COHERENCE IN ENVIRONMENTAL POLICIES AMONG ISKANDAR MALAYSIA'S SELECTED BLUEPRINTS

REYHANEH BEHBOUDI

UNIVERSITI TECHNOLOGI MALAYSIA

COHERENCE IN ENVIRONMENTAL POLICIES AMONG ISKANDAR MALAYSIA'S SELECTED BLUEPRINTS

REYHANEH BEHBOUDI

A project report submitted in partial fulfillment of the
requirements for the award of the degree of
Master of Science (Urban and Regional Planning)

Faculty of Alam Bina

University Technologi Malaysia

JANUARY 2012

ABSTRACT

A significant increase in number of International, national, regional and local policies on one hand, and emergence of different policy domains, committees and sections on the other hand, has made the concept of "policy coherence" extremely important. Nations on the way to achieve their long term economic, social and environmental goals try to set the best policy scenarios. Iskandar Malaysia in this context has been defined as the second significant economic project of the country which is looking for an international standing sustainable development. For ensuring the sound development, IRDA, the related authority, has published 32 blueprints. Given the large number of blueprints and consequently policy sets on one hand and importance of environmental concerns in both international and national level, this study is going to evaluate two selected blueprints, Livable Neighborhood Design and Integrated Land use blueprints, in terms of their coherence with environmental guidelines and policies. To achieve so, the Environmental Planning Blueprint, which is a blueprint released by IRDA itself, has been considered as the basis of comparison. Taking texts as the basis of evaluation, content analysis has been applied as a main method of the study. Results coming from the analysis show that two selected blueprints are by and large consistent with the principles of EPB, although their environmental focus has been on distinct environmental features. No contradiction found between EPB and Livable Neighborhood design while some critical contradictions revealed in Integrated Land use Blueprint.

ABSTRAK

Peningkatan ketara bilangan polisi-polisi antarabangsa, negara, wilayah, tempatan serta wujudnya kepelbagaian dalam bidang-bidang, jawatankuasa dan bahagian-bahagian polisi telah menunjukkan kepentingan konsep 'keseragaman polisi'. Kebanyakan negara cuba merangka polisi-polisi terbaik untuk menuju ke arah pencapaian ekonomi, sosial dan alam sekitar berterusan dalam jangka masa panjang. Dalam konteks ini, Iskandar Malaysia telah dikenalpasti sebagai projek ekonomi kedua terpenting di Malaysia yang memfokuskan kepada pembangunan mapan bertaraf antarabangsa. Pihak berkuasa pembangunan Iskandar Malaysia, IRDA (Iskandar Region Development Authority) telah merangka 32 'blueprint' bagi memastikan pembangunan yang lestari. Kajian ini menilai dua 'blueprint' iaitu 'Livable Neighborhood Design' dan 'Integrated Land Use' dari segi keseragamannya dengan garis panduan dan polisi alam sekitar melalui perbandingan dengan 'Environmental Planning Blueprint'. 'Content analysis' digunakan sebagai kaedah kajian dengan menilai isi kandungan teks 'blueprint' tersebut. Hasil kajian menunjukkan kedua-dua 'blueprint' yang dinilai adalah konsisten dengan prinsip-prinsip 'Environmental Planning Blueprint' walaupun alam sekitar difokuskan kepada ciri-ciri ketara alam sekitar, tiada percanggahan antara 'Environmental Planning Blueprint' dengan 'Livable Neighborhood Design' manakala terdapat percanggahan kritikal dengan 'Integrated Land Use'.

TABLE OF CONTENTS

CHAPTER	TITLE	PAGE
	DECLARATION	i
	ABSTRACT	ii
	ABSTRAK	iii
	TABLE OF CONTENTS	iv
	LIST OF TABLES	vii
	LIST OF FIGURES	ix
	LIST OF ABBREVATIONS	xi
	LIST OF APPENDICES	xii
1.	**INTRODUCTION**	**1**
1.1	Background of Study	1
1.2	Problem Statement	3
1.3	Research Objectives and Questions	5
1.4	Research Method	5
1.5	Research Limitations	7
1.6	Research Design	7

2. LITERATURE REVIEW 9

2.1 Introduction 9

2.2 Study Area 9

2.2.1 IRDA 13

2.2.2 Physical Development 14

2.2.2.1 Current Land Uses 15

2.2.3 Natural Environment of Iskandar Malaysia 17

2.2.4 Iskandar Malaysia's Blueprints 22

2.3 Policy Coherence 24

2.3.1 OECD and Policy Coherence 24

2.3.2 Meaning of the Concept of Policy Coherence 26

2.3.3 Coherence Attributes and Dimensions 36

2.3.4 Coherence Classifications 38

2.3.5 Environment Policy Integration 42

2.4 Environmental Movements 45

2.4.1 International Trends 45

2.4.2 Current Concerns 50

2.4.3 Environmental Concerns and Land Use Planning in Malaysia 53

3. METHODOLOGY 56

3.1 Introduction 56

3.2 Qualitative Research 56

3.3 Content Analysis 58

3.3.1 Background of Method 58

3.3.2 Definitions 60

	3.3.3	Content Analysis Process	63
	3.3.4	Research Design	71
3.4		Reliability	76
3.5		Validity	76
3.6		Manifest Versus Latent Content Analysis	77
3.7		Previous Studies	78
4.	**RESULTS AND DISCUSSION**		**80**
4.1		Introduction	80
4.2		Livable Neighborhood, Planning and Design guidelines	81
	4.2.1	Document Analysis	82
4.3		Integrated Land use Blueprint	95
	4.3.1	Analyzing the Content's Sections	96
	4.3.2	Analyzing Implementation Initiatives	102
	4.3.3	Contradictions	107
5.	**CONCLUSION**		**112**
5.1		Conclusion	112
5.2		Recommendations for Future Research	118
	REFERENCES		**119**
	APPENDIX A		**122**

LIST OF TABLES

TABLE No.	TITLE	PAGE
2.1	Existing Land uses in IM	16
2.2	List and categories of ESAs of IM region	22
2.3	ESAs ranking in IM	22
2.4	Lists of IM blueprints	23
2.5	Policy integration criteria	32
2.6	List of definitions of policy coherence and close keywords	35
2.7	Coherence dimensions and criteria	38
2.8	Different types of policy coherence classification	42
3.1	Content analysis definitions	60
3.2	Finalized eight categories	75
4.1	Intents absent-present check list for eight identified themes	82
4.2	Frequency of keywords within intents	83
4.3	Policies absent-present check list for eight identified themes	85
4.4	Frequency of keywords within policies	86
4.5	Regulations absent-present check list for eight identified themes	88
4.6	Frequency of keywords within regulations	89

4.7	Absent-present checklist of livable neighborhood blueprint for eight identified themes	92
4.8	Frequency of keywords within the whole blueprint	93
4.9	Rating policy packages on their coherence with environmental policies	94
4.10	Absent-present checklist for thematic areas within the whole blueprint	97
4.11	Frequency of keywords within whole blueprint	99
4.12	Absent-present check list of Integrated Land use blueprint principles for identified themes	102
4.13	Absent-present checklist of initiatives for identified themes	103
4.14	Priority of implementing initiatives in phasing plan	104
4.15	Development areas within Urban Growth Boundary	109
4.16	Land suitability for development within Urban Growth Boundary	110

LIST OF FIGURES

FIGURE No.	TITLE	PAGE
1.1	Research framework	6
1.2	Research design	8
2.1	Iskandar Malaysia in its national and regional context	10
2.2	The National Physical Plan, 2005-2020/Spatial Development Strategy	11
2.3	Organizational Structure of IRDA	13
2.4	Stakeholders that IRDA needs to work with	14
2.5	Existing land uses distribution plan	15
2.6	Four Main Rivers Basin in IM	19
2.7	Agricultural zones in IM region	20
2.8	Distribution of 3 ranks of ESAs within the region boundaries	22
2.9	Steps towards policy coherence	27
2.10	Degree of policy integration	33
2.11	Policy coherence cycle	34
2.12	Vertical and horizontal coherence	40
3.1	Flowchart of content analysis	66
3.2	Study process	72

4.1	Intents absent-present Pie chart	83
4.2	Keywords within intents	84
4.3	Policies absent-present Pie chart	85
4.4	Keywords within policies	86
4.5	How policies addressed the thematic areas	86
4.6	Policies absent-present Pie chart	88
4.7	Keywords within regulations	89
4.8	How regulations addressed the thematic areas	89
4.9	List of cited keywords in the whole text	91
4.10	Integrated Land-use Blueprint absent present pie chart	98
4.11	Keywords within the whole blueprint	100
4.12	Proposed green networks for Johor Bahru city centre	101
4.13	Proposed pedestrian network for Johor Bahru city centre	101
4.14	Implementation initiatives absent-present pie chart	104
4.15	Keywords within the whole blueprint	106
4.16	Defined Urban Growth Boundary in IM	108
4.17	Land suitable for development within UGB	110

LIST OF ABBREVIATIONS

IM	Iskandar Malaysia
OECD	Organization for Economic Co-operation and Development
EPB	Environmental Planning Blueprint
EPI	Environmental Policy Integration
PCD	Policy Coherence for Development
IRDA	Iskandar Regional Development Authority
SJER	South Johor Economic Region
IDR	Iskandar Development Region
CDP	Comprehensive Development Plan for SJER
NSPC	National SJER Planning Committee
ESA	Environmental Sensitive Area
UGB	Urban Growth Boundary

LIST OF APPENDICES

APPENDIX	TITLE	PAGE
A.	PROFORMS	122

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Environmental concerns, in last four decades have been largely taken in to account. Rapid pace of development particularly in urban areas has had crucial negative impacts on existing ecosystems and consequently threatened the functions provided by them. Now, it has been globally approved that human activities should be concerned environmental issues. At the top of the decision making hierarchy, these are governments who have the responsibility to formulate and implement more environmentally sustainable developments. This fact is more significant in developing countries wish to take off economically.

On the other hand, any proposed development need strong policy base. From the environmental sustainability point of view, policies at first stage should include environmental sustainability requirements and at the second stage, different policy domains should go along each other to achieve targeted goals. Environmental issues cannot be covered and limited to only environmental

departments or environmental blueprints; instead all policy making committees and horizontal sections need to be integrated in a way to obtain environmental sustainability. This approach called policy coherence.

Policy Coherence is a concept largely conceptualized and practiced by Organization for Economic Co-operation and Development (OECD). Most documents on the subject of policy coherence/consistency have been released within and for this organization. OECD, regarding the number of members, 34 countries, and wide range of targets and objectives, handling with too many issues and challenges need to be integrated not only in policies but also in actions. As a result, OECD has made remarkable effort on conceptualizing, operationalizing and assessing the policy coherence in different directions including horizontally, vertically and internally. One of the major goals of these documents is integrating OECD policies for treating towards developing countries which are called aided countries:

> OECD countries recognize the need for greater coherence in policies across sectors that affect developing countries. Aid alone cannot address the needs of the developing world. Policies in areas like agriculture, trade, investment, migration and others have a profound impact on developing countries, yet they often work at cross-purposes. An OECD initiative on policy coherence for development explores ways to ensure that government policies are mutually supportive of the countries development goals.
>
> (www.oecd.org/development/ policy coherence)

Given the importance of the issue among members to act in the same direction in global context, researchers substantially attracted to this area and region to evaluate the degree of their success (Gauttier, 2004; Piccioto, 2005; Hertog and Strob, 2011; PEER, 2009).

Environmental Policy Integration (EPI) is another concept within policy coherence context which is particularly emphasizes on environmental sustainability. The term has been mostly raised from European Countries (EU).

EPI is aiming at integrating policies around environmental issues and concerns. EPI processes and mechanisms are very the same as policy coherence. The only distinction is that the scope is not that much broad and instead has been narrowed to sustainable development.

1.2 Problem Statement

The term "coherence" is a word which usually applied when we are talking about a relationship between two phenomena. This concept has been recently attached importance by scholars and practitioners in the field of policy making. "Planning" means setting goals and objective rationally and define consequent actions systematically. To achieve desired objectives, policies play crucial roles in directing the planning process towards proper actions and outcomes. This is why governments and authorities spend a lot of their time and expenses on the field of policy making. Huge developments, economic growth, social integrity and environmental sustainability cannot be brought to reality without planning and policy making. Malaysia is not either an exception. The country, especially after dependence with respect to its economic goals, strongly has been practiced the field of planning and policy making. One of the main document releases once every five years is National Physical Plan. This influential planning text in 2005 has identified 5 main economic corridors which guarantee the future economic growth of Malaysia. The second important one is Iskandar Malaysia. Iskandar Malaysia sound development is going to be guaranteed by IRDA, an authority which is particularly responsible for IM development. IRDA on the way to pave the way of sound development of southern corridor, at earlier phases, has been concentrated on policy making. These policies are supposed to direct the future development of the projects and can be taken as guidelines for both developers and local authorities. Iskandar Malaysia's set of blueprints have been designed and prepared for these kind objectives. They consist of series of policies on the very wide-range of issues. On the other hand, Iskandar Malaysia is going to turn out a development of a Strong, Sustainable Conurbation of International Standing. The

focus of the vision is undoubtedly on "sustainability" the terms which has been strongly intertwined with environmental concerns. This aspect of sustainability also has been emphasized by related authorities repeatedly. Now the question is that how IM is going to meet environmental concerns. At the planning stage, the answer relies on the act of policy making. The answer should tell us in what extent planning documents of IM have addressed the environmental debates. Have they taken these issues in account or they have overlooked them? Replying to these questions, in fact, require a basis. In other words, the point is that how we are going to investigate the released blueprints and based on which criteria we are going to assess them. For this case, we suppose that the best basis of investigation would be existing body of environmental policies and guidelines. Thus, the project considered the Environmental Planning Blueprint (EPB), released by IRDA itself, as the basis of comparison. We are going to examine the relationship between released IM blueprints and environmental guidelines and principles of EPB. In fact, the main issue regarding the IM released blueprints in terms of environmental sustainability is that if they go along each other or they have some contradictions, if they are in the same directions for achieving the set vision or they cross each other. If they go along each other then they would be synergically move towards the formulated objectives and if they don't, waste of time and expense would be unavoidable. As a result, studying the coherence between formulated policies will ensure the sound development of the project. The seriousness of consistency between released policies will be higher, when we refer to the economic importance of the IM for Malaysia. In this respect, the study is going to investigate the blueprints with respect to the degree of coherence between formulated policies and environmental policies and guidelines. The project is willing to see if blueprints meet objectives of EPB. For fulfilling this purpose, the study out of 35 released blueprints, selected two: Livable Neighborhood and Integrated Land use Planning. Two blueprints which are not only more related to the field of urban planning but also most influential in identifying the main directions of future development.

1.3 Research Objectives and Questions

Following the stated issues and concerns this project has identified following objectives and questions:

Objectives:

- Investigating environmental status of Iskandar Malaysia
- Covering literature review on the concept of policy coherence
- Examining two blueprints of Iskandar Malaysia in terms of their coherence with Environmental Planning Blueprint.

Questions

- Is the Iskandar Malaysia Livable Neighborhood Blueprint coherent with policies under Iskandar Malaysia Environmental Planning Blueprint?
- Is the Iskandar Malaysia Integrated Land use Blueprint coherent with policies under Iskandar Malaysia Environmental Planning Blueprint?

1.4 Research Method

As Indicated earlier, we are going to examine the coherence between Iskandar Malaysia's blueprints and policies under environmental planning blueprint. In other words, our main work is to evaluate some texts and written documents and when the focus of any research would be on a written text, undoubtedly the research method would be content analysis:

> Content Analysis is a research technique for making replicable and valid inferences from texts (or other meaningful matter) on the context of their use.
>
> Krippendorff (2004)

Content analysis has been categorized under qualitative methods due to its nature, though it does not mean that content analysis and qualitative methods do not apply quantitative instruments. For the case of the current project, considering the characteristics of the given texts, we would rather apply more descriptive tools rather than statistical ones. For doing so, the project was assigned to follow the defined process of content analysis to systematically derive and extract targeted data. For this reason, in the first phase, EPB has been coded and recorded and main categories have been identified. In the next step, open coding of blueprints has been conducted. In the third phase, the absence-presence of keywords and key phrases checked and frequencies of each one recorded. After searching for any contradictions, data have been analyzed and presented in a descriptive way. Additionally, latent content analysis has been done besides manifested one for both finding relevant keywords and potential contradictions. The method framework has been shown in Figure 1.1.

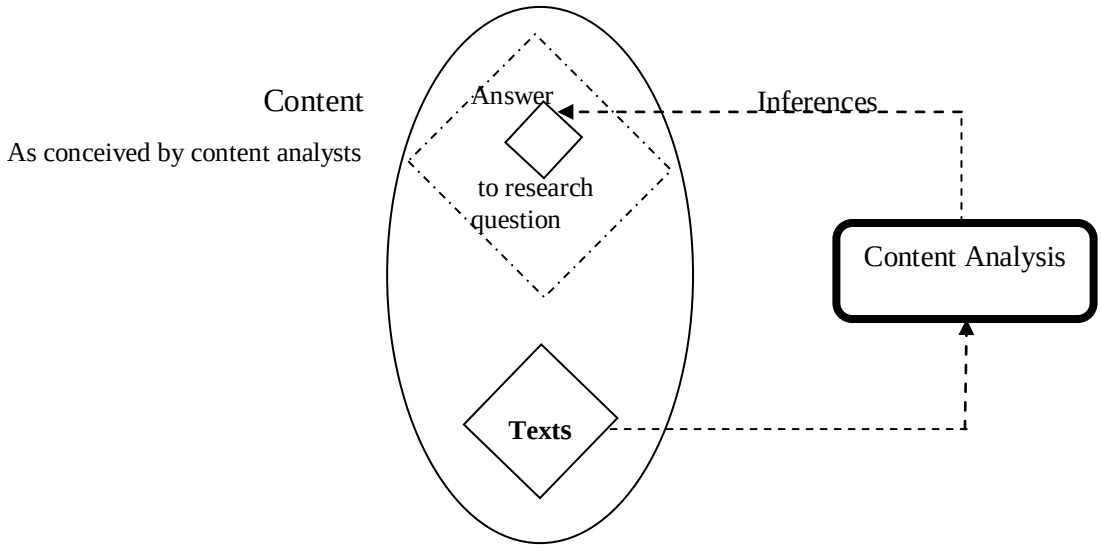

Figure 1.1: Research framework

Source: Kreppendorff (2004)

1.5 Research Limitations

This project has been faced with following limitations:

- Time constraints: the limited due time of the project caused the researcher just focus on two blueprints out of 35
- Man power constrains: ideally any content analysis is conducted using more than one coder, at least two coders. This ideal regarding the time constraints could not be met during the project.

1.6 Research Design

As illustrated in Figure 1.2 this project has gone through following stages:

- Setting research questions
- Literature review
- Identifying the scope of the research: selecting the proper blueprints
- Content analysis
- Evaluating the coherence between selected blueprints and EPB

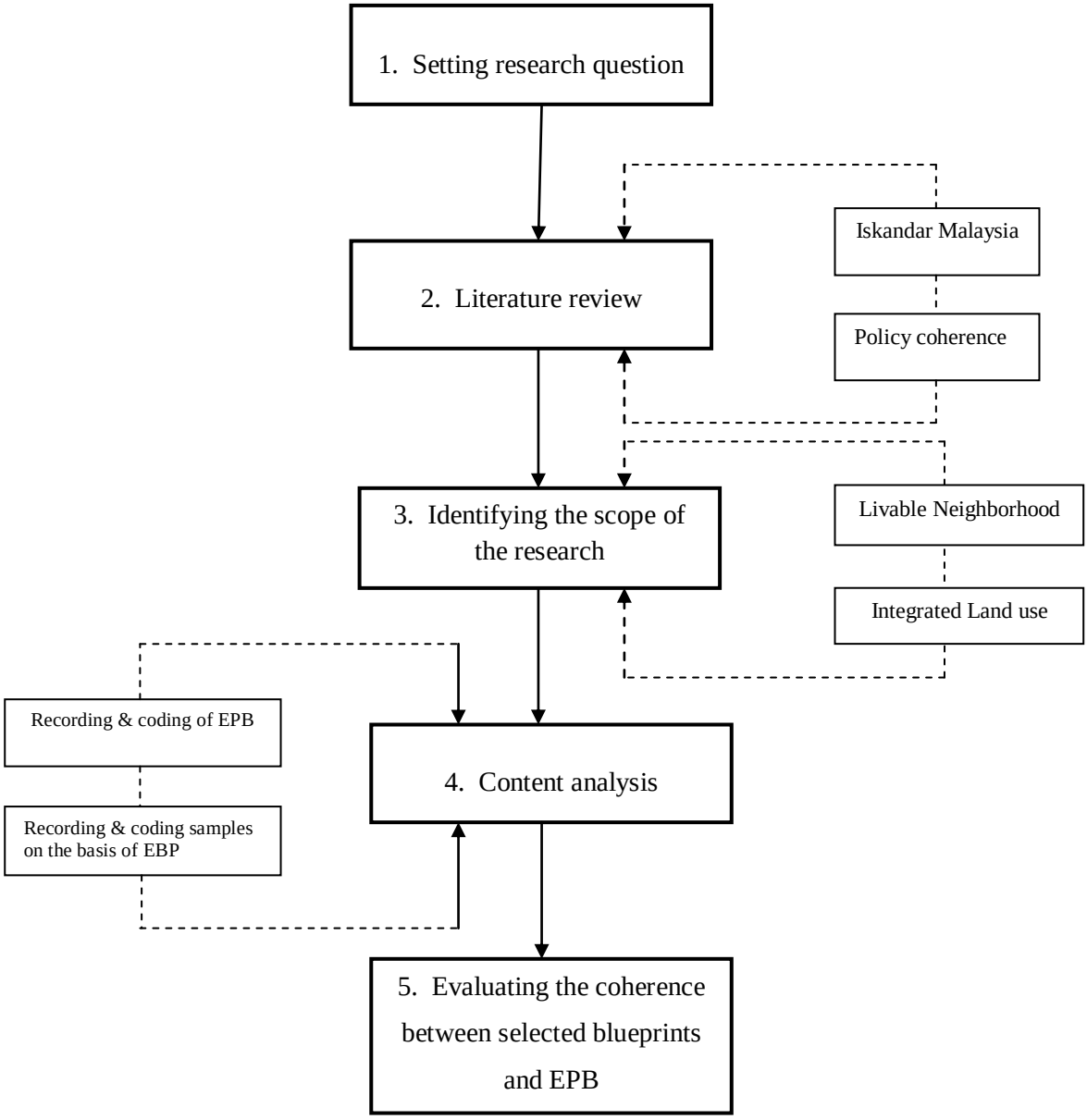

Figure 1.2: Research design

REFERENCES

Birks, M. and Mills. J. *Grounded Theory*. London: SAGE Publications. 2011.

Bruff, G. and Wood, A. (2010). Local Sustainable Development; Land-use Planning Contribution to Modern Local Government. *Journal of Environmental Planning and Management*, 43 (4), 519-539.

Challis, L. Fuller, S. Henwood. M. Klein. R. Plowden. W. Webb. A. Whittingham. P. Wistow. G. (1988). *Joint Approaches to Social Policy: Rationality and Practice*. Cambridge: Cambridge University Press.

Colby, M. (1991). Environmental Management in Development: the Evolution of Paradigms. *Ecological Economics*, 1, 193-213.

Colorado State University. *Writing Guide: Content Analysis*. Viewed 5 November. <http://writing.colostate.edu/guides/research/content/>

Comprehensive Development Plan for South Johor Economic Region, 2006-2025 (CDP). (2006). Khazanah National.

Conroy, M. and Berke, P. (2004). What Makes a Good Sustainable Development Plan? Analysis of Factors that Influence Principles of Sustainable Development. *Journal of Environment and Planning A*, 36, 1381-1396.

Duiaiapphah, A. and Bhraradwaj, A. (2007) *Measuring Policy Coherence among the MEAs and MDGs*. Institute for Sustainable Development. Viewed 1 November 2011< http://www.iisd.org/publications/pub.aspx?id=709>.

Environmental Planning Blueprint for Iskandar Malaysia. *(2010)*. Minconsult Environment.

Flick, U. *Designing Qualitative Research*. London: SAGE Publications. 2007.

Foziah, J. (2009). Environmental Sustainability in Selected Local Plans in Malaysia. In Kdouf. H. Aljunid, S (Ed). *Land use Planning and Environmental Sustainability in Malaysia: Policies and Trends*. (pp. 255-274). Research Centre of International Islamic University Malaysia.

Funke, N. and Roux. D. (2009). Evaluating Environmental Policy Integration and Coherence across Service Sectors: The case of South Africa's Inland Water Biodiversity. *Journal of Africanous*, 39 (2). 18-30.Policy

Galser, B. and Strauss, A. (1967). The Discovery of Grounded Theory. *British Journal of Sociology*, 20 (2). 227-228.

Geerlings, H. and Stead. D. (2004). The integration of Land Use Planning Transport and Environment in European Policy Research. *Transport Policy*, 10(3), 187-19.

Gray, J. H. and Densten, I. (1998). Integrating Quantitative and Qualitative Analysis Using Latent and Manifest Variables. *Quality & quantity*. 32, 419-431.

Guattier, P. (2004). Horizontal Coherence and the External Competences for the European Union. *European Law Journal*, 10 (1), 23-41.

Hansen, A. and Luniewska, M. (2010). Strategic *Planning of the Iskandar Region in Malaysia as a Sustainable Metropolis.* Master thesis. Technical University of Denmark.

Healy, P. and Shaw, T. (1993). The Treatment of Environment by Planners: Evolving Concepts and Policies in Development Plans. Working Paper No 31. Centre for Research in European Urban Environment, University of Newcastle Upon Tyne.

Hertog, L. and Strob, S. (2011). Policy Coherence in the EU System; Concepts and Legal Rooting of an Ambiguous Term. *The EU as Global Player*. 7-8 April. Madrid: 1-30.

Hoebink, P. European Development cooperation In Between the Local and the Global. Amsterdam: Amsterdam University Press. 2010.

Holsti, R. (1968). *Content Analysis.* G. Lindzey. E. Aronson. The Handbook of Social Psychology. Reading, Mass: Addison-Wesley.

Integrated Land use Blueprint, a Land use and Growth Management Plan for Iskandar Malaysia. (2010) AJM Planning & Urban Design Group.

Iskandar Malaysia. *Organizational structure*. Viewed 7 October. <http://www.irda.com.my/>.

Iskandar Malaysia. *Iskandar Malaysia Blueprints*. Viewed 2 October. <http://www.iskandarmalaysia.com.my/iskandar-malaysia-blueprint>.

Krippendorff, K. *Content analysis, An Introduction to Its Methodology*. 2th Ed. London: SAGE publication. 2004.

Livable Neighborhood Planning & Design Guidelines for Iskandar Malaysia. (2010). Garish Architects.

Luken, R. and Hesp, P. (2007). The Contribution of Six Developing Countries Industry to Sustainable Development. *Journal of Sustainable Development*, 15. 242-253.

Maile, S. *Education and Poverty Reduction strategies; Issue of Policy Coherence*. Cape Town: HSRC Press. 2008.

Mason, J. *Qualitative Researching*. 2th Ed. London: SAGE Publications. 2002.

May, P. and Sapotichne. J. Workman. S. (2006). Policy Coherence and Policy Domains. *The Policy Studies Journal*, 34 (3), 381-403.

Neuendorf, K. *The Content Analysis Guidebook*. London: SAGE Publications. 2002.

OECD. (2006). EU *Mechanisms that Promote Policy Coherence for Development*. ECDM. ICEI. Maastricht, Viewed 11 October< http://www.three-cs.net/images/poster_pcd.pdf>.

OECD. (2009). Building *Blocks for Policy Coherence for Development*. Viewed 3 November. < http://www.oecd.org/dataoecd/14/53/44704030.pdf>.

PEER. (2009). Climate *Policy Integration, Coherence and Governance*. Vammalan Kirjapaino Oy, Sastamala, Viewed 15 October< http://www.peer.eu/fileadmin/user_upload/publications/PEER_Report2.pdf >.

Person, A. (2004). Environment *Policy Integration: An Introduction*. Stockholm Environmen Intitute & Policy Institutions. View 18 October. < http://www.sei-international.org/mediamanager/documents/Publications/ Policyinstitutions/ pints_intro.pdf>.

Piccioto, R. *The evaluation of Policy Coherence for Development*. London: SAGE Publications. 2005.

Steurer, R. Berger, G. Hametne, M. (2010). The Vertical Integration of Lisbon and Sustainable Development Strategies across the EU: How Different Governance Architectures Shape the European Coherence of Policy Documents. *Journal of Natural Resources Forum*, 34, 71-84.

Swan, H. (2009). *The Search for Policy Coherence: Australia Regional Governance in a Federal Framework.* Doctor Philosophy, University of Canberra.

The DAC Journal: Development Co-operation Report 2001 – Efforts and Policies of the Members of the Development Assistance Committee, 3**(1)**.