



Department Of Environment  
Ministry of Natural Resources and Environment 



# **3R INITIATIVE ON SCHEDULED WASTE MANAGEMENT IN MALAYSIA**

**SENIOR OFFICER MEETING ON 3R INITIATIVE, TOKYO,  
JAPAN**

**PRESENTED BY  
MR. ZARMADI MOHAMED  
DEPARTMENT OF ENVIRONMENT, MALAYSIA**

# **DOMESTIC LEGAL AND INSTITUTIONAL MEASURES**

- **Section 34B, EQA on control of scheduled wastes**
- **Environmental Quality Act (Scheduled Waste) Regulation 2005**
- **Environmental Quality Act (Prescribe Activities) Order 1989**
- **Customs (Prohibition of Export) Order 1998**
- **Customs (Prohibition of Import) Order 1998**

**Exports/Imports through Customs be accompanied by a permit issued by DOE (BASEL CONVENTION PROCEDURE)**

# LEGAL REQUIREMENT (DOMESTIC)

- **Section 34B (1) EQA 1974:**
- **No person shall –**
  - (a) place, deposit or dispose of, or cause or permit to place, deposit or dispose of, except at prescribed premises only, any scheduled wastes on land or into Malaysian waters;**
  - **(b) receive or send, or cause or permit to be received or sent any scheduled wastes in or out of Malaysia; or**
  - **(c) transit or cause or permit the transit of scheduled wastes without any prior written approval of the Director General**

***ENVIRONMENTAL QUALITY (SCHEDULED WASTE)  
REGULATION 2005***

***Treatment of Scheduled Wastes (Regulation 5)***

***On-site or at prescribed premises only***

***Recovery of Scheduled Waste (Regulation 6)***

***On-site or at prescribed premises only***

***Residuals shall be disposed at prescribed  
premises***

# ENVIRONMENTAL QUALITY (PRESCRIBE ACTIVITIES) 1989

- Activities 18

- **WASTE TREATMENT AND DISPOSAL**

- Toxic and Hazardous Waste

- i) Construction of incineration plant
- ii) Construction of Recovery plant (off-site)
- iii) Construction of waste water treatment plant (off-site)
- iv) Construction of secure landfill facility
- v) Construction of storage facility (off-site)

# REUSE/RECOVERY/RECYCLE

- PROCEDURE FOR RECOVERY/REUSE/RECYCLE FACILITIES
  - Environmental Impact Assessment Report (EIA)- approved by Director General on the Environment
  - Approval on construction (siting and zoning)
  - Licensing on operation

# Import & Export of Schedule Waste

- All import and export activities need to follow BASEL Convention procedure
- **Consideration for import**
  - Not enough supply at local sources
  - Licencing with DOE
- **Consideration for export**
  - There is no domestic recovery facility
  - Approval from recipient country

# Handling Of Scheduled Wastes, 2000 - 2004

BIL	FACILITY	Quantity (Tonne)				
		2000	2001	2002	2003	2004
1	DISPOSAL	84,321.000	76,334.000	85,797.000	81,358.820	88,268.000
2	EXPORT TO FOREIGN FACILITIES	4,879.520	2,675.000	3,110.000	2,361.880	3,354.000
3	DELIVERED TO LOCAL OF-SITE RECOVERY FACILITES	120,570.960	123,670.000	204,666.000	250,260.450	272,419.590
4	OFF-SITE CLINICAL WASTE INCINERATORS	3,780.820	7,863.000	17,779.000	5,239.420	12,840.540
5	ON-SITE TREATMENT	0.000	156,619.000	15,458.000	68,052.930	53,061.300
6	ON-SITE STORAGE	130,998.040	53,037.000	36,207.000	53,592.240	39,640.640
	<b>TOTAL</b>	<b>344,550.340</b>	<b>420,198.000</b>	<b>363,017.000</b>	<b>460,865.740</b>	<b>469,584.070</b>



## Quantity of Scheduled Wastes Exported (Tonnes) by Type of Waste 2000 – 2004

Tahun/ Year Jenis Buangan / Type of Waste	2000	2001	2002	2003	2004
<i>Metal Hydroxide Sludge</i>	1,678	1,795	1,537	212	2494
<i>Spent Catalyst</i>	2,905	816	1,365	693	722
<i>Copper Oxide</i>	-	-	142	1,209	-
<i>Used Blasting Material</i>	36	19	-	-	25
<i>Cadmium Nickel Oxide</i>	108	-	67	30	-
<i>Aluminium Dross</i>	10	-	-	-	-
<i>Nickel Cadmium Battery</i>	-	-	-	217	103
<i>Glass Cutlet</i>	141	45	-	-	-
<i>Used drums containing chemicals</i>	-	-	-	-	10
<i>Total (Tonnes)</i>	4,878	2,675	3,110	2,361	3354

# ISSUES

- **Electric and electronic waste**

*Code SW 110 - Waste electrical and electronic assemblies containing components such as accumulators, mercury-switches, glass from cathode-ray tubes and other activated glass or polychlorinated biphenyl-capacitors, or contaminated with cadmium, mercury, lead, nickel, chromium, copper, lithium, silver, manganese or polychlorinated biphenyl.*

- Improper recovery (partial and full recovery)
- Local sources vs importation
- Differentiate between second hand and waste
  - Brand, packaging ?

The image is a composite of two nature scenes. The top half shows a suspension bridge made of wooden poles and ropes, stretching across a dense, green forest. The bottom half shows a colorful coral reef with various types of coral in shades of green, blue, and red, and several fish swimming in the clear blue water. The text 'TERIMA KASIH' and 'THANK YOU' is overlaid in the center in a bold, yellow, sans-serif font.

**TERIMA KASIH**  
**THANK YOU**

# SENIOR OFFICERS MEETING ON 3R INITIATIVES

6-8<sup>TH</sup> MARCH 2006,  
TOKYO, JAPAN

WASTE MINIMISATION  
PROGRAM IN MALAYSIA

# HISTORICAL BACKGROUND

- **Resource recovery and recycling is practiced ever since, as demanded by local industries.**
- **1988 Action Plan for Beautiful & Clean (ABC) Malaysia was formulated;**
- **ABC indicate the need to reduce and recycle solid waste.**
- **1993 1<sup>st</sup> Recycling Program was launched.**

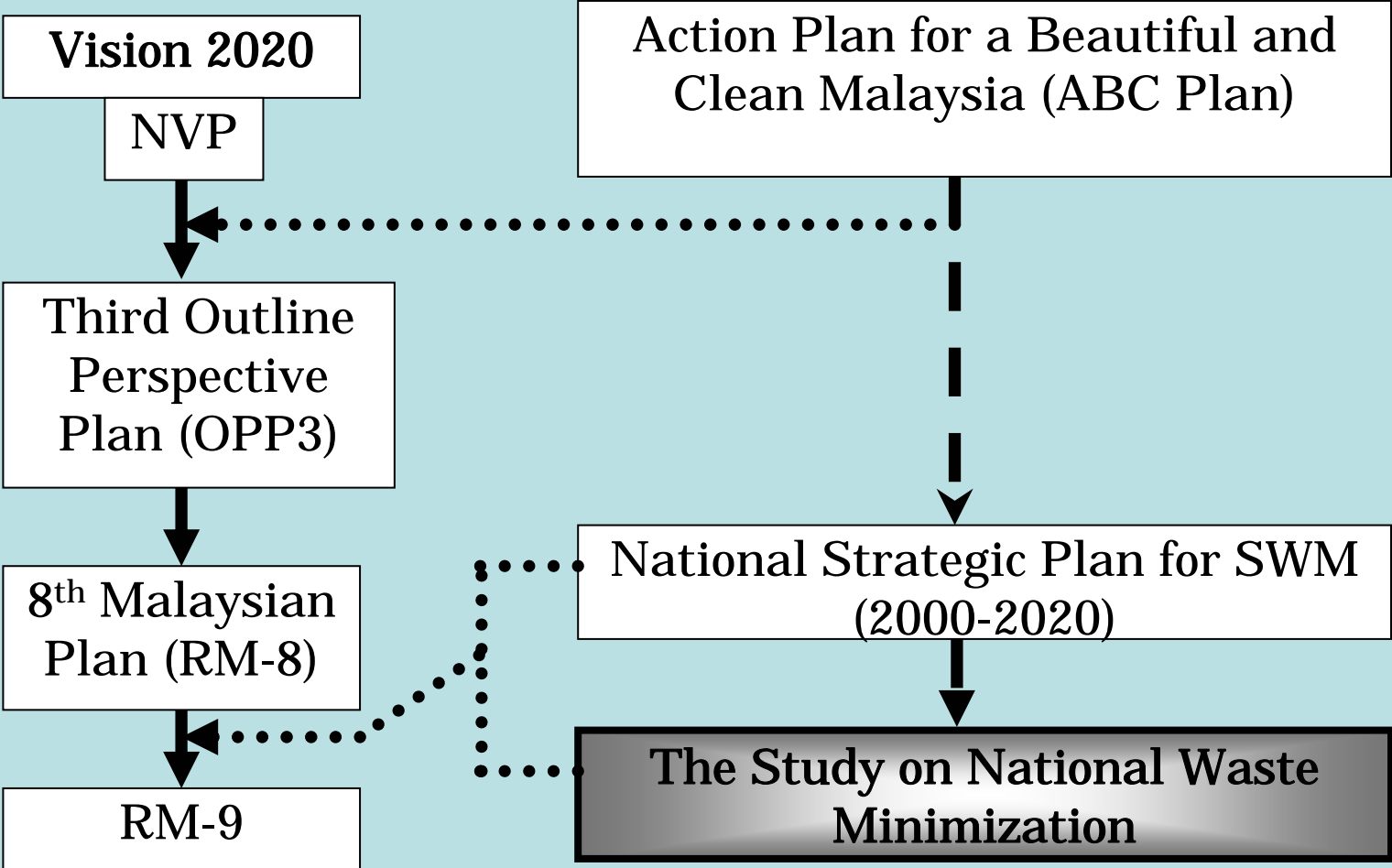
# National Recycling Program

- Launched in November 2000
- Long term Objective : to inculcate the habit of recycling among the population,
- Reduce operation cost of solid waste management.
- Minimize the volume of waste disposed by landfill.
- Reduce utilizations of raw materials.
- To improve awareness and cooperation among stakeholders.

# National Strategic Plan for Solid Waste Management- 2005

1. Determination of SWM priority.
2. Rapid and Comprehensive Development of the necessary Legal and Institutional Framework.
3. Development of Public Participation in SWM.
4. Provision of Sustainable Technologies to Manage Solid Wastes in Malaysia.
5. *A comprehensive Approach to Develop the Waste Reduction, Reuse and Recovery Elements of SWM.*
6. A socially Acceptable SWM System that calls for substantial Initial Government Intervention with Gradual Shift towards Full Cost Recovery.

# Development of 3R Program in Malaysia





# Development of National Waste Minimisation Master Plan - 2006

<b>(1) Objective</b>	<b>To Provide visions, strategies, policies, institutional mechanisms and roles of stakeholders to minimize the amount of solid waste disposed in Malaysia</b>
<b>(2) Target Waste</b>	<b>Municipal Solid Waste, which is generated from household and various business entities.</b>
	<b>As to the other types of waste (industrial waste, construction/demolition waste, etc.), M/P only provides recommendations regarding the institutional mechanisms with the proposed allocation of task among the relevant government ministries and agencies.</b>
<b>(3) Target Area</b>	<b>Whole Malaysia</b>
<b>(4) Target Year</b>	<b>2006-2020</b>

<M/P Strategies>

Enhancement  
of  
Awareness

Strengthening  
of  
Partnership

Development  
of  
Institutions

**Action-1:**  
Awareness  
Raising  
Activities under  
NRP

**Action-2:**  
3Rs Activities in  
School

**Action-3:**  
Source  
Separation

**Action-4:**  
Networking and  
partnership  
Activities of  
NGOs/ CBOs

**Action-5:**  
Legal & Reg.  
Mechanism

**Action-6:**  
Financial  
Incentives  
**Action-7:**  
Capacity  
Development

Pilot Projects

THANK YOU