SUSTAINABILITY REPORTING INITIATIVE IN THE MALAYSIA CONSTRUCTION INDUSTRY

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A project report submitted in partial fulfilment of the requirements for the award of Bachelor of Science (Hons.) Quantity Surveying

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DECLARATION

I hereby declare that this project report is based on my original work except for citations and quotations which have been duly acknowledged. I also declare that it has not been previously and concurrently submitted for any other degree or award at UTAR or other institutions.

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ABSTRACT

Construction industry has been recognised as the major catalyst for the development of a country and it has a major impact in sustainable development. Due to the increasing public concern regarding these issues, companies are being called upon to apply sustainability practices to the way in which they conduct their business and disclose it to the public including their positive and negative contributions. Hence, this research explores the sustainability reporting initiative in Malaysia construction industries. Specifically, the objectives are to identify sustainability activities undertaken by Malaysian construction companies, to investigate whether the reported activities are as per GRI G4 Guideline and to determine the level of disclosure in Malaysia's construction industry. Content analysis is employed in this research. Annual reports from 33 companies listed in Bursa Malaysia are used to analyse the sustainability activities which covered economic, environment and social Findings indicate that only 9% of the companies under study had disclosed on 50% to 75% of sustainability activities which mainly involved in the area of economic whereby the companies disclosed their financial performance and operations. Therefore, there is a low level of disclosure of sustainability reporting in Malaysia construction industry.

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LIST OF ABBREVIATIONS

ASEAN Association of Southeast Asian Nations

CSR Corporate Sustainability Reporting

GRI Global Reporting Initiative

OECD Organisation for Economic Co-operation and Development

UNGC United Nation Global Compact

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CHAPTER 1

INTRODUCTION

1.1 Background

Malaysia is categorised as a middle-income country. In recent years, Malaysia has been constantly growing among the ASEAN countries (Ismail et al., 2015). Its wealth of natural resources has been a main source of contribution to economic growth (Yeoh, 2015). Also, for the past twenty years, construction industry has been contributing to the development of social and economic as well as generating wealth for the country (Kamae, 2011). According to Abidin (2008), "Buildings and structures enabled mankind to meet their needs for shelter, to meet economic needs for investment and to satisfy corporate objectives." It improved people's standard of living, modernized a community and create a better future. However it is difficult to achieve sustainable development. In the Eighth Malaysia Plan (2001-2005), sustainable development arose as one of the main issue and according to Chan (2014), "the issue continues to be address in the Tenth Malaysia Plan (2011-2015) to ensure that future is not compromised as the country continues to develop."

Since construction industry has major impact on sustainable development, it does not only affect resources, land use and emissions of greenhouse gases (Pitt et al., 2009), it also indirectly affect the environment, communities and also public health (Holten et al., 2007). Pitt et al. (2009) once stated, "the built environment affects all human activity." Consequently, the construction industry has major impact on the three pillars of sustainability which are economic, social and environment (Warnock, 2007). Therefore, companies are being called upon to apply sustainable practices to

the way in which they conduct their business (Amato et al., 2009). One way to address sustainability issues is by reporting the sustainability performance of the organisation including their positive and negative contributions (Henderson, 2012). Business managers are require to determine "how their businesses can become socially responsible, ecologically sustainable and economically competitive in order to remain competitive" (Siegal et al., 2011).

1.2 Problem Statement

Although corporate sustainability reporting (CSR) is developing into global norm, however, there is a misconception of CSR in achieving sustainability. This is because CSR reporting has been criticised for its "lack of relevance and credibility" (Husillos, 2011). Moreover, many companies are attempting to increase their image by reporting their corporate philanthropic activities (Prathaban, 2005). Bursa Malaysia (2006) has highlighted that "this was at a time CSR was perceived and implemented by majority of the Malaysian companies as philanthropic initiatives with very little link to the business core or strategy" and since then Bursa Malaysia has been continuously promoting CSR as being a key to sustainability.

Therefore, this research is an attempt to explore the sustainable reporting initiative adopted by construction companies in Malaysia. It is conducted to observe whether Malaysian companies practices on CSR has discussed on the area of economic, social and environmental to the stakeholders. A total of 33 construction companies were studied to answer these questions: (1) What are the sustainability activities undertaken by Malaysia construction companies? (2) Are the activities reported in a proper manner in accordance to GRI's G4 reporting content? (3) What is the level of disclosure in Malaysia construction industry?

1.3 Research Aim and Objectives

The aim of this research is to explore the sustainability reporting initiatives in the Malaysia construction industry.

The objectives of this research are:

- To identify sustainability activities undertaken by Malaysia construction companies.
- To investigate whether the reported activities are as per GRI G4 Guideline.
- To determine the level of disclosure in Malaysia construction industry

1.4 Research Methodology

In this research, content analysis was employed using annual reports which include sustainability reports or corporate social responsibility reports from 33 construction companies listed in Bursa Malaysia. These reports were used to identify and compare sustainability activities undertaken by construction companies while GRI G4 Guideline was used to analyse the disclosure of these activities. To analyse the data, a scale was developed. The results obtained were sort using Microsoft Excel.

1.5 Scope and Limitations of Research

The scopes and limitations of this research are:

- Focuses on construction companies listed in Bursa Malaysia (Kuala Lumpur Stock Exchange)
- Focuses on the company's latest annual report

1.6 Report Structure

This report is divided into five chapters. Chapter 1 is the Introduction where in this chapter it roughly described on the background of research study, problem statement, research aim and objectives, research methodology, scope and limitations and the report structure.

Chapter 2 is the Literature Review where it provides the review on the information of this research study by past academicians and researchers. This chapter includes definition of sustainability and sustainable development, the three pillars of sustainability, sustainability reporting and sustainability reporting guidelines

Chapter 3 is the Research Methodology where this chapter includes the outline on the research method, unit of analysis and coding and data analysis.

Chapter 4 is the Findings and Discussions where this chapter presents the findings and analysis through the application of methods that has been explained in Chapter 3 as well as discussion on the findings.

Chapter 5 is the conclusion where this chapter draws conclusion on the overall study of the research and limitation as well as provide recommendations for further research.

CHAPTER 2

LITERATURE REVIEW

2.1 Definition of Sustainability and Sustainable Development

There is no universally agreed definition to what sustainability means due to it can be defined in many ways based on individual's perception in different situations and varying circumstances. However, the most common definition was defined by the United Nations World Commission on Environment and Development report in 1987 (WCED, 1987) as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

An alternative definition of sustainability was established by the World Business Council for Sustainability Development (WBCSD, 2000) which states that "sustainable development involves the simultaneous pursuit of economic prosperity, environment quality and social equity". Companies that aim for sustainability need to perform against the triple bottom line. Similarly, Hart and Milstein (2003) also states "A sustainable enterprise is one that contributes to sustainable development by delivering simultaneously economic, social and environmental benefits—the socialled triple bottom line."

A further expansion of the standard definition was indicated by The 2002 World Summit on Sustainable Development (United Nations, 2002) with the used of three pillars of sustainable development which are economic, social and environment.

2.2 Three Pillars of Sustainability

The term economic, environmental and social are explained as follows:

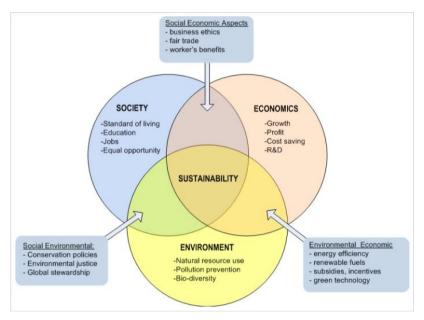


Figure 2.1: Three Pillars of Sustainability

(Source: Fedkin, Faculty & State, 2015)

2.2.1 Economic Sustainability

Economic sustainability indicates a system of production that meet the present consumption levels without compromising the future needs (Basiago, 1999). It means that economic sustainability requires a business or country to use its resources efficiently and responsibly in order to operate in a sustainable manner to produce an operational profit consistently. If a company operates without taking into account of sustainability and does not use resources efficiently, it will not be able to sustain its activities in the long term. According to Elkington (1997), economic sustainability refers to "the impact of organisation's business practices on the economic system." Such impacts are for example, job creation, local wages, public works and social services systems and other indicators that the business has positively contributed to local economic growth while maintaining corporate profitability.

2.2.2 Environmental Sustainability

Environmental sustainability means living within the limits of our natural resources by reducing or minimising the impact of any development activities to the ecosystem, thereby preserving environment resources for our future generations (Morelli, 2011) Construction industry is perceived as a major exploiter of natural non-renewable resources and a polluter of the environment whereby it contribute to environmental degradation through resource depletion, and generation of waste in the acquisition of raw material (Watuka et al.,2003). Ross (2009) notes that one of the UN Millennium Development Goals (MDGs) is 'Ensuring environment sustainability'. In the MDGs Report, the major global issues concerning environmental sustainability include carbon emission, climate change, pollution, and extinction of earth's natural resources, deforestation, overexploitation of fisheries, ozone depletion and water scarcity. The initiatives may include the organisation's usage of energy and water, discharge of emission and waste management and etc.

2.2.3 Social Sustainability

Social sustainability is the ability of society to achieve a good social well being continuously. Mckenzie (2004) define and conclude social sustainability to be, "a life-enhancing condition within communities, and a process within communities that can achieve that condition." From a company's perspective, social sustainability is about understanding and managing the positive and negative impacts of business activities on people and society. It also refers to "conducting a fair and beneficial business practices to the labour, human capital and to the community" (Elkington, 1997). The most common initiatives used to highlight the impact of business activities are through corporate social responsibility (CSR). According to Weingaertner & Moberg (2011), companies engaging in CSR allow a business to quickly respond to the needs of society whether they are economic, environmental and social problems. For example, many firms and government bodies viewed that the provision of work-life balance practices can help employees in balancing their work and family demands, which in turn lead to enhance employees productivity and

significant business improvements (Human Resources and Social Development Canada, 2006).

2.3 Sustainability Reporting

According to Aktas et al. (2013), "from sustainability perspective, corporations are being forced to redesign almost every part of their operations; from their strategies to objectives, to technologies, to product design, to production process, to business models, etc." In the previous section, we have defined what sustainability and sustainable development are as well as the three pillars of sustainability and from that it can be said that the idea of sustainability is changing not only in business cultures, but also changes people's habits, lifestyle and plans as well. Since there are currently a variety of global issues including climate change, pollution, human rights issues, poverty, inequality, economic crises, and etc., it therefore, had encouraged the development of ongoing public discourse about the role of business in society and the need for greater transparency, sustainability and responsibility in business (Ernst and Young LLP, 2016). In other words, the companies is to present what they do for 'sustainability'. Hence it leads to the need of sustainability reporting.

According to GRI (2004), sustainability reporting is defined as "a vehicle to assess the economic, environmental and social impacts of the organization's operations, products, and services, and its overall contribution to sustainable development". The terms "sustainability", "corporate social responsibility", "corporate sustainability", "environmental, social and governance (ESG)", "corporate accountability" reporting has been used interchangeably (Australian Parliamentary Joint Committee and Financial Service, 2006). Defining CSR or sustainability reporting is one of the major challenges in both corporate and academic fields. Reed (2014) explain that "CSR is linked to company's obligation to be accountable in its operation and activities to all stakeholders, with the purpose of achieving sustainable development in the economic dimension as well as in social and environmental dimensions" (Reed 2015). Roca and Searcy (2012) also suggest that the definition provided by WBCSD is similar which is "sustainable development

reports as public reports by companies to provide internal and external stakeholders with a picture of the corporate position and activities on economic, environmental and social dimensions." This means that sustainability reporting is an integral part of sustainable development to address sustainability issues.

2.3.1 Benefits of Sustainability Reporting

Sustainability reporting is a relatively new concept that has rapidly grown due to increased expectations for public disclosure about the role of business in society. One major benefits of sustainability reporting is that it acts as a corporate tool for communicating sustainability performance and impacts to stakeholders (Foronda, n.d). Clikeman (2004) argues, "When a company practices, documents and discloses its sustainable development activities to its stakeholders, the company will gain many benefits not usually associated with releasing data in an annual financial report." The key benefits of sustainability reporting are as follows:

Enhancing risk management. Sustainability reporting may serve as catalyst managing risk in the area of economic, social and environment and can reduced exposures to sustainability related risks such as floods arising from extreme weather or strikes arising from unsafe working conditions and these may cause the organisation to incur losses or costs (e.g. disruptions to production). Therefore, if an organisation proactively recognises and manages sustainability related risks, it can avoid and reduce cost impacts resulting from these risks. Apart from that, it can help an organisation to be readily responding to any emerging sustainability risks and regulations.

Promoting innovation and attracting new customers. As sustainability considerations increases, an organisation that recognises the opportunities and has the capacity to innovate will drive growth through new products, services and customers (Bursa Malaysia, 2015).

Maintaining a licence to operate- A "licence to operate" also known as "social licence to operate" refers to a local community acceptance or approval of a company's business operations It is an essential aspects for a company to develop and manage its operation in long term (Yates, 2013). Communities and various stakeholders are likely to be more supportive of organisations that engage and openly communicate their management of economic, environment and social matters

Securing capital. Researcher has specifies that reporting may well open the door to new and less costly sources of capital (Ernst & Young LLP, 2016). By reporting on sustainability initiative, company are able to convince potential sources of equity that they are competitive and lower-risks investment. According to Bursa Malaysia (2015), "local investor are beginning to consider sustainability factors in their investment decision-making processes and given the increasing focus by investors, improving sustainability performance and disclosure may provide organisations increased access to capital, locally and globally."

Improving productivity and cost optimisation. When sustainability efforts, such as employee engagement programs or health and safety programs is conducted, an organisation can expect to improve its attractiveness to recruit and retain top talent and enhance employee and supplier productivity. This can lead to long-term benefits such as customer attraction, improved reputations, stronger operating margins and optimised capital expenditure (UNEP, 2012).

Enhancing brand value and reputation. By incorporating sustainability as a business practices will not increase companies' brand value but also guarantee a long life for the business. Brand can be the engine towards a more sustainable world and they should be ahead of the market and create products and service that will be relevant to customer while at the same time helping them to live in a sustainable manner. This creates a positive influence on the environment and communities as well as generates dividends to shareholders through growing demand. A sustainable brand will also enhance a company's reputation and secure future earnings of stakeholder loyalty and thus increase brand value (Natsu, 2008).

2.3.2 Voluntary or Mandatory Sustainability Reporting

As previously mentioned, sustainability reporting is one of the initiatives for a company to determine its impact on the environment and society as well as on its economic. Each company that aware of these benefits had taken advantage of this mechanism for reporting their activities in the field of CSR. According to Todorova (2011), "companies do so voluntarily because it is considered useful and necessary to spend the required funds and resources to provide reliable insight and control over its operation." Meet et al. (1995) defines voluntary disclosure as "disclosures in excess of requirements which represent free choices on the part of company management to provide accounting and other information deemed relevant to the decision needs of users of their annual report." This means that the management can choose whatever information to report and determine on how relevant the information is to the person who will use to make decisions.

However, it is because of the voluntary nature of CSR as well as there is no single, recognised standard to be followed, there are differences in the content and quality of sustainability reports. According to Lydenberg et al. (2010), companies reporting on voluntary basis may choose to:

- Report in different time periods where some may report annually, biannually, some at irregular interval and some only once and then not at all.
- Report on different indicators even if the companies is in the same industries
- Report in different formats and using different metrics. If companies reporting
 on the same indicators, the data reported may covered different time periods,
 using different unit of measurements or choosing different benchmark against
 which to measure performance.

One example can be seen is in the findings of Joseph (2012) where he argued that "with the emphasis on voluntarism, sustainability reporting is in a transition stage and in some countries there are only some indicators that are revealed properly in the sustainability reports." This is agreed by Murguia and Böhling (2013) where they concluded that environmental and economic indicators are the least reported in some Argentinean firms.

There are some countries, however, has mandatory sustainability reporting such as Sweden and France. Whether CSR reporting remains voluntary or mandatory, the role of governments is not deniable (Sarna, 2016). This is because the laws and regulations outline how the sustainability reporting must be. González et al. (2004) had concluded that "there is a strong case for mandatory approach to CSR and governments use a combination of both voluntary and mandatory laws to achieve their public policy goals." Similar study conducted by Ioannou et al. (2012) found that when laws and regulation established the need for mandatory corporate sustainability reporting, social responsibility of business leaders increased as well as it can improve sustainable development, employee training and corporate governance.

As mandatory sustainability reporting research is limited, most literature review is based on assumptions and speculations (Sarna, 2016). Ligteringen (2010) has stated that "although sustainability reporting is voluntary but awareness that no longer it shall be completely voluntary and must be normal practices for everybody has been gaining force."

2.3.3 Sustainability Reporting Previous Studies and Practices

Previous studies have pointed out corporate sustainability reporting are used in order to manage reputation. Since sustainability reports are prepared on a voluntary basis, there is a possibility that certain aspects in the company's operation is visualised in the reports (Gray et al., 1996). Schilizzi (2002) provides similar point of view where "corporate sustainability is only a way for organisations to enhance their reputation." Fombrun et al. (1997) argue that "reputation produce tangible benefits; premium prices for products, lower costs for capital and labour, improved loyalty from employees, greater freedom in decision making and a cushion of goodwill when crises hits." Also, by conducting CSR related activities create a reputation showing that the company is honest and reliable (McWilliams et al., 2001).

Some researchers found that sustainability reporting does not only focus on the private sector but also public sector (Williams et al., 2011). This means that public sector should also be analysed in perspective of sustainability and it's reporting. It is found that public sector companies were mostly fixated on disclosing their environmental plan compared to social and economic disclosure (Gibson and Guthrie, 1995). However, Guthrie et al. (2008) states that "sustainability reporting in public sector is still lacking in delivering the impact of sustainable development to the organisation" while GRI (2004) claimed that "sustainability reporting in the public sector only focuses on sustainability strategies and the information does not reflect the overall organisation's sustainability performance." A study by Guthrie and Farneti (2008) on the sustainability reporting of seven Australian public sector organizations revealed that only 32% out of 81 elements within the GRI were used for reporting. The labour practice category was the most reported element that is 54% of the total possible elements that could have been reported.

Besides that, previous studies have shown findings on the website sustainability reporting in the private sector. It is revealed that there are more companies reporting on social information as compared to environmental information (Rikhardsson et al., 2002) as well as community or civic involvement (Esrock & Leichty, 1998). However, Gillet et al. (2008), in her study on a web analysis reporting using GRI indicator stated that most firms reported in environmental responsibility followed by economic and social information. According to Dutta and Bose (2007), environmental web reporting is still new and the level of disclosure is low in developing country such as Bangladesh.

Nayak and Venkatraman (2011) in their study mentioned that large companies disclosed more on the environmental pillar than small ones and that the disclosure on the economic and social pillar is the same between large and small companies. However, Rouf (2011) found that firm's size has no effect on CSR. According to Joshi & Gao (2009), activity of a company has an influence on the information disclosed by the companies in the industrial sector. Eccles et al (2012) explained that companies from the same sector are expecting to disclose the same way on sustainability.

A survey related to sustainability is conducted and the results show that most firms have difficulties in understanding on applying sustainability concepts especially issues relating to environment. However many firms have shown interest mostly in social and economic elements of sustainability (Sustainability Survey, 2011).

Anderson (1998) advocated that "corporate reports are the main communication vehicle between the company and investment community, hence, should include information, other than plain financial information, that would be interest to users of such information." A study done by Rajandran et al. (2014) determined how Chief Executive Officer (CEO) statement communicates the CSR performance. According to the survey done by KPMG (2002), "there is a continual increase in the proportion of companies issuing environmental and sustainability reports from 13% in 1993 to 25% in 2002." These reports are presumed to help companies to maintain their license to operate. Several studies such as Park (2004) and O'Dweyer et al. (2007) states that "these reports are able to serve the stakeholders, increasing demand for sustainability reports that represents what the companies have achieved and foreseen to achieve in the future." This is also agreed by Melvin (2003) where stakeholders require transparency in order to maintain their confidence in the company which will subsequently affect their decision making.

Besides that, sustainability reporting varies from country to country (Adams et al, 1998) and between developed and developing countries (Imam, 2000). A survey was done in western countries and it was found that companies set maximum importance on reporting human resource information such as employee numbers and remuneration, equal opportunity, disability policy and employee training (Gray et al.) Similarly Ratanajongkol et al. (2006) found that the level of corporate social reporting is increasing with more importance on human resources.

A research was done in South Africa on the extent of CSR disclosures in annual report among 115 companies revealed that approximately 50% of the companies has some disclosures, with human resources being the most popular followed by disclosures on community involvement and environmental performance (Savage 1994). Typical human resource disclosures include, pay, working conditions,

compensation and equal opportunities. Other social disclosures include community involvement (72%) and environmental disclosure (63%).

Tsang (1998) in a study of 33 public listed companies in Singapore revealed that CSR disclosures were mainly in the area of human resources and community involvement. Another study conducted by Andrew (1989) on 119 annuals reports of publicly listed companies in Malaysia and Singapore revealed that only 26% of the companies have some disclosure where human resource was the dominant theme. However, the author did not make any distinction between Malaysian and Singaporean companies and therefore one is unable to get a complete picture of the CSR disclosures in each individual country.

Le (2011) conducted a study on sustainability reporting in 33 large listed Vietnamese Companies. The research method used was the content analysis and GRI Guidelines were used to compare the result obtained. The study found that the most disclosed information of Vietnamese companies focuses on economic performance followed by the disclosure of social performance, labour practice or human resources information. It was found that the product responsibility and environment performance account for a very limited amount in CSR disclosure. More significantly, Vietnamese companies are unlikely to communicate about their human rights performance. According to Tran (2014), "indirect economic impact and procurement practices were the least reported indicators." In general, the CSR reporting is currently not the priority of a vast number of Vietnamese enterprises at all sizes (Ha, 2013).

A survey of CSR practices in Bangladesh conducted by Imam (2000) reported that all companies made some form of human resources disclosure, 25% community, 22.5% environmental and 10% consumer disclosure. The study concluded that the disclosure level was very poor and inadequate. Jose et al. (2013) concluded that more than 70% of companies under studied in India focussed on four core areas which are education, healthcare, community livelihood and infrastructure development and that disclosures on CSR finances and donation were too low. According to survey by Sustainability Reporting Practices and Trends (2012), the issues that are considered reported include initiatives related to materials, emission,

effluents and waste and biodiversity. Over 80% of Indian company reports on effluent discharge and waste management in their sustainability reports.

There have been a number of studies done by previous researchers pertaining to corporate sustainability reporting in Malaysia. One of the studies worth mentioning is by Teoh and Thong (1984) where they investigated CSR accounting and reporting from the perspective of developing country. It was found that the attitude of Malaysian companies towards corporate sustainability reporting is conservative. Their findings revealed that "CSR reporting lagged behind corporate social involvement and that attention was largely focussed on activities relating to employees and products." Other researchers such as Zain (1999), Ramasamy and Ting (2004) and Amran & Devi (2008) examined on the reasons for disclosure of corporate sustainability reports in Malaysia. The study done by Zulkifli & Amran (2006) in determining the level of awareness and perceptions towards corporate sustainability finds that the level is still low. According to Amran & Devi (2008), "Corporate sustainability is believed to be driven by government influence as well as the nation's commitment to Vision 2026." To date, there is however very limited study has been conducted on sustainability reporting initiative in Malaysian construction industry.

2.4 Sustainability Reporting Guidelines

There are numerous reporting guidelines that have been published for guiding companies to develop their sustainability reporting. Among these, there are three worldwide reporting guidelines at international level which are often adopted by companies and these are:

- The United Nations Global Compact
- The Organisation for Economic Co-operation And Development (OECD Guidelines for Multinational Enterprise)
- GRI (GRI's Sustainability Reporting Standards)

2.4.1 UNGC

The United Nations Global Compact was launched in year 2000 and it is the largest corporate sustainability initiative in the world with over 8,000 companies and 4,000 non-business participants based in over 160 countries. It consists of ten general principles which cover human rights, labour, environment and anti-corruption. According to UNGC (2014), "By incorporating the global Compact principles into strategies, policies and procedures and establishing a culture if integrity, companies are not only upholding their basic responsibilities to people and planer, but also setting the stahe for long-term success."

2.4.2 **OECD**

OECD Guidelines for Multinational Enterprises are recommendations formally developed and approved by government to multinational enterprises. OECD guidelines provide principles and standards of good practice consistent with applicable laws and internationally recognised standards. They address the CSR areas which cover disclosure, human rights, employment and Industrial Relations, environment, combating bribery, bribe solicitation and extortion, consumer interest, science and technology, competition and taxation. These principles and standards draw on the same core values in the area of human rights, labour standards, the environment and anti-corruption as the UN Global Compact. The guidelines aims to promote positive contributions to multinational enterprises can make to economic, environmental and social and to ensure MBE's act in harmony with policies of countries in which they operate and with societal expectations.

2.4.3 GRI G4

The Global Reporting Initiatives (GRI) guidelines, which "have become the de facto international reporting standards" (MacLean et al., 2007). According to Moneva et al.

(2006), "the GRI sustainability reporting guidelines were developed to help organisations to report on their environmental, social, and economic performance and to increase their accountability." This was also stated in GRI website that GRI's sustainability reporting framework contains reporting principles and performance indicators to measure and disclose the economic, environmental and social performances. According to Kercher (2007), "The GRI assembled in 1997 was established to improve sustainability reporting practices while achieving comparability, credibility, timeliness and verifiability of reported information." The first released guidelines was in June 2001, which was then revised in 2002 and released G3 guidelines in 2006 followed by G3.1 guideline in 2011. In May 2014, GRI's fourth generation of sustainability reporting guidelines G4 was launched. The GRI guidelines are becoming a universally accepted method to harmonise CSR reporting in various jurisdictions. According to GRI website, more than 1500 global organisations incorporate the GRI's guideline in their reporting.

2.4.4 Comparison between GRI, UNGC and OECD Reporting Content

Table 2.1: Reporting Content between GRI, UNGC and OECD

Category	GRI	UNGC	OECD
Economic	4	-	1
Environment	12	12	12
Social			
Labor Practice and Descent Work	8	1	3
Human Rights	10	4	4
Society	7	3	7
Product Responsibility	5	-	1

(Source: GRIG4 part1 reporting principles and standard disclosures, 2014.)

Table 2.1 shows the comparison of reporting content between GRI, UNGC and OECD (Refer to Appendix A for more details). As shown above, GRI and OECD reporting content focuses on economic, environment and social while UNGC reporting content focuses on environment and social. From the table, only UNGC reports three out of four of the social sub-categories which are Labor Practice and

Descent Work, Human Rights and Society while GRI and OECD reports on all the social sub-categories.

Under the sub-category of Labor Practice and Descent Work, UNGC reports only on labor/management relationship, OECD reports on occupational health and safety, training and education and labor practices grievance mechanism while GRI reports on all of the aspects (Refer to Appendix A). Under the sub-category of Human Rights, UNGC and OECD reports only on non-discrimination, freedom of association and collective bargaining, child labor and forced or compulsory labor while GRI reports on aspects (Refer to Appendix A). Under the sub-category of Society, UNGC reports on local communities, anti-corruption and public policy while OECG and GRI reports on all aspects (Refer to Appendix A). Under the sub-category of product responsibility, OECD reports only on customer health and safety while GRI reports on all aspects (Refer to Appendix A).

CHAPTER 3

METHODOLOGY

3.1 Introduction

Research is defined as a systematic and scientific search for relevant information on a particular topic. Redman and Mory (Kothari, define research as a "systematised effort to gain knowledge." On the other hand, Burn (1997) defines research as "a systematic investigation to find answers to problems." Therefore, the purpose of research is to search for answers to questions through the application of scientific procedures. Research methodology is a method to systematically solve research problem. It acts as a guideline to ensure that the research is conducted in proper and well-manner way. This chapter organised around three issues which are the research method, unit of analysis and coding and data analysis.

3.2 Research Method

Content analysis has become a commonly used method of analysis in a variety of settings such as linguistics, social physiology, communication and organisation studies (Duriau et al., 2007). Kripendorff (2004) defined content analysis as "a research technique for making replicable and valid inferences from the texts (or other meaningful matter) to the context of their use." As its name implied, it is the collecting and analysing of content of text. Content analysis allows us to perceive and uncover the content (words, meanings, symbols, drawings, pictures and any

communicated messages) within a communication source (books, newspaper, advertisement, articles and any other sources) (Nueman, 2014).

In this research, content analysis is conducted using annual reports that includes sustainability reports or corporate social responsibility reports from 33 construction companies which are listed in Bursa Malaysia. Table 3.1 shows the list of companies that were involved in this research.

Table 3.1: List of Companies Involved

No	Companies	Annual Report Year
1	Ahmad Zaki Resources Berhad	2015
2	Bina Puri Holdings Bhd	2015
3	Crest Builder Holdings Berhad	2015
4	DKLS Industries Berhad	2015
5	Econpile Holdings Berhad	2016
6	Ekovest Berhad	2016
7	Fajarbaru Builder Group Bhd	2016
8	Gabungan ARQS Berhad	2015
9	Gadang Holdings Berhad	2016
10	Gamuda Berhad	2016
11	Ho Hup Construction Company Berhad	2015
12	Hock Seng Lee Berhad	2015
13	IJM Corporation Berhad	2016
14	Ikhmas Jaya Group Berhad	2015
15	Ireka Corporation Berhad	2016
16	JAKS Resources Berhad	2015
17	Kerjaya Prospek Group Berhad 2015	
18	Kim Lun Corporation Berhad 2015	
19	Kumpulan Jetson Berhad 2015	
20	Lebtech Berhad 2015	
21	Muhhibah Engineering (M) Bhd 2015	
22	Merge Energy Bhd	2016
23	Mitrajya Holdings Berhad	2015
24	ML Global Berhad	2015
25	MTD ACPI Engineering Berhad	2016
26	Mudajaya Group Berhad	2015
27	Pintaras Jaya Berhad	2016
28	Persona Metro Holdings Berhad 2015	
29	Prinsiptek Corporation Berhad 2015	
30	Protasco Berhad	2015
31	Puncak Niaga Holdings Berhad	2015
32	TSR Capital Berhad	2015
33	WCT Holdings Berhad	2015

Annual reports are used in this research because it is often used as the principal of focus of reporting to stakeholders. According to Campbell et al (2000), "annual report is the most widely distributed source of all public documents produced by a company" and "it can be accepted as an appropriate source of a company's attitudes towards social reporting." This is also agreed by Bouten et al. (2011) where annual reports plays an important role in corporate accountability activities as it is prevailing and often can be directly accessible in the company's website and it is one of the important tools used by companies to communicate with the stakeholders.

3.3 Unit of Analysis and Coding

Content analysis involves the selection of unit of analysis. The unit of analysis vary depending on the nature of data and the purpose of research (Neuman, 2014). It can be a word, a letter a sentence, paragraph, theme, entire article and so forth. Coding the unit of analysis into a content category is known as coding. Coding is a set of instructions or rules describing how to observe and record content from text (Neuman, 2014). Prasad (n.d.) states that "a coding resembles a survey questionnaire and contains different dimensions of the communication content to be coded" and it depends on the unit of analysis chosen. According to Guthrie et al. (2004) "in order to increase the reliability in recording and analysing data, first, selecting disclosure categories from well-grounded relevant literature and clearly define them and second, establish a reliable coding instrument with well specified decision categories and decision rules."

In this research, the unit of analysis used was theme. It was done by reading and highlighting the activities disclosed by the companies relating to the theme (Level 2) and coding them into three (3) main categories (Level 1) which are economic, environmental and social and these were done manually. Table 3.2 shows the list of category (Level 1) and theme (Level 2) to be coded. These themes were developed using the GRI G4 guideline as a framework.

Table 3.2: List of Category (Level 1) and Theme (Level 2) to be coded

Categories (Level 1)	Theme (Level 2)
Economic	
	Economic Performance
	Market Presence
	Indirect Economic Impact
	Procurement Practices
_=	_
Environment	
	Effluents and Waste
	Energy
	Emissions
	Products and Services
	Compliance
	Water
	Biodiversity
	Materials
	Transport
	Overall
	Supplier Environmental Assessment
	Environmental Grievance Mechanisms
Social	
	Society
	Labor Practices and Descent Work
	Product Responsibility
	Human Rights

Whereas, Figure 3.1 shows the coding sheet that was prepared to record the activities disclosed by the companies (Refer to Appendix B for the sample of activities recorded).

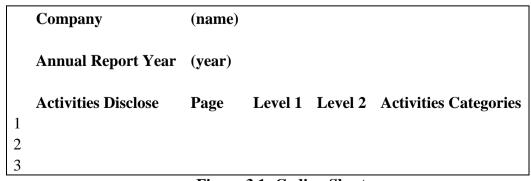


Figure 3.1: Coding Sheet

3.4 Data Analysis

3.4.1 Descriptive Statistic Method

Descriptive statistic method would be used to analyse the data collected from the content analysis. It provides a general and overall view of the results and it can be present in the form of graph, table and histogram. Descriptive statistic method used either percentage or contained actual number to summarise the data collected (Naoum, 2007).

In this research, the data collected are inserted in the coding sheet prepared and analysis of the data is done manually from the coding sheets. A scale is developed to examine whether a company disclosed the theme or categories stated in Table 3.2. A score of (0) indicates that the report does not disclose the theme or category whereas one (1) indicates the report discloses the theme or category. The results obtained from coding sheets are then sort using Microsoft Excel.

The overall processes of obtaining data from the annual reports are as follows:

- i. The entire annual report is read in order to understand the basic of the reports.
- ii. Coding was done by identifying information and categorising the information into its theme manually
- iii. Each theme that was disclosed by the company was rated using a scale of zero or one.

CHAPTER 4

RESULTS AND DISCUSSION

4.1 Introduction

This chapter will present the analysis of data collected from 33 companies' annual reports as well as the discussion on the findings. The data collected were based on content analysis using theme and sorted them into 3 categories which are economic, environment and social.

4.2 Findings

Table 4.1: Number of Companies Disclosing on All Sustainability Categories (N=33)

Disclosure on all 3 categories	Number of Companies (%)
YES	22 (67%)
NO	11 (33%)

From Table 4.1, it is revealed that 11 companies did not disclosed on all the sustainability categories and is denoted by NO. This means that 33% of the companies probably disclose either one or two of the three sustainability categories in their annual report. The remaining percentage represents companies that disclosed on all three sustainability categories in the annual report and is denoted by YES in the table above.

Table 4.2: Disclosure of Sustainability Categories and Indicators in Annual Report of Companies

Categories	Indicator	Percentage of companies (%)
Economic		40.00
	Economic Performance	19.41
	Market Presence	18.24
	Indirect Economic Impact	1.76
	Procurement Practices	0.59
Environment		24.00
	Effluents and Waste	7.16
	Energy	4.21
	Emissions	3.37
	Products and Services	2.53
	Compliance	2.11
	Water	1.68
	Biodiversity	1.68
	Materials	1.26
	Transport	0
	Overall	0
	Supplier Environmental Assessment	0
	Environmental Grievance Mechanisms	0
Social		36.00
	Society	15.65
	Labor Practices and Descent Work	15.65
	Product Responsibility	3.65
	Human Rights	1.05

Table 4.2 summarised the disclosure of sustainability categories and indicators in the annual reports by construction companies listed in the Bursa Malaysia. Overall, it can be seen that the major part of the information reported is on the economic category (40%), followed by social category (36%) and environment category (24%).

Under the Economic category, it is shown that almost all of the companies focus their reporting on economics performance (19.41%) and market presence

(18.24%). The least reporting indicators under economic category will be indirect economic impact (1.76%) and procurement practices (0.59%).

Under the Environmental category, the three highest reporting indicators are effluents and waste (7.16%), energy (4.21%) and emissions (3.37%) while the least reporting indicators are product and services (2.53%), compliance (2.11%), water (1.68%), biodiversity (1.68%) and materials (1.26%). It is shown from Table 4.2 that there are no companies that report on transport, overall, supplier environmental assessment and environmental grievance mechanisms

Under the Social category, it can be seen that society (15.65%) and labour practices and descent work (15.65%) were the two most reported indicators while product responsibility (3.65%) and human rights (1.05%) were the least reported indicators.

Table 4.3: Sustainability Activities Related to Business Operation and Corporate Social Responsibility

Categories	Activities Related	Percentage of companies (%)
Economic		40.00
	Financial Performance	20.31
	Operations	19.69
Environment		24.00
	Environment Management	
	Initiatives	15.48
	Green Development	4.65
	Environmental Policies	3.87
Social		36.00
Labor Practices and		
Descent Work		15.65
	Work-Life Balance	5.22
	Trainings & Development	4.56
	Occupational Health and Safety	3.48
	Diversity and Equal Opportunity	2.39
Society		15.65
•	Donations & Sponsorships	4.85
	Education	4.19
	Social Welfare and Local	
	Community Services	3.75
	Healthcare	1.76
	Disaster Relief Assistance	1.10
Product Responsibility		3.65
FJ	Quality Management	2.03
	Customer Satisfaction	1.22
	Customer Privacy	0.41
Human Rights		1.05
	Security Practices	1.05

Table 4.3 shows the sustainability activities undertaken by construction companies. The activities studied in the annual reports will be divided into three categories that are economic, environmental and social. As for social category, the activities are

group further into Labor Practices and Descent Work, Society, Product Responsibility and Human Rights.

Overall, it can be seen that nearly all companies undertake activities related to economic category which is by disclosing their Financial Performance (20.31%) followed by Operations (19.69%) to all stakeholders. It is shown in Table 4.3 that the highest activities taken by the companies for the environment category are related to Environment Management Initiative (15.48%) followed by Green Development (4.65%) and Environmental Policies (3.87%).

Under the Social Category, for Labour Practices and Descent Work, it is found that there are 5.22% of companies take activities relating to Work-Life Balance 4.55% on Training and Development, 3.48% on Occupational Health and Safety and 2.39% on Diversity and Equal Opportunity. For Society, there are 4.85% of companies take activities related to Donation & Sponsorship, 4.19% related to Education, 3.75% related to Social Welfare, 1.76% related to Healthcare and 1.10% related to Disaster Relief Assistance. For Product Responsibility, there are 2.03% companies' take activities related to Quality Management, 1.22% on Customer Satisfaction and 0.41% on Customer Privacy. For Human Rights, there are 1.05% of companies who take activities relating to security practices.

Table 4.4: Number of Indicators Disclosed by Companies (N=33)

Percentage of Companies (%)
42.00
49.00
9.00
0

From table 4.4, it is revealed that there are no companies disclosing on 16 to 20 indicators. However, there are 42% of companies reporting on range of 0 to 5 indicators, 49% on 6 to 10 indicators and 9% on 16 to 20 indicators.

4.3 Discussion

Results from content analysis of 33 companies were revealed in the previous sections. Firstly, it can be concluded that the companies under studied are adopting the nature of voluntary reporting and that is why there are differences in the content and quality of annual reports (Lydenberg et al, 2010), where some companies (67%) reported on all sustainability categories while some companies (33%) reported on one or two sustainability categories. Since these companies seem to disclose whatever they considered important and relevant to the stakeholders (Meet et al., 1995), it can be said that the company reveals only some of the indicators properly (Joseph, 2012).

When reporting on sustainability, companies generally produce reports using different guidelines. Therefore, in this study, the analyses of disclosures as per the GRI G4 guideline.

By category, it is found that the level of environmental disclosure is disgracefully low compared to economic and social disclosure. This means that the companies are not prioritising environmental issues (Sustainability Survey, 2011). And in fact the theory of Nayak and Venkatraman (2011) who considered that "large companies disclose significantly more on the environmental sustainability than the small companies and that disclosure on the economic and social sustainability is the same" was rejected. However, Rouf, (2011) finds that firm's size has no effect on CSR disclosure. Joshi & Gao (2009) argued that the sector of activity could influence the information that the companies disclose as company does not have the same requirements according to their activity. Since the companies under this study came from the same sector, the companies are expected to disclose the same way on sustainability (Eccles et al., 2012). However, based on the content analysis done, it is revealed that the companies did not disclose on the same information for each of the category and indicator.

By indicators, under economic category, it was revealed that the highest disclosure indicator was economic performance. This finding is similar to Le (2011) in his study of CSR disclosure practices in Vietnamese companies. Based on the

analyses in Table 4.3, the economic activities undertaken by these companies are by disclosing to stakeholders on their financial performance and operations in the annual reports. Anderson (1998) states that the corporate reports are the main communication vehicle between company and community hence should include financial information as well as other information that would be interest to users of such information. In this research, the financial performance does not include information of financial statements instead it is the financial information or the key financial highlights of the Group's business operation located at the Chairman's Statement. An example of statement by ARZB is as follow:

"For 2015, the Group recorded a revenue of RM715 million (2014: RM662.4 million), a profit before tax of RM32.1 million (2014: RM25.7 million). In terms of growth, the Group recorded an encouraging year on year growth of about 8% in terms of revenue and 25% in terms profit before tax. In terms of contribution, the Engineering and Construction Division continues to be the main driver for the Group with revenues of RM644.2 million (2014: RM601.7 million) representing 90% of total Group consolidated revenue..." (ARZB, annual report 2015)

The operations mostly disclosed in the annual reports were the companies' completed, on going and current construction and infrastructure project, new projects secured, acquisition and launching and sales of development. An example of statement by Crest Builder is as follow:

"During the year, we had secured a construction project that was awarded by UDA Holdings Berhad on Jalan Sultan Ismail. The contract is in respect of the construction for the super-structure works of a 30 storey serviced apartments with 1 level podium and 8 levels of car park which started work in March 2015." (Crest Builder, annual report 2015).

Tran (2014) mentioned that the indirect economic impact and procurement practices seemed not to be taken into considerations. This is the reason why information concerning indirect economic impact and procurement practices were the least reported indicators in this study.

The most reported environmental indicator is effluents and waste. As the companies under study are from the construction industry, the construction activities generate a large amount of waste while contributing to socio-economic development (Watuka et al.,2003). This is why most companies reported thoroughly on effluents and waste indicator where information disclosed focuses on minimising construction waste as well as the incorporation of waste management practices in their business operations and workplace. As seen from Table 4.3, most companies took up environmental management initiatives as part of their CSR activities to address the current environment issues arising from construction activities. These include conservation and preservation of water, energy, effluents and waste, biodiversity and emissions. This finding is consistent to the analysis from Sustainability Reporting Practices and Trends (2012). Since, the disclosure of effluents and waste is by far the most prevalent of all environment indicator, the most popular activities taken by these companies to manage waste are usually recycling and reuse of resources. An example of managing waste statements by PMBH is as follows:

"As part of our Green 5-S programme, we practice 4R (Reduce, Reuse, Recycle and Refuse) where we reduce waste generation ... We also salvage and reuse demolition waste such as rocks, wood plank, and cement blocks. We also segregate and recycle all other discarded materials such as paper boxes, wrappers and wooden trays, among other materials." (PMBH, annual report 2015)

In terms of the social category, it is found that the highest reporting indicators by these companies are on labour practices and descent work (15.65%) and society (15.65%). This finding is to Tsang (1998) study of 33 public listed companies in Singapore where CSR disclosure were mainly in the area of human resources and community involvement.

For labour practices and descent work, activities undertaken by companies related to work-life balance is the highest. According to WBCSD, improving the quality of life of the work force as well as their family is one of the important factors to achieve social sustainability and subsequently sustainable development. By supporting a positive work-life balance can increase employee's performance and

productivity. This is agreed by Human Resources and Social Development Canada (2006). In this research, the activities that were discovered are as follows:

- Recreational activities such as outings, local and international trips, birthday celebrations, festive celebrations, family days, departmental gatherings.
- Health and Wellness such as establishing sport clubs, sport competitions, employees participation in marathon events, annual health screening examinations, gotong-royong
- Flexible working arrangement such as flexible working hours, telecommuting, work as a part timer
- Enhanced leave benefits such as familycare leave, emergency leave, extended maternity leave, marriage leave, study leave
- Employee Support Scheme such as childcare support, childcare subsidies, financial support, insurance
- Remuneration and compensation

For Society, donation and sponsorship (5.22%) as well as education (4.56%) were the top two activities taken up and disclosed by most companies. Based on the analysis on the annual report, donation range from offering cash or material donations in to sponsoring programmes. This finding is supported by Disu and Gray (1998) where they noted that charitable donation was one of the mandatory disclosure that all companies included in sustainability report. However, Jose et al. (2013) said the other way around. An example of charitable donation statement can be found in Kerjaya Prospek's annual report is as follow:

"The Group answers to the social needs by making direct donation to orphanage houses, old folk homes and disability or regularly support charity organisation, amongst others, Magnum Foundation, St John Ambulance and ECO World Foundation." (Kerjaya Prospek, annual report 2015)

It was also found that most companies under study reported on their activities to promote education to the local communities and society. This finding is similar to Jose et al. (2013) where he found that education is one of the four core areas of CSR disclosure. The activities that was found under the annual report of 33 construction

companies in Malaysia is such as providing scholarship, internship programs and career talks.

The least disclosure indicator under the social category is human rights and this raises a serious concern on whether the companies under study were ignoring this issues or they were not eager to report on this particular issues. This finding is similar to Le (2011) where he discovered that companies are unlikely to communicate about their human right performance. This is most probably because companies face a number of challenges when reporting on human issues (GRI and The Global Compact, 2009)

The overview of sustainability reporting for all companies is that although there is no mandatory requirement of sustainability reporting, there are still a few companies that manage to presents information voluntarily on all sustainability categories even though they reported on some indicators under each category. As most companies reporting indicators falls in the range of 6-10, it can be concluded that the sustainability reporting in Malaysia's construction industry is low and in poor quality. This finding is similar to Zulkifli & Arman (2006). Since there is low disclosure in Malaysia construction industry, it means that there is low disclosure of sustainability activities performed by the companies. Besides that, it was found that companies could follow the sustainability reporting guidelines established by Global Reporting Initiatives G4 in order to improve the coverage in the sustainability disclosure.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter concludes the study of this research based on the analysis and discussion in Chapter 4. The limitations encountered during the research will be reflected together with the recommendations suggested for future study

5.2 Conclusion

The research aims to explore the sustainability reporting initiative adopted by Malaysia construction companies. The results provide very interesting and important findings. One of the finding is that the activities identified from annual reports are in accordance to GRI G4 Guideline. However there are differences in the content of company's report where there are some companies who disclose on all sustainability categories and some did not (Lydenberg et al, 2010). For example, there are 67% of companies disclosed on all sustainability categories which are economic, social and environment whereas 33% disclosed probably either one or two of the sustainability categories. The second major finding is that only 9% of 33 companies under this research had disclosed on 50% to 75% of sustainability activities. In conclusion, there is a low disclosure/ adoption of sustainability reporting in Malaysia construction industry which is the third major finding. This finding is similar with

the study of Zulkifli & Arman (2006). Hence, this research had answered on the three objective outlined in Section 1.3

5.3 Research Limitation

The findings of this study should be interpreted with caution. Firstly, the sample sizes were limited to construction firms who were listed in Bursa Malaysia and therefore do not provide an overview about Malaysia companies as a whole. Secondly, this research focuses only on annual report. Lastly, this research is cross sectional in nature where only the latest annual report released by the companies are taken for this study. The annual report consists of year 2016 and if not release, year 2015 will be taken. Thus it provides only a snapshot of disclosure practices.

5.4 Recommendation

Since there are only a few studies done on sustainability reporting, hence, it can be develop further by recommending the researcher to use larger sample of companies. For example analysing all the construction firms which are available in Malaysia to improve the reliability of the analysis. Secondly, researcher might want to extend their focus into other reporting media such as corporate websites, and newspaper articles. Lastly, researcher might want to consider longitudinal research to observe any trend in reporting and the evolution of how companies disclose their CSR information.

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APPENDICES

APPENDIX A: Comparison of GRI, UNGC and OECD Reporting Content

Content	GRI	UNGC	OECD
Category: Economic	✓		✓
Economic Performance	✓		✓
Market Presence	✓		
Indirect Economic Impact	✓		
Procurement Practices	✓		
Category: Environmental	✓	✓	✓
Materials	✓	✓	✓
Energy	✓	✓	✓
Water	✓	✓	✓
Biodiversity	✓	✓	✓
Emissions	✓	✓	✓
Effluents and Waste	✓	✓	✓
Products and Services	✓	✓	✓
Compliance	✓	✓	✓
Transport	✓	✓	✓
Overall	✓	✓	✓
Supplier Environmental Assessment	✓	✓	✓
Environmental Grievance Mechanisms	✓	✓	✓
Category: Social	✓	✓	✓
Sub-category: Labor Practice and Descent Work	✓	√	✓

Labor/Management Relations Occupational Health and Safety Training and Education Diversity and Equal Opportunity Equal Remuneration for Women and Men Supplier Assessment for Labor Practices Labor Practice Grienvance Mechanisms V Sub-category: Human Rights Investment Non-discrimination Freedom of Association and Collective Bargaining Child Labor Forced or Compulsory Labor Security Practices Indigenous Rights Assessment Supplier Human Rights Assessment Human Rights Grievance Mechanisms Sub-category: Society Local Communities Anti-corruption Public Policy Anti-competitive Behavior Compliance Sup-category: Product Responsibility Customer Health and Safety Product and Service Labeling	Employment	✓		
Training and Education Diversity and Equal Opportunity Equal Remuneration for Women and Men Supplier Assessment for Labor Practices Labor Practice Grienvance Mechanisms Sub-category: Human Rights Investment Non-discrimination Freedom of Association and Collective Bargaining Child Labor Forced or Compulsory Labor Security Practices Indigenous Rights Assessment Supplier Human Rights Assessment Human Rights Grievance Mechanisms Sub-category: Society Local Communities Anti-corruption Public Policy Anti-competitive Behavior Compliance Sup-category: Product Responsibility Customer Health and Safety	Labor/Management Relations	✓	✓	
Diversity and Equal Opportunity Equal Remuneration for Women and Men Supplier Assessment for Labor Practices Labor Practice Grienvance Mechanisms Sub-category: Human Rights Investment Non-discrimination Freedom of Association and Collective Bargaining Child Labor Forced or Compulsory Labor Security Practices Indigenous Rights Assessment Supplier Human Rights Assessment Human Rights Grievance Mechanisms Sub-category: Society Local Communities Anti-corruption Public Policy Anti-competitive Behavior Compliance Supplier Assessment for Impacts on Society Grievance Mechanisms for Impacts on Society Sub-category: Product Responsibility Customer Health and Safety	Occupational Health and Safety	✓		✓
Equal Remuneration for Women and Men Supplier Assessment for Labor Practices Labor Practice Grienvance Mechanisms Sub-category: Human Rights Investment Non-discrimination Freedom of Association and Collective Bargaining Child Labor Forced or Compulsory Labor Security Practices Indigenous Rights Assessment Supplier Human Rights Assessment Human Rights Grievance Mechanisms Sub-category: Society Local Communities Anti-corruption Public Policy Anti-competitive Behavior Compliance Supplier Assessment for Impacts on Society Grievance Mechanisms for Impacts on Society Sub-category: Product Responsibility Customer Health and Safety	Training and Education	✓		✓
Supplier Assessment for Labor Practices Labor Practice Grienvance Mechanisms Sub-category: Human Rights Investment Non-discrimination Freedom of Association and Collective Bargaining Child Labor Forced or Compulsory Labor Security Practices Indigenous Rights Assessment Supplier Human Rights Assessment Human Rights Grievance Mechanisms Sub-category: Society Anti-corruption Public Policy Anti-competitive Behavior Compliance Sup-category: Product Responsibility Customer Health and Safety	Diversity and Equal Opportunity	✓		
Labor Practice Grienvance Mechanisms Sub-category: Human Rights Investment Non-discrimination Freedom of Association and Collective Bargaining Child Labor Forced or Compulsory Labor Security Practices Indigenous Rights Assessment Supplier Human Rights Assessment Human Rights Grievance Mechanisms Sub-category: Society Local Communities Anti-corruption Public Policy Anti-competitive Behavior Compliance Supplier Assessment for Impacts on Society Grievance Mechanisms for Impacts on Society Sub-category: Product Responsibility Customer Health and Safety	Equal Remuneration for Women and Men	✓		
Sub-category: Human Rights Investment Non-discrimination Freedom of Association and Collective Bargaining Child Labor Forced or Compulsory Labor Security Practices Indigenous Rights Assessment Supplier Human Rights Assessment Human Rights Grievance Mechanisms Sub-category: Society Local Communities Anti-corruption Public Policy Anti-competitive Behavior Compliance Supplier Assessment for Impacts on Society Sub-category: Product Responsibility Customer Health and Safety	Supplier Assessment for Labor Practices	✓		
Investment Non-discrimination Freedom of Association and Collective Bargaining Child Labor Forced or Compulsory Labor Security Practices Indigenous Rights Assessment Supplier Human Rights Assessment Human Rights Grievance Mechanisms Sub-category: Society Local Communities Anti-corruption Public Policy Anti-competitive Behavior Compliance Supplier Assessment for Impacts on Society Grievance Mechanisms for Impacts on Society Sub-category: Product Responsibility Customer Health and Safety	Labor Practice Grienvance Mechanisms	✓		✓
Non-discrimination Freedom of Association and Collective Bargaining Child Labor Child Labor Forced or Compulsory Labor Security Practices Indigenous Rights Assessment Supplier Human Rights Assessment Human Rights Grievance Mechanisms Sub-category: Society Local Communities Anti-corruption Public Policy Anti-competitive Behavior Compliance Supplier Assessment for Impacts on Society Grievance Mechanisms for Impacts on Society Sub-category: Product Responsibility Customer Health and Safety	Sub-category: Human Rights	✓	✓	√
Freedom of Association and Collective Bargaining Child Labor Child Labor Forced or Compulsory Labor Security Practices Indigenous Rights Assessment Supplier Human Rights Assessment Human Rights Grievance Mechanisms Sub-category: Society Local Communities Anti-corruption Public Policy Anti-competitive Behavior Compliance Supplier Assessment for Impacts on Society Grievance Mechanisms for Impacts on Society Customer Health and Safety	Investment	✓		
Child Labor Child Labor Forced or Compulsory Labor Security Practices Indigenous Rights Assessment Supplier Human Rights Assessment Human Rights Grievance Mechanisms Sub-category: Society Local Communities Anti-corruption Public Policy Anti-competitive Behavior Compliance Supplier Assessment for Impacts on Society Grievance Mechanisms for Impacts on Society Customer Health and Safety	Non-discrimination	✓	✓	✓
Child Labor Forced or Compulsory Labor Security Practices Indigenous Rights Assessment Supplier Human Rights Assessment Human Rights Grievance Mechanisms Sub-category: Society Local Communities Anti-corruption Public Policy Anti-competitive Behavior Compliance Supplier Assessment for Impacts on Society Grievance Mechanisms for Impacts on Society Customer Health and Safety	Freedom of Association and Collective	✓	✓	✓
Forced or Compulsory Labor Security Practices Indigenous Rights Assessment Supplier Human Rights Assessment Human Rights Grievance Mechanisms Sub-category: Society Local Communities Anti-corruption Public Policy Anti-competitive Behavior Compliance Supplier Assessment for Impacts on Society Grievance Mechanisms for Impacts on Society Customer Health and Safety	Bargaining			
Security Practices Indigenous Rights Assessment Supplier Human Rights Assessment Human Rights Grievance Mechanisms Sub-category: Society Local Communities Anti-corruption Public Policy Anti-competitive Behavior Compliance Supplier Assessment for Impacts on Society Grievance Mechanisms for Impacts on Society Customer Health and Safety	Child Labor	✓	✓	✓
Indigenous Rights Assessment Supplier Human Rights Assessment Human Rights Grievance Mechanisms Sub-category: Society Local Communities Anti-corruption Public Policy Anti-competitive Behavior Compliance Supplier Assessment for Impacts on Society Grievance Mechanisms for Impacts on Society Customer Health and Safety	Forced or Compulsory Labor	✓	✓	✓
Assessment Supplier Human Rights Assessment Human Rights Grievance Mechanisms Sub-category: Society Local Communities Anti-corruption Public Policy Anti-competitive Behavior Compliance Supplier Assessment for Impacts on Society Grievance Mechanisms for Impacts on Society Sub-category: Product Responsibility Customer Health and Safety	Security Practices	✓		
Supplier Human Rights Assessment Human Rights Grievance Mechanisms Sub-category: Society Local Communities Anti-corruption Public Policy Anti-competitive Behavior Compliance Supplier Assessment for Impacts on Society Grievance Mechanisms for Impacts on Society Customer Health and Safety	Indigenous Rights	✓		
Human Rights Grievance Mechanisms Sub-category: Society Local Communities Anti-corruption Public Policy Anti-competitive Behavior Compliance Supplier Assessment for Impacts on Society Grievance Mechanisms for Impacts on Society Sub-category: Product Responsibility Customer Health and Safety	Assessment	✓		
Sub-category: Society Local Communities Anti-corruption Public Policy Anti-competitive Behavior Compliance Supplier Assessment for Impacts on Society Grievance Mechanisms for Impacts on Society Sub-category: Product Responsibility Customer Health and Safety	Supplier Human Rights Assessment	✓		
Local Communities Anti-corruption Public Policy Anti-competitive Behavior Compliance Supplier Assessment for Impacts on Society Grievance Mechanisms for Impacts on Society ✓ Sub-category: Product Responsibility Customer Health and Safety	Human Rights Grievance Mechanisms	✓		
Anti-corruption Public Policy Anti-competitive Behavior Compliance Supplier Assessment for Impacts on Society Grievance Mechanisms for Impacts on Society Sub-category: Product Responsibility Customer Health and Safety	Sub-category: Society	✓	✓	✓
Public Policy Anti-competitive Behavior Compliance Supplier Assessment for Impacts on Society Grievance Mechanisms for Impacts on Society ✓ Sub-category: Product Responsibility Customer Health and Safety	Local Communities	✓	✓	✓
Anti-competitive Behavior Compliance Supplier Assessment for Impacts on Society Grievance Mechanisms for Impacts on Society Sub-category: Product Responsibility Customer Health and Safety	Anti-corruption	✓	✓	✓
Compliance ✓ ✓ Supplier Assessment for Impacts on Society ✓ Grievance Mechanisms for Impacts on Society ✓ Sub-category: Product Responsibility ✓ Customer Health and Safety ✓ ✓	Public Policy	✓	✓	✓
Supplier Assessment for Impacts on Society ✓ ✓ Grievance Mechanisms for Impacts on Society ✓ ✓ Sub-category: Product Responsibility ✓ ✓ Customer Health and Safety ✓ ✓	Anti-competitive Behavior	✓		✓
Grievance Mechanisms for Impacts on Society ✓ Sub-category: Product Responsibility ✓ Customer Health and Safety ✓ ✓	Compliance	✓		✓
Sub-category: Product Responsibility ✓ ✓ Customer Health and Safety ✓ ✓	Supplier Assessment for Impacts on Society	✓		✓
Customer Health and Safety ✓ ✓	Grievance Mechanisms for Impacts on Society	✓		✓
	Sub-category: Product Responsibility	✓		✓
Product and Service Labeling ✓	Customer Health and Safety	✓		✓
	Product and Service Labeling	✓		

Marketing Communications	✓
Customer Privacy	✓
Compliance	✓

(Source: "GRIG4 part1 reporting principles and standard disclosures," 2014.)

APPENDIX B: Sample of Activities coded using self-developed Coding Sheet

	Company	AZRB			
	Annual Report Year	2015			
	Activities Disclose	Page	Categories (Level 1)	Theme (Level 2)	Activities Categories
1	Financial review	7,44-45	Economic	Economic Performance	Financial Performance
2	Received two letter of acceptance:	49	Economic	Market Presence	Operations
	i) from East Coast Economic Region Development Council ("ECERDC") for 'The proposed construction and completion of the				
	KPC Port Link Roadin Kuatan Port City, Pahang Darul Makmur' ("KPC Link Project")				
	ii) from UDA Legasi Sdn Bhd for the Proposed Mixed Development				
4	Current projects such as eathworks for the Kertih Polymer Park in Terenggan and Animal Production in Pekan Pahang,	49	Economic	Market Presence	Operations
	Pahang.				
5	Completed projects such as IIUM Teaching Hospital and handover of viaduct guideway at the Groups's MRT V6 Project to the	49	Economic	Market Presence	Operations
	system work package contractor				
6	Acquiring 51% shareholding stake in MRSB	50-51	Economic	Market Presence	Operations
	21.5 years concession with Ministry of Higher Education for maintainance and facilities management of IIUM Teaching Hospital				
7	Two significant achievement which are acquisition of 67 acres of land near Ajil, Terengganu and the receipt of letter of award	51	Economic	Market Presence	Operations
	from Kwasa Land Sdn Bhd whom appoint the group as a development partner for the residential parcel R3-4 at Kewasa				
	Development.				
8	Launching first residential phase of Tiara Paka development in Paka, Terengganu	52	Economic	Market Presence	Operations
9	ARZB LRT Hunt	54	Social	Labor Practices and Descent Work	Work-Life Balance
10	Career talk and internship program at UKM Bangi	55	Social	Society	Education
11	Professional visit by MBA Program Students from Universiti Terengganu	55	Social	Society	Education
12	Director and Senior Management Retreat at Holiday Inn Resort Phuket, Patong, Thailand	58	Social	Labor Practices and Descent Work	Work-Life Balance

APPENDIX C: Analysis of Disclosure on Sustainability Categories

Companies	Economic	Environment	Social	Reporting on All 3 Categories
ARZB	1		1	NO
Binapuri	1		1	NO
Crest Builder	1	1	1	YES
DKLS	1	1	1	YES
Econpile	1			NO
Ekovest	1		1	NO
Fajarbaru	1	1	1	YES
Gabungan ARQS	1	1	1	YES
Gadang	1	1	1	YES
Gamuda	1	1	1	YES
Ho Hup	1	1	1	YES
HSL	1	1	1	YES
IJM	1	1	1	YES
Ikhmas Jaya	1	1	1	YES
Ireka	1	1	1	YES
JAKS	1	1	1	YES
Kerjaya Prospek	1	1	1	YES
Kim Lun	1		1	NO
Kumpulan Jetson	1	1	1	YES
Lebtech	1	1	1	YES
MEB	1		1	NO
Merge Energy	1		1	NO
Mitrajaya	1		1	NO
ML Global	1	1	1	YES
MTD ACPI	1	1	1	YES
Mudajaya	1	1	1	YES
Pintaras	1		1	NO
PMBH	1	1	1	YES
Prinsiptek	1			NO
Protasco	1	1	1	YES
Puncak Niaga	1	1	1	YES
TSR	1			NO
WCT	1	1	1	YES
Total	33	22	30	

APPENDIX D: Analysis of Disclosure on Economic Indicator in Annual Report

Companies	Ecomomic Performance	Market Presence	Indirect Economic Impact	Procurement Practices
ARZB	1	1		
Binapuri	1	1		
Crest Builder	1	1		
DKLS	1	1		
Econpile	1	1		
Ekovest	1	1		
Fajarbaru	1	1		
Gabungan ARQS	1	1		
Gadang	1	1		
Gamuda	1	1	1	1
Ho Hup	1	1		
HSL	1	1		
IJM	1	1	1	
Ikhmas Jaya	1	1		
Ireka	1	1		
JAKS	1	1		
Kerjaya Prospek	1	1		
Kim Lun	1	1		
Kumpulan Jetson	1	1		
Lebtech	1	1		
MEB	1	1		
Merge Energy	1	1		
Mitrajaya	1	1		
ML Global	1	1		
MTD ACPI	1	1		
Mudajaya	1	1		
Pintaras	1			
PMBH	1	1		
Prinsiptek	1	1		
Protasco	1	1		
Puncak Niaga	1		1	
TSR	1	1		
WCT	1	1		
TOTAL	33	31	3	1

APPENDIX E: Analysis of Disclosure on Environment Indicator in Annual Report

Companies	Materials	Energy	Water	Biodiversity	Emissions	Effluents & waste	Products & Services	Compliance	Transport	Overall	Supplier Environmental Assessment	Environmntal Grievance
ARZB												
Binapuri												
Crest Builder						1						
DKLS			1	1	1	1						
Econpile												
Ekovest												
Fajarbaru		1										
Gabungan ARQS	1	1				1						
Gadang		1	1	1	1	1		1				
Gamuda		1				1	1	1				
Но Нир			1			1						
HSL		1				1						
IJM			1	1	1		1					
Ikhmas Jaya								1				
Ireka							1					
JAKS		1			1	1						
Kerjaya Prospek		1			_	1						
Kim Lun												
Kumpulan Jetson						1						
Lebtech		1			1	1						
MEB		-			-	-						
Merge Energy												
Mitrajaya												
ML Global	1											
MTD ACPI	1				1	1		1				
Mudajaya	1	1			1	1	1	1				
Pintaras Jaya		1				1	1					
PMBH						1		1				
Prinsiptek						1		1				
				1	1	1	1					
Protasco		1		1	1	1	1					
Puncak Niaga		1				1						
TSR					4	4	4					
WCT TOTAL	3	10	4	4	1 8	1 17	6	5	0	0	0	0

APPENDIX F: Analysis of Disclosure on Social Indicator in Annual Report

Companies	Labor Practices and Descent	Human Rights	Society	Product Responsibility
ARZB	1		1	
Binapuri	1		1	
Crest Builder	1		1	
DKLS	1		1	1
Econpile				
Ekovest	1		1	
Fajarbaru	1		1	1
Gabungan ARQS	1		1	1
Gadang	1		1	1
Gamuda	1		1	
Но Нир	1		1	
HSL .	1		1	
IJM	1		1	1
Ikhmas Jaya	1		1	
, Ireka	1		1	
JAKS	1		1	
Kerjaya Prospek	1		1	
Kim Lun	1		1	
Kumpulan Jetson	1		1	1
Lebtech	1		1	
MEB	1		1	
Merge Energy	1		1	
Mitrajaya	1		1	
ML Global	1		1	
MTD ACPI	1	1	1	1
Mudajaya	1		1	
Pintaras Jaya	1		1	
PMBH .	1		1	
Prinsiptek				
Protasco	1		1	
Puncak Niaga	1	1	1	
TSR				
WCT	1		1	
TOTAL	30	2	30	7

APPENDIX G: Analysis of Sustainability Activities Undertaken by Companies

Category Companies/Activitivities	ECONOMIC			ENVIRONMENTAL			LABOR DESCENT AND WORK			HUMAN RIGHTS			SOCIETY			PRODUCT RESPONSIBILITY			
		Operations	Environment	Environemental Policies	Green Development	Work-Life Balance	Trainings & Occupational Healt		Diversity and Equal	Security Practices	Education	Social Welfare and Local	Donations &	Disaster Relief			Customer Satisfaction	Customar Drivos	
			Management Initiatives				Development	and Safety	Opportunity	Security Practices	Education	Community Services	Sponsorships	Assistance	Healthcare	Quality Management	customer Satisfaction	customer Privacy	
ARZB	1	1				1					1								
Binapuri	1	1				1	1					1	1	1					
Crest Builder	1	1	1				1	1			1		1						
DKLS	1	1	1				1				1				1		1		
Econpile	1	1																	
Ekovest	1	1				1					1	1	1						
Fajarbaru	1	1	1				1				1		1			1			
Gabungan ARQS	1	1	1			1	1	1	1			1	1			1		1	
Gadang	1	1	1	1		1	1	1	1		1		1			1			
Gamuda	1	1	1	1	1	1		1	1		1	1							
Но Нир	1	1	1			1	1		1		1	1	1						
HSL	1	1	1			1	1	1	1		1	1							
UМ	1	1	1		1	1	1		1		1	1	1		1		1		
Ikhmas Jaya	1	1		1		1		1					1						
Ireka	1	1			1	1	1					1	1						
JAKS	1	1	1			1	1	1	1		1		1						
Kerjaya Prospek	1	1	1			1	1	1			1		1						
Kim Lun	1	1					1	1	1		1	1	1						
Kumpulan Jetson	1	1	1			1	1	1	1			1	1	1	1	1	1		
Lebtech	1	1	1			1		1				1	1						
MEB	1	1				1	1				1				1				
Merge Energy	1	1				1	1					1	1		1				
Mitrajaya	1	1				1					1	1	1		1				
ML Global	1	1	1					1					1						
MTD ACPI	1	1	1	1		1	1		1	1		1			1	1			
Mudajaya	1	1	1		1	1	1				1								
Pintaras	1							1					1						
PMBH	1	1	1	1		1	1	1			1		1						
Prinsiptek	1	1																	
Protasco	1	1	1		1	1					1	1	1	1					
Puncak Niaga	1	1	1			1	1	1	1	1		1		1					
TSR	1	1																	
WCT	1	1	1		1	1	1	1			1	1	1	1	1				
Total	33	32	20	5	6	24	21	16	11	2	19	17	22	5	7 8	5	3	1	