Workshop 2014 of the Asian Network for Prevention of Illegal Transboundary Movement of Hazardous Wastes

Case Analysis of ESM and TBM in Asia and Ongoing EWG Activities under the Basel Convention

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Hazardous Waste Treatment and Recycling

- There are many kinds of hazardous wastes and recycling, treatment and disposal technologies.
- There is economy of scale in pollution control of hazardous waste recycling, treatment and disposal technologies.
- If the size of economic activities in a country is small, it may be difficult for the country to recycle, treat and dispose all kinds of hazardous wastes.

International Trade of Hazardous Waste under Prior Notice and Consent in 2009 (Unit: ton)

	Export	Import
Japan	81,358	2,847
China	958	0
Thailand	703	0
Malaysia	2,833	170,878
Canada	405,372	480,829
Mexico	0	370,880
Belgium	655,288	1,417,046
Germany	151,694	2,172,508
Italy	1,216,223	3,682

The volume of transboundary movement of hazardous waste under prior notice and consent scheme in Asia is smaller than that in other regions such as EU and North America.

Source: Data reported to the Secretariat of the Basel Convention

BASEL CONVENTION

Basel Convention:
Article 4 General Obligations (1)

2. Each Party shall take the appropriate measures to:

(d) Ensure that the transboundary movement of hazardous wastes and other wastes is reduced to the minimum consistent with the environmentally sound and efficient management of such wastes, and is conducted in a manner which will protect human health and the environment against the adverse effects which may result from such movement;

(e) Not allow the export of hazardous wastes or other wastes to a State or group of States belonging to an economic and/or political integration organization that are Parties, particularly developing countries, which have prohibited by their legislation all imports, or if it has reason to believe that the wastes in question will not be managed in an environmentally sound manner, according to criteria to be decided on by the Parties at their first meeting.

Basel Convention:
Article 4 General Obligations (2)

8. Each Party shall require that hazardous wastes or other wastes, to be exported, are managed in an environmentally sound manner in the State of import or elsewhere. Technical guidelines for the environmentally sound management of wastes subject to this Convention shall be decided by the Parties at their first meeting.

9. Parties shall take the appropriate measures to ensure that the transboundary movement of hazardous wastes and other wastes only be allowed if:

(a) The State of export does not have the technical capacity and the necessary facilities, capacity or suitable disposal sites in order to dispose of the wastes in question in an environmentally sound and efficient manner; or

(b) The wastes in question are required as a raw material for recycling or recovery industries in the State of import;

Principles to be considered in the Development of Waste and Hazardous Waste Strategies in Guidance Document on the Preparation of Technical Guidelines for the ESM in 1994

(f) *The Self-sufficiency Principle* (to be considered with (g) and (h)) - by which countries should ensure that the disposal of the waste generated within their territory is undertaken there by means which are compatible with environmentally sound management, recognizing that economically sound management of some wastes outside of national territories may also be environmentally sound;

(g) *The Proximity Principle* (to be considered with (f) and (h)) - by which the disposal of hazardous wastes must take place as close as possible to their point of generation, recognizing that economically and environmentally sound management of some wastes will be achieved at specialized facilities located at greater distances from the point of generation;

(h) *The Least Transboundary Movement Principle* (to be considered with (f) and (g) - by which transboundary movements of hazardous wastes should be reduced to a minimum consistent with efficient and environmentally sound management;

Principles (f), (g) and (h) should be considered in relationship and balance. It should also be recognized that considerations for disposal may be different from those for recovery, which, if soundly managed, can provide environmental and economic benefits and should be encouraged;

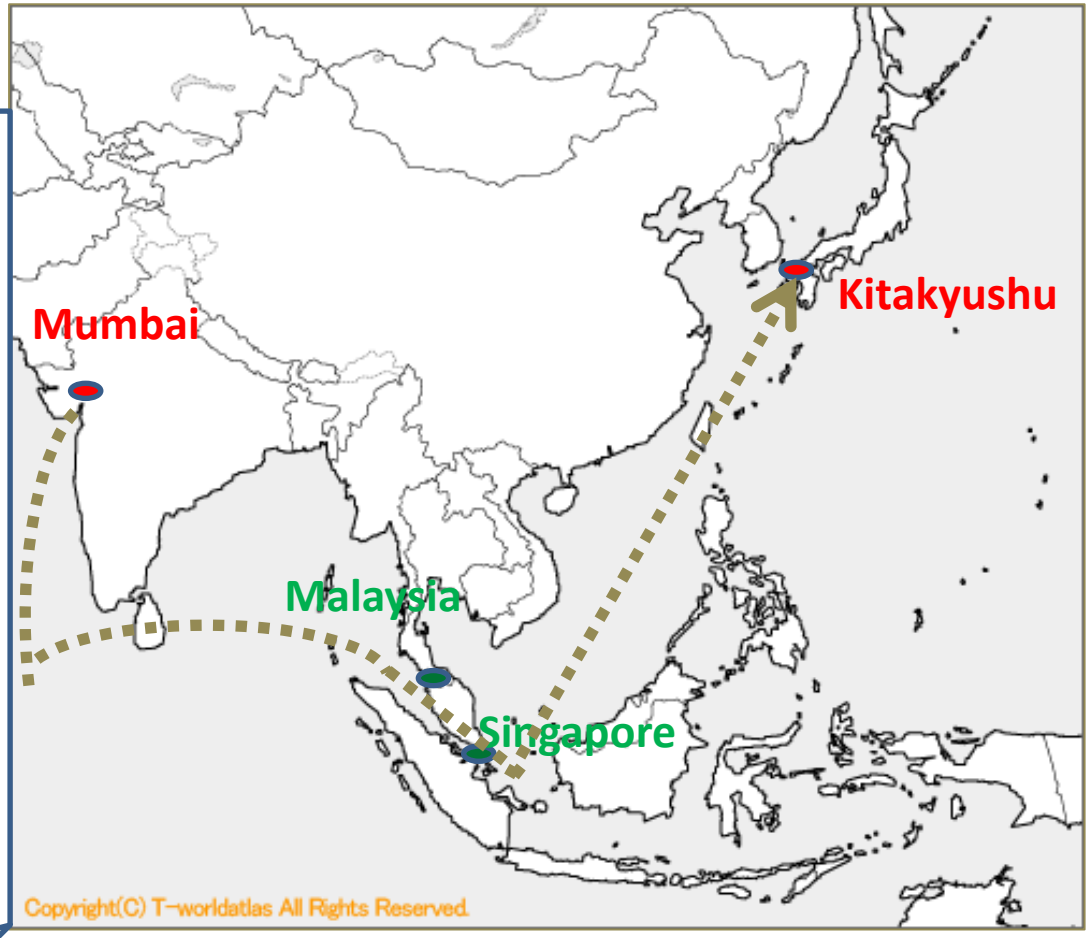
CASE ANALYSIS OF ESM AND TBM IN ASIA

Case 1: The Philippines & Japan

- Currently, the Philippines has no proper busted florescent lamps (BFLs) recycling facilities.
- Japanese manufacturers in the PH collected FLs but no proper facilities are available.
- So the JP companies send collected BFLs to Nomura Kosan Ltd, located in Itomuka Japan which has long-term experience of mercury recycling from used product.
- Every year, approx. 10 tons of BFLs have been exported from PH to JP through the Basel procedure.

Case 2: India & Japan

- Printed circuited board (PCB) cannot be recycled in environmentally sound manner in India currently
- Those collected PCB in Mumbai, India is exported to Kitakyushu in Japan for the purpose of ESM (1st TBM was in 2013)
- Furthermore, for this TBM, the transit permits were obtained from Malaysia and Singapore in order to ensure appropriate TBM control

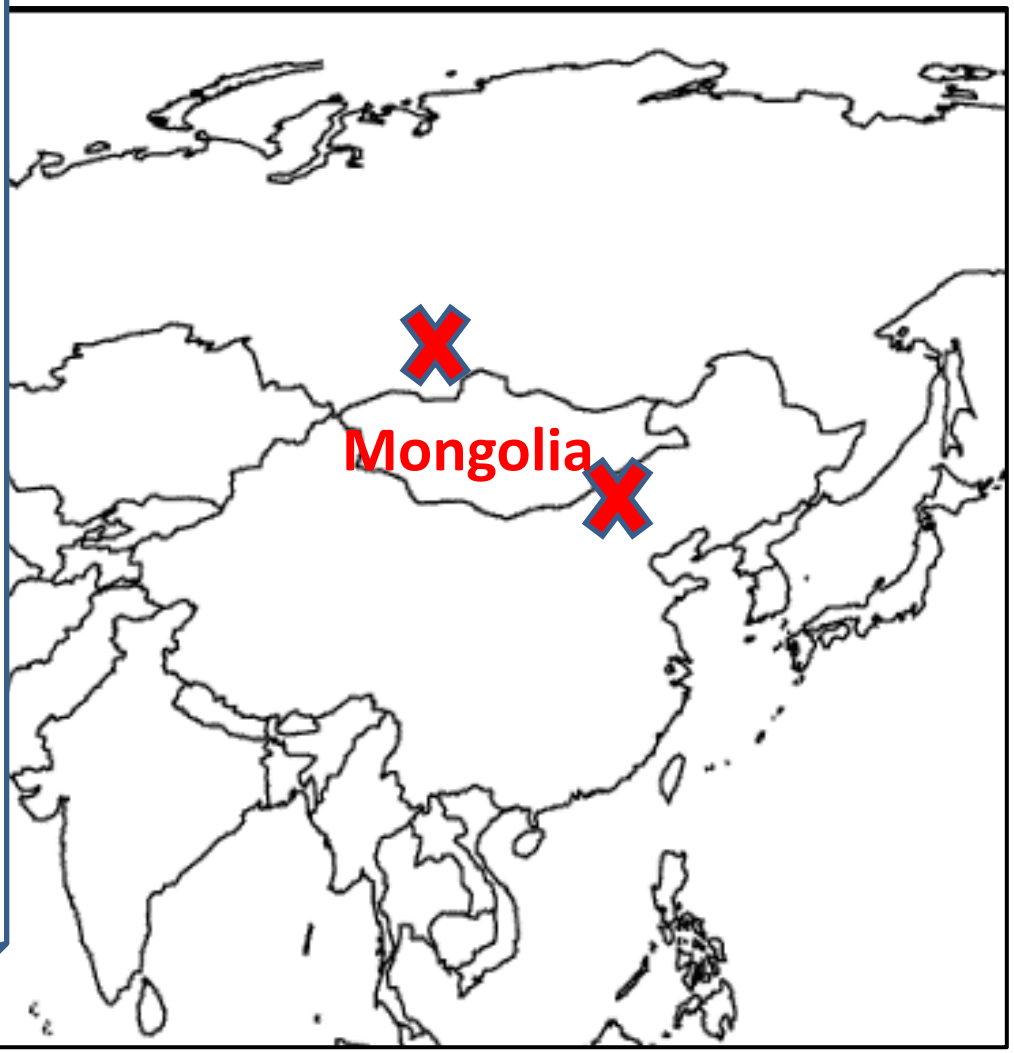


Case 3: Kazakhstan & its neighboring countries

- According to the statement of the representative of Kazakhstan at the AP regional meeting of the COP11, Kazakhstan has no facility for treatment of PCB waste and want to export it to Europe for ESM purpose
- However, its neighboring countries, such as China and Russia, do not allow to transport PCB wastes in their own territory, so Kazakhstan has no means to send it to EU.
- As a consequence, PCB wastes are still stored in the country w/o treatment.

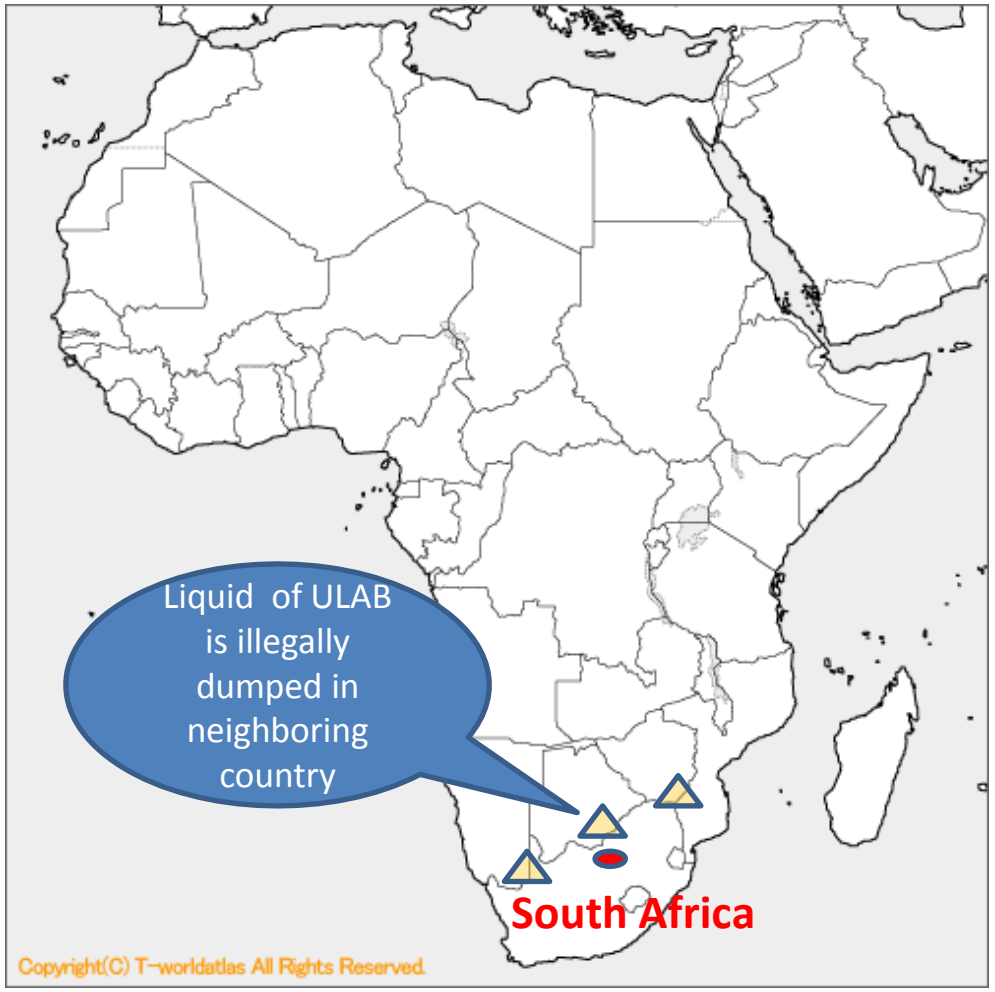
Case 4: Mongolia & its neighboring countries

- Mongolia had a plan to send mercury waste to Japan for treatment with support of UNIDO. But China and Russia did not allow the transit of hazardous waste. .
- They gave up the original plan. The are planning to build temporary storage site



Case 5: South Africa & its neighboring countries

- According to the statement of the representative of African countries at the side event of the COP11, South Africa has ESM recycling facility of used lead-acid batteries (ULAB) .
- On the other hand, its neighboring countries have no ESM facilities for ULAB, so want to export it to South Africa.
- However, South Africa only allowed import only if no liquid is in ULAB. As a consequence, liquids of ULAB were illegally dumped in neighboring countries prior to export to South Africa.



*Now South Africa allows to import ULAB which contains liquid

Formal Lead Recycler in South Africa

Lead Acid Battery Recycling facility in South Africa, November, 2013.

- Lead acid battery recycler In South Africa has long history of operation. The factory control air and water pollution.

EWG ACTIVITIES UNDER THE BASEL CONVENTION

Background

- COP 10 decided to establish technical expert group (TEG) for developing framework for the environmentally sound management (ESM) of hazardous wastes and other wastes. (The part B of BC-10/3 "Indonesian-Swiss country-led initiative to improve the effectiveness of the Basel Convention")
- COP 11 adopted the framework developed by TEG, and decided to establish expert working group on ESM, for conducting activities to support the implementation of environmentally sound management.

TOR for EWG (1)

- Develop and implement actions on initial short-term work items identified below:
  - Collection of available information on national and other ESM standards and practices;
  - Identify ESM elements and develop practical guidance in the context of relevant national systems and structures, on certain waste streams (to be decided by the expert working group);
  - Develop generic guidance on how to establish ESM;
  - Assess existing useful training and information material on policies, legislation and best practices on ESM;
  - Assess possible incentives to encourage the private sector to invest in ESM.

TOR for EWG (2)

- Develop a work program for additional priorities and key work items for implementation of ESM and report on this to the Open-ended Working Group at its ninth meeting and to the Conference of the Parties at its twelfth meeting. Priority areas to include:
  - How to ensure consistent interpretation of ESM;
  - Encouraging parties to develop and implement comprehensive strategies and legislation;
  - Encouraging the private sector to implement and invest in ESM;
  - Ensuring that hazardous waste and other waste that is subject to transboundary movement is managed in an environmentally sound manner.

Documents to be developed(1)

- Practical Manual
  - Certification schemes
  - Principles /General Rules and Model Legislation
  - Prevention
  - Terminology
  - Licenses / Permits
  - Safety and Insurance /Liability
- Waste stream fact sheets
  - Used Lead Acid Battery
  - Waste Tyres
  - ELV
  - E-waste
  - Healthcare waste
  - Household waste
  - Mercury waste
  - Waste Oil

Documents to be developed(2）

- Compilation of training and information material on ESM
- Compilation of information on private sector incentives
- Draft work program of the expert working group

Discussion in TEG and EWG on ESM and TBM

- Relationship between ESM and TBM have been discussed in TEG and EWG. But members have not reached any consensus.
  - Regional cooperation should be considered, because the number of ESM facilities is limited in a region.
  - Producer in a developing country want to take back discarded product from developed countries and recover materials to comply with EPR regulation. But the importing country ratify the Ban Amendment.
  - It is good to establish certification scheme for ESM. ESM should be allowed to import hazardous waste.
  - Transboundary movement should be minimized.
- It is not main focus of TEG and EWG, so far.

The Schedule of EWG on ESM

- First meeting of EWG: Buenos Aires, Argentina in December 2013
- Second meeting of EWG: Jakarta Indonesia, in June 2014.

- Third Meeting of Expert Working Group will be held in Konstanz, Germany in January 2015.
- The documents made by EWG will be reported in next COP12 in May 2014.

2nd EWG meeting in Jakarta

Question

- To consider future work of EWG on ESM, I need your comment or suggestion.
  - What is the most significant challenge for realizing ESM in your country?
  - What are your priority wastes?

DISCUSSION ON ESM AND TBM

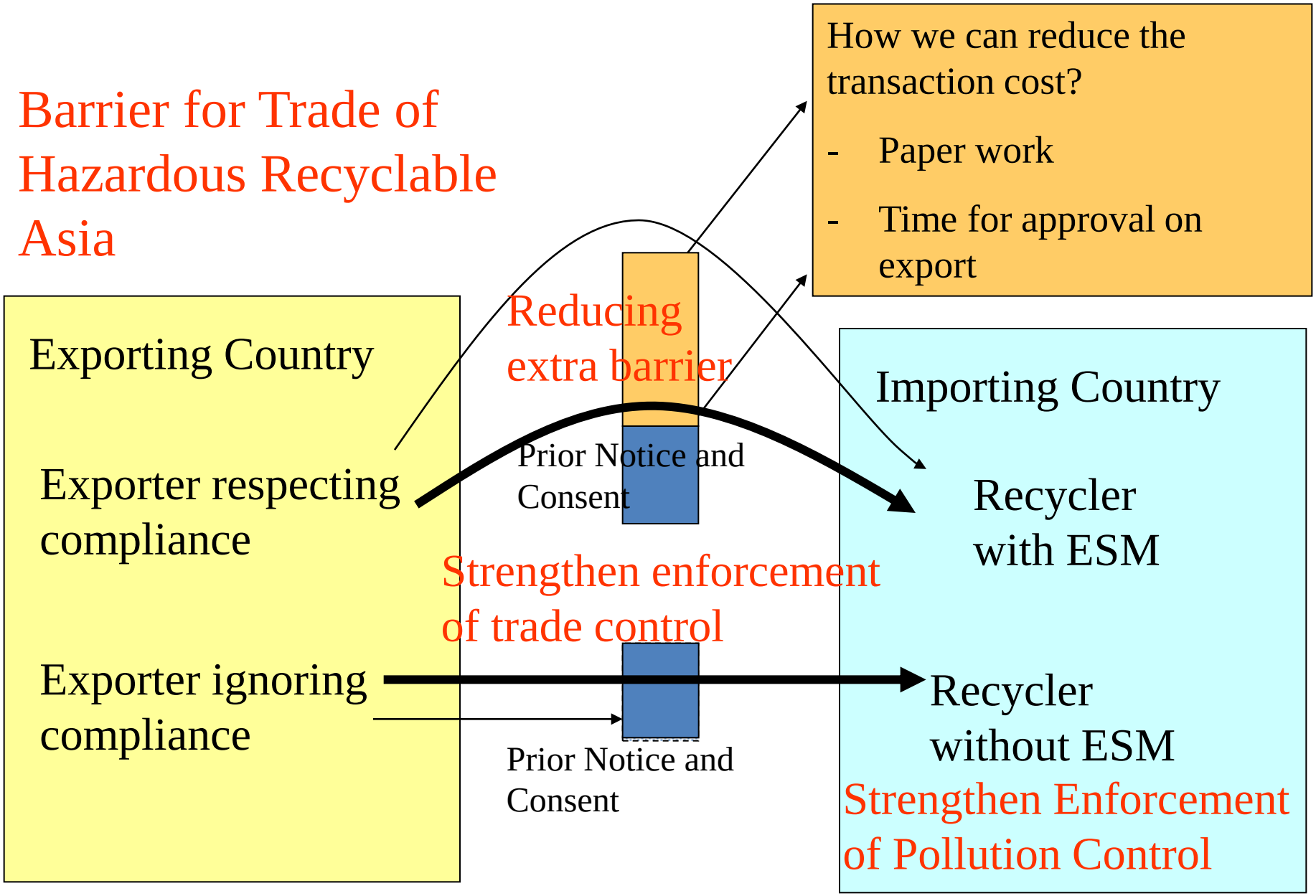
ESM and TBM (1)

- Even in developed countries, it is difficult to recycle, treat and dispose all kind of HWs within a country.
- Especially, in least developed countries and small countries, where industries are not well developed and where enforcement of pollution control regulation is weak, it may be difficult to find ESM facility within a country.

ESM and TBM (2)

- Wilson and Balkau (1990) mentioned interim measures of HW disposal in developing countries.
  - Co-disposal in controlled landfill for municipal waste.
  - Solidification of selected HWs prior to landfill
  - Chemical treatment off-site of electroplating and textile effluents
  - Co-incineration of combustible oily wastes, pesticides or similar materials in cement kilns
  - Export to approved overseas facilities of difficult wastes, such as PCBs for incineration
  - Concrete entombment of non-treatable toxic wastes

Barrier for Trade of Hazardous Recyclable Asia



To reduce transaction cost for exporting HW to ESM facilities

- Disclose the information on required document for getting approval.
- Create internal regulation on procedure to approve the export and import, within the ministry or government.
- Share the information on ESM facilities accepting HW among parties or regions. Share the inspection result among parties, if appropriate.
- Make a rules on pre-approved facilities
- To reduce time for communication, use e-mail (and hard copy), and allow for exporter to submit application simultaneously.

To reduce extra barriers

- Some land locked countries have faced difficulties to send hazardous waste to ESM facilities, due to ban on transit of hazardous waste by countries on the way to importing country.
- Transit countries have right to prohibit the transit of hazardous waste.
- But it makes treatment and disposal option expensive, which may lead improper management of hazardous waste.

To strengthen enforcement of trade control

- Capacity development of border inspection
- Shipback procedure
- Punishment
- Punishment for attempting or preparing illegal export of HWs

References

- Wilson, David C. and Fritz Balkau (1990) "Adapting Hazardous Waste Management to the Needs of Developing Countries – an Overview and Guide to Action" *Waste Management and Research*, Vol.8, pp.87-97.
- Kojima, Michikazu and Etsuyo Michida (ed.) [2013] *International Trade in Recyclable and Hazardous Waste in Asia*, Edward Elgar.