

3R :
SOLID WASTE MANAGEMENT
AND MANAGEMENT OF
SCHEDULED WASTES IN
MALAYSIA

Representatives : Ir. Lee Heng Keng

&

Ellyza Mastura Ahmad Hanipiah

**DEPARTMENT OF NATIONAL SOLID WASTE MANAGEMENT,
MINISTRY OF HOUSING AND LOCAL GOVERNMENT**

- Malaysia:**
 - **land area : 329,758 square km**
 - **population : 27.17 million**

- Solid waste generated**
 - **17,000 tones per day in 2002**
 - **19,000 tones per day in 2005**
 - **30,000 tones per day in 2020**

- 0.9 kg per capita per day; estimated 1.15 kg in 2020**

- 9th MP – 5% of solid waste is recycled**

- Target in 2020 – 22% to be recycled**

SOLID WASTE AND PUBLIC CLEANSING MANAGEMENT ACT 2007

TYPES OF CONTROLLED SOLID WASTE:

- **commercial solid waste;**
- **construction solid waste;**
- **household solid waste;**
- **industrial solid waste**
- **institutional solid waste**
- **imported solid waste;**
- **public solid waste; and**
- **special solid waste.**

Provisions on 3R in SWM&PCA

- The Act list several actions to be taken to enhance 3R programmes and activities
- The Act provides provision which will enable the government to impose any type of sorting of waste for recycling or special treatment and to direct the flow of waste to facilities dedicated for such purpose.

Provisions on 3R in SWM&PCA

- The Act also include a wide range of instruments including powers to establish take-back systems; deposit-refund system; and powers to require manufacturers to use recycled materials, to restrict the use of certain materials, to reduce waste generation etc.
- The Act also provide for the implementation of coding and labeling system for any product or material as a mechanism to promote recycling

DEPARTMENT OF NATIONAL SOLID WASTE MANAGEMENT,
MINISTRY OF HOUSING AND LOCAL GOVERNMENT

PROGRAMMES AND ACTIVITIES

- Partnership programmes:
 - **Local Authorities**
 - **Concessionaires**
 - **Recyclers**
 - **NGO**
 - **Resident Associations**
 - **Private Sector**
 - **Educational Institution**
 - **Others (Hotel, Hospital etc)**

DEPARTMENT OF NATIONAL SOLID WASTE MANAGEMENT, MINISTRY OF HOUSING AND LOCAL GOVERNMENT

- Awareness programme -Dissemination of knowledge and best practices to the population and community

➤ Medium:

- ❖ **Poster, pamphlets, bulletin, books**
- ❖ **Electronic medium : TV (advertisement), Radio, Internet, VCD**
- ❖ **Web portal**
- ❖ **Advertisement**
- ❖ ***Roadshow* at Schools/LA**
- ❖ **Recycling Directory**

□ Infrastructure programmes

- 7080 unit RB 240 liter - at Public Area
- 3675 unit RB 360 liter - at Public Area
- 3950 unit RB 660 liter - at Recycle centre
- 173 unit Recycle centre
- 44 unit Silverbox
 - Local Authorities (DBKL, MPPJ & MPSJ)
- Integrated Recycling Centre – (completion 2010)

DEPARTMENT OF NATIONAL SOLID WASTE MANAGEMENT, MINISTRY OF HOUSING AND LOCAL GOVERNMENT

Community Initiative Programmes

| Local Authority | Title of Community Initiative | Duration |
|------------------------------------|---|--|
| Completed | | |
| Majlis Perbandaran Pulau | Recycle Bank in Schools and 3R Activities in Rural Community | June 2007 – June 2008 (12 months) |
| Majlis Daerah Kinta Selatan | Project on Recycling Activities in Selected Schools (model schools) | July 2007 – July 2008 (12 months) |
| Majlis Daerah Pekan | Community 3R Centre | August 2007 – August 2008 (12 months); extended to December 2008 |
| Majlis Bandaraya Melaka Bersejarah | Scheduled collection of bulky wastes and recyclable materials | Apr 2008 – Jan 2009 (9 months); extended to April 2009 |



**3R collection centre
in operation**

DEPARTMENT OF NATIONAL SOLID WASTE MANAGEMENT, MINISTRY OF HOUSING AND LOCAL GOVERNMENT

Community Initiative Programmes

| Local Authority | Title of Community Initiative | Duration |
|--------------------------------|--|----------------------------------|
| Majlis Bandaraya Subang Jaya | Food waste composting by hawker centres | Jun 2008 – Jun 2009 (12 months) |
| Majlis Bandaraya Petaling Jaya | Project on Household Waste Composting | June 2008 – Sep 2009 (15 months) |
| Majlis Bandaraya Shah Alam | Participation of residents' association in waste disposal at Civic Amenity Site | Aug 2008 – Aug 2009 (12 months) |
| Majlis Perbandaran Kuantan | Glass collection | Aug 2008 – Aug 2009 (12 months) |
| Majlis Daerah Marang | Public participation in solid waste management on Pulau Kapas and waste audit programme in schools | Aug 2008 – Aug 2009 (12 months) |



Demonstration session on household waste composting in MBPJ

DEPARTMENT OF NATIONAL SOLID WASTE MANAGEMENT,
MINISTRY OF HOUSING AND LOCAL GOVERNMENT

Kuching Community Centre (KCC)



A partnership programme



DEPARTMENT OF NATIONAL SOLID WASTE MANAGEMENT, MINISTRY OF HOUSING AND LOCAL GOVERNMENT

Buy back Centre



DEPARTMENT OF NATIONAL SOLID WASTE MANAGEMENT, MINISTRY OF HOUSING AND LOCAL GOVERNMENT

Recycling Bins



DEPARTMENT OF NATIONAL SOLID WASTE MANAGEMENT, MINISTRY OF HOUSING AND LOCAL GOVERNMENT

Local Authorities Recycling Centres



MB MELAKA BERSEJARAH, MELAKA



MD SEGAMAT, JOHOR



MD JEMPOL, NEGERI SEMBILAN



MP KUANTAN, PAHANG

3R Awareness Material



DEPARTMENT OF NATIONAL SOLID WASTE MANAGEMENT, MINISTRY OF HOUSING AND LOCAL GOVERNMENT

Posters



FUTURE EFFORTS IN 3R

- ❑ **Continuous improvement on current programmes**

- ❑ **Enforcement of Act by stages:**
 - ✓ **Extended Producer Responsibility**
 - ✓ **Take-back system:**
 - **Identify specific products to be included in the take-back system**
 - **Establish mechanism for take back system**

 - ✓ **Deposit refund system**
 - **Establish mechanism for deposit refund system**



DEPARTMENT OF ENVIRONMENT
MINISTRY OF NATURAL RESOURCE & ENVIRONMENT

ENVIRONMENTAL QUALITY (SCHEDULED WASTES) REGULATIONS 2005

came into force on 15 August 2005

CATEGORIES OF SCHEDULED WASTES

Scheduled wastes have been categorised based on type of waste, regardless of wastes origin.

Currently, 77 categories of scheduled wastes which are grouped into 5.



SW 110 E-Waste

Waste from 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



Recovery/Recycling Facilities

- 126 partial recovery
- 15 full recovery



FUTURE EFFORTS IN E-WASTE RECYCLING

- **Extended Producer Responsibility**
- **Take-back schemes**