



SOLID WASTE MANAGEMENT

by

Nadzri Yahaya, Ph.D
Deputy Director General
National Solid Waste Department

at

Conference on Climate Change Preparedness



FEDERAL CONSTITUTION

- Solid Waste is a Sanitation issue
- Solid Waste Management under Concurrent List of the Ninth Schedule
- Carried out by Local Authorities



SOLID WASTE GENERATION

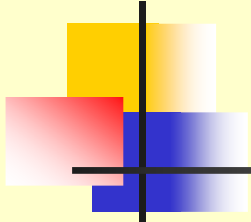
- Solid waste generated in 2002 was 17,000 tones per day in Peninsular Malaysia;
- Generation of solid waste expected to reach 30,000 tones per day in 2020; and
- 9th Malaysia Plan estimated about 45% of the waste is made up of food waste, 24% of plastic, 7% is paper, 6% of iron and glass and others made of the rest

Current Status

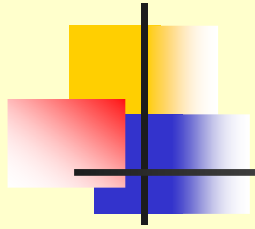
Landfills

- 261 landfill sites all over the country as at April 2007
- About 111 of these sites are closed
- 150 still operating

9th Malaysia Plan

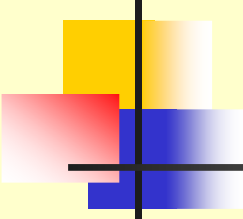


-
- National Strategic Plan for Solid Waste Management will be implemented
 - upgrading of unsanitary landfills as well as the construction of new sanitary landfills and transfer stations with integrated material recovery facilities.
 - Legislation to streamline the strategies and measures in the Strategic Plan will be enacted.



9th Malaysia Plan

- A solid waste department will be established to implement these measures and to administer solid waste policy, planning and management in a holistic manner



3rd Outline Perspective Plan (2001-2010)

the government will consider the adoption of a comprehensive waste a management policy including the installation of incinerators for safe and efficient disposal of waste as well as to formulate strategies for waste reduction, reuse and recycling



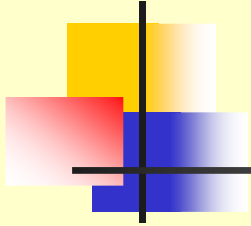
Current Status

(Policy, organizational and legislative framework)

- National Strategic Plan for SW Minimization -2005
- National Policy on Solid Waste Management -2006
- Solid Waste and Public Cleansing Management Act 2007: Confer executive authority to the Federation for matters relating solid waste - Article 74(2) and Article 80

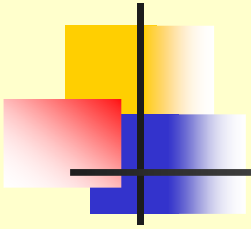
- 2 new agencies are established
- 2 new laws are formulated
- 3 existing acts are amended

National Policy on SWM



- **Established a holistic, integrated, cost effective solid waste management;**
- **Emphasis on environmental protection and public health;**
- **Utilised proven cost effective technology; and**
- **Priority on 3R**

Solid Waste and Climate Change



- **Landfill – a major source of Methane**
- **21 x GWP**
- **65 of 776 registered CDM projects are landfill projects**
- **Waste handling and disposal 20.93% of registered projects -211 projects**



REDUCTION OF GHG (METRIC TONNES CO2 EQ)

- **Seelong (Malaysia)** – 758,348 -2007- 2013
(1200tpd)_
- **Novagerar (Brazil)** - 1,895,256 -7 yrs (2 million tonnes deposited)
- **Bandeirantes (Brazil)** 7.5 million-7yrs (1.8million tonnes/year)
- **Olavaria (Argentina)** – **18,688 per yr**



CURRENT PLANNING

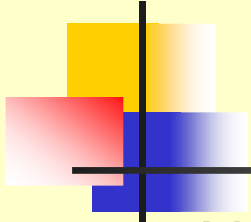
- **Immediate Safe closure of 16 landfills that are in critical areas;**
- **Upgrading of non sanitary landfills**
- **Building new sanitary landfills**
- **Building MRF, incinerators**



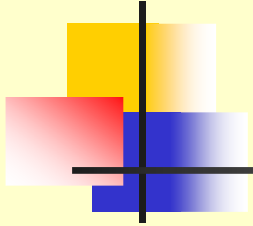
SOLID WASTE AND PUBLIC CLEANSING MANAGEMENT ACT 2007

- Require approval for any construction, alteration or closure of prescribed SWM Facilities;
- Require license to carry out SWM services, manage or operate SWM Facilities ;
- Prescribed recycling and separation of recyclables
- Require generator to reduce generation of SW

CONCLUSION



- New Legislation provides a centralised and coordinated solid waste management
- 3R programmes and activities can be enhanced through mandatory sorting requirement, deposit rebate scheme, take back system
- GHG from landfills can be addressed through development of sanitary landfills and safe closure of non sanitary ones
- CDM can be utilised to supplement government effort



TERIMA KASIH