

Study on Transboundary Movement and Environmentally Sound Management of Hazardous Wastes in Asia

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Asian NT Workshop, Siem Reap, Cambodia
30 Nov – 2 Dec 2010



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1. TBM of HW in Asia

Recycling/Treatment Facilities

	Ave amount of import (2001-2006)	GDP PPP (USD)		Recycling and treatment facilities (National Reporting 2006, etc)
		1995	2008	
Malaysia	213,215	7,521	14,081	104 recycling facilities (2006) 16 full and 117 partial recovery contractors for E-waste
Rep. Korea	107,953	12,766	27,692	A large number of facilities established
Indonesia	47,759	2,265	3,980	25 recycling facilities (2006) 225 permits for B3 waste management (2004)
Philippines	21,468	1,981	3,515	114 treatment/storage/disposal facilities (2009)
Japan	4,225	22,464	34,116	19,164 recycling/treatment facilities (2006) 2,335 final disposal sites (2006)
Thailand	327	7,256	8,239	1,356 waste treatment/recycling facilities (2009)
Singapore	62	25,433	51,226	8 recycling facilities (2006) 49 recycling facilities (2009)
China	0	1,514	5,970	6 recycling facilities permitted by MEP (2006) 741 hazardous waste recovery facilities permitted by local EMB (2006)
Vietnam	0	1,009	2,794	Limited number of recycling and treatment companies
Cambodia	0	647	2,082	Very few intermediate treatment and recycling facilities

2. ESM of HW in Asia

Standards and Criteria for ESM of HW

Background: Status of Asia

- Borderless industrial collaboration
- Establishment of ESM facilities

Current situation	Trigger
Sustainable development	Rapid economic development with environmental concerns
Rapid development of recycling facilities in Asia	Demand of development for recycling facilities
Introduction of ESM at high level	High awareness to protect human health and the environment

Progress in Recycling Activity

Recycling activity with no pollution control

Photos: Yoshida(2010)



Hazardous liquid



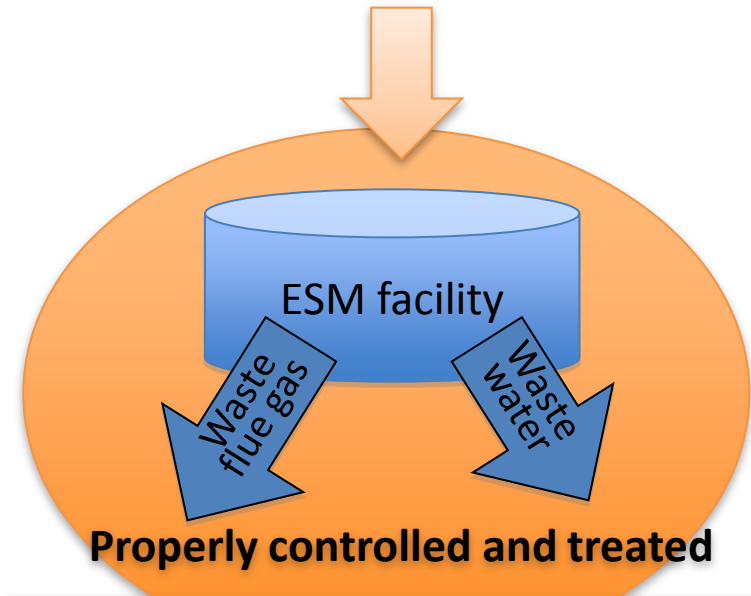
Harmful air



Health impact

Air, soil, water contamination and even health effect caused

Recycling activity at ESM facility



Sufficient labor safety measures and proper operational management

Air, soil, water pollution is controlled
Labor safety is secured

Should be shifted toward this direction

Survey for Criteria on Import of Hazardous Wastes/Other Wastes in Asian Countries

Purpose

Identification of requirement or criteria being currently practiced in Asian countries for ensuring those imported wastes (especially, E-waste) which are recycled or treated in environmentally sound manner

Target

Competent Authorities to the Basel convention in the following countries which permit import of hazardous wastes and other wastes only if certain ESM conditions (ESM standards) are met.

Results

Some Asian countries have introduced concept of ESM in import/export permit criteria , and/or facility licensing requirement.

Result of Questionnaire Survey

	Republic of Korea	Philippines	Singapore	Japan (export case)
Major ESM components in each country's criteria for ensuring ESM of exported/imported wastes	Korean Basel Law, Waste Management Law	DENR Administrative Order 92-29, 2004-36	Hazardous Waste (Control of Export, Import and Transit) Act	Japanese Basel Law
Occupational and environmental health safety	X	X	X	X
Monitoring, Record, Reporting	X	X	X	X
Awareness and competency of workers	X	X	X	X
Emergency response	X	X	X	X
Securing of finance		X	X	X
Evidence of downstream use and recycling	X	X	X	

3. Policy for Export and Import of HW in Japan

Japan's Policy on Export: Criteria

Japan's Legislation permits export of hazardous wastes **only under certain conditions.**

Examples

- A** Lack of technical capacity or necessary facilities in Japan or special need for materials for recycling or recovery in the state of import
- B** Consent of the state of import
- C** Achievement of environmental standards that meets Japan's domestic standards through transport and recycle/disposal
- D** Presence of guarantee for transport and disposal such as insurance coverage, bond etc. or a sufficient financial base and technical capacity

Japan's Policy : Export to Non Annex VII

There are specific procedures for the export of hazardous wastes to a Non Annex VII country .

Examples

A The export is conducted under the Basel Convention with the consent of the state of import.

B Prior document examination to confirm whether the facility handling wastes would meet Japan's domestic environmental standards (water/air pollution controls).

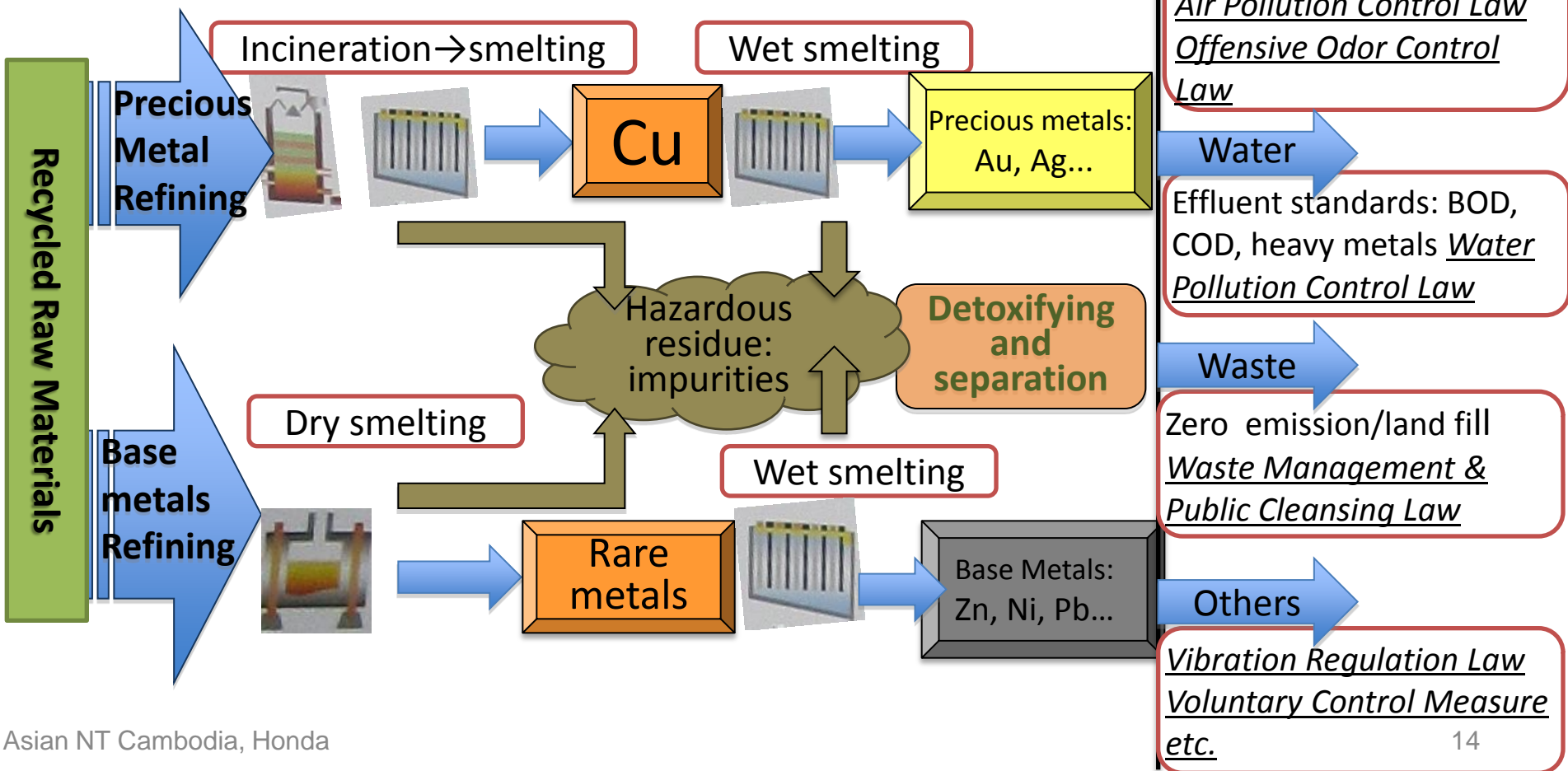
C Site examination might be conducted additionally, with cooperation of the importer, according to the results of the prior document examination.

ESM of HW in Japan

Technology realises detoxifying and separation of hazardous substances and zero-emission

Sampling & Monitoring

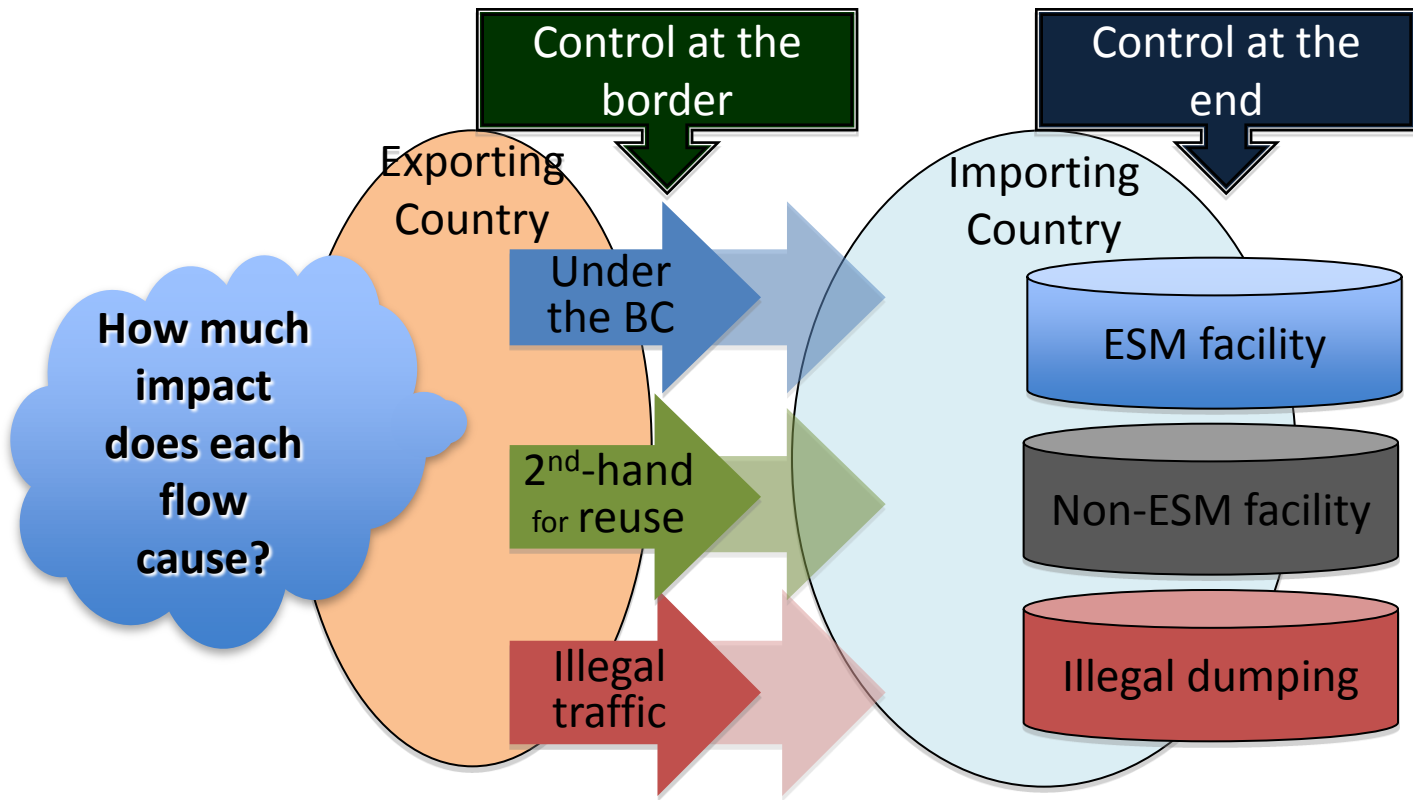
Emission control



4. Conclusions

TBM and ESM of HW

Both control at the border and end are needed



Control	at	border	by	Basel Convention	<ul style="list-style-type: none"> •Clear distinction of controlled wastes •Interdiction at customs
		end		ESM	<ul style="list-style-type: none"> •Standards, criteria or guidelines for ESM

Conclusions

A Considering Asian economic situation, activities for resource recovery from waste have been developed in a borderless manner.

B In such situation, standards or guidelines for ESM to identify facility which can treat wastes will become essential.

C Introduction of standards or certification scheme for ESM can support manufacturers which need ESM facilities as well as highlight such enterprises' activities.

D Consideration of ESM standards under the Basel Convention should learn from experience of leading multinational manufacturers to avoid applying double standards.

Thank you !!