



QUALITY OF ENVIRONMENTAL DISCLOSURE OF  
ENVIRONMENTALLY SENSITIVE INDUSTRIES IN  
MALAYSIA

BY

NORHAYATI BINTI ABDULLAH

A dissertation submitted in fulfilment of the requirement  
for the degree of Master of Science (Accounting)

Kulliyyah of Economics and  
Management Sciences

International Islamic University  
Malaysia

JUNE 2011

## **ABSTRACT**

The Malaysian government is becoming increasingly concerned about the corporate environmental policies regulating the Malaysian companies. As a result, Bursa Malaysia, as an authoritative body in monitoring the Malaysian PLCs, has made it mandatory for all listed companies in Malaysia to publicly disclose their social and environmental related information in annual reports effective year 2007 onwards. Better quality environmental disclosures may indicate that corporations place their contribution and commitment in effort to protect the environment. The purpose of this study is thus to examine the quality of environmental disclosure in annual reports after the mandatory requirement took place. Furthermore, it also aims to identify determinants of the quality of environmental disclosure using multi-theoretical perspectives that rely on institutional theory, information cost theory, resource based view theory and legitimacy theory. The study compared the quality of environmental disclosures between year 2005 and 2009; before and after the CSR mandatory reporting requirement that took effect in Malaysia. The quality of environmental disclosures was measured using a disclosure index. A content analysis of the annual report of 164 environmentally sensitive industries companies was undertaken. The findings reveal that there is a significant increase in the quality of environmental disclosures in 2009 as compared to 2005. Accordingly, the study concludes that the environmental reporting in Malaysia is now improving as compared to years before the mandatory requirement. Theoretically, the findings suggest that the better quality environmental disclosures in annual reports by corporations in 2009 may well be influenced by the mandatory CSR requirement. Additionally, the results also suggest the quality of environmental disclosures in Malaysia is determined by firms' size and leverage level. This result is strongly supported by legitimacy theory. Overall, the study views institutional and legitimacy based theoretical perspectives as complementary in providing an appropriate explanation for environmental reporting behaviour in Malaysia.

## خلاصة البحث

والهدف من هذه الدراسة هو فحص تأثير فعالية لجنة المراجعة في بورصة ماليزيا ، بوصفها هيئة موثوقة في رصد الشركات المحدودة العامة الماليزية ، ألزمت جميع الشركات المدرجة في ماليزيا بالكشف علنا عن معلوماتهم ذات الصلة الاجتماعية والبيئية في التقارير السنوية بدأ من عام 2007. الإفصاح الجيد عن الكشوف البيئية تشير إلى أن الشركات المساهمة تلعب دورا مهما في الجهود المبذولة لحماية البيئة. و عليه فإن الغرض من هذه الدراسة هو فحص جودة الإفصاح البيئي في التقارير السنوية و ذلك بعد تطبيق الشرط الإلزامي. كما ان الدراسة تهدف إلى التعرف على محددات نوعية الكشف البيئية باستخدام النظرية العدسية المتعددة و التي تعتمد على النظرية المؤسسية ، نظرية تكاليف المعلومات ، ونظرية نظرة الموارد القائمة و أخيرا النظرية الشرعية. إن هذه الدراسة تقارن بين نوعية الكشف البيئي خلال عامي 2005 و 2009 ؛ أي قبل وبعد الإبلاغ عن المسؤولية الاجتماعية للشركات عند البدء بالعمل بالشرط الإلزامي في ماليزيا .وقد كانت نوعية الكشف البيئي تقاس باستخدام مؤشر الكشف "الحساسية البيئية الصناعية" (اي اس أي) على 164 شركة لكل من السنتين. وتدل النتائج على أن هناك زيادة كبيرة في نوعية الكشف البيئي في عام 2009 مقارنة بعام 2005. ولذلك ، خلصت الدراسة إلى أن إعداد التقارير البيئية في ماليزيا يتحسن الآن بالمقارنة مع السنوات التي سبقت سريان الشرط الإلزامي . نظريا ، فإن النتائج تشير إلى الإفصاح البيئي الجيد في التقارير السنوية التي تقدمها الشركات في 2009 قد تتأثر بشرط الإزامية للمسؤولية الاجتماعية. بالإضافة إلى ذلك ، تشير النتائج أيضا إلى أن نوعية الإفصاح البيئي في ماليزيا تتأثر بحجم الشركات ومستوى الفعالية. إن هذه النتيجة لها ما يسندها نظريا ألا و هي النظرية الشرعية . وعموما ، فإن الدراسة نظرت إلى النظرية المؤسسية والشرعية على أنهما نظريات متكاملة تساهم في تقديم تفسير مناسب لإنتهاج سلوك إعداد التقارير البيئية في ماليزيا.

## 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.

.....  
Maliah Sulaiman  
Supervisor

.....  
Fatima Abdul Hamid  
Co-Supervisor

I certify that I have 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.

.....  
Hafiz Majdi Abdul Rasyid  
Examiner

This dissertation was submitted to the Department of Accounting and is accepted as a fulfilment of the requirement for the degree of Master of Science in Accounting.

.....  
Hafiz Majdi Abdul Rasyid  
Head, Department of Accounting

This dissertation was submitted to the Kulliyah of Economics and Management Sciences and is accepted as a fulfilment of the requirement for the degree of Master of Science in Accounting.

.....  
Khaliq Ahmad  
Dean, Kulliyah of Economics and  
Management Sciences

## 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.

Norhayati Abdullah

Signature .....

Date .....

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

**DECLARATION OF COPYRIGHT AND AFFIRMATION  
OF FAIR USE OF UNPUBLISHED RESEARCH**

Copyright © 2011 by International Islamic University Malaysia. All rights reserved.

**QUALITY OF ENVIRONMENTAL DISCLOSURE OF  
ENVIRONMENTALLY SENSITIVE INDUSTRIES IN MALAYSIA**

I hereby affirm that the International Islamic university Malaysia (IIUM) holds all the rights in the copyright of this work and henceforth any reproduction or use in any form or by means whatsoever is prohibited without the written consent of IIUM. No part of this unpublished research may be produced, stored, in a retrieval system, or transmitted, in any form or by means, electronic, mechanical, photocopying, recording or otherwise without prior permission of the copyright holder.

Affirmed by Norhayati Abdullah

.....  
Signature

.....  
Date

## ACKNOWLEDGEMENTS

In the name of Allah, the most Gracious and the most Merciful, Lord of the universe. Peace and blessing be upon Prophet Muhammad (PBUH). *Alhamdulillah* all praises be upon Allah, for the successful completion of this dissertation against all odds.

First and foremost, I would like to express my deep and sincere gratitude to my supervisors, Professor Dr. Maliah Sulaiman and Dr. Fatima Abdul Hamid. This dissertation would not have been possible without the detailed and constructive comments of my supervisors. Their good advices, wisdoms, supports and friendship, have been valuable on both academic and personal level, for which I am very grateful. I owe much of their patience in correcting and improving several drafts of this work before it took its final form.

My special thanks go to all lecturers at the Kulliyah of Economics and Management Sciences, International Islamic University Malaysia (IIUM) who have taught me during my coursework. For the administration staffs of Post Graduate Unit and Department of Accounting, I would also like to thank for their kindness and assistance throughout my period of study and the completion of this work.

I would also like to acknowledge the financial backing and technical supports of the University of Sultan Zainal Abidin (UniSZA) and the Government of Malaysia, particularly on the study leave and scholarship scheme that provided the necessary supports for my study.

During this work, I have collaborated with many of my friends for whom I have great regard, and I wish to extend my warmest thanks to all those who have helped me in my work. For Ika and Akma, who as good friends, were always willing to help. Thank you for the time, stories, experiences, the ups and downs throughout this valuable learning process.

Above all, I owe my loving thanks to my husband, Kamarul Baharim. He always stood by me through the good and bad times. For my children, Arif, Nurul and Aman, they have always cheering me up and supporting me with their best wishes. Without their constant encouragement, understanding and patience, it would have been impossible for me to finish this work. For my mother, her supports and prayers are very much appreciated.

Finally, I would like to thank everyone who was important to the successful realization of the dissertation. Accept my apologies for not being able to mention everyone individually. I offer my regards and blessings to all who supported me in any respect during the completion of this work. For any errors or inadequacies that remain in this work, or course, the responsibility is entirely my own.

# TABLE OF CONTENTS

Abstract .....	ii
Abstract in Arabic .....	iii
Approval Page .....	iv
Declaration Page .....	v
Copyright Page .....	vi
Acknowledgements .....	vii
List of Tables .....	viii
List of Tables .....	x
List of Figures .....	xii
List of Abbreviations .....	xiii

<b>CHAPTER ONE: INTRODUCTION .....</b>	<b>1</b>
1.1 Introduction .....	1
1.2 Motivation of the Study .....	2
1.3 Background of the Study .....	4
1.4 Research Objectives and Research Questions .....	7
1.5 Contribution of the Study .....	8
1.6 Organization of the Chapters .....	10

<b>CHAPTER TWO: LITERATURE REVIEW .....</b>	<b>13</b>
2.0 Introduction .....	13
2.1 Quantity and Quality of Environmental Reporting .....	13
2.1.1 Prior Studies in Developed Countries .....	14
2.1.2 Prior Studies in Developing Countries .....	18
2.2 Use of Disclosure Index to Measure the Quality of Environmental Disclosure .....	29
2.3 Determinants of Environmental Disclosure .....	36
2.4 Environmentally Sensitive Industries (ESI) .....	46
2.5 Government Regulatory Support .....	48
2.6 Summary .....	45

<b>CHAPTER THREE: THEORETICAL FRAMEWORK AND HYPOTHESES DEVELOPMENT .....</b>	<b>53</b>
3.0 Introduction .....	53
3.1 Factors that Affect the Quality of Environmental Disclosures .....	53
3.2 Theoretical Perspective and Determinants of Environmental Disclosure .....	59
3.3 Hypotheses Development .....	60
3.3.1 Institutional Theory .....	60
3.3.2 Information Cost Theory .....	64
3.3.3 Resource Based View Theory .....	66



3.3.4 Legitimacy Theory .....	68
3.4 Summary .....	71
<b>CHAPTER FOUR: SAMPLE SELECTION RESEARCH METHOD .....</b>	<b>72</b>
4.0 Introduction .....	72
4.1 Sample Selection .....	72
4.2 Measurement of Dependent Variables .....	75
4.2.1 Disclosure Index to Measure Quality of Environmental Disclosure.....	78
4.3 Corporate Characteristics – Operationalisation of Independent Variables .....	88
4.3.1 Independent Variables in Association with Quality of Environmental Disclosures .....	88
4.4 Statistical Analysis.....	92
4.4.1 Model Development.....	93
4.5 Summary .....	94
<b>CHAPTER FIVE: FINDINGS AND ANALYSIS.....</b>	<b>96</b>
5.0 Introduction .....	96
5.1 Data Analysis.....	96
5.1.1 Number of Reporting Company.....	96
5.1.2 Quality of Environmental Reporting.....	98
5.1.3 The Factors that Influence the Environmental Reporting Quality.....	112
5.2 Summary.....	122
<b>CHAPTER SIX: CONCLUSION, LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH .....</b>	<b>124</b>
6.0 Introduction .....	124
6.1 The Study.....	124
6.2 The Findings .....	125
6.2.1 The Quality of Environmental Disclosure .....	125
6.2.2 Factors that Influence the Quality of Environmental Disclosure.....	127
6.3 Implications of the Study.....	129
6.4 Limitations.....	131
6.5 Directions for Future Research.....	132
<b>BIBLIOGRAPHY .....</b>	<b>134</b>
<b>APPENDICES .....</b>	<b>142</b>
APPENDIX I: BURSA MALAYSIA LISTING REQUIREMENT	
APPENDIX II: DISCLOSURE INDEX SHEET	
APPENDIX III: DEFINITION OF DISCLOSURE INDEX ITEMS	
APPENDIX IV: NAME OF SAMPLE COMPANIES	
APPENDIX V: STATISTICAL ANALYSIS	

## LIST OF TABLES

<u>Table no.</u>		<u>Page no.</u>
2.1	Summary of studies on quantity and quality of environmental reporting in annual report	23
2.2	Summary of disclosure indexes used to measure quality of environmental disclosures	33
2.3	Summary of theoretical framework adopted by literatures relating to environmental reporting.	42
2.4	The variables and theoretical perspectives	45
4.1	Distribution of companies according to sectors	75
4.2	The scoring procedures of the disclosure checklist	76
4.3	Disclosure checklists and sources of reference	78
4.4	Summary of the operationalisation of independent variables	91
4.5	Definition of variables	93
5.1	Disclosing companies according to industrial classification	96
5.2	Descriptive statistics of total environmental disclosures in 2005 and 2009	97
5.3	Firms' environmental disclosure score by category	98
5.4	Firms' environmental disclosures by items according to scores categories	100
5.5	Firms' environmental disclosures by industries: Scores by categories	102
5.6	Descriptive statistic for the dependent variable (Total score) and all explanatory variables	113
5.6a	One Sample <i>Kolmogorov-Smirnov Z</i> test (after transformation)	114
5.7	Spearman's Correlations Coefficient	115
5.8	Descriptive Statistics for regression analysis	116

5.9	Regression results for environmental disclosure score	116
6.1	The summary of the results	127

## **LIST OF FIGURES**

<u>Table No.</u>		<u>Page No.</u>
3.1	Factors that affect the quality of environmental disclosures	58

## LIST OF ABBREVIATIONS

PLC	Public Listed Companies
UN	United Nation
CSR	Corporate Social Responsibility
DOE	Department of Environment
ESI	Environmental Sensitive Industries
RBVT	Resource Based View Theory
GLC	Government Linked Companies
ACCA	The Association of Certified Chartered Accountants
NACRA	National Corporate Reporting Awards
MASRA	Malaysian Sustainability Reporting Awards
ER	Environmental Reporting
AR	Annual Reports
SER	Social Environmental Reporting
ED	Environmental Disclosures
SGX	Singapore Stock Exchange
GRI	Global Reporting Initiatives
KPI	Key Performance Indicators
ROA	Return on Assets
ROE	Return on Equity
SEC	Stock Exchange Commission
ISO	International Organization for Standardization
EPA	Environmental Protection Act
EMS	Environmental Management System
IPC	Infrastructure Project Companies
OSH	Occupational Safety and Health
ESH	Environmental Safety and Health
EP	Environmental Protection
SPSS	Statistical Package for Social Science
US	The United State of America
10MP	10 <sup>th</sup> Malaysia Plan
4MP	4 <sup>th</sup> Malaysia Plan
i.e.	( <i>id est.</i> ): that is
et al.	( <i>et alia</i> ): and others
FRS	Financial Reporting Standard Board
MASB	Malaysian Accounting Standard Board
e.g.	( <i>exempligratia</i> ): for example

# CHAPTER ONE

## INTRODUCTION

### 1.0 INTRODUCTION

Malaysia is committed to actively participate in global initiatives aimed at addressing climate change. According to United Nations data pertaining to carbon emissions footprint, Malaysia's carbon emissions in 2006 stood at 187 million tonnes, or 7.2 tonnes per person<sup>1</sup>, while the UN Human Development Report on fighting climate change put Malaysia on 26<sup>th</sup> place on a global table of carbon emitters. Nevertheless, considering the alarming rate of carbon emission in the country, Malaysia aims to establish a voluntary national indicator as an effort to offset carbon intensity globally<sup>2</sup>. This was stated by the Prime Minister of Malaysia, Datuk Seri Najib Tun Razak during the Climate Change Conference 2009 (COP15) in Copenhagen, Denmark on the 17<sup>th</sup> of December 2009. In conjunction with this initiative, the recent launch of the National Climate Change Policy in August 2010 was specifically aimed at tackling the climate change problem in Malaysia<sup>3</sup>. This policy is believed to be useful to facilitate better resource management and environmental conservation as well as climate change management<sup>4</sup>. Furthermore, prior to these recent developments on preserving the environment, Bursa Malaysia, as an authoritative body in the surveillance of Public Listed Companies (PLC henceforth) in Malaysia, has made corporate social responsibility (CSR henceforth) disclosure in annual reports mandatory. This

---

<sup>1</sup> Data obtained from Department of Environment as published by New Straits Times dated December 1, 2010.

<sup>2</sup> Data obtained from News Straits Times dated December 18, 2009.

<sup>3</sup> Data obtained from News Straits Times dated December 1, 2010.

<sup>4</sup> National Climate Change Policy – launched by Deputy Prime Minister – Tan Sri Muhyiddin Yassin on August 2010 – specifically to tackle climate change issue. Data obtained from NST Dec 1, 2010.

requirement is clearly stated in the listing requirement for Periodic Disclosure Policy<sup>5</sup> by Bursa Malaysia, in which one of the elements of CSR is environmental reporting.

The continuous effort by the Malaysian government in protecting the natural environment is believed to have begun in the eighties<sup>6</sup>. However, with regard to corporate disclosure, the directive by the government in 2006 finally made corporate social reporting mandatory; effective on companies' annual reports for the year ended 2007 onwards. This public CSR reporting consists of four focal areas of disclosure: community, workplace, employees and environment. Prior to 2007, the environmental reporting in annual report by PLCs in Malaysia was merely based on corporate voluntary initiatives by individual companies.

## **1.1 MOTIVATIONS OF THE STUDY**

The motivation of the present study originated from an interest to know the effect of the government's environmental efforts on corporate disclosures. Additionally, recent environmental issues around the world such as climate change have also triggered the researcher to investigate the disclosure of corporations in their efforts to combat these issues. For example, according to the UN Environmental Programme (UNEP), around 20 per cent of annual greenhouse emission is imputable to logging, farming and burning of peat lands<sup>7</sup>. Furthermore, in Malaysia; according to the Environmental Quality Report 2006 (EQR2006)<sup>8</sup> as published by the Department of Environment (DOE henceforth), the pollution of the river basins in Malaysia were largely contributed by untreated water or partially treated sewage and discharge from the

---

<sup>5</sup> Bursa Malaysia Listing Requirement – Periodic Disclosure Policy Section 9 (Para. 9.25); Part A (no.29 of Appendix 9C) – refer to Appendix 1 in this study.

<sup>6</sup> Fourth Malaysia Plan (4MP) in 1980 has devoted a clause for preserving the natural environment.

<sup>7</sup> Data obtained from New Straits Times, June 14, 2009.

<sup>8</sup> EQR2006 can be accessed through DOE websites; <http://www.doe.gov.my>

agro-based and manufacturing industries, livestock farming, earthwork and land clearing. Moreover, based on cumulative water quality data, high ammonium and turbidity level were recorded more frequently in the industrial areas in Malaysia. These data, in summary, conveyed a series of evidence that corporate business operations should be partly blamed for the environmental degradation happenings, hence they should disclose their efforts to alleviate or prevent such atrocities.

The CSR mandatory reporting requirement by Bursa Malaysia including environmental disclosures in annual reports signifies that corporations are also required to place their commitment to protect the environment. The government's role via the authoritative body, Bursa Malaysia, in monitoring the PLCs, is expected to provide some influence on the extent of environmental disclosure to the public. As for their continuous survival in the capital market, corporations are expected to improve the quality of environmental disclosures to the stakeholders so as to demonstrate their support for the government's environmental efforts. Previous studies conducted before the CSR mandatory reporting requirement showed that the environmental information disclosed was low in quality and most of these studies concluded that environmental reporting in Malaysia has yet to have visible drivers<sup>9</sup>. Nonetheless these studies had used data from published annual reports before the year 2006 and have not considered the effect of this new listing requirement by Bursa Malaysia. Hence, interested to know the outcome, the researcher proceeded with the current study aiming to investigate the state of the quality of environmental reporting after the regulation took place.

---

<sup>9</sup> For details of the studies refer to Chapter 2 – literature review

## 1.2 BACKGROUND OF THE STUDY

Environmental reporting in its early development in both developing and developed countries was found to be non-comprehensive and non-quantitative in nature. The majority of the information was reported in declarative format<sup>10</sup>. Additionally, most prior environmental reporting studies in developing countries have largely focused on the quantity<sup>11</sup> of reporting and these studies were conducted before the mandatory CSR reporting in annual reports in Malaysia. So far, in Malaysia, Ten (2009), Bakhtiar (2005) and Sharifah et al. (2009) have specifically examined the quality of environmental disclosures. The results found some increment in the disclosure quality (Bakhtiar, 2005), but it was still low in terms of reporting quality (Ten, 2009; Sharifah et al., 2009). Given that CSR reporting was made mandatory by Bursa Malaysia in 2007, the present study is timely. This is because, to the researcher's knowledge, there has not been any published study examining the quality of environmental reporting in the annual reports following the CSR mandatory listing requirement by Bursa Malaysia. Thus, the present study attempts to fill the gap by examining the quality of environmental disclosures made by Malaysian PLCs in 2009 compared with 2005 annual reports.

The comparison of the quality of environmental disclosures between the two disparate years; before and after the requirement took place, may perhaps provide some information pertaining the effect of the CSR mandatory listing requirement onto the quality of public environmental disclosures.

For the present study, only companies in environmentally sensitive industries (ESI henceforth) were examined as their operations are perceived as more harmful and

---

<sup>10</sup> For details of the studies refer to Chapter 2 – literature review

<sup>11</sup> E.g. (Tsang, 1998; Nik Ahmad and Sulaiman, 2003; Thomson and Zarina, 2004; Kuasirikun and Sherer, 2004; Chatterjee and Mir, 2008)



may impose direct negative impact on the natural environment. Moreover, ACCA (2002) found that ESI companies are more likely to be engaged in environmental reporting. Hence for this study, eight ESI were identified; industrial products (which include oil and gas, metal manufacturing, cement manufacturing, chemicals etc.), consumer products, plantation, property, trading and services, construction, mining, and infrastructure. These industries were identified as highly environmentally sensitive after a thorough review of prior literature<sup>12</sup>.

Total sample of 164 listed companies from ESI were examined in this study. Specifically, environmental related disclosures in annual reports for both year 2005 and 2009 of each company in the sample were analysed. The analysis was made in order to compare the quality of environmental disclosure for both years; before and after the CSR requirement took place. The analysis of the environmental disclosure quality was made using an environmental disclosure index. The use of the disclosure index to measure the quality of reporting has been demonstrated by prior literature<sup>13</sup> across countries. It also enables a systematic numerical basis for comparing companies' disclosures across different firms' characteristics (Haslinda et al., 2004). To be consistent with the numerous prior studies, the present study therefore, will also use the disclosure index to measure the quality of environmental reporting in Malaysia.

In addition to the comparison of the quality of environmental reporting in 2005 and 2009, this study also aims to analyse the potential factors that determine the quality of the environmental reporting in 2009. Previous studies<sup>14</sup> in Malaysia found

---

<sup>12</sup> For details refer to Chapter 4 - Sample selection and methodology

<sup>13</sup> Examples of studies that used disclosure index as a mean for accessing the quality of environmental disclosures: Wiseman, 1982; Fekrat et al., 1996; Cormier and Magnan, 1999; Cormier and Gordon, 2001; Cormier and Magnan, 2003; Cormier et al., 2005; Bakhtiar, 2005; Ten, 2009.

<sup>14</sup> See example; ACCA 2002; Nik Ahmad and Sulaiman, 2003; 2004 and Thomson and Zarina, 2004

that public environmental reporting in the country had a lack of visible drivers. Furthermore, the applicability of underlying theoretical framework such as legitimacy theory also provided limited explanation. However, these studies had used data before the mandatory listing requirement. Thus, with more recent data in 2009, i.e., two years after the mandatory requirement was implemented, the present study seeks to provide evidence about some important factors that potentially influence the quality of the environmental disclosures. The timing difference, two years after the mandatory requirement in 2007, would possibly give some time for PLCs to initiate more quality environmental reporting in 2009 and thus would provide some indicators for the reasons of the disclosure behaviour in Malaysia.

Several independent variables will be tested to examine their association with the quality of environmental reporting in 2009. These variables are categorised into a few organisational factors, i.e., share ownership distribution, economic performance, leverage and size; and an institutional factor, i.e., coercive isomorphism. Additionally, with an aim to provide an insightful explanation pertaining to environmental reporting behaviour in Malaysia, this study will examine the issue from four different theoretical perspectives. This is primarily because; a reliance of single theoretical perspective in explaining CSR behaviour may not be sufficient (Gray et al., 1995). Four theoretical frameworks will underlie each of the above said variables. They are institutional theory, resource based view theory (RBVT henceforth), information cost theory, and legitimacy theory.

### **1.3 OBJECTIVES OF THE STUDY**

Since this study aims to examine the quality of environmental disclosure after the Bursa Malaysia mandatory CSR reporting requirement, it will compare the disclosures

between 2005 and 2009; before and after the mandatory requirement took effect. The study will also test several variables and examine their association with the quality of environmental reporting in 2009. Specifically, the study formulated the following research questions:

1. What is the level of the quality of environmental reporting in 2009 as compared to the quality of environmental reporting in 2005 among companies in environmentally sensitive industries?
2. Is there an association between the quality of environmental reporting in 2009 and share ownership distribution, profitability, leverage and firm's size?

In essence, the present study seeks to examine the quality of environmental reporting practices amongst Malaysian companies in 2005 and 2009. Specifically, it intends;

- a) to investigate whether there is significant change in the quality of environmental disclosure, and
- b) to examine whether the share ownership distribution, profitability, leverage and firm's size have significantly influenced the quality of environmental reporting in 2009.

#### **1.4 CONTRIBUTION OF THE STUDY**

The present study will perhaps contribute in several ways.

1. By examining the quality of environmental reporting in 2009, two years after the mandatory CSR reporting took effect in 2007, it will exhibit some influence of the government efforts in promoting environmental sustainability towards the corporate public environmental disclosures. The study will only

focus on the quality of environmental reporting in Malaysia. This is because it was argued that compared to quantity, the quality of environmental disclosures will ultimately benefit stakeholders and society (Cormier et al., 2005). With more quality environmental information, it indicates that corporations are participating in environmentally related activities and contributing efforts to preserve the environment. This will essentially benefit their shareholders in particular and also the society at large.

2. A serious effort by the government to promote green technology across all sectors can be seen, such as an allocation of funds amounting to RM1.5 billion of loans for firms to use green technology<sup>15</sup>. According to Energy, Green Technology and Water Minister, Datuk Peter Chin, the financial benefit that firms could expect from the utilisation of green technology is lower energy, waste and water costs, lower environmental operational and maintenance costs and increased productivity and health. For example, Far Eastern Group Taipei Metro in Taiwan have managed to save costs of up to RM2.1 million a year in energy bills after incorporating a series of energy-efficient features<sup>16</sup>. The researcher believes that with the feasibility of loan provided by the government and the potential benefit to be derived from the green technology, it is expected that more corporations will be engaging in environmentally related programmes. Thus, improved quality of environmental disclosure in the future by these PLCs is also expected. In fact, corporate environmental disclosures can potentially have an economic significance considering the scarcity of alternative information (Cormier et al., 2005). Besides, more

---

<sup>15</sup> Green Technology was introduced during budget 2010. This information was obtained from New Straits Times dated October 24, 2009 in Budget 2010 report section.

<sup>16</sup> This information is obtained from News Straits Times, dated October 13, 2009.

investors are now more interested in companies which are more socially responsible<sup>17</sup>. Thus to be competitive in the future, it is important for companies to demonstrate that not only is its governance good, but also it must make a positive contribution to society. This study will contribute to provide a more recent state of environmental commitment undertaken by Malaysian corporations through their environmental reporting quality.

3. This study will analyse the factors that potentially influence the environmental reporting behaviour through several theoretical perspectives. Firstly, by adopting the coercive isomorphism<sup>18</sup> stipulated under the institutional theory, this study may provide some reasoning about an external institutional factor that perhaps significantly influences the disclosure practice in Malaysia. In this study context, the listing requirement imposed by Bursa Malaysia in 2007 will possibly influence the disclosure practice in 2009. Secondly, this study also makes use of legitimacy theory, information cost theory and RBVT. The employment of these theories may provide an explanation on the internal or organisational factors that influence management to disclose more quality environmental disclosure. Therefore, the use of a multi-theoretical perspective (Cormier, Magnan and Velthoven, 2005) in this study will provide a more meaningful explanation about environmental reporting behaviour in Malaysia.

## **1.5 ORGANISATION OF THE CHAPTERS**

The rest of the thesis will be organised as follows;

---

<sup>17</sup> This statement is according to a group director of corporate responsibility of Telenor Group - a global telecommunication company. This information is obtained from Business Times, December 6, 2010.

<sup>18</sup> Although institutionalisation can also be achieved through mimetic and normative mechanism, this study will only focus on institutionalisation of environmental quality disclosure through coercive isomorphism.

Chapter Two presents a review of literature on social and environmental information disclosure. Firstly the review will provide an overview of the studies regarding the quantity and quality of environmental disclosures. Basically, it will be divided into studies on reporting quality in developed and developing countries. Secondly, the review will provide studies on the use of a disclosure index in determining the quality of environmental disclosures. Thirdly, since this study also examines the potential factors that may influence the quality of reporting, this chapter will then discuss previous literature on the determinants of environmental disclosures. Fourthly, this chapter will discuss the ESI. This section is useful to decide which industries in Malaysia are regarded as having a direct impact on the natural environment. Finally, this chapter also will discuss the environmental commitment in Malaysia.

Chapter Three will provide the theoretical framework underlying this study. This will be followed by the hypotheses development. The chapter starts with the examining of potential factors that affect the quality of environmental disclosures with reference to many previous studies. This is followed by a discussion on multi-theoretical frameworks that underlie environmental disclosure practice. Specifically, the chapter will discuss each of the theoretical frameworks to be used in this study; the Institutional theory, Information Cost theory, RBVT and Legitimacy theory.

Chapter Four will describe the sample selection and the research method used in gathering data. Besides that, this chapter will explain the measurement of the dependent variables in this study, i.e., through the use of the disclosure index in measuring the quality of environmental reporting. This chapter then will provide the disclosure index checklist to be used in this study together with the source of each of the items. This section also will explain scoring procedures; specifically to measure

the reporting quality of the sample. Besides that, this chapter also will provide a brief explanation for each of the categories of the disclosure score checklist. Thereafter this chapter will explain the operationalisation of the independent variables which may possibly determine the quality of environmental reporting in 2009.

Chapter Five will designate the data analysis. Firstly, this chapter will present the findings of the study, including outcome details such as those derived from the comparison in the quality of the environmental reporting between 2005 and 2009. Besides that, the detailed findings on the quality according to the disclosure score will also be discussed. Furthermore, the evidence pertaining to the quality of reporting from the annual reports will also be provided in this chapter. Secondly, this chapter will present the determinants that were found to have association with the quality of environmental reporting in 2009. As a summary, the coercive isomorphism, firm's size and leverage influence the quality of environmental reporting in 2009.

Chapter Six is the final chapter of this study. This chapter consists of the conclusion, limitations and the direction for future research in this area of study. Overall, the study concludes that the institutional theory and legitimacy theory are found to be complementary in explaining the environmental reporting practice in Malaysia.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 INTRODUCTION**

This chapter consists of six sections. The first section reviews the quantity and quality of environmental disclosures. This is followed by the review of the use of the disclosure index to determine the quality of environmental disclosures. The third section reviews the determinants of environmental disclosures. The fourth section on the other hand discusses the environmentally sensitive industries. Thereafter, the fifth section reviews the environmental commitment in the Malaysian context. The final section then concludes all sections in this chapter. In this study, environmental reporting refers to the preparation and provision of information relating to environmental activities undertaken by a firm's management including environmental status and performance for the use of multiple internal and external stakeholders. The term does not strictly refer to environmental disclosures in annual reports.

#### **2.1 QUANTITY AND QUALITY OF ENVIRONMENTAL REPORTING**

Tsang (1998) quoting Ernst and Ernst (1978, p.31) argued that the quantification of CSR disclosure may improve the quality of such disclosures made. This can be done by specifying the amount and effort of a particular area of social responsibility activities undertaken. For a better quality of environmental disclosures, literature advocate for specific numerical measures for each of the disclosed items (Wiseman, 1982). Lack of specificity with only general description of the reported information and with non-quantitative measures indicated that the reporting is vague and