Semi-aerobic landfill sites are increasing in Asia

The semi-aerobic landfill structure developed and commercialized in Japan was first introduced overseas at an open dump site in Penang, Malaysia. Before that, all waste generated in the city was brought into this 20 hectare site and fire erupted daily affecting the health of residents living near the site and the waste pickers who collect recyclable resources from the waste.

Measures for improvement began with controlling fire incidents. Degassing was performed by setting up degassing tubes and the ground was covered with earth. In one year, the foliage that had stopped growing due to gas returned to the site; and in two years, the site was reborn as a non-pollution generating ground.

A new disposal site was then constructed with a semi-aerobic landfill structure standing 5 meters high and 10~20 meters wide, which made it possible to treat polluted water and turn the disposal site into a sanitary location.

The semi-aerobic landfill structure is technology that quickly transforms open burning sites into sanitary ground that emit no smoke. This is a low cost, low-tech method, which is being introduced and spreading to Asian countries, such as Malaysia, Pakistan, China, Thailand and Vietnam, as well as Samoa, the Dominican Republic, Mexico, Italy and many others.
Legal System for Establishing a "Sound Material-Cycle Society"

Japan has a legal system for establishing a "Sound Material-Cycle Society", in which consumption of natural resources will be conserved and the environmental load will be reduced to the greatest extent possible.

The Basic Environment Law
- Provides basic policies for environmental conservation
  - Enacted in 1987
  - Enacted in 1993

Basic Environmental Plan
- Established in 1994
  - (Ministry of the Environment)

The Basic Act for Establishing a Sound Material-Cycle Society (Basic Framework Act)
- Provides basic principles related to the establishment of material-cycle society
- Enacted 2000

Waste Management and Public Cleansing Law
- Enacted in 1970 (Ministry of the Environment)
  - Appropriate treatment of waste
  - Rules for establishing waste treatment facility
  - Rules for waste treatment businesses
  - Waste treatment standards, etc.

Law for the Promotion of Sorted Collection and Recycling Containers and Packaging
- Enacted in 1995 (Ministry of the Environment; Ministry of Economy, Trade and Industry; and others)
  - Collection of containers and packaging by municipalities
  - Recycling of containers and packaging by producers and users

Law for the Recycling of Specified Kinds of Home Appliances
- Enacted in 1998 (Ministry of the Environment; Ministry of Economy, Trade and Industry)
  - Retailers receiving used appliances from consumers
  - Recycling by manufacturers, etc.
  - Consumers shouldering cost for recycling

Construction Material Recycling Law
- Enacted in 2000 (Ministry of Land, Infrastructure, Transport and Tourism; Ministry of the Environment)
  - Construction contractors are responsible for the sorting and dismantling
  - Construction contractors are responsible for the recycling of construction waste

Law for Promotion of Recycling and Related Activities for treatment of Cyclic Food Resources
- Enacted in 2000 (Ministry of Agriculture, Forestry and Fisheries; Ministry of the Environment)
  - Recycling of food waste by food manufacturer, processors and sellers

Law for the Recycling of End-of-Life Vehicles
- Enacted in 2002 (Ministry of Economy, Trade and Industry; Ministry of the Environment; Ministry of Land, Infrastructure, Transport and Tourism)
  - Recycling of end-of-life vehicles
  - Payment of recycling fee at the time of purchase of new vehicle

Law concerning the Promotion of Procurement of Eco-Friendly Goods and Services by the State and Other Entities (Law for the Promoting Green Purchasing)
- Enacted in 2000 (Ministry of the Environment)
- Promotion of procurement of eco-friendly goods and services by the government and other entities