



**ENVIRONMENTAL REPORTING PRACTICES OF
MALAYSIAN CONSTRUCTION COMPANIES: A
CONTENT ANALYSIS AND PERCEPTION STUDY**

BY

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**A dissertation submitted in fulfilment of the requirement
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**Kulliyyah of Economics and
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ABSTRACT

Pressure for companies to be accountable to a wider group of stakeholders has encouraged companies to provide additional information including social and environmental-related information. Accordingly, such information should be valuable in assisting stakeholders in their decision making. The present study examines the extent and quality of environmental reporting of the construction sector in Malaysia, and compares this information with the environmental information desired by potential customers. Quantitative content analysis and structured interviews were used to collect the data. A total of forty nine construction companies in Malaysia were examined and thirty potential customers were interviewed in the present study. The results reveal that while the extent of environmental disclosures was increasing, the quality of environmental disclosures is low. Additionally, the study found that there is a significant difference between environmental items as proposed by Clarkson et al. (2008) in their environmental disclosure index and environmental information actually reported by Malaysian construction companies. A significant difference further exists between environmental disclosure items actually disclosed by construction companies and the information desired by potential customers. The findings of the present study suggests that there is a need for detailed guidelines for environmental reporting to assist companies in providing environmental disclosures, to ensure that stakeholders' information needs are met. Additionally, the findings suggest that for environmentally-sensitive sectors such as the construction industry, there is a need for environmental reporting to be made mandatory. Further research examining the perceptions of other stakeholder groups, such as non-governmental organisations (NGOs) on environmental disclosures needed, is proposed.

خلاصة البحث

شكلت الضغوطات على الشركات ومسئوليتها أمام مجموعة من الشركاء حافزا لها في تقديم معلومات إضافية تشمل المعلومات المتعلقة بالمجتمع والبيئة. وفقا لذلك، فإن مثل هذه المعلومات تجب أن تكون ذات قيمة في مساعدة الشركاء لاتخاذ قراراتهم. وتكشف هذه الدراسة مدى ونوعية التقرير البيئي في قطاع البناء بماليزيا، لمقارنة تلك المعلومات مع المعلومات البيئية التي يرغب بها العملاء. واستخدم في هذا البحث منهجي التحليل الكمي للنص، والمقابلات الشخصية لجمع البيانات. وتبحث عينة هذه الدراسة في 49 شركة بناء في ماليزيا، ومقابلات شخصية مع 30 عميلا. وأظهرت النتائج بأنه في حين ازدياد مدى علميات الكشف البيئية، تنخفض نوعية عمليات الكشف البيئية. وتوصلت الدراسة إلى أن هناك اختلاف مهم بين المواد البيئية - والمقترحة من قبل كلاركسون وغيره (2008) في دليل عمليات الكشف البيئي والمعلومات البيئية- التي ذكرت من قبل شركات البناء الماليزية. كما كشفت الدراسة عن اختلاف مهم أيضا بين مواد عمليات الكشف البيئية، والتي كشفت بواسطة شركات البناء والمعلومات المرغوبة للعملاء. ومن خلال هذه النتائج، تقترح الدراسة بأن هناك شركات بحاجة إلى إرشادات مفصلة في التقرير البيئي، لمساعدتها في تقديم علميات الكشف البيئية، ولضمان وصول المعلومات التي يحتاجها الشركاء. إضافة إلى ذلك، تقترح الدراسة بأن القطاعات الحساسة بيئيا مثل أعمال البناء بحاجة إلى جعل التقرير البيئي إلزامي. وتوصي البحوث القادمة في دراسة تصورات مجموعة شركات أخرى، مثل المنظمات غير الحكومية في احتياجات عمليات الكشف البيئية.

APPROVAL PAGE

I certify that I have supervised and read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Master of Science in Accounting.

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DECLARATION

I hereby declare that this dissertation is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

Noor Afzalina Mohamad

Signature

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**Environmental Reporting Practices of the Malaysian Construction Companies:
A Content Analysis and Perception Study**

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LIST OF ABBREVIATIONS

ACCA	: Associations of Chartered Certified Accountants
BMP	: Brown Marshall Plumlee
CSEAR	: Centre of Social and Environmental Research
CSED	: Corporate Social Environmental Disclosure
CSER	: Corporate Social and Environmental Reporting
CSR	: corporate social reporting
CSR	: Corporate Social Responsibility
e.g.	: (<i>exempligratia</i>): for example
EPI	: Environmental Performance Indicators
et al.	: (<i>et alia</i>): and others
FEE	: European Federation of Accountants
GBI	: Green Building Initiatives
GDP	: Growth Domestic Product
GRI	: Global Reporting Initiative
i.e.	: (<i>id est.</i>): that is
ISO	: International Organisation for Standardisation
MaSRA	: ACCA Malaysia Sustainability Reporting Awards
MCA	: Minerals Council of Australia
MEKAR	: Persatuan Khazanah Rakyat Ma' Daerah
MGCC	: Malaysian-German Chamber of Commerce and Industry
MNS	: Malaysian Nature Society
NGOs	: non-governmental organization
PC	: Potential Customer
RO	: Research objective
UK	: United Kingdom
US	: United States
VED	: voluntary environmental disclosure
WWF	: World Wide Fund for Nature

LIST OF STATUTES

Environmental Quality Act (1974)

CHAPTER ONE

INTRODUCTION

1.0 INTRODUCTION

This chapter presents the introductory and background part of the study. Section 1.1 describes the general background of the study. The problem statement is presented in section 1.2 and the motivation for study is discussed in section 1.3. Subsequently, section 1.4 describes the research objectives followed by section 1.5, which discusses the contribution of the study and, finally, section 1.6 describes the organisation of the dissertation.

1.1 BACKGROUND OF THE STUDY

Over the past few years, an increasing number of companies in the global market have provided environmental reporting in annual reports as well as in stand-alone environmental reports. In fact, various studies found that social and environmental reports continue to increase from time to time (Gray, Kouhy and Lavers, 1995a and Deegan, Rankin and Tobin, 2002). However, most of the literature tended to concentrate on the context of Europe, the United States and Australia (see for example Gray et al., 1995a; Deegan and Rankin, 1996; Larrinaga-Gonzalez and Bebbington, 2001; Deegan and Blomquist, 2006). A few studies have been conducted in other countries such as Singapore (Tsang, 1998), Thailand (Kuasirikun and Sherer, 2004) and Bangladesh (Islam and Deegan, 2008). Al-Tuwaijiri, Christensen and Hughes (2004) mentioned that competition among managers globally has improved the environmental disclosure of companies all over the world and, consequently, inflated

the public concern regarding both the environmental performance of the company and the public disclosure of its performance. This has further enhanced the research on the environmental disclosure in many countries.

A similar trend is found in Malaysia. The report on social and environmental disclosure has been increasing among Malaysian companies (Associations of Chartered Certified Accountants [ACCA], 2002b). This has motivated researchers in Malaysia to embark on social and environmental studies. Some of the research discusses the extent and type of voluntary environmental disclosure (Nik Ahmad and Sulaiman, 2004; Yusoff, Lehman and Mohd Nasir, 2006; Sumiani, Yusoff and Lehman, 2007), the extent of environmental disclosure and relationship with corporate characteristics (Smith, Yahya and Amiruddin, 2007) and recent studies examined the demand of Malaysian stakeholders for environmental disclosure (Elijido-Ten, Kloot and Clarkson, 2010). The emerging research in this area shows that companies in Malaysia have shown some concern for social and environmental disclosure and realised the importance of such reports for their businesses (Mohd. Said, 2010).

However, most of the studies on Malaysia have only focused on the extent of disclosure and less emphasis has been given to the perceptions of external stakeholders concerning social and environmental disclosure (Elijido-Ten et al., 2010). Accordingly, the present study attempts to address this issue. This study aims to examine the perceptions of potential customers on environmental reporting of construction companies in Malaysia. The study will analyse actual disclosure produced by construction companies in Malaysia and compare this with views from potential customers concerning the type of environmental disclosure they desire from construction companies.

This study is particularly timely given the recent introduction of the Green Building Initiatives to the Malaysian construction sector in 2009. Since year 2001, the Malaysian government has shown its enthusiasm for environmental issues because the environmental considerations were emphasised in the Eighth Plan Period, which covered the years between 2001 to 2005 (Elijido-Ten, 2009). Consequently, the authorities encouraged the application of green initiatives as a way to promote environmental preservation (Kok, 2009). For instance, the Malaysian government has encouraged construction companies to apply green technology and the construction of green buildings as part of an effort to instil green initiatives in Malaysia (Md Darus et al., 2009). Through integrating environmental preferences in the construction industry, it can improve construction companies' environmental performance, and, at the same time, influence other related parties such as suppliers to improve the environmental initiatives towards producing green products. In fact, YTL Corporation, which is a construction company in Malaysia, has adopted green measures as part of their corporate strategy (Cheng and Mahalingam, 2010).

Furthermore, construction activities have caused many problems such as flooding, degradation of rivers and bad air quality in the surrounding area (Tam and Tam, 2006). Adding to this problem, construction companies in Malaysia have undertaken extensive construction on delicate hill slopes and wetlands, which have caused flooding, as well as land and mud slides (Shafii, Arman Ali and Othman, 2006). All these problems will continue to occur if there is a lack of awareness of the importance of ensuring that construction companies are environmentally responsible. One means of examining whether companies are environmentally responsible is through examination of their environmental disclosure and investigating the extent to which the disclosure matches with the information needed by stakeholders. Therefore,

it is hoped that the present study will provide valuable guidance to the Malaysian government on whether there is a need to develop specific mandatory environmental requirements for disclosure by the construction sector in Malaysia.

1.2 PROBLEM STATEMENT

The construction sector in Malaysia has received considerable attention regarding issues pertaining to waste management and other adverse environmental effects on construction sites. The amount of waste has increased rapidly due to the growing population, urbanisation and industrialisation. Many of the previous researchers believed that improper waste management, excessive wastage of raw materials and less awareness of the benefit of waste management contributes to the pollution on construction sites (Begum et al., 2006; Tam and Tam, 2006; Begum et al., 2007). Additionally, Ithnin (2006) reported that there are significant environmental impacts arising from construction activities including erosion and siltation, flooding, destruction of habitats and degradation of biodiversity and the air, and water and noise pollution. This proves that construction activities have led to serious environmental pollution. Consequently, there is a critical need to examine the environmental disclosure of construction companies as these companies have a major adverse impact on the environment.

Currently, studies focusing on the involvement of companies pertaining to environmental disclosure in Malaysia are limited. Among the studies conducted in Malaysia during early 2000 was the survey done by ACCA (2002b), which found low growth of environmental reporting in Malaysia during year 1999 to 2001. Other previous studies further revealed similar results that there is limited disclosure of environmental reporting among Malaysian companies (Nik Ahmad and Sulaiman,

2004; Yusoff et al., 2006). This suggests that the environmental disclosures in Malaysia is still in its infancy (Elijido-Ten, 2008; Sawani, Mohamed Zain and Darus, 2010).

Moreover, not much study has been done to investigate the involvement in social responsibility and environmental reporting among specific sectors in Malaysia. To date, most of the studies on specific industries focus on social responsibility, however, these are still low in number. This can be seen in Janggu, Joseph and Madi (2007), who emphasised on industrial companies and Mohamed Zain and Janggu (2006) who examined construction companies in Malaysia. Furthermore, their studies focused on determining the level of CSR disclosure only and did not examine the stakeholders' need for such information. With this lack of focus on information needed by stakeholders, we may have limited information concerning the elements of the environmental information disclosed in annual reports and the information that is actually needed by stakeholders in the annual reports.

Additionally, the environmental report plays a bigger role in providing environmental information for the benefit of the stakeholders, in order to protect the accountability relationships between companies and their stakeholders (Gray, Owen and Maunders, 1991). However, social, ethical and environmental reporting has been criticised as not instilling a reasonable level of confidence in stakeholders (Dando and Swift, 2003), in terms of the relevance of information disclosed and quality of the system used to convey the performance improvements. Some studies further revealed that the stakeholders need for information has not been fulfilled by companies (Azzone et al., 1997). Therefore, the investigation on environmental information in annual reports and sustainability reports needs to be emphasised while the issue concerning stakeholders' perceptions should also be examined further. This will

provide the answer to the crucial issues on whether the information disclosed in the annual report satisfies the stakeholders' need and whether environmental disclosures portray the companies' real accountability towards their shareholders.

Furthermore, specific guidelines, such as Global Reporting Initiative or GRI need to be implemented by those organisations that intend to report their social and environmental performances to their stakeholders. Turner, Vourvachis and Woodward (2006) have mentioned that companies need to improve the disclosure of information to the legislators, investors, and civil society using the GRI guideline in order to improve accountability. Therefore, the GRI is a significant tool in guiding organisations to disclose social and environmental reporting as well as to encourage organisations to discharge their accountability towards stakeholders. Companies in Malaysia should utilise the GRI framework to guide their social and environmental reporting.

The present study also examines the differences of environmental information needed by stakeholders and the environmental information disclosed by Malaysian construction companies in annual reports and sustainability reports. The environmental information in annual reports and sustainability reports are examined using the Clarkson et al. (2008) index which was developed based on the GRI framework. Finally, using stakeholder theory and accountability theory, the present study draw conclusions on whether construction companies in Malaysia disclose environmental information in annual reports and sustainability reports which meet their stakeholders' need for such information.