

Strategies and roadmap towards
GHG emission reduction by
Waste Sector



National Solid Waste Management Dept.



Strategies and roadmap towards GHG emission reduction by Waste Sector

**15th Conference of Parties (COP 15),
Copenhagen, Denmark, 7-18 December
2009 :**

- Malaysia's Voluntary Reduction:
Reduction of GHGs emissions up to
40% by 2020 - Based on carbon
intensity**

Strategies and roadmap towards GHG emission reduction by Waste Sector

GHG from Waste Sector in Malaysia

- Waste Sector contributes - 12% of the total GHG emission : Third largest behind Energy (66%), LULUCF (13%)
-
- CH₄ from solid waste disposal – largest contributor .
- Account for > 93% of the total emission
- 290 landfills: 7 sanitary , 114 are not in operation

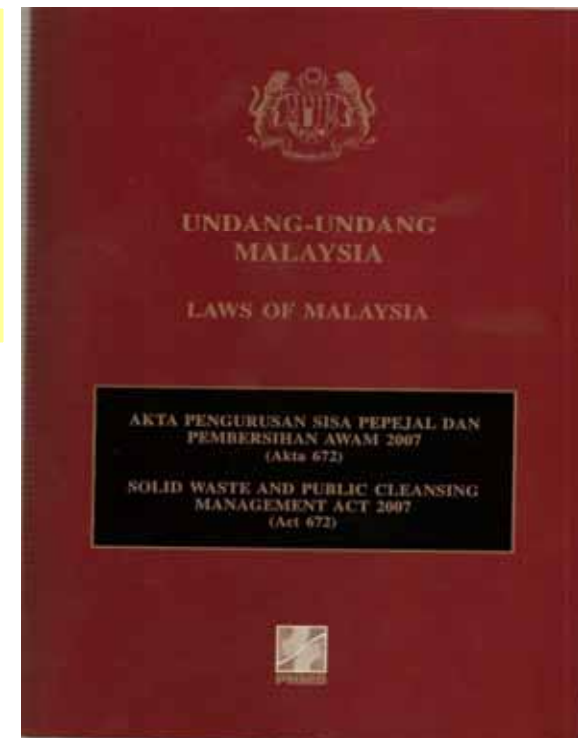
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Solid Waste Sector in Malaysia

A new Solid Waste and Public Cleansing Management Act 2007 was gazetted in 2007 which provides executive authority to the Federal government in matters pertaining to solid waste management



National Solid Waste Management Department was established under the Ministry of Housing and Local Government in 2007



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National Waste Minimization Master Plan and Action Plan

“To realise a Material Cycle Society where waste minimisation activities are systemised and sufficiently enrooted in the behaviour of government, private sector and the people in Malaysia”

MINISTRY OF HOUSING AND LOCAL GOVERNMENT
MALAYSIA

THE STUDY ON
NATIONAL WASTE MINIMISATION
IN MALAYSIA

FINAL REPORT

Summary

JULY 2006

JAPAN INTERNATIONAL COOPERATION AGENCY
YACHIYO ENGINEERING CO., LTD.
EX CORPORATION

Strategies and roadmap towards GHG emission reduction by Waste Sector

National Strategic Plan for Solid Waste Management

Provides key strategy to sustainable waste management through reduction, reuse and recycling and the use of appropriate technologies, facilities and equipment



LOCAL GOVERNMENT DEPARTMENT
MINISTRY OF HOUSING AND LOCAL GOVERNMENT
MALAYSIA

NATIONAL STRATEGIC PLAN FOR SOLID WASTE MANAGEMENT



EXECUTIVE SUMMARY

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Mitigation Strategies

3 Stages Of Solid Waste Management

Waste Generation

Reduction of organic waste generation so that the organic wastes that need to be treated or disposed are minimised

Waste Treatment

Proper treatment/ recycling of organic waste to minimise the total organic wastes that need to be disposed off

Waste Disposal

Proper landfill management to ensure that the GHG emission from the site is properly captured for flaring or recovery

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Waste Generation



National Recycling Rate Target of 22% by 2020

-Recycling Centres And Distribution Of Recycling Bins

-Separation At Source To Be Made Mandatory By - 2013

-Composting of Food Wastes And Green Wastes

-Continuous Awareness Creation To The Public On Waste Minimisation



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Waste Treatment



- Anaerobic Digester

-insinerator

-To Materialise Various Waste Treatment Alternatives



Picture from thestar online



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Waste Disposal



-Construction And Operation Of Sanitary Landfills : 9 new sanitary landfills

-Upgrading Of Non-Sanitary Landfills To Sanitary Landfills: 32 sites

-Safe Closure Of Existing Disposal Sites

-16 sites being safe closed

-112 to be closed in 10th MP





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GHG Reduction Potential

Initial National Communication – solid waste Sector contribute 1,043 Gg (46.8%) CH₄ in 1994

BAU – no policy and no strategy, projection of CH₄ generation 2,037 Gg in 2020

Government's target to achieve 22% recycling target by year 2020 and operation of several alternative technologies for example MRFs and thermal treatment plants, sanitary landfills : reduction – 57.7%

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Conclusion



New Act And Strategies Enable Reduction Of Organic Wastes Into Landfills




Reduction Of GHG Emissions Through 3R, Implementation Of Alternative Treatment Technologies For Organic Wastes And Better Management Of Landfills



Stakeholders' Networking, Public Participation And Partnership on 3R Is Essential For Effective Solid Waste Management



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**THANK YOU
TERIMA KASIH**

National Solid Waste Management Dept.