

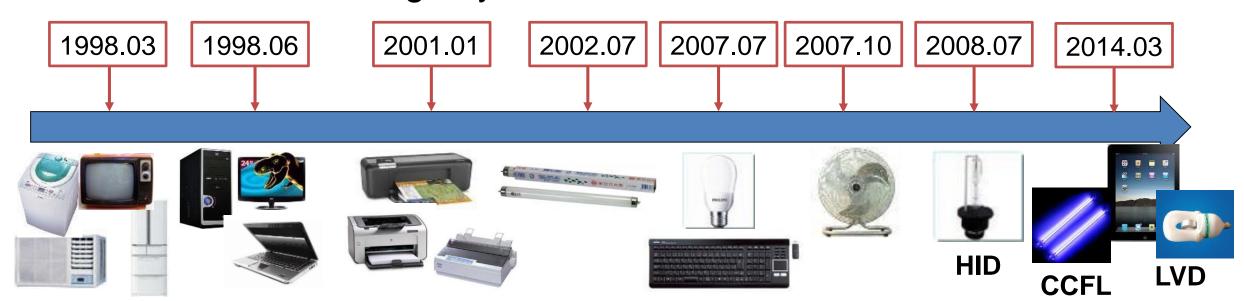
TAIWAN

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Definitions and Background

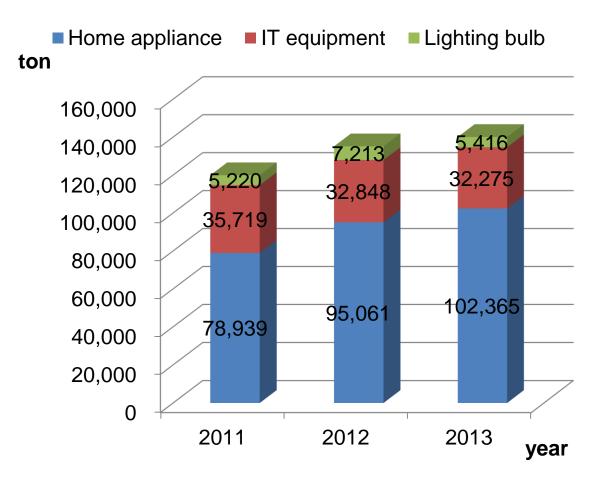
- The definition of WEEE Subject to Taiwan's EPR Law.
- RRW e-waste in charge by RFMB, EPAT.



- RRW: Regulated Recycling Waste that regulated by Waste Disposal Act
- 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
- Under current framework, WEEE from industry is categorized as hazardous waste in disposal and import/export stages



Statistics



■ Home appliance ■ IT equitment ■ lighting bulb collection rate(%) 186.55 200 150 126.25 88.62 100 80.41 65.64 73.89 **46**.91 **42**.93 40.08 50 0 year 2011 2012 2013

Certified Collection Amount

Certified Collection Rate

Current Status of WEEE Regulation

Recycling Fund Management Board

Recycling Rate Review
Committee

Auditing and Certification Supervisory Committee The operational measures of auditing and certification of RRW

Management measures for application and review of subsidies regarding the collection and recycling of RRW

Producer

Fund Management

Fee

The management measures for manufacturers and importers of new RRW products **Subsidy**

Recycling System

Retailers

Collector

Recycler

Waste Appliance
Take-back Policies

Standards for the operations and facilities for the collection, storage, transportation and recycling of RRW

The management measures of scale, registration, cancellation of registration, reporting and other relevant matters of the collection and recycling enterprises

Current Status of WEEE Regulation

2013~2014 update

- Differential Fee:
 - Recycling fees for environmental friendly Electrical and Electronic Equipment are 30% lower.





• New RRW:



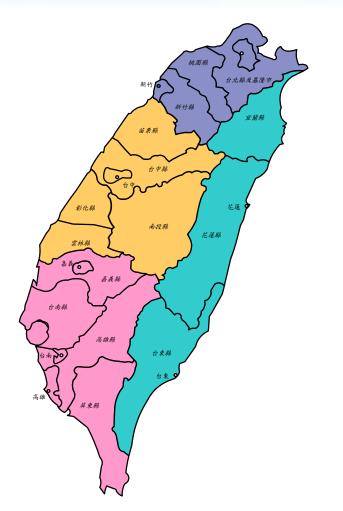




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Current Status of E-Waste Industries



ltem	Collectors	Recyclers
Home Appliance	246	12
IT Equipment	241	15
Lighting Blub	190	6

- The number of Collectors increased while the number of Recyclers decreased.
- EPAT updated materials recycling and recovery specifications for ESM.
 - Fluorescent powder (CRT TV:0.006kg/unit, CRT monitor:0.0025kg/unit)(in draft)
 - Coolant (Air conditioner:0.20 Kg/unit, Refrigerator 0.03kg/unit)

Current Status of E-Waste Industries

- Summary of technologies/processes used and level of environmentally sound management (ESM):
 - Use recycled materials from waste lightings to make a new one.
 - Pilot study of the LCD panel recycling process.
- HCFCs has been prohibited in Taiwan since 2011, So the recyclers have to adjust their disposal treatment processes for refrigerator, which using the Hydrocarbon blowing agent (Cyclopentane) as refrigerant, for safety purpose.

Other Relevant Projects

Item	technology
Printed Circuit Board	Printed Circuit Board recycling technology
Refrigerator	PUR and ABS recycling technology
LCD TV and monitor	LCD Panel treatment technologyLC recycling technology
CRT TV and monitor	Funnel glass recycling technology
Lighting Bulb	 Recycle Rare Metals(Eu and Y) from Fluorescent powder Fluorescent powder purification

Prospects and Challenges

- Encourage green design and enhance treatment performance by economic means.
- Improve the system performance and treatment technology
 - 1. CRT glass and LCD panel treatment.
 - 2. HCFC collect safely.

Thank You for Your Attention

