Among the incidents are the Asian recession of 1997 to 1999, the global financial crisis of 2006 to 2012, and the latest COVID-19 pandemic occurrence. These adverse events severely impact various aspects of life, especially causing unstable economic conditions (Dias et al., 2016; Flammer & Ioannou, 2020). Due to this, companies suffer from fewer financial resources (He & Harris, 2020; Pinto et al., 2014) and began to cost-cutting business expenses to survive (Yelkikalan & Kose, 2012). In response, companies involved with less sustainability matters led to a reduction in transparency,

quantity, and quality of companies' sustainability reporting disclosure (Karaibrahimoglu, 2010; Rodolfo, 2012; Pinto et al., 2014). Nevertheless, Bell (2020) suggests that times of crisis are the ideal opportunity to express companies' concerns about stakeholders' preferences.

The COVID-19 pandemic crisis may prompt a shift in how businesses pursue their sustainability goals (García-Sánchez & García-Sánchez, 2020) as companies with limited financial resources find it challenging to decide which EES areas they should engage with (United Nations, 2020; Pinner, 2020; He & Harris, 2020; Burke, 2020; D'Auria & De Smet, 2020; Fishman et al., 2020). It is crucial to perform this priority action and select the proper strategy for conveying companies' preferred sustainable activities to the stakeholders through sustainability reporting. Deriving from sustainability reporting disclosure, stakeholders can evaluate whether the companies' efforts in responding to the crisis match up to their expectations, or fail to the point of threatening the companies' reputations (Coombs, 2007; Zharfpeykan & Ng, 2021).

A study by Herzig et al. (2012) examined sustainability reporting for the ten largest banks in Germany from 2008 to 2009. The findings indicate that the banks were more concerned with their business affairs during the crisis time compared to incorporating a sustainability agenda into their business operations. The results showed banks' prioritisation of their commitment, suggesting their incapacities in taking advantage of sustainability reporting as an effective tool to showcase responsible sustainability practices to stakeholders despite the crisis.

Another study elaborates on the adjustment of companies' participation in sustainability activities among the US companies during the previous economic crisis of 2008 to 2009. Bansal et al. (2015) found that companies were less involved with social activities, which required minimum time spent and less effort. This kind of activity falls under tactical sustainability initiatives. In contrast, the companies seem to shift their attention to strategic initiatives that consume more time and energy pertaining to employee matters, environment, and product quality issues. The results propose companies' preference towards sustainability areas during the uncertain economic condition.

Meanwhile, it is interesting to know how companies typically react during unstable economic conditions in crises. Wenzel et al. (2020) synthesised 13 research papers that offer strong empirical proof to understand companies' strategic responses to previous crises. From their study, they identified four types of strategies, namely *retrenchment action*, which is about companies' strategy to cut costs or cease part of their business operation during the crisis, *persevering action*, which is about companies continuing business activities through additional financing from companies' slack or borrowing, *innovating action* as an alternative approach in response to the crisis, and *exit action*, which is used to shut down all business operations. This study is able to provide guidance on available options for companies seeking potential responses to future crises.

In addition, Stocker et al. (2020) observed strategies concerning companies' engagement with stakeholders. The study proposes three types of quality engagement levels, i.e. 1) Level 1- stakeholder information strategy (to recognise and inform stakeholders), 2) Level 2 - stakeholder response strategy (to match with stakeholders' interests and demands), and 3) Level 3 - stakeholder involvement strategy (to establish good rapport and execute projects collaboration with stakeholders). The results show less companies concentrate on the highest quality level, which is the stakeholder involvement strategy. They rather adopted an information and response strategy in engaging with stakeholders in sustainability initiatives. Perhaps companies prefer to make less bonding with the stakeholders.

In devastating conditions, companies can adopt innovative action using their crisis experience to proactively upgrade the regular sustainability reporting into a further compatible



version (KMPG, 2020). This innovative action is a way of companies' strategic response to a crisis (Wenzel et al., 2020). A study by Mohd Zam et al. (2023) identified this transformed compatible reporting as strategic sustainability reporting practices. It acts as a communication platform for expressing what kind of sustainability strategy and initiatives companies engage with amid crisis time.

Previous studies give attention to examining the quantity and quality of companies' sustainability reporting in stable economic and prior crises (Ahmed Haji, 2013; Ardiana, 2019; Bakar et al., 2019; de Villiers & Alexander, 2014). Conversely, fewer studies highlighted sustainability reporting matters during the fragile moment in time of the COVID-19 crisis (García-Sánchez & García-Sánchez, 2020), especially concerning what kind of sustainability initiatives that companies conducted as the strategic response towards the crisis with restrained financial ability. The disclosure in sustainability reporting may resemble companies' stance on management approach regarding sustainable activities execution and stakeholders' concerns during the crisis (Mohd Zam et al., 2023). Pinto et al. (2014) mentioned that during financial distress, companies may reveal a reduction in sustainability reporting disclosure as they prefer to satisfy their interest in business survival, opposing stakeholders' expectations. However, some companies may choose to increase their disclosure. The intention is to become more visible to the public to gain continuous support and confidence to conserve their business image. Therefore, the following hypothesis is formulated:

H1: There is a significant change in the strategic sustainability reporting practices before and during the crisis period.

### 3.0 METHODOLOGY

#### 3.1 Sample Selection and Data Sources

This study examined the 2018 and 2021 annual reports or stand-alone sustainability reports of companies listed under Industrial Products and Services in Bursa Malaysia. The years 2018 and 2021 under study represent the period before and during the pandemic crisis. This study used a purposive sampling technique to select 60 samples (see Appendix 1) of public listed companies from the Industrial Products and Services industry that were considered non-essential businesses and might suffer financial distress due to the business operation restriction enforced by the government. Table 1 shows the number of samples according to the relevant sectors.

Table 1. Sample distribution by sector of Industrial Products and Services industry

Sector	No. of sample
Auto Parts	5
Building Materials	9
Industrial Engineering	6
Industrial Materials, Components & Equipment	13
Metals	15
Wood and Wood Products	12
TOTAL	60

The relevant data were collected from the companies' annual reports or stand-alone sustainability reports for the years 2018 and 2021. Both years represent the period before and during the pandemic crisis. About 120 annual reports or stand-alone sustainability reports were obtained from Bursa Malaysia's website. This study used content analysis to acquire related information and understand the companies' strategic sustainability reporting practices.

### **3.2 The Strategic Sustainability Reporting Practices Instrument**

Prior literature examined the quantity and quality of sustainability reporting (Ahmed Haji, 2013; Ali et al., 2022; Ardiana, 2019; Bakar et al., 2019; de Villiers & Alexander, 2014; García-Sánchez & García-Sánchez, 2020). However, this study assessed the type of strategy, quality, and quantity of strategic sustainability reporting practices disclosure by adopting a multidimensional checklist developed by Mohd Zam et al. (2023). This checklist consists of 49 items to measure the EES areas, which enable this study to discern what kind of disclosure strategy companies employ when conducting sustainable activities and preparing reports. Mohd Zam et al. (2023) developed the instrument from modification of the checklist and its quality and quantity measurements proposed by Jamil et al. (2021) and integrated it with the stakeholder engagement strategy (Stocker et al., 2020).

This first dimension of the instrument enables the study to understand companies' engagement with stakeholders when performing sustainability initiatives during the reporting period. Each item under the checklist was initially examined to check whether the relevant sustainability initiatives were being disclosed. Next, the disclosure was observed to determine what kind of stakeholder engagement disclosure strategy was being applied, either information strategy, response strategy, or involvement strategy.

The information strategy (IFS) is about companies' disclosure to inform any sustainability initiatives they performed during the crisis period. Secondly, a response strategy (RES) indicates the disclosure of sustainability initiatives that specifically meet and support stakeholders' demands. Thirdly, involvement strategy (IVS) is the disclosure of companies' engagement in sustainable activities involving collaboration and partnership initiatives with relevant stakeholders (Mohd Zam et al., 2023, p. 266).

After identifying the strategy, the disclosure of each sustainability initiative was further evaluated to consider the quality and quantity of the explanation. This second dimension was assessed according to four types of disclosure classification.

The disclosure of the initiatives usually has been explained either in general and brief qualitatively (GB); in detailed qualitative explanation (QL); briefly explained with quantitative or monetary evidence (QU); or in a detailed explanation of the sustainability initiatives engaged with further quantitative or monetary disclosure (QQ) (Mohd Zam et al., 2023, p. 266).

The detailed scoring for the combination measurement of both dimensions is mapped in the matrix developed by Mohd Zam et al. (2023), as in Fig. 1 This study fully adopted the matrix in measuring the strategic sustainability reporting practises by the sample companies. The matrix illustrates all potential pairing of stakeholder engagement disclosure strategy (IFS, RES, and IVS) in the Y-axis, and the quality and quantity disclosure (GB, QL, QU, and QQ) in the X-axis. Each pair yield a score ranging from 1 to 12 based on the corresponding 12 quadrants. The score for every sustainability initiative reflected the mapping results in low (scores 1 to 4), moderate (scores 5 to 8), or high (scores 9 to 12) levels of strategic sustainability reporting practices. Finally, the overall index reporting is computed for each company using total weightage calculation.

According to Mohd Zam et al. (2023), a score of 1 indicates that the company disclosed sustainability initiatives that did not specifically fulfil the stakeholders' demands, and the reporting was brief, with not more than five sentences. On the other hand, the highest score of 12 suggests that the firm reported sustainable activities in which they directly collaborate or partner with stakeholders according to their needs. The firm also provided comprehensive disclosure exceeding five sentences, which was supported by quantitative figures such as the total cost incurred and the number of stakeholders who benefited from the execution of the project.

		Quality and Quantity Disclosure					
		GB	QL	QU	QQ		
Stakeholder Engagement Disclosure Strategy	Involvement Strategy (IVS)	9	10	11	12	HIGH	Strategic Sustainability Reporting Level
	Response Strategy (RES)	5	6	7	8	MODERATE	
	Information Strategy (IFS)	1	2	3	4	LOW	
		Scoring					

Note: GB is disclosure in general and brief explanation of up to five sentences; QL is disclosure in more detailed narrative description of more than five sentences; QU is disclosure in brief reporting but supported with quantitative or monetary data between one to five sentences; QQ is more comprehensive qualitative reporting supported with quantitative or monetary data which exceeded five sentences.

**Fig. 1** Strategic Sustainability Reporting Practices Matrix (Mohd Zam, 2023)

### 3.3 Data Analysis

Descriptive statistics were first used to highlight the numerical differences between strategic sustainability reporting before and during the pandemic crisis. In addition, the Shapiro-Wilk test was applied to check the data distribution of the study and the p-value was found less than a 1% significance level. The result provides sufficient evidence to prove that the data is not normally distributed. Hence, the study performed a non-parametric Wilcoxon Signed Rank test supported by a Paired t-test to answer hypothesis 1.

## 4.0 RESULTS AND DISCUSSION

This study conducted the Wilcoxon Signed-Rank Test and paired t-test to determine whether there are significant changes in strategic sustainability reporting practices disclosures. Referring to Table 2, the Wilcoxon Signed-Rank Test results showed statistically significant changes in strategic sustainability reporting practices at a 1% level ( $z = 5.573$ ,  $p = 0.000$ ). Table 3 consists of results for Paired t-test that also reveals similar results of significant reporting changes for 2018 and 2021 with a significant level 1% ( $t = -6.2141$ ,  $p = 0.000$ ). These results indicate that companies' disclosure during the crisis increased compared to reporting before the pandemic crisis and supported H1. This result is consistent with the findings by Haji (2013).

Table 2. Wilcoxon Signed Rank test result

SSRP disclosure		N	Sum of ranks	z	Prob >  z
Disclosure 2021 – 2018	Positive	47	1653	5.573	0.0000
	Negative	5	141		
	Zero	8	36		
	Total	60	1830		

Table 3 also contains the descriptive statistics of the overall index sustainability reporting for 60 Industrial Products and Services companies. The lowest reporting index is 0.5357 for



both years. However, the highest overall index is 4.2143 for the year 2018 and 5.6071 for the year 2021. These results denote that the reporting level among the companies is between low (index 0.01-4.99) and moderate (index 5.00-8.99) levels for both years. The average index in 2021 is higher (2.3935) compared to the index for the year 2018 (1.8464). This result suggests that, on average, companies' overall reporting in 2021 during the crisis was much better than in 2018. Even though the average index for both years presents a low level indicating companies using information strategy, reporting in 2021 was a further detailed explanation with more than five sentences (refer to Fig. 1). These findings matched the study conducted by Bakar et al. (2019).

Table 3. Descriptive analysis for overall index and paired t-test for strategic sustainability reporting practices

Year	2018	2021
Minimum	0.5357	0.5357
Maximum	4.2143	5.6071
Mean	1.8464	2.3935
Standard deviation	0.9172	1.1504
Mean differences		0.5470
t-statistic		-6.2141***

Notes: N = 60

Significant at 1% level\*\*\*

As for Table 4, it indicates the summary disclosure level for companies before and during the crisis. The findings state that all 60 sample companies (100%) fell under low level disclosure in 2018. However, a slight improvement happened in 2021 when two companies (3.3%) were found to increase their overall reporting to a moderate level. Moreover, Table 3 shows that even though 58 companies (96.7%) maintained adopting the information strategy in 2021, the overall quality and quantity of the reporting improved as the mean reporting index was 2.3935, which is higher than 1.8464 in 2018. The finding suggests that, on average, companies disclosed information on sustainable activities more elaborately, exceeding five sentences in their sustainability reports. Nevertheless, none of the companies achieved a high level of disclosure.

Table 4. Overall strategic sustainability reporting practices level

Overall disclosure level	2018 (before crisis)		2021 (during crisis)	
	Frequency	%	Frequency	%
Low	60	100	58	96.7
Moderate	0	0	2	3.3
High	0	0	0	0

Table 5 reveals the distribution of strategic sustainability reporting overall index according to the sectors of the Industrial Products and Services industry, which are directly affected due to business operations restrictions during MCO. There were 35 companies that briefly explained their sustainability reporting within five sentences (index 0.01-1.99) in 2018, and it was reduced to 23 companies only in 2021. Meanwhile, there is also an increment in the number of companies that obtain the index 4.00-4.99. In 2018, only two companies disclosed better quality and quantity reports, which increased to four companies during the crisis year 2021. Ultimately, two companies have shifted to the response strategy in 2021. These results suggest that both companies had shown their stance to be more focused on meeting stakeholders' demands during the difficult time. However, the quality and quantity disclosure are still at the minimum stage. These companies are each from the Metals and Industrial

Materials, Components, and Equipment sectors. Both companies had chosen response strategy to disclose sustainability initiatives that specifically met the stakeholders' demands (refer to Fig. 1) when facing the pandemic crisis moment. The overall results validate the low reporting level among public listed companies in Malaysia, particularly those from this industry. This finding is consistent with the study by Haji (2013) and Bakar et al. (2019).

Table 5. Distribution of overall index of strategic sustainability reporting according to sectors

Reporting Level	Low (Information Strategy)				Moderate (Response Strategy)				High (Involvement Strategy)				Total
Overall index	0.01	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00	11.00	12.00	
	-	-	-	-	-	-	-	-	-	-	-	-	
	1.99	2.99	3.99	4.99	5.99	6.99	7.99	8.99	9.99	10.99	11.99		
<b>Sectors</b>													
<b>Year 2018 (before)</b>													
Auto Parts	5	-	-	-	-	-	-	-	-	-	-	-	5
Building Materials	7	2	-	-	-	-	-	-	-	-	-	-	9
Industrial Engineering	2	4	-	-	-	-	-	-	-	-	-	-	6
Industrial Materials, Components & Equipment	5	4	4	-	-	-	-	-	-	-	-	-	13
Metals	9	4	1	1	-	-	-	-	-	-	-	-	15
Wood & Wood Products	7	3	1	1	-	-	-	-	-	-	-	-	12
TOTAL	35	17	6	2	-	-	-	-	-	-	-	-	60
<b>Year 2021 (during)</b>													
Auto Parts	3	2	-	-	-	-	-	-	-	-	-	-	5
Building Materials	5	3	1	-	-	-	-	-	-	-	-	-	9
Industrial Engineering	1	2	1	2	-	-	-	-	-	-	-	-	6
Industrial Materials, Components & Equipment	2	5	5	-	1	-	-	-	-	-	-	-	13
Metals	7	5	1	1	1	-	-	-	-	-	-	-	15
Wood & Wood Products	5	5	1	1	-	-	-	-	-	-	-	-	12
TOTAL	23	22	9	4	2	-	-	-	-	-	-	-	60

The increase in disclosure in the period of the pandemic crisis in 2021 can be further explored by examining the index results according to EES areas. In Table 6, the overall index of strategic sustainability reporting is encouraging. The maximum and mean companies' reporting index for all EES areas rose in 2021 compared to 2018. The highest index of reporting was recorded in the economic area, which was 8.00 and 8.67 for the year 2018 and 2021, respectively. The related companies' reporting was considered at a moderate level.

They adopted a response strategy and provided detailed disclosures, enclosed with quantitative evidence in more than five sentences, explaining their sustainability initiatives relating to economic matters performed during the reporting years. This is similar to findings by Bakar et al. (2019) and García-Sánchez and García-Sánchez (2020) that found companies focus more on economic activities. As for the environmental and social area, there are also increases in the maximum index score from low to moderate level (4.86 to 6.57 index and 3.89 to 5.00) in 2018 and 2021, respectively. However, the disclosure of environmental initiatives' quality and quantity was more detailed than that of social initiatives.

Table 6. Scoring strategic sustainability reporting practices according to EES areas

EES area	N	Economic		Environmental		Social	
		2018	2021	2018	2021	2018	2021
Maximum	60	8.00	8.67	4.86	6.57	3.89	5.00
Minimum	60	0.00	0.00	0.14	0.14	0.44	0.5
Mean	60	2.43	3.18	1.93	2.74	1.72	2.13

## 5.0 CONCLUSION

This study examines the strategic sustainability reporting for Industrial Products and Services companies before and during the pandemic crisis. The focus is to understand the reporting level, which considers the type of companies' strategy and the quality and quantity of the disclosure. Overall, the study found that the reporting disclosure has changed over the years under investigation. On average, strategic sustainability reporting remains low, but the reporting quality and quantity disclosure are much better in the crisis year. Companies are mostly adopting an information strategy as a way to inform their ordinary sustainability initiatives with more explanation, which may not incur additional costs to them. This strategy is considered a company's strategy in expressing their response when facing financial difficulties due to MCO during the COVID-19 outbreak period. In addition, some companies managed to upgrade their reporting from low to moderate. They have begun to be more responsive to specific stakeholders' needs (responsive strategy) during the pandemic compared to before, especially in environmental and social areas. However, the disclosure's quality and quantity aspects were brief and general narrative. These actions demonstrate that companies have played a valuable role in being more empathetic towards the particular stakeholders' needs in facing challenges posed by the COVID-19 pandemic. Meanwhile, some companies were keen to remain at a moderate level by directly engaging in sustainable activities that satisfy stakeholders' demands in the economic aspect with more comprehensive information in both years' reports.

The whole results above imply the enhancement of companies' efforts to portray their concern to stakeholders by continuously engaging with sustainable initiatives that offer indicators of being good corporate citizens amid pressure events. However, on average, Industrial Products and Services companies were not ready to get closer to stakeholders in collaborating and partnering on sustainability projects with stakeholders during the crisis. Cost matters may become a barrier to companies struggling to survive, mainly in conditions of financial distress such as during the pandemic. Limited financial resources may limit the companies' ability to obtain high-level strategic sustainability reporting, restraining them from getting stakeholders' positive impressions and preferences.

The finding can assist stakeholders to determine a company's stance on whether it is willing to continue to engage in sustainability initiatives for long-term advantages or is more concerned with its immediate business survival during the crisis. Moreover, the results can provide self-checking to management in assessing which sustainability strategy and disclosure they may adopt, which might not jeopardise their ability to survive when facing

future crises. Furthermore, it provides insight for regulators to identify firms' proactive efforts reflected through strategies executed by companies in reporting their sustainability initiatives. Besides that, policymakers may consider the strategic disclosure elements in their enhanced future framework that can improve the functionality of sustainability reporting practices in any economic condition, even during crises.

This study limits the focus on strategic sustainability reporting for companies in the Industrial Products and Services industry, one of the various industries listed in Bursa Malaysia. Future studies should expand the scope of the population to consider other industries to provide a more appropriate understanding of strategy implementation and disclosure details in response to the crisis by public listed companies in Malaysia. Besides, future research should extend the study by examining factors that can influence strategic sustainability reporting practices, which would be useful for companies in managing future crises.

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## APPENDIX

### Appendix 1. List of 60 public listed companies from the Industrial Products and Services industry

1. A-RANK BERHAD
2. AJIYA BERHAD
3. ALCOM GROUP BERHAD
4. ANN JOO RESOURCES BERHAD
5. ANNUM BERHAD
6. ANZO HOLDINGS BERHAD
7. APM AUTOMOTIVE HOLDINGS BERHAD
8. ATTA GLOBAL GROUP BERHAD
9. AYS VENTURES BERHAD
10. BTM RESOURCES BERHAD
11. CB INDUSTRIAL PRODUCT HOLDING BERHAD
12. CHIN HIN GROUP BERHAD
13. CHIN WELL HOLDINGS BERHAD
14. CN ASIA CORPORATION BHD
15. DESTINI BERHAD
16. DOLOMITE CORPORATION BERHAD
17. DOMINANT ENTERPRISE BERHAD
18. EKSONS CORPORATION BERHAD
19. ENGTEX GROUP BERHAD
20. EVERGREEN FIBREBOARD BERHAD
21. FACB INDUSTRIES INCORPORATED BERHAD
22. FAVELLE FAVCO BERHAD
23. FOCUS LUMBER BERHAD
24. GLOBALTEC FORMATION BERHAD
25. HEVEABOARD BERHAD
26. HIAP TECK VENTURE BERHAD
27. HSS ENGINEERS BERHAD
28. JOE HOLDING BERHAD
29. KIA LIM BERHAD
30. KOBAY TECHNOLOGY BERHAD
31. KPS CONSORTIUM BERHAD
32. KUMPULAN H & L HIGH-TECH BERHAD
33. LEADER STEEL HOLDINGS BERHAD
34. LUSTER INDUSTRIES BHD.
35. LYSAGHT GALVANIZED STEEL BERHAD
36. MCE HOLDINGS BERHAD
37. MINETECH RESOURCES BERHAD
38. MINHO (M) BERHAD

39. MYCRON STEEL BERHAD
40. MYTECH GROUP BERHAD
41. OKA CORPORATION BHD
42. P.I.E. INDUSTRIAL BERHAD
43. PERUSAHAAN SADUR TIMAH MALAYSIA (PERSTIMA) BHD
44. PESTECH INTERNATIONAL BERHAD
45. ROHAS TECNIC BERHAD
46. RUBBEREX CORPORATION (M) BERHAD
47. SAPURA INDUSTRIAL BERHAD
48. SKB SHUTTERS CORPORATION BERHAD
49. SKP RESOURCES BHD
50. SOUTHERN STEEL BERHAD
51. TIMBERWELL BERHAD
52. TONG HERR RESOURCES BERHAD
53. TURBO-MECH BERHAD
54. UMS HOLDINGS BERHAD
55. UNIMECH GROUP BERHAD
56. V.S. INDUSTRY BERHAD
57. WATTA HOLDING BERHAD
58. WHITE HORSE BERHAD
59. WTK HOLDINGS BERHAD
60. WZ SATU BERHAD