

# Management of transboundary movement and Recycling of wastes (e-wastes) in Thailand

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**Pollution Control Department**

**Ministry of Natural Resources and Environment**



# Presentation Outlines

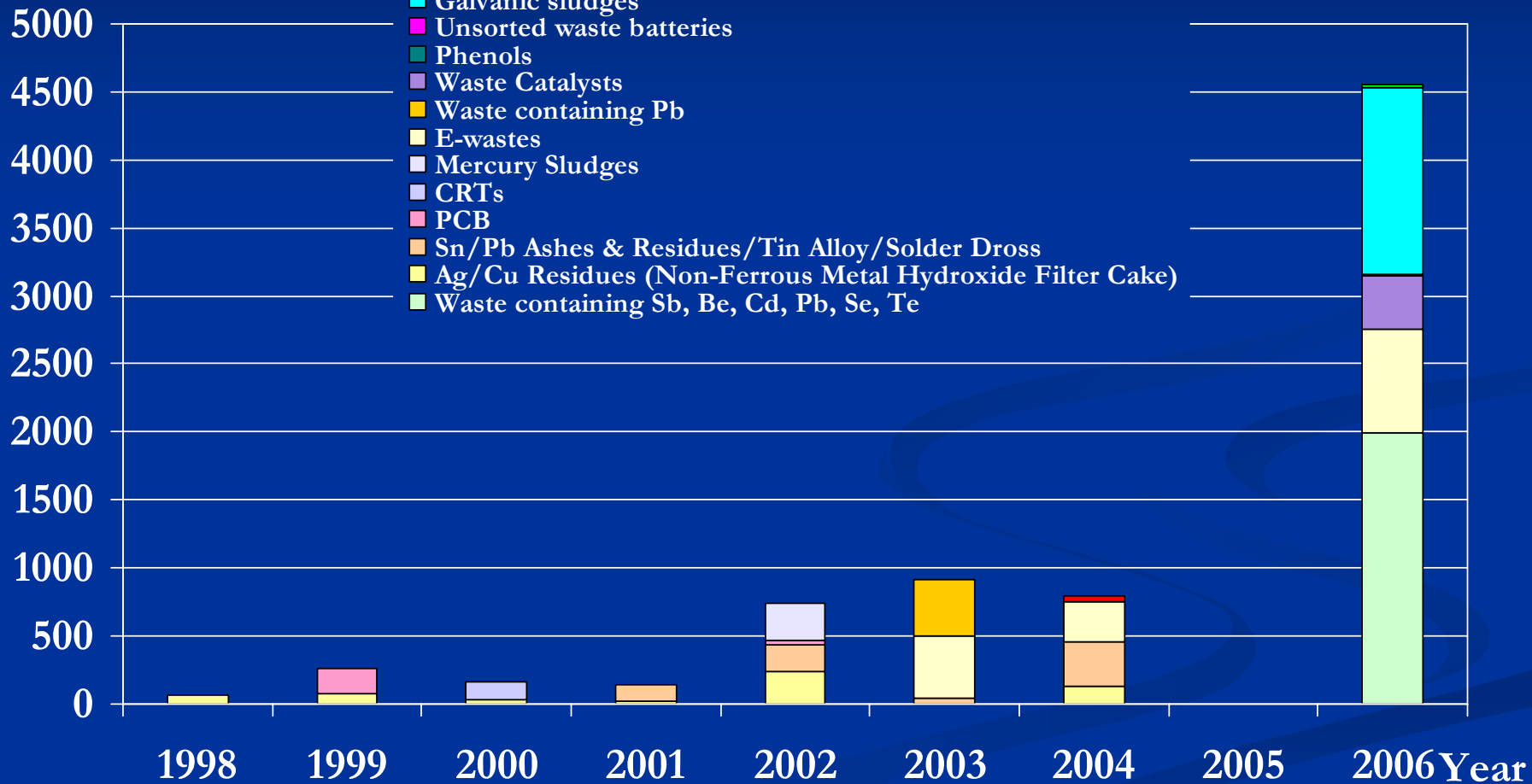
- Statistics of wastes import/export
- Illegal Traffic of E-wastes and Others
- Activities on HZW and E-waste management
  - Household hazardous waste collection project
  - Mobile phone batteries and fluorescent lamps take back program
  - E-waste inventory
  - Recycling facilities
- Major challenges

# Waste Statistics



# Export Amount

Metric Tonnes





# Exporting Country/Origin

- Singapore
- Japan



# Import Amount

Metric Tonnes

25000

20000

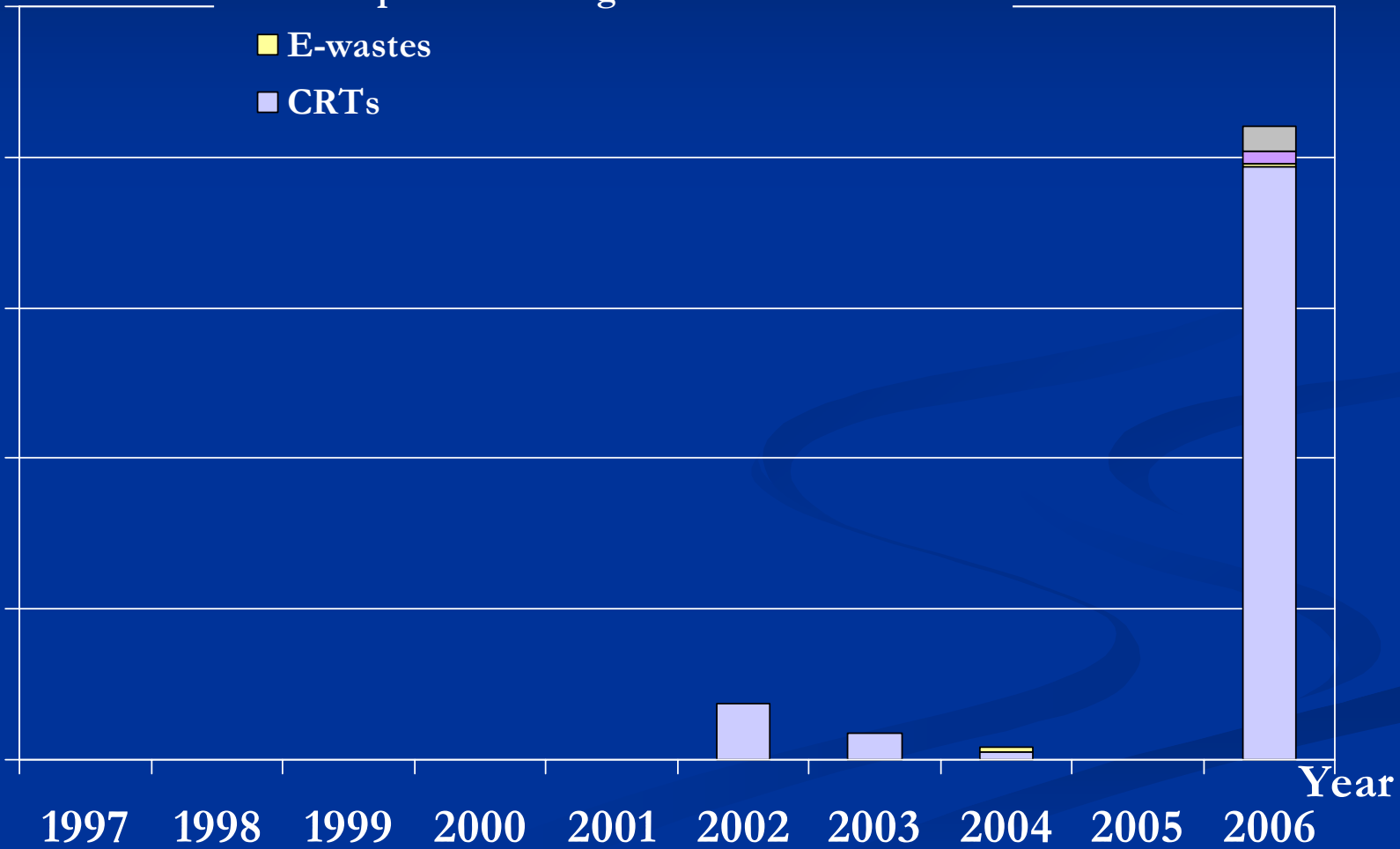
15000

10000

5000

0

- Metal wastes and waste consisting of alloys
- Used printer cartridges
- E-wastes
- CRTs





# Importing Country/Destination

- Netherland
- Germany
- France
- Canada
- Belgium
- UK
- Japan
- Philippines
- Singapore
- Korea

# Thailand's Experience on Illegal Traffic of E-wastes and Other Wastes





# Illegal export of used tires, used car bodies/parts and used lead acid batteries (23.45 tons) from UK to Thailand (Dec. 2001 - Feb. 2003)





## Illegal export of plastic wastes and others (17.7 tons) from Netherlands to Thailand (Sep. 2003 –Apr. 2004)





## Illegal import of used boards of pinball game (46.2 tons) from Japan to Thailand (Jan. 2004 - 2005)



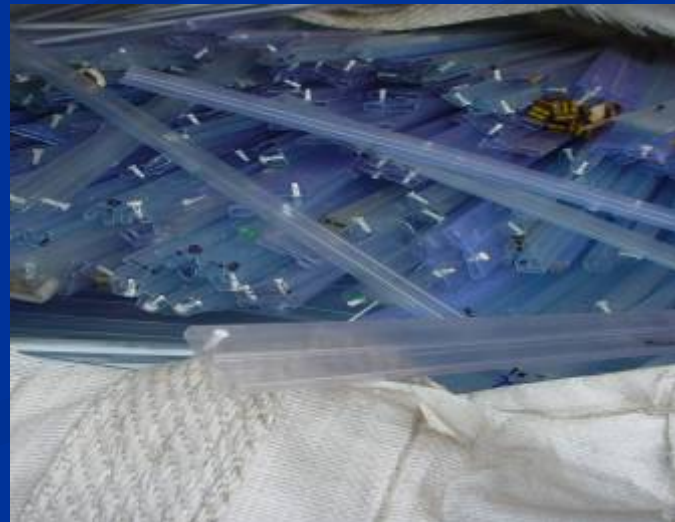


## Illegal export of used monitors (19, 15.6, 16.75 tons) from Thailand to China (Feb., Apr., May 2004 - present)





## Illegal export of E-wastes (18.18 tons) from Thailand to Hong Kong (Dec. 2005 - present)





# Procedures for the Investigation and Cooperation on Illegal Traffic of Wastes

**False declaration/  
unclaimed goods**

**Inform agent/  
consignee**

**Set up  
investigation team**

**Investigation**

**Legal actions**

- Discrepancy in documents (false declaration) or unclaimed goods (> 2 months) were found by Customs
- Customs inform shipping agent /consignee within 15 days
- If no one claimed the goods, Customs will set up the investigation team incl. Customs & environment investigators, port officers & other agencies
- Team will investigate the shipment & other relevant evidences
- Submit all evidences to the authorized agencies for further legal actions



# Training Course on Identification and Prevention of Illegal Traffic of Wastes

**HW  
definition**

**Legislation for  
controlling  
the HW import**

**Roles of Customs,  
Port Authorities,  
shipping agents**



**Environmental and  
waste sampling**

**Site visit at the port  
and waste facilities**

**Illegal shipment  
Inspection**

# **Current Activities on Hazardous Waste and E- waste Management in Thailand**





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# Household HW collection scheme





# Waste containers



Container for dry-cell batteries, aerosol cans, cleaning liquid bottles. (Separate container for different type of waste)

Drop-off Bin  
Installed in community centers



Container for 100 straight FL





# Awareness raising program





# Collected hazardous waste



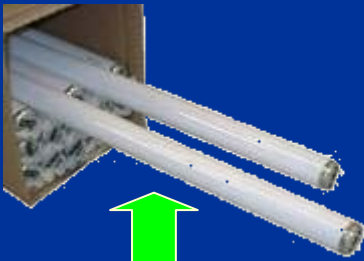
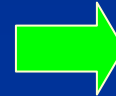


# Mobile Phone Battery Tack Back Project





# Pilot Project on Fluorescent Lamp Recycling





## E-Waste Inventory Development

- **Scope of inventory covers PC, Notebook, TV, air conditioner, mobile phone, refrigerator.**
- **Tool: Questionnaires**
- **Samples**
  - Households: 400 samples
  - Offices: 400 samples (companies, institutions, hotels, apartments)
  - Recyclers: 400 samples (collectors, second-hand shops, repair shops, dismantlers, and recyclers)
- **Sampling Method**
  - Stratify household income by province and number of population
  - Select number of samples by population size



## E-Waste Inventory Development

- **Data are being analyzed and verified.**
  - Purchase / use pattern
  - Amount of used e-product discarded at present and in future
  - Amount of used e-product exported, repaired/ reassembled and dismantled
  - Generation and management of residues generated from repair/reassembling, dismantling, processing

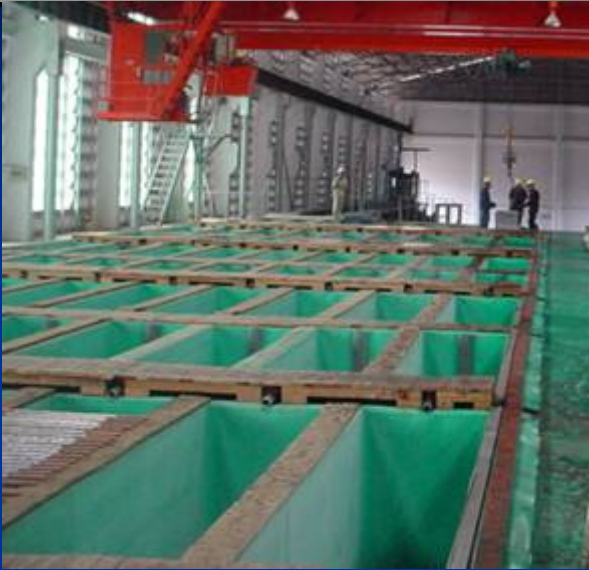


# **Recycling of Hazardous Waste in Thailand**



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# Pb acid batteries





# On-site service



Courtesy of Wongpanit Group



# Destruction of Hard Disk



Courtesy of Wongpanit Group



# Dismantling of Printers





# Destruction of other secret parts



Courtesy of Wongpanit Group



# FL Recycling (Toshiba)



# Major Challenges





# Major Challenges

- Different definitions of e-waste among countries
- Some concerns about Free Trade Agreement
- Lack of domestic facilities to manage internally without exporting to other countries (in terms of number and types of products)

For more information

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