

Recycling Policy and Activities

Rohaya Saharom

National Environment Agency

Singapore

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Movement of Hazardous Wastes

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Challenge

- Import of e-waste, under the guise of second hand electronic goods, for re-export is a potential problem.
- Uncontrolled import of e-waste will result in Singapore becoming a disposal ground for other countries' e-wastes

Facilitate recycling programmes **VS** placing stringent controls that deter the industry



Controls

- Classify used e-appliances as HW only if such appliances are not in good working order and cannot be re-used

(2nd hand e-appliances in good working order and meant for re-used are not classified as HW and do not require PIC for import/export)



Controls

- Control import/export of used electronic and electrical appliances (including second hand electronic and electrical appliances) through TRADENET system

(Under TRADENET control system, all declarations for import/export of used electronic and electrical appliances will be routed to NEA for processing and clearance)

Controls

- Third-party surveyor certification is required for import of second hand electronic and electrical appliances
- PIC from importing/ exporting country required for import/export of electronic and electrical appliances that are meant for recycling/recovery



Consultation with Stakeholders

- NEA has consulted stakeholders (importers & exporters, recyclers, customs, etc) to –
 - **evaluate the implications; and**
 - **see if the proposed tightening of controls need to be further refined**
- NEA has informed traders of the controls via
 - **briefings**
 - **circular to all traders through the TRADENET system**
 - **NEA's website on "Control of Hazardous wastes"**

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



Import for Recycling

- Need to notify NEA prior to import
- Importer shall have approved e-waste recycling facility
- More than 95% 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

Import for Repair and Refurbishment

- Importer has contractual agreement with EEE manufacturers to repair and refurbish their equipment 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
- Importer shall have repair facility
- Market for repaired / refurbished equipment (charitable organisations, less privileged)

Exports

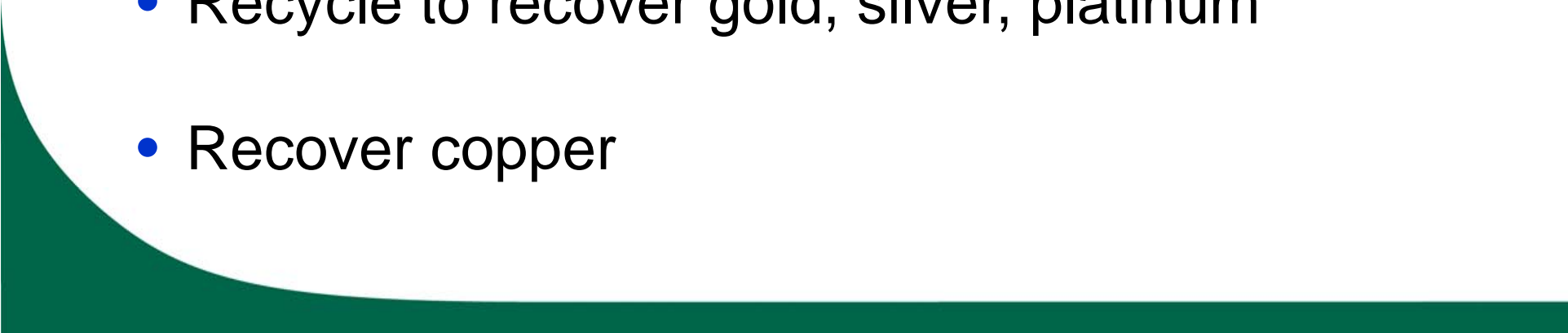
- Export of used electronic and electrical equipment for reuse
 - Require surveyor's certificate to prove good working condition
 - Declaration form for personal use (< 5 pieces)
(eg. transfer of office equipment to foreign branch)
- Export of e-waste for recycling
 - Require PIC from importing country
 - Basel permits required if importing country regards e-wastes as hazardous waste
(eg. 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



E-waste Recyclers in Singapore

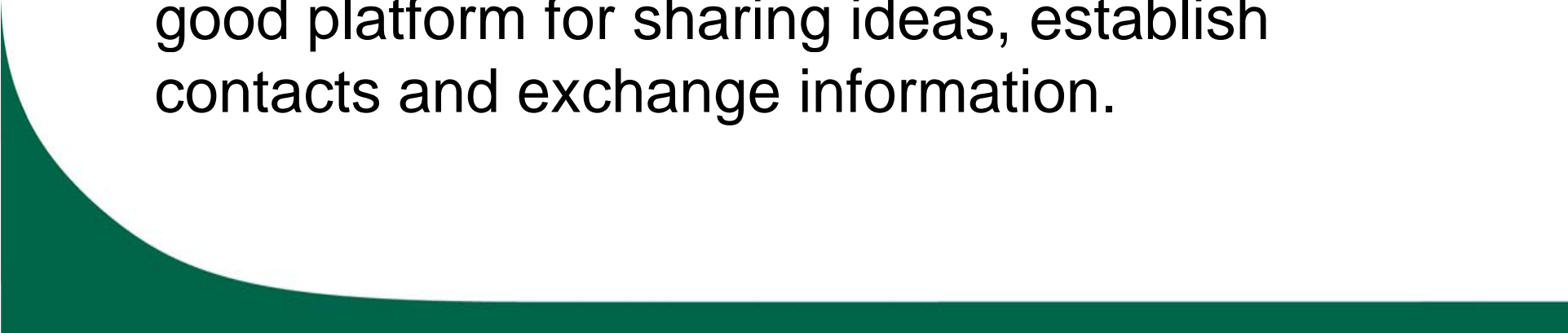
- Refurbish
 - Repair
 - Demanufacturing to recover good parts eg. IC chips, motherboards and other components that have no IP concerns
 - Recycle to recover gold, silver, platinum
 - Recover copper
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E-waste Take Back Scheme

- Singapore implemented a voluntary take back scheme since 2005
- Dell, Nokia and HP set up take back centers to take back used printers / handphones
- Will study the experiences in Japan and the EU and improve our scheme in Singapore



The way forward

- Merits of e-waste reuse, recovery, recycling industry.
 - Consider take-back scheme like the WEEE Directive.
 - Continued participation in network activities - a good platform for sharing ideas, establish contacts and exchange information.
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A large, stylized graphic of a leaf or feather, split vertically. The left half is a muted green color, and the right half is a light pink color. The shape is curved and tapers at both ends, resembling a leaf or a feather.

Thank You

