

# **INTRODUCTION ON MANAGEMENT OF E-WASTE AND HAZARDOUS WASTE IN VIETNAM**

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# CONTENT

- Waste generation
- Legal framework
- Current state of HW and E-waste management
- Illegal import cases
- Challenges and difficulties
- Future activities and recommendations

CONTENT



# 1. WASTE GENERATION

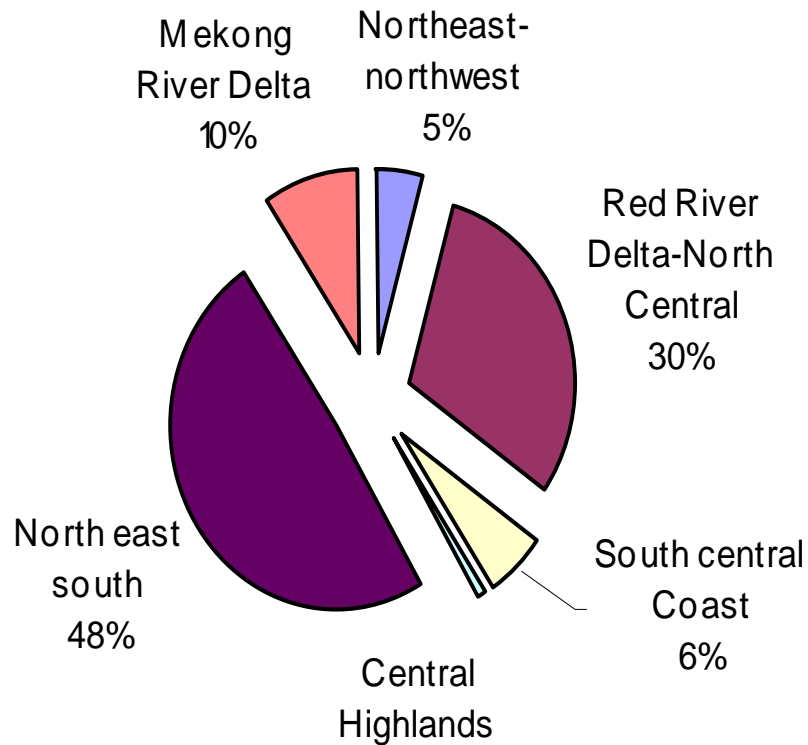
# WASTE GENERATION (2004)

Category	Sources	Types	Generation (1,000 t/yr)		
			Urban	Rural	Total
Household	<ul style="list-style-type: none"> <li>•Residential</li> <li>•Commercial</li> <li>•Markets</li> </ul>	<ul style="list-style-type: none"> <li>•kitchen waste</li> <li>•plastic</li> <li>•paper</li> <li>•glass</li> </ul>		6,400	12,800
Industrial Non-Hazardous	Industries	<ul style="list-style-type: none"> <li>•metals</li> <li>•wood...</li> </ul>	1,740	770	2,510
Industrial Hazardous	Industries	<ul style="list-style-type: none"> <li>•fuel oil</li> <li>•waste sludge</li> <li>•org. chemicals</li> </ul>	126	2.4	128
Hazardous healthcare	Hospitals	<ul style="list-style-type: none"> <li>•tissue samples</li> <li>•blood</li> <li>•syringes</li> </ul>	-	-	21.5
<b>Total-non agricultural waste</b>			<b>8,266</b>	<b>7,172.4</b>	<b>15,460</b>
Agricultural	<ul style="list-style-type: none"> <li>•Cultivation</li> <li>•Livestock</li> </ul>	Plant matter	NA	64,560	64,560

*Note: - Industrial waste excludes mining waste  
 - Rural industrial waste derives from craft villages*

# WASTE GENERATION (2004)

- 20-25% of total household waste concentrated in the South



# WASTE GENERATION (now)

## Industrial Waste:

- 2004 forecast: 3.2 million tons (0,5 million tons hazardous) in 2010
- 2008 report from 35/63 provinces: 7.5 million tons (0,7 million tons hazardous)
- 2010: 0.8 million tons of hazardous waste (JICA report)

## Healthcare waste:

- 2004 forecast: 75 thousand tons in 2010
- 2010: 127 thousand tons (Ministry of Health report)

# E-WASTE GENERATION

Could be forecasted on the estimation on domestic production and importation (in 2006 and 2010) below:

Item	2006 (set)	2010 (set)
TV	3,607,419	7,269,021
PC	594,586	1,072,623
Mobile phone	3,230,788	3,361,971
Refrigerators	985,374	1,790,936
Air conditioner	64,818	640,960
Washing machine	931,313	1,711,971



## **2. LEGAL FRAMEWORK**



# LEGAL FRAMEWORK (1)

- **Law on Environmental Protection in 2005 (enter into force since 1 July 2006) generally defines that**
  - Waste means any matter in form of solid, liquid or gas which is discharged from manufacturing, business, services or living activities or from other activities (Vietnam differentiates between wastes and scrap materials)
  - HW mean wastes containing elements that are toxic, radioactive, inflammable, explosive, abrasive, contagious, poisonous or otherwise harmful
  - Scraps mean products or materials which arise as a result of manufacturing processes or consumption and which are recovered for use as raw materials for manufacturing.

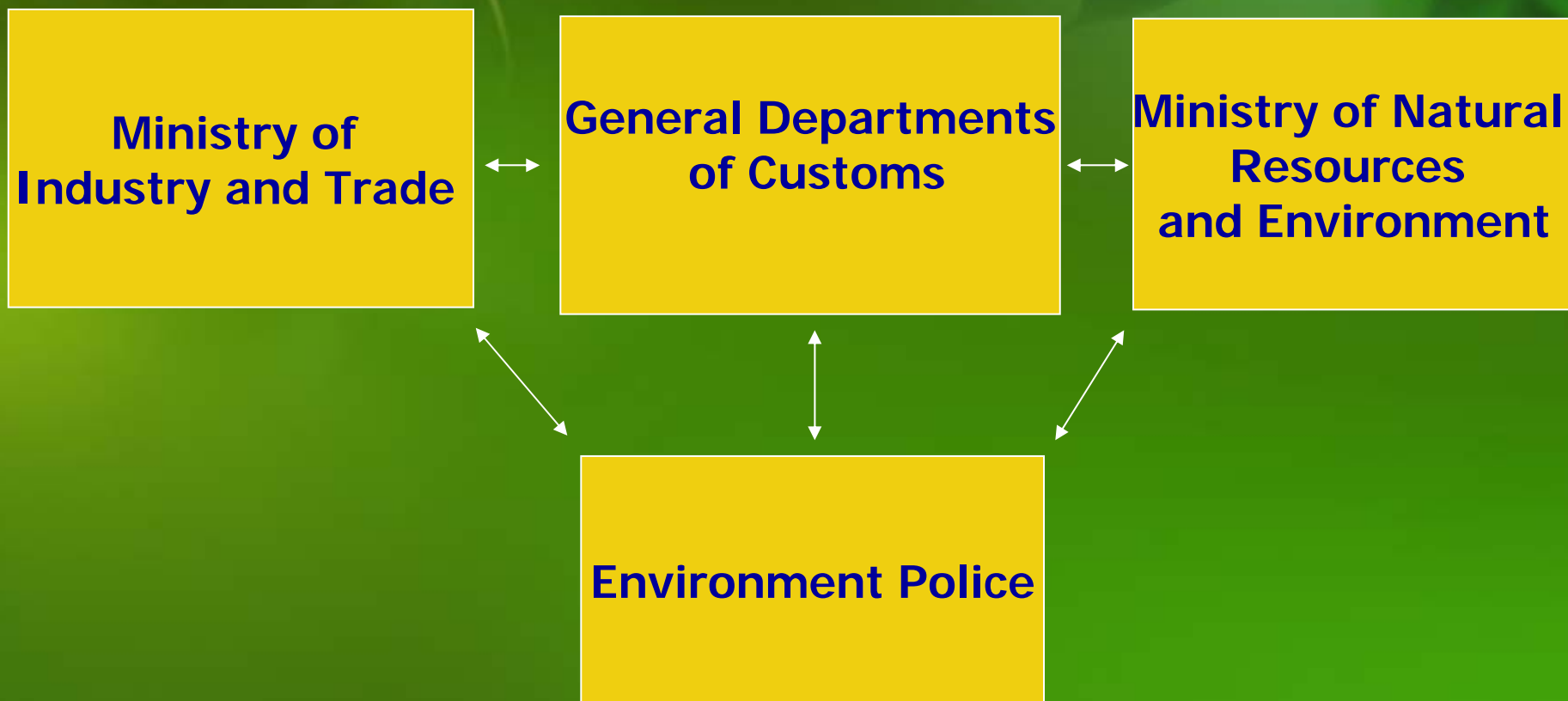
# LEGAL FRAMEWORK (2)

- **Waste importation into Vietnam is prohibited.**
- **The State allows importation of certain categories of scrap materials for use (or recovery) as secondary materials for industrial production (Decision No. 12/2006/QĐ-BTNMT).**
- **Decree No. 12/2006/ND-CP dated 23 January 2006 of the Government providing guidelines on implementation of the Trade Law's stipulates that the temporary import for re-export of commodities (including waste) should have permit from Ministry of Trade**

# LEGAL FRAMEWORK (3)

- **Vietnam does not have specific regulations on e-waste management. Instead, all e-waste are managed under hazardous waste legal framework**
- **Circular 12/2011/TT-BTN&MT on hazardous waste management and issues two kind of wastes:**
  - Wastes that are always HW (including some kinds of e-waste)
  - Wastes that are suspicious for HW: Need to analyze the concentration of hazardous component to identify
- **National Technical Standards for Hazardous Waste thresholds QCVN 07: 2009/BTNMT: used to identify that wastes that are suspicious for HW.**

# AGENCIES INVOLVED IN CONTROL OF TRANSBOUNDARY MOVEMENT OF WASTE IN VIETNAM



A close-up photograph of a snail on a green leaf. The snail is positioned on the left side of the leaf, moving towards the right. Several water droplets are visible on the leaf's surface, reflecting light. The background is a soft-focus green, suggesting a natural, outdoor setting.

### **3. CURRENT PRACTICES OF HW AND E-WASTE MANAGEMENT**

# CURRENT PRACTICES OF HW AND E-WASTE MANAGEMENT (1)

- **Set-up of licensing system for hazardous waste collection, transport and disposal:** around 100 facilities are licensed by VEA (some of them have e-waste treatment equipment), in addition with those licensed by provinces
- **Developing an e-manifest system for hazardous wastes for more effective management**
- **Require e-waste generators to transfer waste to the licensed collectors, transporters and treatment facility operators. Those generators, collectors and treatment operator will need to reports to MONRE, DONRE every 6 months.**
- **Environment Police strengthens the implementation of the regulation by irregularly checks and inspections**

# CURRENT PRACTICES OF HW AND E-WASTE MANAGEMENT (2)

- **Currently, e-waste generation rate is still low because electrical and electronic equipment (EEE) are mostly in reuse**
- **EEE in Vietnam is mostly discarded by selling to the collectors for dismantlement**
- **Different collection systems for e-waste in Vietnam operated by collectors, transporters (licensed or not licensed).**
  - Big generators usually transfer e-waste to licensed transporter and treatment facilities
  - Household and small generators who do not register usually transfer waste to unlicensed collectors and transporters

# CURRENT PRACTICES OF HW AND E-WASTE MANAGEMENT (3)

- **Informal sector usually collect HW from household and small generators**
  - Positive: collect almost HW and e-waste generated from household and small generators
  - Negative: pollute environment (discard residues and invaluable parts to landfills) and affect the worker's health





## **4. IILEGAL IMPORT CASES**

# ILLEGAL IMPORT CASES (1)

- **Some illegal cases: import of used lead battery and e-waste into Vietnam detected by Environment Police and Customs Department in 2009 and 2010 (Fake permits, wrong shipment, disguised declaration to customs)**
- **Vietnam Environment Administration has sent official letters asking to re-export of those wastes to its original country.**
  - Difficult to re-export
  - Destroyed in Vietnam, expenses covered by receiving companies in Vietnam

## ILLEGAL IMPORT CASES (2)

- **10/10/2009: Vietnam Customs discovered one illegal shipment of around 400 ton of used lead battery and 40 ton of e-waste into Vietnam from Hong Kong**
  - The receiver claims: Wrong shipment
  - Can not re-export since the exporting company in Hong Kong is bankrupt
  - Apply to re-export to one in China (fake permit from China)
  - Final decision: destroyed in Vietnam with expenses covered by Vietnam companies

# 5. CHALLENGES AND DIFFICULTIES

- **Lack of HW treatment technology, limited budget and human resources, weak enforcement capacity, small generators transfer waste to un-licensed operators.**
- **Weak capacity to identify different categories of wastes, especially the capacity to analyze concentration of HW in laboratory**
- **Incompetence of custom officers and environment police to quickly identify hazardous waste**
- **Lack of human resource and capacity to control in-land border**
- **HW could be declared as scraps to import into Vietnam**

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## **6. FUTURE ACTIVITIES AND RECOMMENDATIONS**

# FUTURE ACTIVITIES

- **Strengthen capacity to implement the Circular 12/2011 on registration and licensing system for generators, collectors, transporters and treatment facility operators**
- **Issue and implement the Decision on responsibility of EEE manufacturers and importers on take-back of their products**
- **Enforce generators to transfer waste to licensed transporters and treatment facility operators**
- **Encourage transporters and treatment facility operators to work with generators to register with DONRE.**

# RECOMMENDATIONS

- **Review and revise legal framework (particularly Law on Environmental Protection) to create the unification and systematic organization, institution and competence in waste management**
- **Enlarge the awareness raising**
- **Enhance inspection**
- **Develop and implement the central and provincial planning system for HW management**
- **Increase budget for hazardous waste management**
- **Promote socialization**

# **Thank You For Your Attention!**



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