



SOLID WASTE MANAGEMENT AND 3R IN VIETNAM

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CONTENT

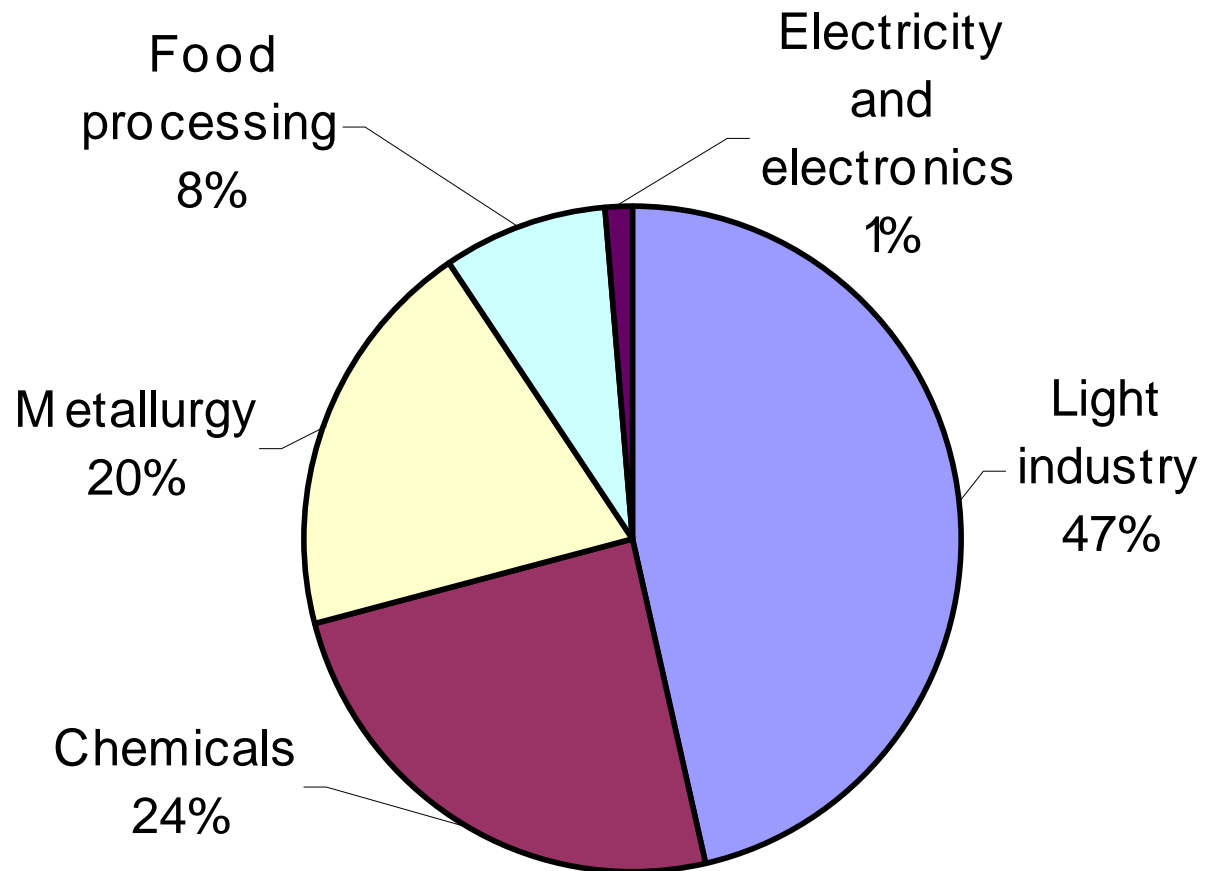
1. Status of solid waste management;
2. Policies and strategies;
3. Priorities for strategic implementation of 3R

1. STATUS OF SOLID WASTE MANAGEMENT

Waste generation in Vietnam (2003)

(Category)	Amount (ton/year)		
	(urban)	(Rural)	(Total)
(Domestic waste)	6.400.000	6.400.000	12.800.000
(non-hazardous industrial)	1.740.000	770.000	2.510.000
(hazardous industrial)	126.000	2.400	128.400
(hazardous medical)	-	-	21.500
(Total non-agricultural waste)	8.266.000	7.172.400	15.459.900
(Agricultural)	unknown	64.560.000	64.560.000

Composition of industrial waste





Composition of domestic solid waste in some urban areas in the North – Viet Nam

(% of amount)

Nº	Composition	Ha Noi	Hai Phon	Nam Dinh	Thai Nguyen
<i>Inflammable material</i>		69.9	52.0	80.5	71.3
1	Organic	51.9	40.48	65.0	62.0
2	Plastic	7.3	3.10	7.0	6.0
3	Paper. catton	4.5	6.42	4.0	5.0
4	Cloth	3.7	1.10	2.3	1.2
5	Rubber	2.5	1.10	2.2	0.5
<i>Other</i>		29.6	46.3	18.3	27.9
6	Metal	7.0	5.5	3.0	2.1
7	Glass	5.1	5.6	2.0	2.2
8	Innert material	17.60	35.0	13.3	20.7
9	<i>Hazardous waste</i>	0.5	1.7	1.2	0.8
Moisture %		41.58	52.2	44.6	50.0
ash %		12.99	7.8	19.5	13.5
Density, ton/m ³		0.40	0.41	0.43	0.45



Collection, Treatment and Disposal

- ✓ Collection rate in urban: 70%;
- ✓ Collection rate in rural areas: 40%;
- ✓ Solid waste separation at source and 3R Pilot project: in some areas of Hanoi (Jica support) and Ho Chi Minh cities;



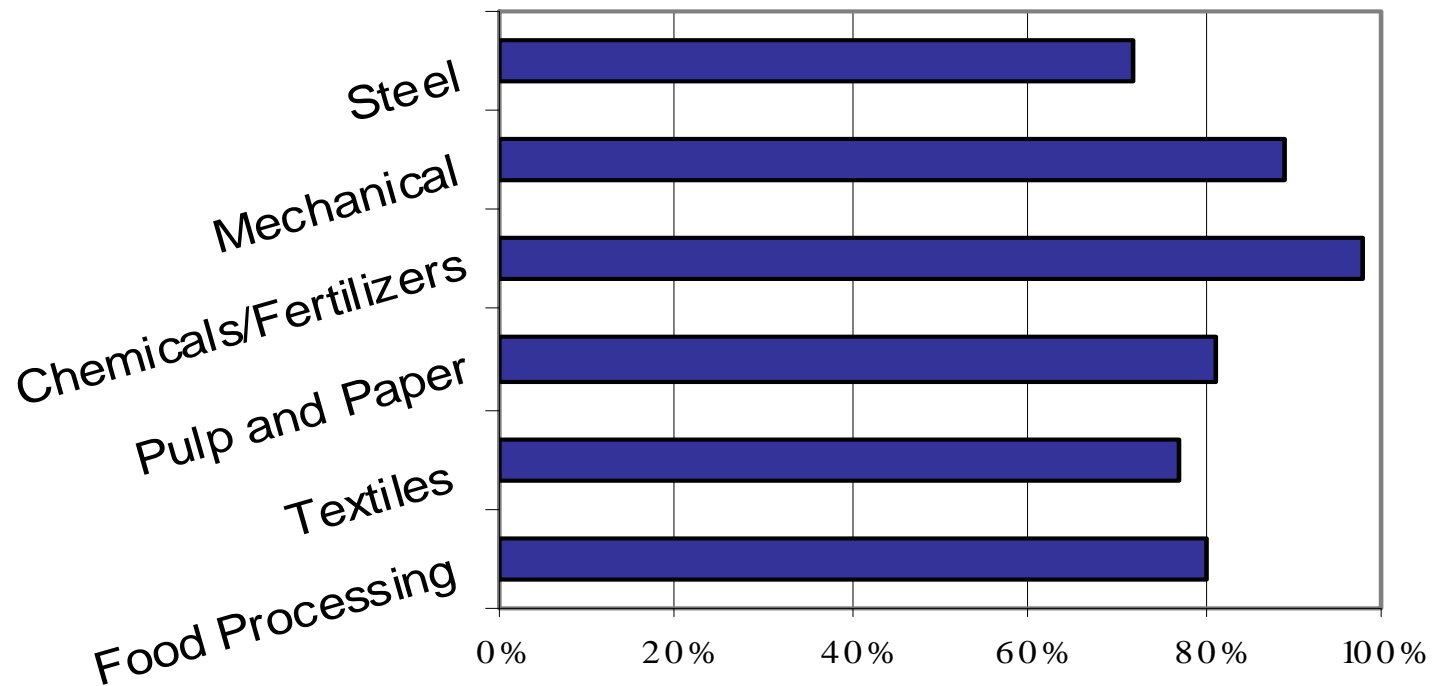
Collection, Treatment and Disposal

- ✔ URENCO company responsible for collection and transportation of solid waste in urban areas;
- ✔ Self-disposal is common in areas with no collection and disposal services
- ✔ 8/63 provinces have composting factories;
- ✔ Incineration for hazardous waste treatment;
- ✔ There are 91 landfills for solid waste among which 17 ones are sanitary;



Recycling Management

✓ **80% non-hazardous industrial waste is potentially recyclable**





Recycling Management

- ✓ **The informal sector collects the majority of the recyclable and reusable waste in urban areas**
- ✓ **Many Craft Villages receive collected recyclable waste for recycling (Northern region);**
- ✓ **Small and medium scale enterprise working on recycling waste (Southern region);**
- ✓ **No large-scale systematic waste recycling facility**



2. POLICIES AND STRATEGIES

- ✓ National Strategy for Environmental Protection until 2010 and vision toward 2020:
 - Establish and develop recycling industry to reach the target of recycling 30% of collected waste until 2020;
 - The State proactively joint with other interest investors in formation of a system of solidwaste recycling, treatment...
 - Construct recycling and treatment facilities for urban and industrial solidwaste



2. POLICIES AND STRATEGIES (cont.)

- ✓ Directive 23/2005/CT-TTg of the Prime Minister on strengthening solidwaste management in urban areas and industrial zones (target 2010):
 - Develop solidwaste recycling facilities
 - Priority to reuse-recycling and limit dumping
 - Encourage all businesses in research & development of solid waste reuse-recycle



2. POLICIES AND STRATEGIES (cont.)

✓ Law on Environmental Protection (2005):

- Reuse/recycling is on the list of encouraged activities
- Reusable /recyclable waste should be reused/ recycled maximally to minimize waste to be treated by other methods
- The State offers incentives for energy recovery from waste, waste reuse/recycle



2. POLICIES AND STRATEGIES (cont.)

✓ National Strategy on Reduce, Reuse and Recycle (Draft):

Target to 2020:

- Collection rate for solid waste: 95%;
- Reduction of waste generation;
- Solid waste disposal: 40% of collection amount;
- Reuse and recycle rate: 60%



2. POLICIES AND STRATEGIES (cont.)

✓ National Strategy on Reduce, Reuse and Recycle (Draft):

Target to 2015:

- Collection rate for solid waste: 80 %;
- Reduction of waste generation;
- Solid waste disposal: 70% of collection amount;
- Reuse and recycle rate: 30 %



POLICIES AND STRATEGIES (cont.)

✓ National Strategy on Reduce, Reuse and Recycle (Draft):

Content:

- Waste separation at source;
- Reduce;
- Reuse;
- Recycle.



3. PRIORITIES FOR STRATEGIC IMPLEMENTATION OF 3R

- ✔ Target waste: Domestic solid waste; Hazardous waste;
- ✔ Priorities areas: Municipalities and industrial zones;
- ✔ Activities: National 3R strategy promulgation; development of policy instrument on 3R; 3R demonstration project and promotion; development of environmentally sound technologies for hazardous waste and 3R.



Thank you very much!