

## Quantity and Quality of Environmental Disclosure by Environmental Sensitive Companies in Malaysia

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**Abstract:** This study examines the level of environmental information disclosure in the annual reports of 150 environmentally sensitive companies in Malaysia for the year 2012. Interpretative content analysis is used to examine the quantity and quality of the environmental disclosure against the global reporting initiative environmental performance indicators. The findings revealed that the level of environmental disclosure by sampled companies is limited and mostly in declarative form. Very few companies disclose comprehensive information in their annual reports. This study contributes to the current literature of environmental reporting and suggests regulators to strengthen the enforcement upon companies to report more comprehensive environmental information.

**Key words:** Environmental information, environmental sensitive companies, Malaysia, companies, disclose

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### INTRODUCTION

Corporate Social Responsibility (CSR) is one of the significant issues that confront modern-day businesses. CSR is referred to the process of communicating the social and environmental effects of organizations' economic actions to particular interest groups within society and to society at large (Tee *et al.*, 2007). CSR consist of three dimensional aspects which are economic, social and environmental aspects (Uddin *et al.*, 2008). CSR is the initiative of companies to seize responsibility for their operation impacts on social welfare, impact on the environment as well as on economics. CSR reports show companies' response to public pressure to be socially responsible. Currently, CSR reporting was voluntary in Malaysia. As a result, companies are free to adopt CSR reporting as a corporate communicating approach for earning public support.

One aspect of CSR is environmental initiatives by companies. In recent year, environmental issues have become a major social focus since public are more concern on environment. The public are more aware of environmental issues, at the same time stakeholders also demand more environmental disclosure by companies. Indeed, corporate information users such as fund managers urged for environmental disclosure to be mandatory to all companies in Malaysia (Said *et al.*, 2013). Environmental reporting practices have become known in consequence of numerous influence factors which included stakeholders' advantage, political and cultural conditions and pressures from various interest groups

(Sumiani *et al.*, 2007). Businesses have started to provide environmental disclosure in annual report, with a number of companies having separate environmental report and sustainability report (Ahmad and Sulaiman, 2004). Prior studies argue that companies have a tendency to provide more informative environmental disclosures in order to increase demand for their equity and debt and thereby lower cost of capital (Gelb and Strawser, 2001).

This study focuses on the environmental perspective by examining the environmental disclosure of environmental sensitive industries in Malaysia through analyzing their annual reports. An interpretative content analysis which based on the Global Reporting Initiative (GRI) sustainability reporting guidelines is applied in this study to assess the extensiveness of environment disclosures in companies' annual reports. Prior studies in Malaysia, for example, Manaf and coauthors and Khalid and coauthors classify industrial sectors namely plantation, construction, consumer products and industrial products as environmental sensitive industries. Environmental sensitive companies might have more environmental information as compared to companies in industries like banking and trading/services (Ahmad *et al.*, 2003). This is due to their activities may have greater effect on the environment (Deegan *et al.*, 2002).

Additionally, prior study revealed that environmentally sensitive companies likely to present more environment related information in their annual reports as compared to less environmental sensitive companies (Raar, 2002; Buniamin, 2012).

The level of environmental reporting practices in Malaysia is still in its infancy phase (Mokhtar and Sulaiman, 2012; Heng *et al.*, 2012). Even though the number of company disclosed environmental information is increasing, somehow the level of environmental reporting practices is rather low (Association Chartered of Certified Accountants (ACCA, 2002). Ahmad *et al.* (2003) found that majority of the environmental information reported in annual report was declarative in nature. ACCA (2002) in its report, "The State of Corporate Environmental Reporting in Malaysia" noted that the extent of environmental disclosure among Malaysian companies was little. Consequently, the introduction of the Malaysia Sustainability Reporting Awards (MaSRA) by ACCA in 2002 signifies the effort of the regulator to foster environmental reporting amongst companies in Malaysia. MaSRA was authorized by the Malaysian Department of Environment Malaysia (DOE) with the intention to recognize those companies that disclosed environmental information in annual report, raising awareness of companies in company transparency and to promote the voluntary adoption of environmental reporting.

In a nutshell, environmental reporting seems to be a "must" for companies in the future, even though in many business organizations and countries, adoption of environmental reporting is still relatively low (ACCA, 2002). Accordingly, this study aims to look at the current state of environmental disclosures specifically by environmentally sensitive companies.

**Social and environmental disclosure by companies in malaysia:** A considerable number of studies focused on the environmental disclosure in Malaysia context (Rashid and Ibrahim, 2002; Ahmad *et al.*, 2003, 2004; Sumiani *et al.*, 2007; Eljido, 2008; Alrazi *et al.*, 2009; Buniamin, 2012; Mokhtar and Sulaiman, 2012; Alazzani and Hussin, 2013; Ahmad and Mohamad, 2014, Ong *et al.*, 2016).

Ahmad *et al.* (2003) investigated the extent of environmental reporting by Malaysian companies listed under various industries. The findings indicated that only 32 companies (33.33%) reported environmental information while another 64 companies (66.67%) fail to report any environmental information. From the industry perspective, plantation sector (62%) was the highest proportion of companies which disclose environmental information, followed by construction sector (55%), technology sector (50%), properties sector (45%), industrial products (25%), consumer products (22%), trading and services (19%) and finance (10%). Generally, the degree of environmental disclosures in Malaysia was still low.

The researchers also conducted a study in 2004 to examine social and environmental disclosure of 138

companies in industrial products and construction sectors. The business operations of these companies had huge impact on the natural environment. Hence, such companies are expected to disclose more on social and environmental information in their annual reports in order to project a healthy public image. Findings showed that 38 companies (27.54%) presented some environmental disclosure while 100 companies (72.46%) fail to present environmental information. From the industry perspective, 10 construction companies (29.41%) disclosed some environmental information. The remaining 24 construction companies (70.59%) failed to disclose information on the environment. Total 28 companies (26.92%) from industrial products included environmental disclosure in annual report while researcher 76 companies (73.08%) did not disclose any information on environment. The authors asserted that the degree of environmental disclosures was still minimal. However, these two studies by Ahmad and Sulaiman were conducted >10 years ago. A new similar study to examine the current state of environmental disclosures is needed. The present study hence is important and timely.

Further research was carried out by Sumiani *et al.* (2007) to examine the environmental disclosure of the top 50 public listed companies in Malaysia and to discover the reporting manners of ISO-certified companies. The findings revealed that 13 ISO 14001 certified companies and another 24 non-ISO certified companies presented some form of environmental disclosures in annual reports. However, the disclosures were in descriptive and general form. ISO 14001 certification had some pressure towards voluntary environmental reporting behavior. External parties were more confidence with ISO 14001 certification and this certification further strengthen the evidence that the companies able to control over their daily business operations. Companies have to constantly improving their environmental performance as companies are obligated with all environmental rules and regulations. This study further indicated that the extensiveness of environmental reporting in Malaysia was rather low.

Alrazi *et al.* (2009) analyzed the extensiveness and quality of environmental reporting of 96 Malaysian public-listed companies for 3 years which included 1999, 2003 and 2006. The study revealed that environmental reporting by the company has improved from 13% from 47% in 1999-60% in 2003 and further increased to 67% in 2006. Nevertheless, the degree of environmental reporting and disclosure scores exhibited a low quality of disclosure. None of the company obtained a third party confirmation on the environmental information reported in annual report. Consequently, the researchers concluded that the environmental reporting among Malaysian companies was lacked of reliability.

A recent study by Buniamin (2012) examined the quantity and quality of environmental disclosure reported in annual reports year 2003 by 243 Malaysian companies. Findings revealed that only 28% of the companies involved in environmental reporting. The average of environmental sentences is 4.70 sentences while the average quality of the environmental information by company was as low as 3.24%. Moreover, it was revealed that larger companies and environmentally sensitive companies presented more information and provided higher quality of environmental disclosure. At the same time, companies with more environmental disclosure are also involved in better quality of environmental reporting.

Mokhtar and Sulaiman (2012) examined the extent of Government-Linked Companies (GLCs) in Malaysia report on the environmental information. Total sample of 47 GLCS was selected, comprising of 19 GLCs and 28 GLCs in environmentally sensitive industries and less environmentally sensitive industries respectively. The outcome demonstrated that the level of environmental disclosure was rather limited while the “accountability” and “visibility” aspects attached to GLCs. In addition, almost 30% of the GLCs did not disclose any environment related information. The study also found that there is no statistical distinction between the level of environmental disclosures by GLCs and non-GLCs and between environmentally sensitive industries and less sensitive industries.

There are several study examined the environmental disclosure of company in Malaysia. Alazzani and Hussin (2013) evaluated the environmental reporting in annual reports year 2009 of 8 oil and gas companies adjacent to the Sustainability Reporting Guidelines issued by the GRI. The findings revealed the companies made reasonable initiative in reporting environment related information in accordance with GRI Sustainability Reporting Guidelines.

A recent study by Ong *et al.* (2016) on 100 listed companies for the year 2009-2013 revealed that the quantity and quality of environmental disclosure for large companies are greater than small companies. Surprisingly, the results also showed the mean of quantity and quality of environmental disclosure for environmental sensitive companies are poorer than less environmental sensitive companies. The researchers concluded that Malaysia is still in an adaptation stage because a lot of companies in Malaysia were found do not disclose any environmental information in their annual reports.

Several studies examined the extensiveness of environmental disclosure in Malaysian context and concluded that the degree of environmental reporting in

Malaysia still in infancy phase (ACCA, 2002; Ahmad and Sulaiman, 2004). Additionally, companies reported most of the environmental information either in general or in descriptive forms (Sumiani *et al.*, 2007). However, these studies were old study. From the prior studies, it is known to the researchers’ knowledge, no studies examine on extensiveness of environmental disclosure specifically on environmental sensitive companies. Furthermore, low environmental reporting among Malaysian companies gave indication to both the regulators and accounting professional bodies to actively promoting environmental reporting. Perhaps with the introduction of the MaSRA award, disclosure level had somewhat improved. Therefore, this study is carried out to discover the current state of the environmental disclosure in terms of quantity and quality specifically on environmental sensitive companies in Malaysia. It contributes additional literature for the current literature on environmental reporting.

## **MATERIALS AND METHODS**

Given that current study is to explore the environmental disclosure in the companies’ annual reports, content analysis method is chosen to investigate the environmental disclosure by environmental sensitive companies in Malaysia against the GRI environmental performance indicators adopted from Alazzani and Hussin (2013)’s study. The procedures involve three steps. The annual reports were scrutinized to check the existence of environmental information, followed by spot and calculate the number of sentences of environmental information and lastly, assign disclosure score to the sentences that have been identified.

There are a number of ways to assess the quantity of disclosures; either measures the number of words (Eljayash *et al.*, 2012), sentences (Ahmad and Mohamed, 2014) and pages (Jaafar and Buniamin, 2004). These measurements barely look on the quantitative of the environmental information disclosed. Hackston and Milne (1996) suggested that sentences calculated are more precise than words since sentences can be used to convey meaning and thus the present study adopted accordingly. Meanwhile, the environmental disclosure quality was measured using study by Raar (2002) whereby the information was classified into seven categories. However, in this study, the authors revised it into four categories which include qualitative, qualitative and monetary, qualitative and non-monetary and combination of qualitative, monetary and non-monetary.

The sampling frame included in this study is the environmentally-sensitive companies. There are total 478 environmentally-sensitive companies which included

44 companies in construction industry, 132 companies in consumer products industry and 263 and 39 companies in industrial products industry and plantation industry respectively. However, a total sample of 150 listed companies on Bursa Malaysia (Malaysian Stock Exchange) as at 31st December 2012 was chosen from four abovementioned industries. The sample will be selected based on the basis of each industry ratio to the population. Accordingly, a total sample of 150 companies in which 14 companies in construction industry, 42 companies in consumer product industry, 82 companies in industrial product industry and 12 companies in plantation industry were collected.

**RESULTS AND DISCUSSION**

There are a total of 30 GRI environmental performance indicators which range from EN1 to EN30 (Appendix). They have been classified into seven sub-categories which include materials; energy; water; biodiversity; greenhouse gas; waste and others environmentally related information. Annual reports and stand-alone reports such as CSR reports and sustainability reports were reviewed. From the total of 150 sample companies, 116 companies (77%) disclosed environmental information while the rest 34 sample companies (23%) did not disclosed any environmentally related information.

Additionally, the location of environmental information being disclosed within the reports is also identified. Figure 1 shows the location of environmental information disclosure by companies within the selected industries. Most of the companies presented environmental information in CSR report (57%) followed by Statement of Corporate Governance (18%). 16% of the companies disclose the environmental information in Chairman Statement while the 9% disclose in other sections such as Other Compliance Report and Corporate Profile.

The number of sentences disclosed by sample environmentally sensitive companies for the year 2012 on the items of material, energy, water, biodiversity, greenhouse gas, waste and others is shown in Fig. 2. The chart shows that other environmental related information such as initiatives to mitigate environmental impacts (EN26) recorded the highest total number of sentences (78%), followed by biodiversity (9%), energy (5%), greenhouse gas (5%), waste (1%), materials (1%) and water (1%).

Table 1 shows the level of environmental information disclosure by companies for the year of 2012.

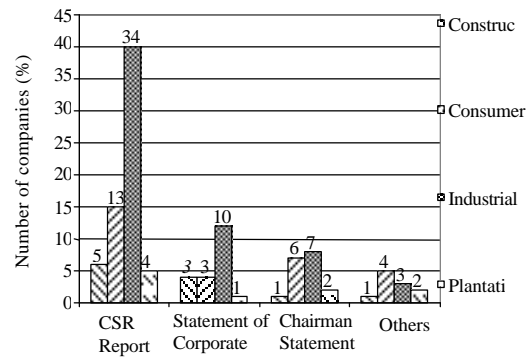


Fig. 1: Location of environmental information disclosure

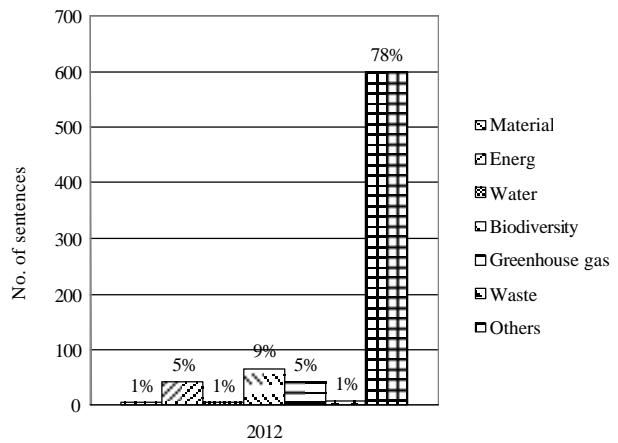


Fig. 2: Total environmental information disclosure

There are 2 GRI indicators under material sub-categories which included EN1 and EN2. Only four sentences on EN1 are disclosed while for EN2, no sentence is being presented. Fraser and Neave Holdings Berhad (F and N) from consumer products industry is the only company which made initiatives in presenting materials related information in their annual report. F and September 5, 2016 N optimizing packaging materials through innovation and technical feasibility and this result in significant reduce in packaging index of PET beverages while the production continues to rise.

Meanwhile, energy sub-categories consist of 5 GRI indicators, namely, EN3-EN7. None of the sampled company takes initiative to disclose information related to EN3 and EN4. Total of 7 sentences are presented in relation to EN5 which focus on initiatives on energy reduction by implement energy efficiency improvement programs. Meanwhile, 29 sentences and 10 sentences are being disclosed for EN6 and EN7, respectively. Malaysian Resources Corporation Berhad (MRCB) from construction industry was the company that contributes highest level of environmental information disclosure on energy

**Table 1: Total number of sentences of environmental information disclosure for the year 2012 according to industry**

Factors environmental information	Construction		Consumer products		Industrial products		Plantation	
	No. of sentences	Percentage	No. of sentences	Percentage	No. of sentences	Percentage	No. of sentences	Percentage
<b>Material</b>								
EN1	0	0	4	2	0	0	0	0
EN2	0	0	0	0	0	0	0	0
	0	0	4	2	0	0	0	0
<b>Energy</b>								
EN3	0	0	0	0	0	0	0	0
EN4	0	0	0	0	0	0	0	0
EN5	0	0	3	2	4	1	0	0
EN6	6	10	10	5	6	2	3	2
EN7	0	0	1	1	9	3	0	0
	6	10	14	8	19	6	3	2
<b>Water</b>								
EN8	0	0	0	0	0	0	0	0
EN9	0	0	0	0	0	0	0	0
EN10	0	0	2	1	2	1	0	0
	0	0	2	1	2	1	0	0
<b>Biodiversity</b>								
EN11	0	0	0	0	0	0	0	0
EN12	0	0	0	0	0	0	0	0
EN13	2	3	4	2	16	5	13	10
EN14	1	2	0	0	3	1	27	20
EN15	0	0	0	0	0	0	0	0
	3	5	4	2	19	6	40	30
<b>Greenhouse gas</b>								
EN16	0	0	0	0	0	0	0	0
EN17	0	0	0	0	0	0	0	0
EN18	0	0	16	8	12	3	13	10
EN19	0	0	0	0	0	0	0	0
EN20	0	0	0	0	0	0	0	0
	0	0	16	8	12	3	13	10
<b>Waste</b>								
EN21	0	0	0	0	0	0	0	0
EN22	0	0	6	3	0	0	0	0
EN23	0	0	0	0	0	0	0	0
EN24	0	0	0	0	0	0	0	0
	0	0	6	3	0	0	0	0
<b>Others</b>								
EN25	0	0	0	0	0	0	0	0
EN26	58	85	150	77	314	85	76	58
EN27	0	0	0	0	0	0	0	0
EN28	0	0	0	0	0	0	0	0
EN29	0	0	0	0	0	0	0	0
EN30	0	0	0	0	0	0	0	0
	58	85	150	77	314	85	76	58
<b>Total</b>	<b>67</b>	<b>100</b>	<b>196</b>	<b>100</b>	<b>366</b>	<b>100</b>	<b>132</b>	<b>100</b>

compared to others. MRCB is concerned with green building initiatives and emphasis the use of renewable energy. Table 1 also shows the number of sentences disclosed on water sub-categories in 2012. There are 3 GRI indicators being included in this category which consisted of EN8-EN10. An example of such disclosure was made by Top Glove Corporation Berhad.

“Approximately 25% out of the Jabatan Bekalan Air (Water Supply Department) water consumption is reused in the production line, housekeeping, toilet flushing and former cleaning. In the near future, Top Glove is pursuing to recycle more waste water from the production line with membrane filtration.” [Top Glove Corporation Berhad 2012 annual report].

Disclosure on water sub-categories is very limited. None of the company disclosed information regarding EN8 and EN9. Total of 4 sentences are disclosed by Fraser and Neave Holdings Berhad (Construction Industry) and Top Glove Corporation Berhad (Industrial Products Industry) on EN10.

In addition, five GRI indicators range from EN11 to EN15 are included in biodiversity sub-category. None of the company disclosed information related to EN11, EN12 and EN15. It showed that EN13 recorded the highest total number of sentences, followed by EN14. DRB-Hicom Berhad (Industrial Products Industry) and Kulim (Malaysia) Berhad (Plantation Industry) are the companies that presented the highest level of information on biodiversity compared to others.

DRB-Hicom Berhad is involved in tree planting and mangrove conservation activities as part of its biodiversity preservation initiatives.

“As neighbours to the Endau-Rompin National Park and a few forest reserves, we work with Wildlife Conservation Society (WCS) Johor, Malaysia to mitigate human-wildlife conflicts, in particular, elephants, at Sungai Tawing Estate and recently, Sindora Estate.” [Kulim (Malaysia) Berhad 2012 annual report]

Kulim (Malaysia) Berhad work with WCS to safeguard the areas with High Conservation Value (HCVs) nearby to their estates. Additionally, Kulim (Malaysia) Berhad cooperates with several environmental organizations to reduce poaching through intervention and enforcement, defending the boundary of the forest reserves nearby to their estates. No information related to greenhouse gas sub-category, i.e., EN16, EN17, EN19 and EN20 are disclosed by the sampled companies. The companies only disclosed information on initiatives to reduce greenhouse gas emissions (EN18) with total of 41 sentences. An extract of such disclosure by Hong Leong Industries Berhad was as follow:

“The biomass plant uses biomass fuel, mainly empty fruit bunches and fibre as fuel in substitution for medium fuel oil. With the replacement of medium fuel oil with biomass fuel, we are able to reduce the generation of certain greenhouse gases.” [Hong Leong Industries Berhad 2012 annual report]

Among the sample companies, Hong Leong Industries Berhad (Consumer Products Industry) disclosed the most sentences on the initiatives to reduce greenhouse gas emissions. Hong Leong Industries Berhad had successfully commissioned in biomass plant which result in reduction of certain greenhouse gas emission.

Next, waste sub-category consists of 5 GRI indicators range from EN21 to EN25. Only 6 sentences is presented regarding to EN22 and this mainly disclosed by Fraser and Neave Holdings Berhad (Consumer Products Industry). A bar chart on soft drinks manufacturing waste ratio from 2007-2012 is being presented in their annual report. Additionally, the company also included bar chart on Dairies Thailand solid waste ratio from 2009-2012. Additional explanation regarding the surge in the waste ratio also included in the annual report. However, none of the company disclosed information related to EN21, EN23, EN24 and EN25.

The last sub-category is other environmental-related information. Total of 5 GRI indicators range from EN26-30 are being classified under this sub-category. The sample companies present 598 sentences in which the information is related to EN26. Generally, companies presented environmentally related information, such as company policies, environmental program and practices they are engaged with and compliance with the applicable laws and regulations. Regarding EN27, EN28, EN29 and EN30, no information is being disclosed by the sampled companies.

From the analysis, companies focusing their environmental disclosure on several areas which included EN25 (Initiatives to mitigate environmental impacts of products and services), EN18 (Initiatives to reduce greenhouse gas emissions and reductions achieved), EN13 (Habitats protected or restored), EN14 (Strategies, current actions and future plans for managing impacts on biodiversity) and EN6 (Initiatives to provide energy-efficient or renewable energy-based products and services and reductions in energy requirements as a result of these initiatives). The average of environmental sentences disclosed in the annual report is 5 sentences.

The highest disclosure made by environmentally sensitive industries is on other environmental related information category. Most of the companies include the initiatives to mitigate environmental impacts in their annual reports. The companies made reasonable efforts to formulate environmental policy and carry out necessary actions to mitigate the impact of their operation on environment. The second highest disclosure identified is on initiatives to reduce GreenHouse Gas (GHG) emissions. As the world are aware with climate change issue, Malaysian government is taking steps to trim down GHG emissions by up to 40% by 2020 through the exercise of emissions trading programmes, GHG and energy taxes and regulations on energy efficiency and emissions. Unfortunately, there is only 15 companies (10%) in this study disclose GHG related information.

Ahmad and Sulaiman (2004) asserted that most of the companies did not have any environmental disclosure in annual reports. Manaf and coauthors concluded only 50% from the total of 100 companies disclosed environmental information in annual reports. In contrast, present study shows that only 23% of the sampled companies did not present any environmentally related disclosure. This result is consistent with Mokhtar and Sulaiman (2012) study which revealed almost 30% of the GLCs did not disclose the environmental information. Findings showed that companies gradually included environmental information in annual report over the period of time. However, the level of environment information disclosure is still unsatisfactory given that the companies are environmental sensitive companies.

Generally, the focus of environmental management by companies in Malaysia is regulatory compliance. Companies need to increase their concern on the environment beyond regulatory compliance. This is essential because stakeholders demand financial and non-financial information (Hooks *et al.*, 2002). Additionally as the corporate world is getting more competitive, companies have to meet consumer expectations and fulfill investors' needs in order to sustain in the market. Reporting ahead of existing legislative requirements was also an excellent risk management and prudence towards managing obligatory requirements in the future.

Concerning the quality of information disclosed by companies, the results revealed that the environmental information is mainly disclosed in qualitative form which means the sentences are descriptive in nature with total of 604 sentences. Majority of the company presents brief statement regarding their environmental initiative on how they mitigate environmental impacts of their products. For example, companies mitigate environmental impacts using greener resources (energy saving lamps, bio-degradable plastic bags) in their operations and adopt the choice of 3R lifestyle "Reduce, Reuse and Recycle" wherever possible in order to minimize the use of new resources. There is only one sentence being disclosed in the form of qualitative and monetary. PADINI Holdings Berhad (Consumer Products Industry) disclosed their initiative to preserve the biodiversity by engaged in monetary support.

"We also started our show of support towards the conservation of nature and wildlife with an initial donation of RM500.00."  
[PADINI Holdings Berhad 2012 annual report]

In addition, only two companies which are PADINI Holdings Berhad (Consumer Products Industry) and DRB-Hicom Berhad (Industrial Products Industry) make initiative to disclose their environmental information in comprehensive form with combination of qualitative, monetary and non-monetary. PADINI Holdings Berhad recycles a total of 2.1 tonnes of used paper and paper products. The proceeds amounting to some RM640.00 were used in part to fund some of the Group's philanthropic activities. DRB-Hicom Berhad disclosed their initiatives on biodiversity preservation by organized a tree-planting programme.

PUSPAKOM and the Group head office staff in Selangor and Wilayah Persekutuan planted 50 Cengal (*neobalanocarpus heimii*) trees in the Kepong Botanical Gardens on 13 February 2012. Cengal was chosen as it is one of the

most popular hardwoods and is being heavily logged throughout the country. Apart from the tree planting activities, PUSPAKOM also contributed RM20,000 in cash to FRIM for its research activities. [DRB-Hicom Berhad 2012 annual report]

The inclination towards qualitative form implies that the companies are committed to provide details thereof with a description of their practices. However, it is better the companies to incorporate monetary and non-monetary form of disclosure concerning their initiatives related to environment.

In sum, most of the companies report their environmental information in qualitative form. From the total of 30 GRI indicators, 20 of the GRI indicators are in quantitative form which included non-monetary and monetary dimensions. GRI indicators included non-monetary measure such as weight, volume and percentage in measuring the environmental information. The findings reveal that the companies disclosed most of the environmental information in the following indicators [EN6 (Initiatives to provide energy-efficient or renewable energy-based products and services and reductions in energy requirements as a result of these initiatives); EN13 (Habitats protected or restored); EN14 (Strategies, current actions and future plans for managing impacts on biodiversity); EN18 (Initiatives to reduce greenhouse gas emissions and reductions achieved) and EN26 (Initiatives to mitigate environmental impacts of products and services and extent of impact mitigation)]. The companies usually report their initiative to mitigate impact on environment in qualitative terms. This is consistent to study by Mokhtar and Sulaiman (2012) where the researchers revealed that companies disclose environment information in declarative form. In addition, Ahmad and Mohamed (2014) study concluded that companies presented general disclosures and very few companies disclose non-monetary and monetary environmental information.

## CONCLUSION

This study examined the environmental disclosure of 150 environmentally sensitive companies in Malaysia by analyzing their annual reports year 2012. The findings revealed that the extensiveness of environmental disclosure by environmentally sensitive companies in 2012 are still inadequate. The respective bodies such as the Ministry of Natural Resources and Environment of Malaysia, Securities Commission and Bursa Malaysia need to find ways to encourage companies in engaging

environmental protection initiatives and be transparent about the activities to wider stakeholders. Disclosure of information can avoid information asymmetry between reporters and corporate users and it reflects corporate accountability not only to shareholders but other stakeholders.

As there is no similar published research has been done in recent years, present study offers evidence of companies' environmental reporting practices and extends the current literature of environmental disclosure. It contributes more knowledge to the public on important of environmental information. In addition, this study is useful for environmentally sensitive companies, drawing their awareness on the importance to increase the extensiveness of environmental disclosure since investors nowadays are more concerned on environment issues and this may affect their corporate evaluations.

## APPENDIX

### GRI indicators

#### Materials:

- EN1: Materials used by weight or volume
- EN2: Percentage of materials used that are recycled input materials

#### Energy:

- EN3: Direct energy consumption by primary energy source
- EN4: Indirect energy consumption by primary source
- EN5: Energy saved due to consumption and efficiency improvements
- EN6: Initiatives to provide energy-efficient or renewable energy-based products and services, and reductions in energy requirements as a result of these initiatives
- EN7: Initiatives to reduce indirect energy consumption and reductions achieved

#### Water:

- EN8: Total water withdrawal by source
- EN9: Water sources significantly affected by withdrawal of water
- EN10: Percentage and total volume of water recycled and reused

#### Biodiversity:

- EN11: Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas
- EN12: Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas
- EN13: Habitats protected or restored
- EN14: Strategies, current actions, and future plans for managing impacts on biodiversity
- EN15: Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk

#### Greenhouse gas:

- EN16: Total direct and indirect greenhouse gas emissions by weight
- EN17: Other relevant indirect greenhouse gas emissions by weight
- EN18: Initiatives to reduce greenhouse gas emissions and reductions achieved
- EN19: Emissions of ozone-depleting substances by weight
- EN20: Nox, Sox, and other significant air emissions by type and weight

#### Waste:

- EN21: Total water discharge by quality and destination
- EN22: Total weight of waste by type and disposal method
- EN23: Total number and volume of significant spills
- EN24: Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I,II,III and VIII and percentage of transported waste shipped internationally

- EN25: Identify size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff

#### Others:

- EN26: Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation
- EN27: Percentage of products sold and their packaging materials that are reclaimed by category
- EN28: Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations
- EN29: Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce
- EN30: Total environmental protection expenditures and investments by typeSource: Alazzani and Wan-Hussin (2013)

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