

## TABLE OF CONTENTS

	PAGE
Acknowledgements	i
Abstract	ii
Table of Contents	iii
List of Tables	vi
List of Figures	xi
CHAPTER ONE:	
INTRODUCTION	1
1.1 Definitions of terms	7
1.2 Problem Statement	9
1.3 The Research Questions	12
1.4 The Objectives of the Study	12
1.5 The Significance of the Study	13
1.6 The Scope of the Study	14
1.7 Limitations of the Study	16
CHAPTER TWO:	
LITERATURE REVIEW	
2.1 The Business responsibilities	18
2.1.1 Health Risk	24
2.1.2 Ecological Risk	28
2.1.3 The Economic Risk	33
2.2 The Malaysian Environment	34
2.3 The Manufacturing Implications	53
2.4 The Interactions: Business activities and the natural environment	59
2.5 The Evolution of Ethics	59
2.6 Environmental Ethics	62
2.7 The Environmental Ethics Development	65
2.8 The Green Movement	76
2.9 Environmental Ethics Philosophy	84
2.10 Environmental Sustainability	92
2.11 Ethical Decision Making	106

2.12	The Cultural Aspects	112
2.13	The Scenario of Manufacturing Industry	115
2.14	The Environmental Ethics Managers	122
2.15	The Core Themes of the Corporations	126
2.16	The Environmental Ethics Approaches	127
2.17	The Environmental Ethics Motives	138
2.18	The Benefits of Environmental Ethical Commitment (EEC)	141
2.19	Selected Empirical Studies in Environmental Ethics	144

## CHAPTER THREE: THE CONCEPTUAL FRAMEWORK

### INTRODUCTION

3.1	The Theory Development	162
3.2	The Dependent Variable (The EEC)	170
3.3	The Independent Variables	
3.3.1	The Ecological Concern	182
3.3.2	The Regulation	184
3.3.3	The Self-Efficacy	187
3.3.4	The Ethical Climate	188
3.3.5	The Financial Aspect	195
3.3.6	Personal Moral Obligation	197
3.3.7	The Stakeholders	199

## CHAPTER FOUR: RESEARCH METHODOLOGY

### INTRODUCTION

4.1	The Research Design	211
4.1.1	Theoretical and Research Framework	213
4.1.2	The Hypothesis	221
4.1.3	The Key Concept	222
4.1.4	The Dependent Variable	222
4.1.5	The Independent Variables	223
4.1.6	The Unit of analysis	237
4.1.7	The Research Sample	238
4.1.8	The Sampling Frame	241

4.2	Data Collection	
4.2.1	Sources of Data and Location of the Study	242
4.2.2	Development of the Questionnaires	244
4.2.3	The Questionnaires	244
4.2.4	Procedure of Data Collection	246
4.2.5	The Pilot Test	246
4.2.6	The Problems of Gathering the Literatures	247
4.3	Analytical Procedures and Techniques	247

## CHAPTER FIVE: DATA ANALYSIS AND RESEARCH FINDINGS

	INTRODUCTION	250
5.1	The Data Analysis	
5.1.1	Research Method	250
5.1.2	Problems and Difficulties	251
5.1.3	The Reliability Test	257
5.1.4	The Descriptive Statistics Analysis	260
5.1.5	The Correlations	261
5.1.6	The Multiple Regression	264
5.2	Research Findings	272
5.2.1	The Objectives of the Research	272
5.2.2	Factors that determine EEC	274
5.2.3	The Environmental Ethical Impact	289
5.2.4	The sources of information and pressure on companies	291
5.2.5	Companies perceptions of environmental issues	294

## CHAPTER SIX: CONCLUSION AND IMPLICATIONS

6.1	The Conclusion	295
6.2	The Implications	299
6.3	A set of General Recommendations	302
6.4	Suggestions for further Research	305

## BIBLIOGRAPHY

## APPENDIXES

## LIST OF TABLES

TABLE	PAGE
1.01 Most Serious Problem Facing Society Today	3
1.02 Level of Concern about Various Environmental Problems	4
2.01 Initiatives and Benefits Associated with Motivation for Ecological Responsiveness	21
2.02 Main Haze Components	27
2.03 Past Problems, Technological “Solutions” and the Long Term Consequences from Continued Practice of the Technology	29
2.04 Carbon dioxide emissions from fossil-fuel burning, cement production and gas flaring (thousands of metric tons of carbon)	31
2.05 World CO <sub>2</sub> Emissions by Region from Year 1990-2025	32
2.06 Occupational Fatalities	36
2.07 Major environmental disasters in Malaysia	37
2.08 Industrial Accidents	39
2.09 Court Charges in Malaysia	40
2.10 Asthmatic cases reported from September 1997 to 2000 by States in Malaysia	41
2.11 DOE: Oil Pollution Incidents 2009	50
2.12 The Environmental Ethics Influencers	63
2.13 The Philosophers and their Work	64
2.14 Typology of Basic Values in Environmental Ethics	67
2.15 Environmental Ethics Matrix	72
2.16 Reference Guide to Environmental Ethics	73
2.17 Environmental Ethics Topology	75
2.18 Business and the Environment	77
2.19 Motivation for Greening	81
2.20 The Green Value Chain	83
2.21 A Typology of Theories within Environmental Ethics	85
2.22 Traditional Versus Ecocentric Management	89
2.23 Alternative Environment Paradigms	90
2.24 Hypernorms and Selected Environmental Principles	93

<u>TABLE</u>	<u>PAGE</u>	
2.25	Operational Principles and Techniques of Biophysical Sustainable Behaviour	97
2.26	Sustainable Competitive Advantage	99
2.27	Restructuring Industrial Economies	100
2.28	Major Challenges to Sustainability	105
2.29	New Metric, Improved Payoffs	106
2.30	Foundations for Ethical Decision Making	108
2.31	Empirical Evidence Relating Factors Not Specific to the Individuals and Ethical Decision Making	109
2.32	Some Important Trade-off Decisions in Manufacturing – or “you can’t have it both ways”	121
2.33	Environmental Ethics: Summary Characteristics of the Two Main Approaches	128
2.34	Conceptual Classification of Firms’ Approaches to the Natural Environment	130
2.35	Developmental Stages of Corporate Environmental Management Programmes	131
2.36	Some of the Managerial and Organizational Features of Proactive Environmental Organizations	133
2.37	Checklist for Implementing a Proactive Environmental Management Programme	135
2.38	Factors of Natural Environmental Management Item	137
2.39	High Performance Model	140
2.40	The Business Process Framework	142
2.41	Some of the Managerial Organizational Features of Proactive Environmental Organizations	153
2.42	Summary of the Contributions	158
3.01	Theory Development – The Independent Variables	170
3.02	Relationships between organizational activities and conditions for ethical behaviour	174

<u>TABLE</u>	<u>PAGE</u>
3.03 Measures of Corporate Financial Performance Used in “Pays to Be Green” Scholarship	177
3.04 Measures of Corporate Environmental Performance Used in “Pays to be Green” Scholarship	178
3.05 The main components of BS 7750, EMAS and ISO 14001	180
3.06 Government Entities Awarded MS ISO 9001:2000 Certification	181
3.07 Environmental Improvement Can Benefit Resource Productivity	186
3.08 Ethical Constructs and Key Descriptors	190
3.09 Measuring Dimensions of Moral Climate	192
3.10 Ranking of the Importance of Sources of Pressure to Consider Environmental Issues	200
3.11 Risks and Stakeholders	201
3.12 Stakeholder Outcomes that Impact Financial Performance	204
3.13 The Links of Stakeholder Responses to Financial Performance	209
4.01 Sources of Questions	237
5.01 The Industry	255
5.02 Number of Respondents and Place	256
5.03 Summary of Reliability of Analysis	259
5.04 Cronbach’s Alpha – The Comparison	260
5.05 Descriptive Statistics for EEC	261
5.06 The Correlations	264
5.07 Model Summary b	268
5.08 ANOVA (b)	269
5.09 Coefficients (a)	270
5.10 Ranking of the Importance of Sources of Information to Consider concerning Environmental Issues	292
5.11 Ranking of the Importance of Sources of Pressure to Consider concerning Environmental Issues	293

## LIST OF FIGURES

FIGURE	PAGE
2.01 The Social Responsibility Categories	23
2.02 Air Pollutants in Malaysia	26
2.03 Cumulative Abnormal Returns of Union Carbide for 50 Days Following the Bhopal Chemical Leak	34
2.04 Asthmatic cases reported from September 1997 to 2000 by State in Malaysia	42
2.05 Emission of pollutants to the atmosphere from stationary sources through industries in Malaysia 2009	45
2.06 Industrial air pollution sources by state 2009	46
2.07 Malaysia: Slightly Polluted River Water Quality Trend (2005-2009)	48
2.08 Malaysia: Percentage of Non-Compliance of Industrial Contaminants by Land Use 2009	49
2.09 Malaysia: Composition of Water Pollution Sources by Sector 2009	51
2.10 Distribution of Industrial Water Pollution Sources (Agro-based and Manufacturing industries) by State in Malaysia 2009	52
2.11 Percentage of Scheduled Wastes Generated by Industry in 2008	53
2.12 Scheduled Waste Management, 2001-2004	56
2.13 Example of Results Obtained From Waste Surveys	57
2.14 Environmental Ethics Tree	70
2.15 Where Green Counts	79
2.16 Ecocentric, Biocentric and Anthropocentric	87
2.17 Building Sustainable Business Strategies	95
2.18 The Multilevel/Multisystem Relationships Web	101
2.19 The Business Charter for Sustainable Development	103
2.20 Reasons for Damaging the Environment	107
2.21 Manufacturing Enterprise Wheel	116
2.22 Ecological Footprint	117
2.23 Primary Job Responsibilities for Ethics and Compliance Officers	124
2.24 Diverse Opportunities in Environmental Products and Services in Companies' Core Business	144

<u>FIGURE</u>		<u>PAGE</u>
2.25	A Profile Analysis Process of Business Ethics Performance – Proactive Versus Reactive	154
3.01	Diagrammatic Representation of the Differences between Efficacy and Outcome Expectations	188
3.02	Four stages Model of Ethical Culture in Organizations	194
3.03	Continuous Ethical Improvement Model	195
4.01	Factors Influencing Firms' Environmental Ethical Commitment	214
4.02	Theoretical Framework of the Study	217
4.03	The Hypothesis Indicators	220