CHAPTER 3 : METHODOLOGY

3.0 Introduction

The methodology used to derive this study on a policy for an Integrated Solid Waste Management (ISWM) in Malaysia has been largely adapted from two key documents. The main document is the proposed format for environmental policy analysis advocated by Wescott in his paper "A Standard Format for Use in the Analysis of Environmental Policy" while the other document is from the methodology advocated by the Asian Development Bank (ADB) on Economic-Cum Environmental Planning. Consequently, the methodology used was an amalgamation of the above two documents taking into consideration the solid waste management scenario in Malaysia.

3.1 Policy Formulation

The policy formulation methodology for this document comprises of 7 main steps as shown below.

- Reviewing existing legal and institutional framework
- Reviewing international trends
- Reviewing existing practices, issues & trends in Malaysia
- Reviewing alternative policy approaches
- Formulation of criteria for selection between alternative policy options
- Recommendation and description of the preferred policy approach
- Formulation of action plans to implement the recommended policy framework

(Adapted from Wescott, G., 1992 & ADB, 1988)

Figure 3-1: Policy Formulation Methodology
The first step describes the existing legal and institutional solid waste management framework, which basically informs us of where we are now in terms of the country's framework for solid waste management. Regardless of the practice and assumptions on the ground, the legal and institutional framework is the backbone from which any progress in formulating policies for solid waste management can be derived. This involves reviewing the various legislation that has implications on ISWM especially the Constitution and Federal laws. This also involves reviewing and understanding the existing institutional mechanism in the implementation of the above legislation.

The second step involves analyzing international trends in solid waste management especially in countries that have developed their solid waste management systems as well as in countries that have similar waste characterization. This presents us with the various options and alternatives in formulating our own policy framework for integrated solid waste management.

The third step involves a description of the existing solid waste management practices, issues and trends in the country. This helps us to identify the main issues in solid waste management and critical factors that would need to be addressed to ensure the success of solid waste management in the country.

The fourth step involves the reviewing of the alternate policy approaches possible for solid waste management in Malaysia. In practice this usually involves three main options which are the status quo option, moderate option and the radical option.
The status quo option presents a policy approach that would involve minimal disturbance and changes to the existing system in the hope that it would be sufficient to bring about the required change. The radical option on the other hand presents a policy approach which is determined to produce a paradigm shift in the existing system and would involve significant changes to achieve the ideal solid waste management scenario. The moderate approach seeks to balance between the existing system and the ideal system by taking into consideration local environmental, economic, social and political factors. However, the selection of a policy approach largely depends on the national objectives of the individual nations.

The fifth step involves determining key criteria for the selection of the policy approach. Determination of criteria involves defining the area/areas for emphasis within the environmental, economic, social and political framework.

The sixth step involves the description of the recommended policy approach for solid waste management in Malaysia based on the selection criteria. Finally, the seventh involves the formulation of Action Plans for the implementation of the recommended policy approach. Action Plans detail initiatives, programs and projects to guide the policy framework.

In conclusion the environmental policy formulation process has currently become a conceptual process that involves data, information, evidence, rhetoric and heresthetic which engages the scientific, economic and political arena. This has to be recognized for the formulation of any effective policy framework (Matier, 1995).