

# Practices at a private company toward improving the environment in Asia

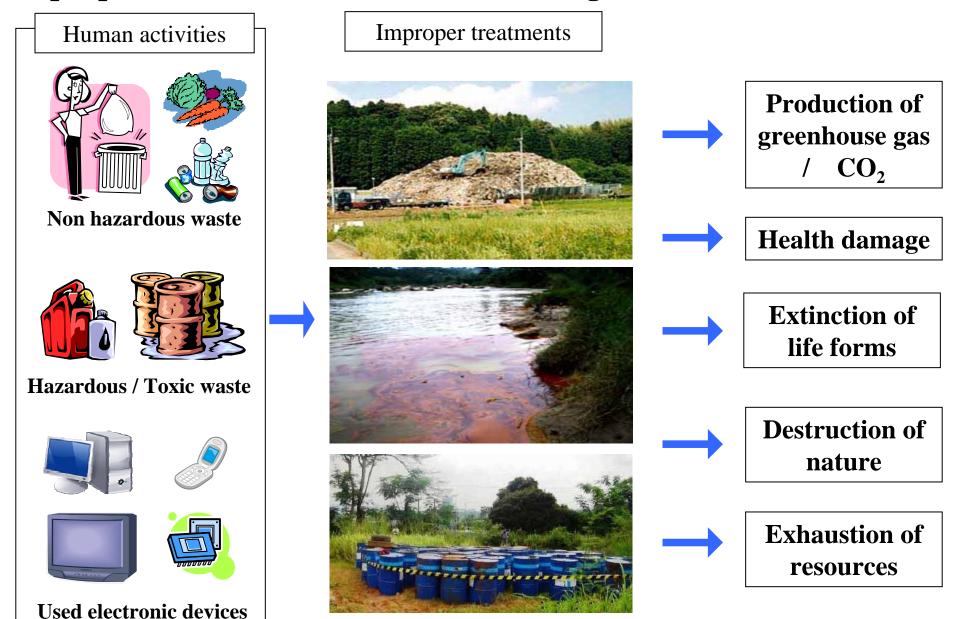
~ proper waste management and recycling ~

March 18, 2010

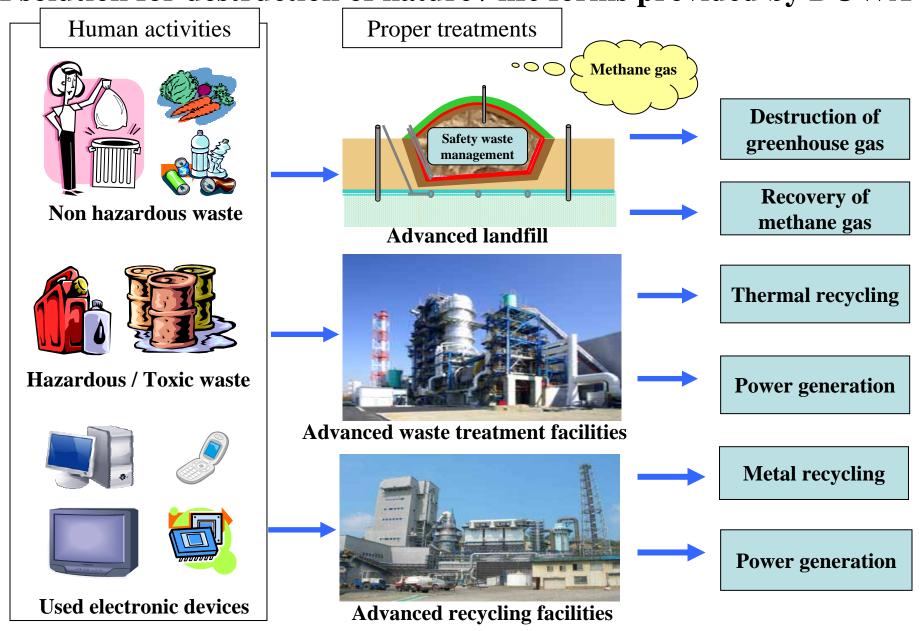
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#### Improper treatments of waste cause damage of nature / life forms



# A solution for destruction of nature / life forms provided by DOWA



Returning the environment to the people of Asia



gas

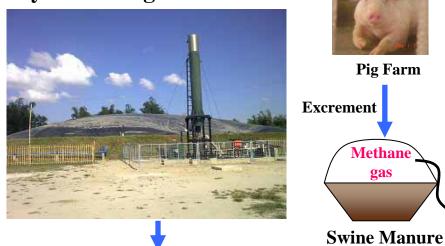
#### ~ Waste management : Landfill ~ **DOWA** s Activities

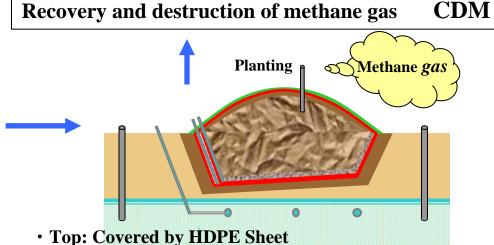
#### 1. Advanced landfill



**Facility in Indonesia** 

2. Decreasing greenhouse gas by methane gas collection





- Bottom: Complete sealing by 3 layers of HDPE sheets & cla Groundwater control and monitoring
- Waste location system by GPS

#### **DOWA** s Activities



#### ~ Waste management : Waste to energy ~

**Destruction of hazardous / toxic waste Power generation by steam recovery** 



The biggest waste incineration plant in Japan



**Metal recycling** 



**Power generation** 



Molten metal



Bottom ash recycling facility



**Artificial gravel** 



The biggest landfill facility in Japan

#### **DOWA's Activities**



#### Shift from natural resources to "Urban Mine" ~

**Printed** circuit boards



Gold plated wire debris

Mobile

phones



**Urban Mine** 

**Open-pit mine = Destruction of nature Exhaustion of natural resources** 





**Advanced metal recycling facility** in Japan

**Recovery of** 18 elements



Gold



Silver



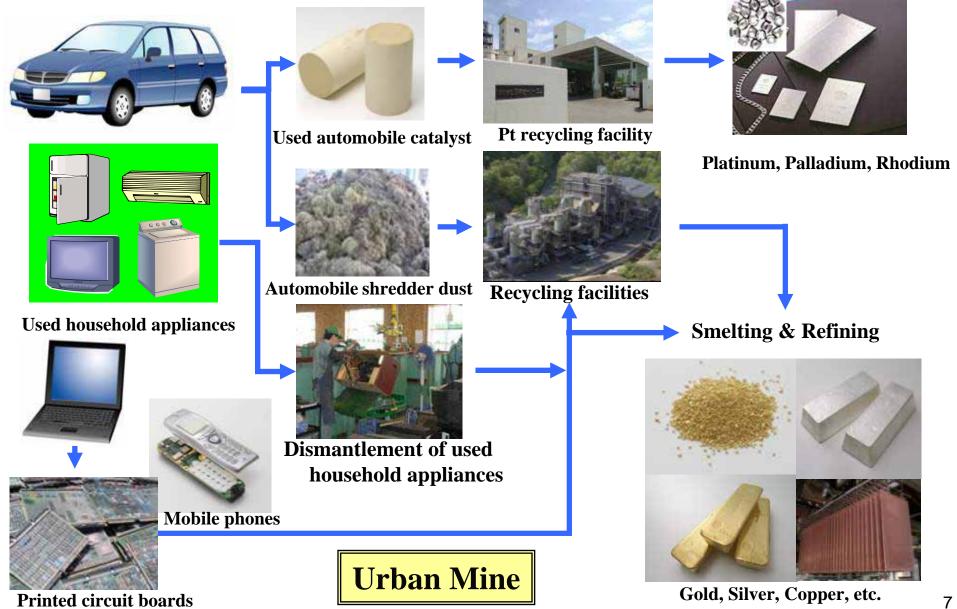
Copper



**Platinum** group metals



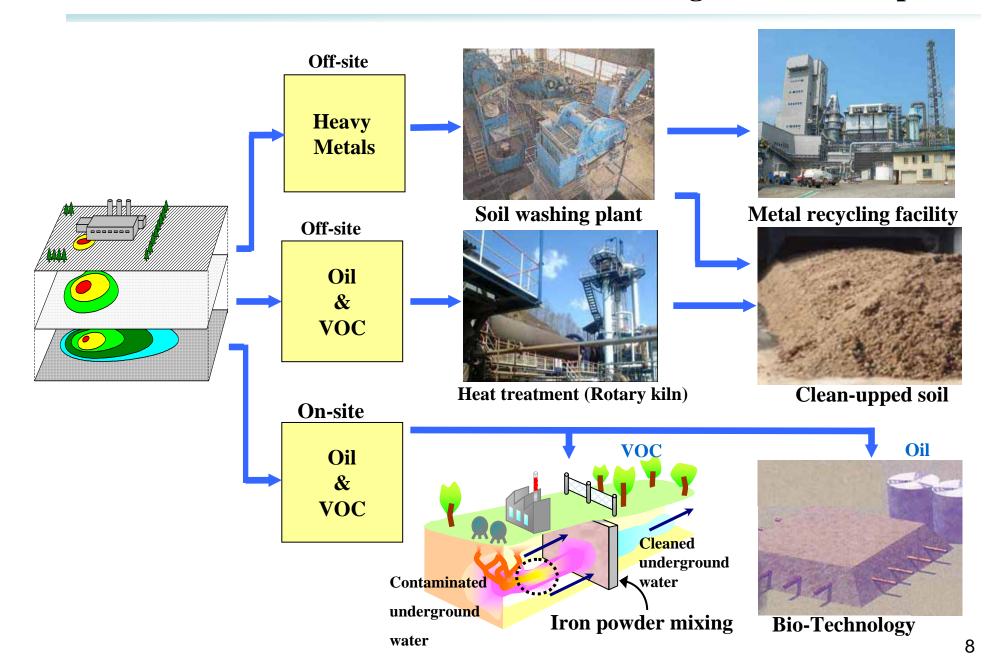
#### DOWA's Activites ~ Advanced recycling technologies ~





#### **Dowa's Activities**

#### ~ Soil remediation technologies for clean-up ~



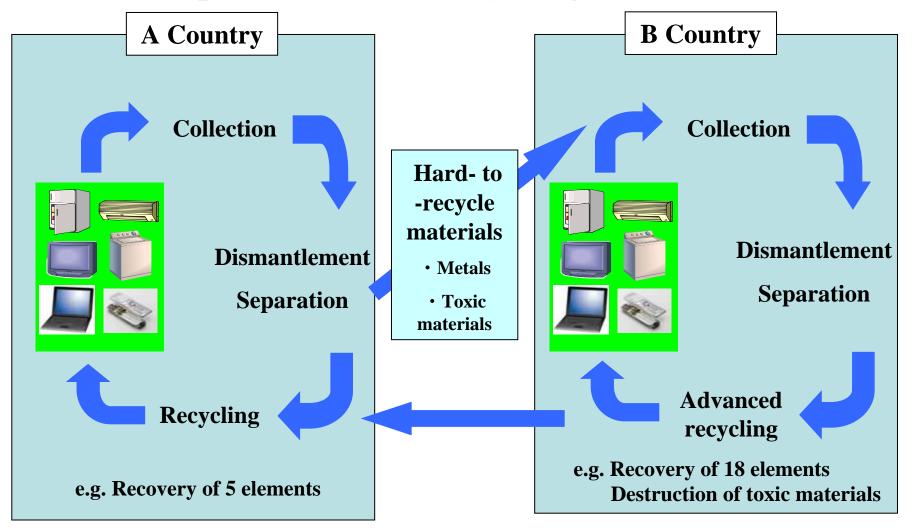


# Proposal about environmental improvement in Asia

- 1 . Establishment of proper waste treatment system in each country
- 2 . Establishment of resource recycling system in each country (Promotion of 3R)
- 3 . Establishment of resource recycling system among Asian countries
- 4 . Promotion of environmental education



#### An example of material recycling framework in Asia

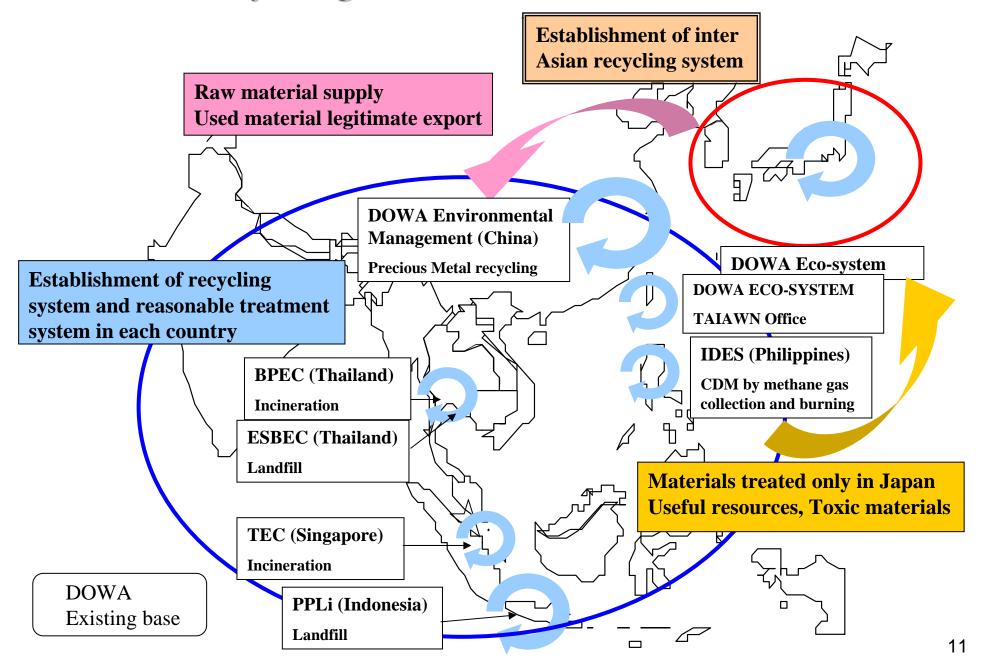


- 1. Proper waste treatment system in each country
- 2. Resource recycling system in each country

3. Resource recycling system among Asian countries

#### Material recycling framework in Asia









## Returning the environment

# to the people of Asia

