

PENANG, Malaysia

City Information

Population - About 1.7 million

Area (km²) - About 1030 square kilometers

Climate - Tropical

Main Economic Activities - Industrial and commercial on island and agricultural on mainland

City website –

<http://www.penang.gov.my/>

<http://www.visitpenang.gov.my/portal3/>

<http://www.mppp.gov.my/en/>

<http://www3.mpsp.gov.my/index.php/en/>



Country Information

Population - 2010 census 28,334,135

Area (km²) - 329,847 km²

Economy and GNI/Capita 46.2 High

Main Economic Activities – Agricultural, industry and mining

Website of National Government Agency responsible for guidance on waste legislation

http://www.kpkt.gov.my/kpkt_bi_2013/

MSW Sector Overview: City Level

Classification of MSW – household, commercial, industrial, institutional

MSW Generation – About 800,000 tonnes per year – About 470 kg per capita

Collection Coverage and Type – Government as well as private collection system – 100% in both urban and rural areas

Waste Composition

Item	%
Food	44.6%
Yard & Garden	11.5%
Paper	12.7%
Plastics	16.4%
Textile/Rubber	3.2%
Metal	4.0%
Hazardous	0.3%
Others	7.5%
Total	100.0%

Source: Satang for UNDP SWM Study Report 2007

Waste Management Practice

Dumpsites and sanitary landfill. Formal recycling and treatment of food waste and green waste.

Formal Waste Sector

Level 3 Sanitary Landfill being upgraded to Level 4 with leachate treatment plant. Composting facilities in communities, residential areas, recycling of both sorted and co-mingled waste.

Informal Waste Sector

Scavengers at the landfill and dumpsites, itinerant street collectors.

Financing of MSW

Property tax, trade service tax, subsidies from the Federal Government

MSW Sector Overview: Country Level

General description and overview of common practice

Waste generated is collected (80%) and disposed of in a sanitary manner by the local municipalities. A total of 165 landfills remain open and operating in Malaysia. Of these, eight are classified as sanitary landfills, with another 11 sanitary landfills at various stages of construction

Waste Generation (per capita/year)

0.5-0.8 kg per capita / day or 182.50 kg - 292.00 kg per capita/year

Collection Coverage

95% of population receiving collection services

Number of Landfills/MSW Disposal rate (tonnes/year)

165 operational landfills,

Recycling Rate

Overall about 5-15%

Waste management of Organic fraction (composting, anaerobic digestion)

Household, community and municipal composting

Energy Recovery Rate

Not available

Plans, Strategies, Policies [including financial instruments] and National Objectives

City Level

Aimed at improving Waste Management in General

- Penang's Solid Waste Management Policy Framework
- Integrated Solid Waste Management (ISWM) Framework For Penang - Implementation Strategies

Aimed at addressing Climate change and reducing SLCPs through waste related activities

- Penang' Organic Waste Policy
 - Waste separation at source
 - Waste diversion from the landfill
 - Incentivising the system
 - Capacity Building & Awareness Programmes

Other City Projects

1. Landfill gas extraction and flaring for CDM
2. Turning pig waste into bio-gas and electricity - Sustainable Bio-fuels Co. using the Indian system bio-gas project in Kg Valdor. June 2012
3. Cultivation of algae from pig waste for animal feed
 - a. Ministry of Environment, Japan - a pilot project a zero discharge system using pig waste to cultivate Chorella algae as well as composting in Pinang Tunggai. 2011/12
 - b. UTAR pilot project for production of Spirulina from pig waste in Juru
4. Institute of Developing Economies, Japan External Trade Organization (IDE-JETRO) research project in Penang, "Impact of Product related Environmental Regulations on Asian Firms" (2012/2013) in Penang, Malaysia.

Country Level

Aimed at improving Waste Management in General

3Rs, household composting, resource recovery

The preference hierarchy remains clear. Avoidance, reduction, and reuse remain the most preferred options; recovery and treatment are next, with disposal and landfilling being the least preferred options.

Privatisation of collection of household and similar solid waste and public cleansing with long term concessions.

Aimed at addressing Climate change and reducing SLCPs through waste related activities

Establishing Integrated Waste Management facilities – MRFs, Biological / Thermal treatment of waste

Legislation

City Level

Legislation governing MSW management

1. Local Government Act 1976 (Act 171)
2. Road, Drainage And Building Act 1974 (Act 133)
3. Town And Country Planning Act 1976 (Act 172)

Guidance for MSW management (after legislation, before inspection activities)

- *Environmental Quality (Prescribed Premises) (EIA) Order 1987*
- *EQA new regulations (final drafting stage, 2007)*
- *Public Cleansing and Safety By-Laws, 1980*
- *Refuse Collection, Removal and Disposal By-laws*
- *Municipal Council (Compounding Of Offences) By-Laws*
- *Anti-Litter laws*

Inspection activities/supervision and enforcement of legislation

- *Regularly for illegal dumping and violations*
- *Environmental Quality (Prescribed Premises) (EIA) Order 1987*
- *EQA new regulations (final drafting stage, 2007)*
- *Public Cleansing and Safety By-Laws, 1980*
- *LGA 1976 U02 Collection, Disposal and final Disposal of Rubbish By-Laws*
- *LGA 1976 U04 Public Toilets 1993*
- *LGA 1976 U06; Businesses that are Dangerous, Unhealthy or Offensive*
- *Street, Drainage and Building Act*
- *LGA 1976 U01 Prevention of Littering By-Laws KTSP 1975*

LGA = Local Government Act

National Level

Legislation governing MSW management

Solid Waste and Public Cleansing Management Act 2007 (Act 672)

Guidance for MSW management (after legislation, before inspection activities)

Not available

Inspection activities/supervision and enforcement of legislation

Department of Environment

Ministry of Health

Involvement to date in CCAC MSW Initiative

City

Global Environment Centre Foundation (GEC)

2-110, Ryokuchi-koen, Tsurumi-ku, Osaka 538-0036 Japan

Tel: +81-(0)6-6915-4121 Fax: +81-(0)6-6915-0181

Website: gec.jp

UNEP IETC (International Environmental Technology Centre)

2-110 Ryokuchi koen

Tsurumi-ku, Osaka 538-0036, Japan

Tel: +81-6-6915-4581 Fax: +81-6-6915-0304

Website: <http://www.unep.org/ietc/>

Country

Not available

Current Projects or activities aimed at reducing SLCP Emissions

City Level

- Methane avoidance organic waste diversion from landfill and dumpsites through food waste separation for composting and conversion to bio-soil enhancers.
- Treatment of landfill gas

Country Level (and/or international)

- Waste minimization and diversion
- Treatment of landfill gases
- Thermal treatment of waste - incineration
- Waste to energy

Key Stakeholders

MINISTRY OF HOUSING AND LOCAL GOVERNMENT

I 2 - 38, No. 51, Persiaran Perdana, Presint 4,
62100, Putrajaya, Malaysia.

Tel. Number : **603-8000 8000**

Fax : **603-8891 3182**

http://www.kpkt.gov.my/kpkt_bi_2013/

SOLID WASTE AND PUBLIC CLEANSING MANAGEMENT CORPORATION (PPSPPA)

Wisma UOA Pantai, Tingkat Mezzanine, 2, 3 & 4, No 11 Jalan Pantai Jaya (Jalan 4/83A),

Peti Surat 12038, 59200 Kuala Lumpur

Tel : 603-2245 9292

Fax : 603-2245 9394 / 9293

Email : ppsppa@sisa.my

URL : <http://www.ppsppa.gov.my/en/>

FEDERAL TOWN AND COUNTRY PLANNING DEPARTMENT (JPBD)

Jalan Cenderasari, 50646, Kuala Lumpur.

Tel : 603-2698 9211

Fax : 603-2692 9994

Email : webmaster@townplan.gov.my

URL : http://www.townplan.gov.my/en_index.php

LOCAL GOVERNMENT DEPARTMENT (JKT)

Aras 25-29, No. 51, Persiaran Perdana, Presint 4, 62100 Putrajaya

Tel : 603-8891 5000

Fax : 603-8891 3090

Email : jkt@kpkt.gov.my

URL : <http://jkt.kpkt.gov.my/en/main.php>

Additional useful information

Department of Environment

Ministry of Natural Resources and Environment

Level 1 – 4, Podium 2 & 3, Wisma Sumber Asli

No.25, Persiaran Perdana, Precint 4

Federal Government Administrative Centre

62574 Putrajaya, Malaysia.

Complaints Line: 03-8889 1972

Hotline: 1-800-88-2727

General Line (Request information & Contact DOE Staff)

Telephone: 03-8871 2000 / 2200

Fax: 03-8889 1973/75

URL : <http://www.doe.gov.my/>

Ministry of Health

Jalan Rumah Sakit Bangsar 59000 Kuala Lumpur

Tel : (6)03 2282 5921/2297 1555 Fax : (6)03 2282 5172

Email: www.moh.gov.my

The Government of Malaysia's Official Portal

<http://www.malaysia.gov.my/en/home#>

Contacts

MSW Initiative City Lead

Hon. Mr Phee Boon Poh

State Environment Minister

Level 53, KOMTAR, George Town,

10503 Penang Malaysia.

Tel: 604 262 0870 Email: pheeboonpoh@penang.gov.my

MSW Initiative City Representatives

1. Mubarak Bin Junus

Director of Urban Services

Penang Island Municipal Council

Address:

Bahagian Perkhidmatan Perbandaran

Majlis Perbandaran Pulau Pinang

Jalan Padang Kota Lama 10200 Pulau Pinang

Tel: +604 263300 Fax: +604-2633036 Email: mubarak@mppp.gov.my

2. Ms Rosnani bte Mahmud
Director of Urban Services

Seberang Perai Municipal Council

Jalan Perda Utama, Bandar Perda,

14000 Bukit Mertajam, Pulau Pinang

Tel: +604-5497601 Fax: +604-5395588 Email: rosnani@mpsp.gov.my

MSW Initiative Country Contact

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Wisma UOA Pantai, Tingkat Mezzanine, 2, 3 & 4, No 11 Jalan Pantai Jaya (Jalan 4/83A),

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