

Good Practices for Effective Implementation of the Basel Convention

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Movement of Hazardous Wastes

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Basel Convention


Basel Convention

- **Electrical and electronic scrap, including computers, are hazardous wastes, -**
 - **if they contain heavy metals or toxic compounds in quantities that render them hazardous**
 - **E.g. Used batteries containing Lead, Mercury and Cadmium**
- **No specific limits for heavy metals and toxic compounds**

Guidelines Adopted in Singapore

- Allow import/export of second hand electronic and electrical appliances, if there are documents to support appliances are –
 - In working condition;
 - Suitable for reuse
- Prohibit export of used electronic and electrical appliances that are
 - Not suitable for re-use
 - Destined for disposal
- Prohibit import of used electronic and electrical appliances for the purpose of re-export to other countries

Tradenet Controls

- **Since March 2008, PCD implemented control of the import / export of used electronic and electrical appliances and e-waste on TRADENET SYSTEM.**
 - **Under the TRADENET system, all declarations for import / export of used electronic and electrical appliances and e-waste will be routed to PCD for processing and clearance**
 - **Importer / Exporter shall submit necessary documents for clearance (e.g. invoice, warranty, bill of lading, letters of approval)**
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TRADENET APPROVAL PROCESS



Declaring agent



Submission through
TradeNet



PCD vets through
application.

Approves application



Customs vets
application at its side.

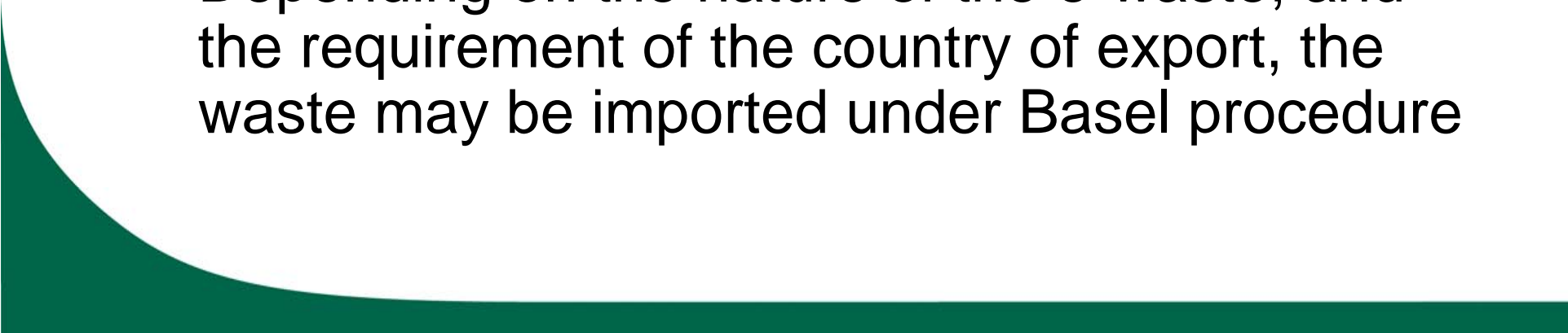


Import for Reuse

- Third-party surveyor certification to prove good working condition is required for import of second hand electronic and electrical appliances meant for reuse
- Declaration form is required for import for personal use (less than 5 pieces)



Import for Recycling

- Importer shall have approved e-waste recycling facility
 - PCD's approval is required for the import of e-waste for recycling
 - May seek PIC from competent authorities in country of export
 - Depending on the nature of the e-waste, and the requirement of the country of export, the waste may be imported under Basel procedure
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Import for Repair and Refurbishment

- Importer has contractual agreement with EEE manufacturers to repair and refurbish their equipment
- Importer shall have repair facility
- Market for repaired equipment



Import for Repair and Refurbishment

- E.g. Import of defective hard-disks under Return Merchandise Authorization (RMA)
 - Local repair facilities have contractual agreement with hard-disk manufacturers for repair services
 - Defective hard-disks imported from Asia Pacific region
 - Repaired hard-disks are re-exported back to customers



Control of Exports

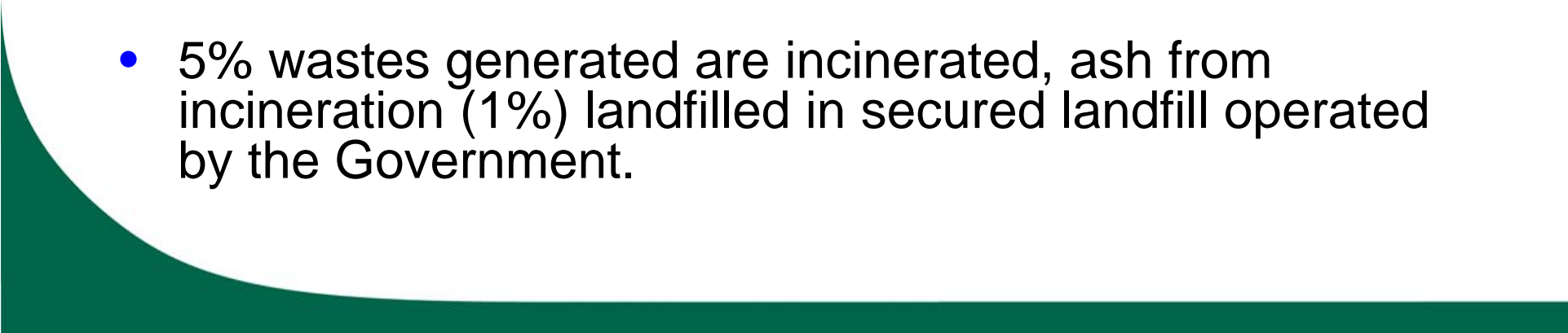
- Export of used electronic and electrical equipment for reuse
 - Require surveyor's certificate to prove good working condition
 - Declaration form for personal use (< 5 pieces)
 - E.g. transfer of office equipment to foreign branch
- Export of e-waste for recycling
 - Require PIC from importing country
 - Basel permits required if importing country regards e-wastes as hazardous waste
 - E.g. export of lithium-ion batteries to Japan, printer cartridges for recycling in Canada

E-waste Recyclers in Singapore

- 5 e-waste recycling plants in Singapore
 - M/s Centillion Environment & Recycling Ltd
 - M/s Cimelia Resource Recovery Pte Ltd
 - M/s SPM Recycling Pte Ltd
 - M/s Advance SCT Ltd
 - M/s TES-AMM Singapore Pte Ltd



TES-AMM Singapore Pte Ltd

- Major e-waste recycler
 - Collects local wastes and imports of used electronic and electrical equipment from overseas
 - Repair, refurbish, resale
 - Asset management
 - Lithium ion battery recycling
 - Spent epoxy resins recycling – plastic pallets
 - Recovers gold, silver and platinum
 - 5% wastes generated are incinerated, ash from incineration (1%) landfilled in secured landfill operated by the Government.
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TES-AMM Major Process Units



Crusher System - Size reduction of materials, Magnetic separation



Hammer Mill System - Further size reduction, Powder form



Extraction Process (Stripping) - Stripping of precious metals or metallic coating from base metals



Gold Ingots

Pollution Control



Dust collection system



Acid/Cyanide Scrubber



Wastewater treatment plant

Challenges Ahead

- Illegal transboundary movements and mismanagement of hazardous wastes may occur through many causes as follows:
 - False declaration
 - Ignorance among industries and traders on hazardous wastes issues especially waste consumer items that they deal with everyday such as electronic goods
 - Weakening economy –
 - Beware of companies that may use recycling facilities as a front to receive hazardous wastes which are then channeled elsewhere and not recycled at facilities;
 - Beware of companies cutting down on health and safety measures

Conclusion

- Safeguard the environment from illegal movements
 - Strict controls and enforcement checks on import and export of wastes
 - Strong network with local authorities eg. customs, maritime and port authorities
 - Awareness raising among industries and traders (industry feedback important in enforcement)
 - Strong network with regional and international counterparts (information sharing and timely intelligence)
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Thank You

