

行政院環境保護書 Environmental Protection Administration Executive Yuan, R.O.C. (Taiwan)

### TAIWAN

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### **Definitions and Background**

- The definition of WEEE subject to Taiwan's EPR Law.
- EEE in charge by RFMB of Taiwan EPA.



- EPR: Extended Producers Responsibility
- RRW: Regulated Recycling Waste that regulated by Waste Disposal Act
- RFMB: Recycling Fund Management Broad, responsible for WEEE management
- Hazardous Waste: Produced by industry that is toxic or dangerous and the concentration or volume of which is sufficient to influence human health or pollute the environment.



### **Statistics**



**Certified Collection Volume** 



## **Current Status of WEEE Regulations**

	Pro	oducer	The management measures of new RRW products for manufacturers and importers							
	Payment (Recycling fee)									
	Fund	metyching Fullu Management Doard				e operational asures of auditing				
	Management	Recycling Rate Review Committee		Auditing and Certification Supervisory Committee	and RR	l certification for W				
Subsidy										
Recycling System						Management measures of subsidies regarding the collection and recycling of RRW for application and review				
Retailer Collector			Recycler					1		
Waste Home Appliance Take-back Policies	e and facilities for the collection, re k storage, transportation and re			nent measures of scale, ancellation of registration, other relevant matters of the recycling enterprises	Э					
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### 4 in 1 recycling system in Taiwan



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# Challenges of E-waste recycling system in policy aspects

#### Emerging products potentially cause E-waste recycling difficulties.



 International raw material market fluctuation affects subsidy fees adjustment



### **2015 E-waste management results(1/2)**

#### **1.Recycling Fees and Subsidy Fees**

			Recyclir (NTD	J	Subsidy	Item		Recycling fees (NTD/unit)		Subsidy Fees	
				, , ,	Fees (NTD/unit)			General Fees	Green Fees	(NTD/unit)	
			General Fees		, , ,		Mother Board	47.6	33.4		
						Personal	Hard Disk Drive	47.6	33.4	100	
TV Set	Non-LCD	> 27"	371	<u>334</u>	284	Computer	Case	7.9	5.6	182	
		<b>≦ 27</b> "	247	<u>222</u>			Power Supply	7.9	5.6		
	LCD	> 27"	233	<u>211</u>	303			39	27	250	
	LOD	<b>≦ 27</b> "	127	<u>114</u>	505			25.3	18	146	
Refrigerat	> 250 liters		588	<u>500</u>		Non-LCD Monitor		127	89	215	
or	$\leq$ 250 liters		392	333	635.5	LCD Monitor		127	89	199	
Washing Machine		307	261	346.5	Printer	Inkjet Printer	144	131			
Air Conditioner			241	205		500	Laser Printer	159	151	130	
Electric	> 12"		34	<u>16</u>	00		Dot Matrix Printer	155	147		
Fan	<b>≦ 12</b> "		19	<u>29</u>	33	Keyboard		14	10	<u>14</u>	



### 2015 E-waste management results(2/3)

2. Standard for waste electrical and electronic equipment (WEEE) collection, transportation, recycling and facility management amendment

- 1. For WEEE that contain cathode-ray tubes, funnel and panel glasses must be separated, and fluorescent powder must be stored in closed containers according to the following rules:
  - The vacuum needs to be removed and funnel and panel glass must be separated free from CRT.
  - > The operation must be conducted in a separate and confined space.
- 2. Fluorescent need to contain in closed vessel Waste appliance contains refrigerants should have satisfied following operation procedure:
  - Shredding the waste casing should in subatmospheric and confined space.
  - Plants for processing of appliance containing HCs should have certain explosion precaution procedure.
  - > Shredding should able separate metal fractions (ferrous and non ferrous) and the other PURs.
  - Plants should equip with refrigerant liquefaction systems must be installed to collect foaming agents in foam insulating materials.



### 2015 E-waste management results(3/3)

2. Standard for waste electrical and electronic equipment (WEEE) collection, transportation, recycling and facility management amendment

- 3. LCD display treatment should have satisfied following operation procedure:
  - LCD monitor or TV contains CRT should be treated in the fume extraction hood.
  - Mercury vapour absorption equipment should be installed on exhaust port.
  - > Shall not by using destroying method for dismantling LCDs.
  - Workers should wear gloves for personal protection.
  - > No liquid crystal leaking during dismantling process.
  - Specific area for CCFL storage.







### 2015 E-waste management projects outcomes

- 1. Improving technology and management of home appliances and IT equipment trafficking system, and WEEE recycling and system
  - Safety hydrocarbon refrigerant operation design based on substance characteristics, technical feasibility, cost reasonability and regulation availability.
  - Completed the estimation of collection cost for waste home appliances and waste IT equipment, and made the estimation of recycling costs for LCDs with various types and sizes of backlight devices.

2. Scope review and recycling promotion of waste home appliances and waste IT equipment

- Data collection of the household usage of electric and electronic equipment containing monitors including product life-span, household stock and end-of-life flow of electric and electronic device which was based on telephone survey to predict "put on the market volume"," discard volume" and "funding deficit "in the next five years for policymaking.
- E-waste recycling program and system study focus on collecting United Kingdom, Germany, Belgium, Netherland, Switzerland and Japan recycling system for further research reference.



### Thank You for Your Attention

資源回收基金管理會 Recycling Fund Management Board Environmental Protection Administration http://recycle.epa.gov.tw