Overview of Waste Management in Thailand

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Pollution Control Department (PCD), THAILAND
STATUS OF WASTE MANAGEMENT

15.04 Million Tons Generated 100%

12.94 Million Tons Recyclable Potential 80%

12.04 Million Tons Collected 84%

3.1 Million Tons Actual Recycled 22%
From recovery activities:
Garbage Banks, Municipal Collectors, junk shops

Sanitary Disposed 37%

Improper Disposed 63%

Open Dump Sites
Open Burning

97 Operated Sites
* 91 Landfills
* 3 Incinerators
* 3 Integrated SW
20 Under construction

91 Landfills

3 Incinerators

3 Integrated SW
Problems of Non-Waste Separation

Co-disposal HW and MSW
Illegal Dumping/Open Dumping
Problems of Landfill Operations

No Operational Procedures
No Environmental Controls
National Policy and Plan

Social Strategies

- To promote participation between public sectors, private sectors and public awareness to reduce waste and to increase the utilization of organic wastes and recyclable wastes

Economic Strategies

- To promote the investment of private sectors in using clean technology for goods production, waste treatment and disposal management. In addition, taxation might be used (if necessary) as a tool for reducing wastes generated from production process
Legal Strategies

- Establish laws and revise existing laws and regulations as well as emphasize on law enforcement in order to make various steps of waste management more effective.

Supportive Strategies

- To support the research and development of appropriate technology for producing environmental friendly products and products made from recycled materials.
Policies Proposed to Cabinet in 2005

- Waste separation and utilization
- Share disposal facilities (Cluster)
- Encourage integrated technologies and waste to energy
- Private involvement for investment and operation
Goals

- **MSW Quantities:** To ensure that MSW will be disposed not less than 50% by the year of 2009 and up to 100% by 2017.

- **Number of MSW Facilities:** To increase efficient MSW disposal facilities not less than 50% of all provinces by 2009 (38 provinces) and up to 100% by 2013.

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Existing Disposal Facilities in Thailand

- 101 Landfills
- 3 Incinerators
- 2 Integrated SW Disposal Facilities

Source: PCD, 2004
Organizational Roles Related to MSW Management

Royal Thai Government

Central Governments
- Formulate policies, guidelines, programs, regulations and standard

Regional Governments
- Coordinate related works between central and local governments.

Local Governments
- Handle waste management within governed area.

Implementation unit
Central Governments

1) Pollution Control Department (PCD)
   - Provide recommendations on the technical preparation of MSW Management policy.
   - Develop guidance/guidelines and processes

2) Department of Environmental Quality Promotion (DEQP)
   - Promote and disseminate information pertaining to MSW management.

3) Office of Natural Resources and Environmental Policy and Planning (ONEP)
   - Prepare policies and prospective plans.
   - Administer the Environmental Fund.
Central Governments

4) Department of Local Administration (DOLA)
   - Administer the finances of Local Government Organizations.
   - Provide support for the preparation of Local Development Plans.

5) Public Health Department
   - Issue ministerial regulations to stipulate service charges.
Local Governments

- Handle waste management within governed areas.
- There are 4 categories of local administrative organizations.

1) Municipality
2) Sub-district Administrative Organizations (SAO)
3) Provincial Administrative Organizations (PAO)
4) Special Administrative Areas (Bangkok and Pattaya City)
Associated Laws & Regulations for MSW Management

Waste management is responsibility of local government.

- The Constitution
- Provincial Administrative Organization Act. B.E.2542
- Decentralization to LAO Act. B.E.2542 (A.D.1999)
Schemes of Waste Management

- **Integrated Management System (Non-haz)**
  - Composting
  - Energy recovery
  - Material recovery

- **Disposal Center (Cluster)**
  - Co-disposal of solid waste for nearby municipalities

- **Final Disposal** (Sanitary Landfill)
Integrated MSW Practices

Waste Separation

Composting

Incineration

Landfill
Q & A

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