

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

Mr. Nguyen Thanh Yen

Head of Hazardous Waste Management Division
Waste Management and Environment Promotion Agency
Vietnam Environment Administration

Content

- Waste Generation
- Legal framework
- Existing management system to implement the legal framework
- Current state of HW and e-waste management;
- Barriers, challenges and difficulties
- Future activities and recommendations

1. WASTE GENERATION

Waste Generation (2004)

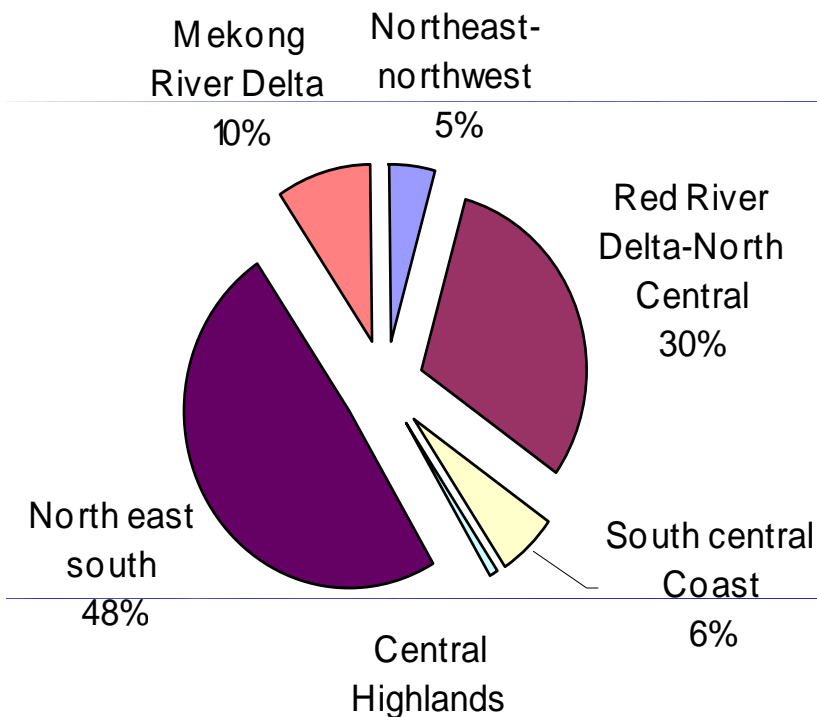
Category	Sources	Types	Generation (1,000 t/yr)		
			Urban	Rural	Total
Household	<ul style="list-style-type: none"> • Residential • Commercial • Markets 	<ul style="list-style-type: none"> • kitchen waste • plastic • paper • glass 		6,400	12,800
Industrial Non-Hazardous	Industries	<ul style="list-style-type: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

Note: - Industrial waste excludes mining waste

- Rural industrial waste derives from craft villages

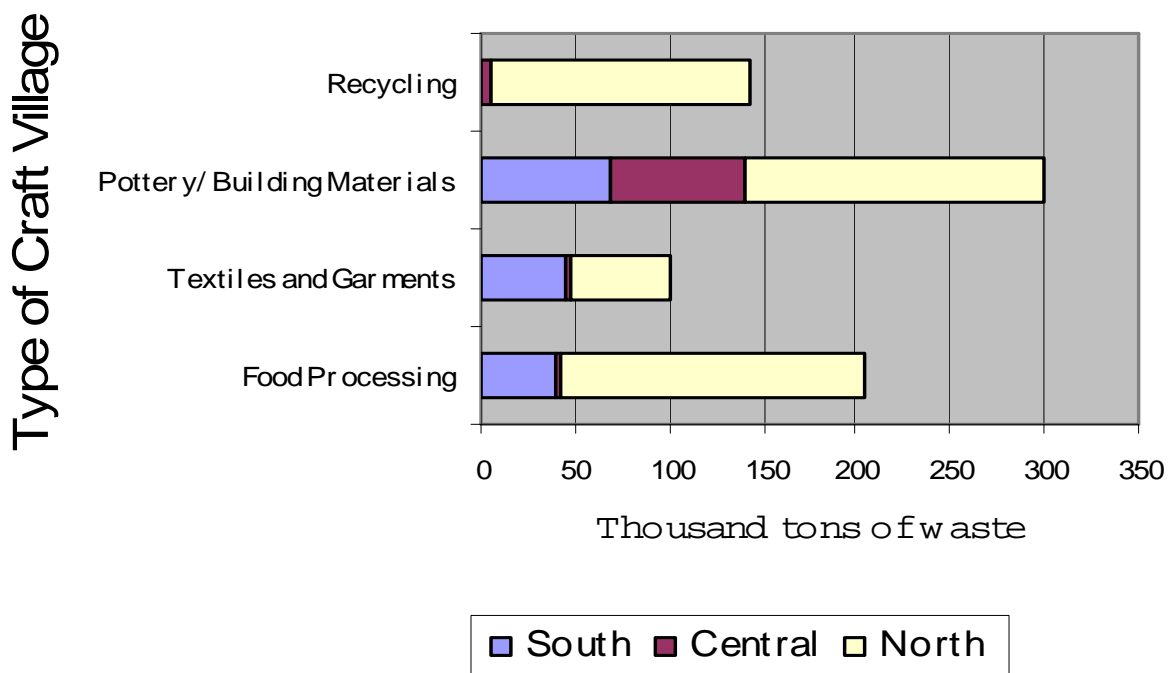
Waste Generation (2004)

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



Waste Generation (2004)

Waste generation from craft villages:
concentrated in the North



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)

Healthcare waste:

- 2004 forecast: 75 thousand tons in 2010
- 2008 report from 35/63 provinces: 1,79 million tons

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 in Vietnam (1)

- Vietnam does not have specific regulations on e-waste management. Instead, all e-waste are managed under hazardous waste legal framework
- Decision 23/2006/QD-BTN&MT on issuing the list of hazardous waste (2 kinds):
 - Wastes that are always HW (including some kinds of e-waste)
 - Wastes that are suspicious for HW: Need to analyze the concentration to identify
- National Technical Standards for Hazardous Waste thresholds QCVN 07: 2009/BTNMT: used to identify that wastes that are suspicious for HW.

Legal framework in Vietnam (2)

- Circular 12/2006/QD-BTNMT of Ministry of Natural Resources and Environment (MONRE) requires:
 - Generators of HW must register with provincial Department of Natural Resources and Environment (DONRE) and must transfer waste to licensed collectors, transporters, and treatment facility operators
 - HW collectors, transporters, and treatment facility operators (including recyclers) must apply for professional license.
 - Within one province: license issued by DONRE
 - Inter-provinces: license issued by MONRE

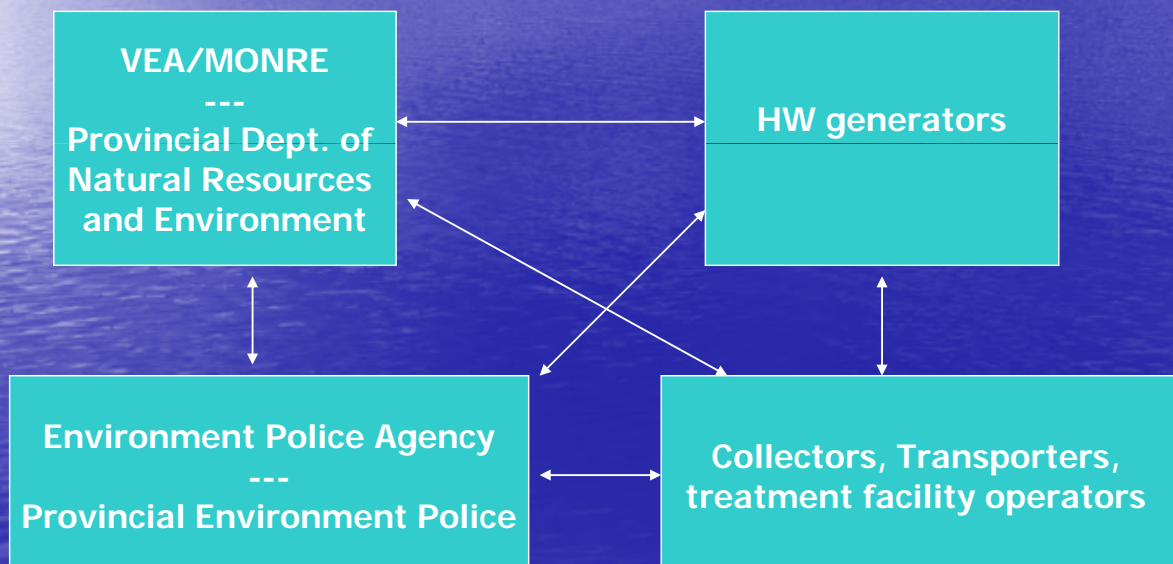
Legal framework in Vietnam (3)

- Article 67 of Law on Environment Protection 2005 requires the taking-back of discarded electronic & electric products and batteries
 - Developing a Decision to be issued by Prime Minister which requires the manufacturers and importers of EEE to have responsibility on collection of their products when they become e-waste. Main idea is the manufacturers and importers of EEE must deposit a certain amount of money to Vietnam Environment Fund for taking back activities

3. EXISTING MANAGEMENT SYSTEM TO IMPLEMENT THE LEGAL FRAMWEWORK

Current Management systems

Enforcement of regulation is strengthened by establishment of Environment Police in 2006 and Environment Inspectorate under Vietnam Environment Administration in 2008



4. 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: 71 facilities are licensed by VEA (treatment and collection, transportation facilities) in addition with those licensed by provinces
- Developing an e-manifest system for hazardous wastes for more effective management
- Based on registration of e-waste generators, DONRE/DONRE require them 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)

- Until now, 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

5. BARRIERS, CHALLENGES AND DIFFICULTIES

Barriers, challenges and difficulties

- Low rate of e-waste will bloom up very fast soon and will be big problem if there is not good preparation for management capacity
- Small generators and household do not register for their e-waste and transfer their wastes to un-licenced collectors and transporters (get higher payment)
- Some licensed transporters still break the regulations: discard HW to environment without treatment (MONRE considers to stop issuing licenses to transporters but only to treatment facility)
- Limited budget and human resources
- Lack of appropriate treatment technology
- Low awareness of risk posed by e-waste: people consider e-waste as a valuable resources, not a pollution sources
- Low enforcement capacity

6. FUTURE ACTIVITIES AND RECOMMENDATIONS

Next steps

- Continue implementing the Circular 12/2006 (or its revised version) on registration and licensing system for generators, collectors, transporters and treatment facility operators
- Very soon issuing and implement the Decision on responsibility of EEE manufacturers and importer on take-back of their products
- Encourage the generators to transfer waste to licensed transporters and treatment facility operators.
- Through licensed collectors, Encourage and force transporters and treatment facility operators, the generators to register with DONRE.

Recommendations

- Review for revision of legal frame (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
- Increase budget
- Promote socialization

Sword lake - Hanoi



Hochiminh city



Ha Long Bay → new 7 wonders???



The beauty and usefulness often bring about problems or hazards after all !!! ;-)))



Thank you for your attention!

Web: www.vea.gov.vn
E-mail: baselvn@vea.gov.vn
ngthanhyen@vea.gov.vn

