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# **EPR in Promotion of Chinese Circular Economic Law**

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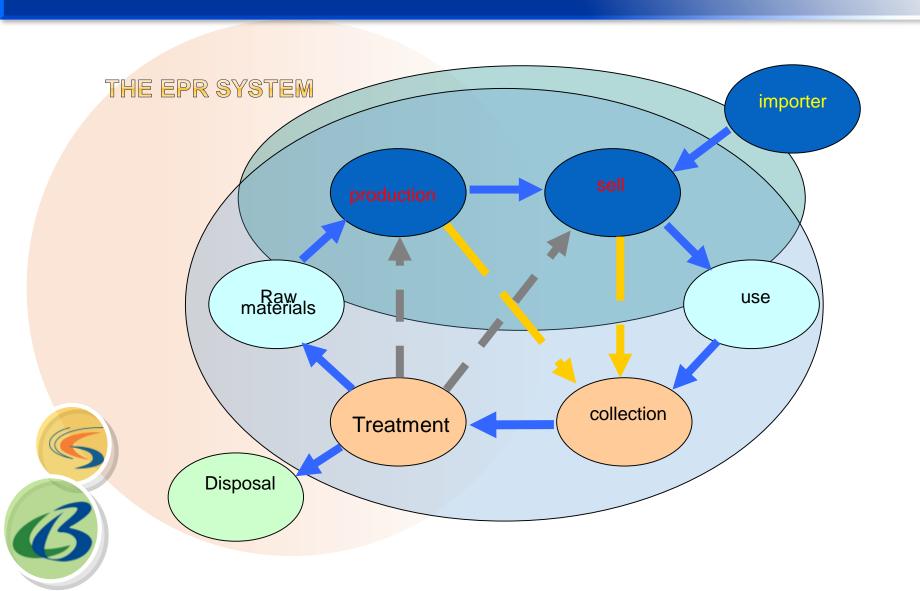
# **BACKGROUND TO EPR**

#### Trends in environmental policy-making:

- o These trends are the prioritisation of *preventative* measures over end-of-pipe approaches
- o enhancement of <u>life cycle thinking</u> and a shift from the "command-and-control" approach to a nonprescriptive, goal-oriented approach
- The incorporation of <u>incentive</u> mechanisms for industries to continuously improve their products and processes.
- o Polluter's pay principle not suitable for end-of-life products



# EPR concept



## **BACKGROUND TO EPR**

The term "extended producer responsibility", and its concept as a preventative environmental protection strategy was first used and defined by Thomas Lindhqvist in 1990.



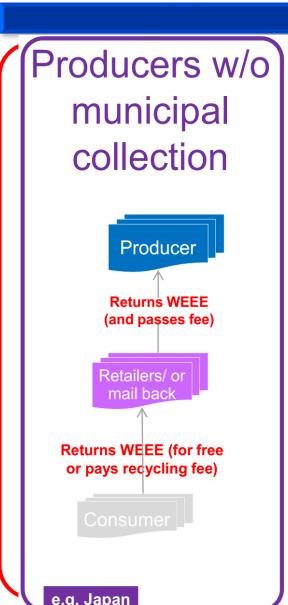


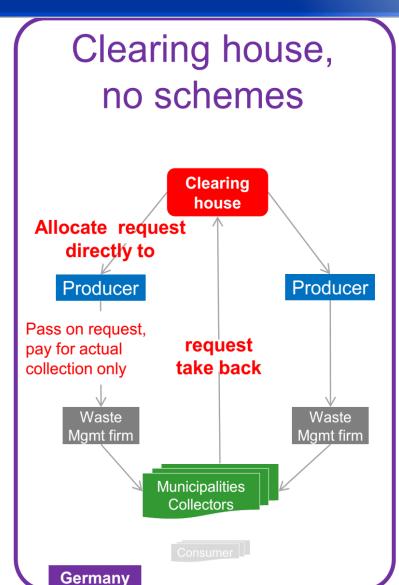
✓ making producers the primary actor responsible for the entire life cycle of their products

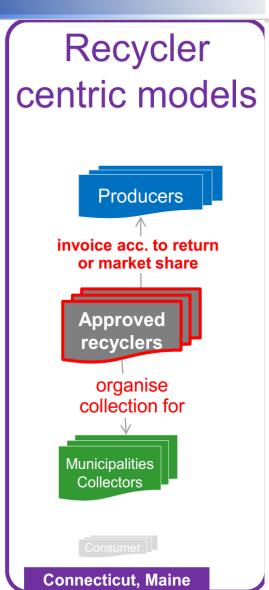
# **EPR** in the EU

	1991	Batteries and accumulators directive	91/157/EE
	1994	Directive on packaging and packaging waste	94/62/EC
	2000	Directive on End-of-Life Vehicle	2000/53/EC
	2002	WEEE directive	2002/96/EC
(5)	2006	Revised directive on batteries and accumulators	2006/66/EC
B	2012	Revised WEEE directive	2012/19/EU

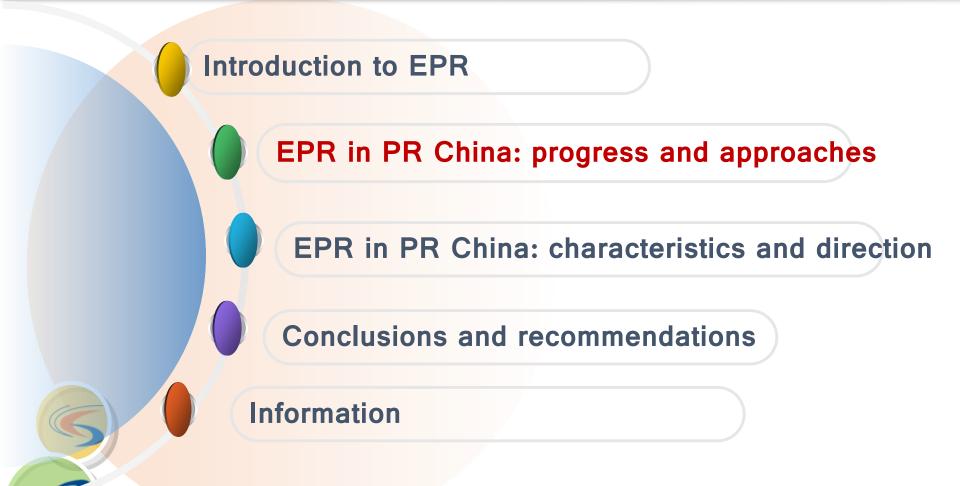
# Typical EPR models in the world







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# EPR in China's legislation system

# Responsibility in source prevention

Environmental Protection Law (1989) (2014 revised) Law on the Prevention and Control of Pollution by Solid Waste (1995) (2004, 2015 revised

Responsibility in source prevention

#### Responsibility in recycling

Cleaner Production Promotion Law (2002) (2012 revised) Circular Economy Promotion Law (2008)

Responsibility in source prevention and recycling

# EPR in PR China's legislation system

#### **Product**

Used cement sack

\* 1989, Recycling approach of used cement sack

**Battery** 

❖ 1997, Provisions on the Limitation of mercury content in batteries products; 2003, Technology policy of pollution prevention and controlling of spent battery

Packaging waste

2002, Povisional Administrative Measures on packaging recycling of resources

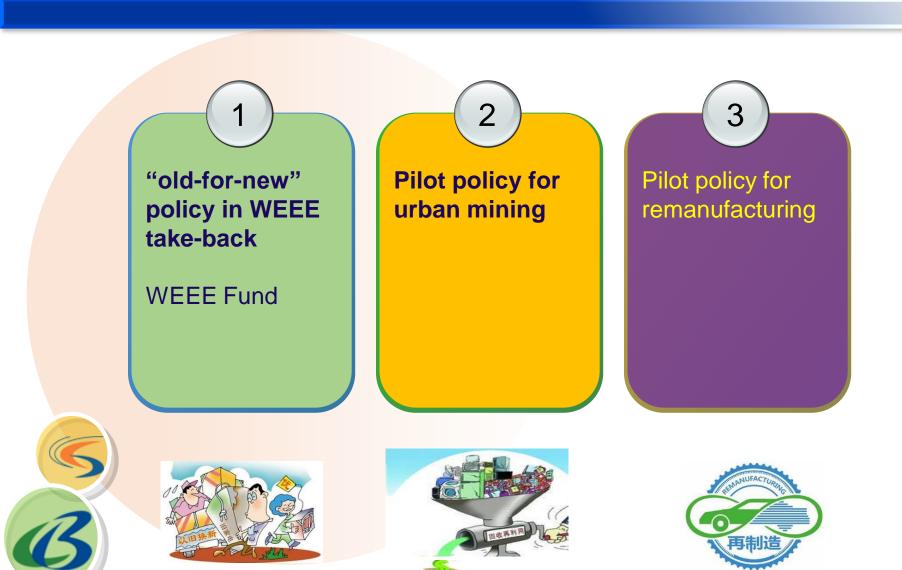
Used vehicle

2001, Administrative Measures on the Recovery of Scrapped Automobiles; 2006, Policy on recycling of Scrapped Automobiles

WEEE

\* 2009, WEEE regulation

# Main fields of EPR implementing and policy pushing

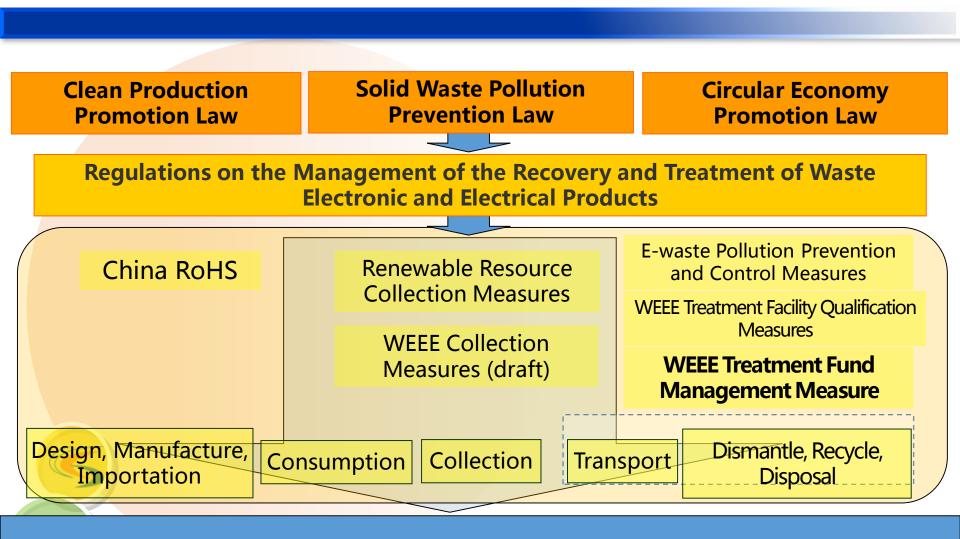


# **Evolution of EPR in PR China: case of WEEE management**

1995		2000	2005	2010	2015			
		EE treatment sector						
2004, WEEE recycling pilot programs and facilities set up.								
	$\overline{}$		nic Waste Pollution to	the Environment'				
End 2012	: Real-time	monitoring system of	f WEEE processing					
	Massive WEEE trade in program							
	2009 - 2011: "old for new appliances' regulation							
	To stimulated domestic demand and direct WEEE into authorized treatment							
	channels, deprive informal sector of materials.							
	Worked because: Massive gov. funding; IT systems to ensure fraud							
	prevention (id cards, serial numbers)							
	State fur	nd coordinates WEF	EE management					
	2012 Regulation on the WEEE Treatment Fund, 2009 Regulations on the							
(2)	Management of the Recovery and Treatment of Waste Electronic and							
	Electrical Products							
112	Fund fed by charging to producers, provides treatment subsidies to							
		ed recyclers.	, <b>1</b>					

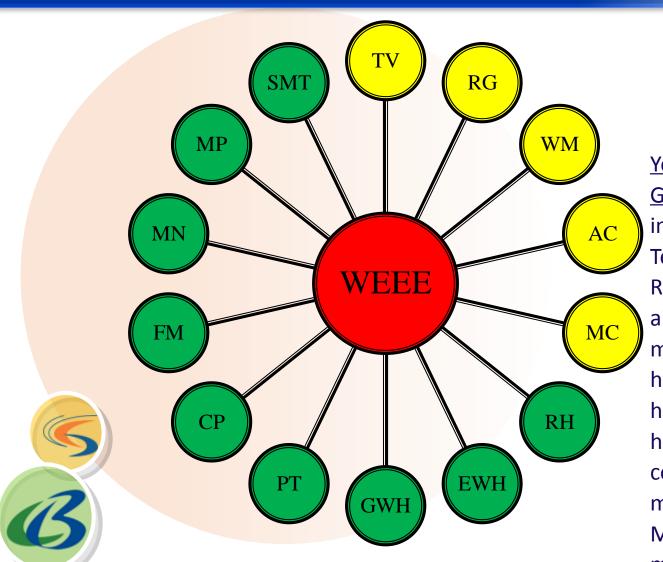
Work now: fund can keep informal sector weak

## **E-waste Legislation System**



Catalogue, Multi-collection, Centralized Treatment, Development Plan, Qualification Licensing, Treatment Subsidies

### Catalogue of Waste Electronic and Electric Products for Treatment



<u>Yellow color</u>: first catalogue; Green color: added catalogue in the new catalogue. Television, TV; refrigerator, RG; washing machine, WM; air conditioner, AC; microcomputer, MC; range hood, RH; electric waterheater, EWH; gas waterheater, GWH; printer, PT; copier, CP; fax machine, FM; monitor, MN; mobile phone, MP; telephone singlemachine, SMT.

# **Treatment fund subsidy**

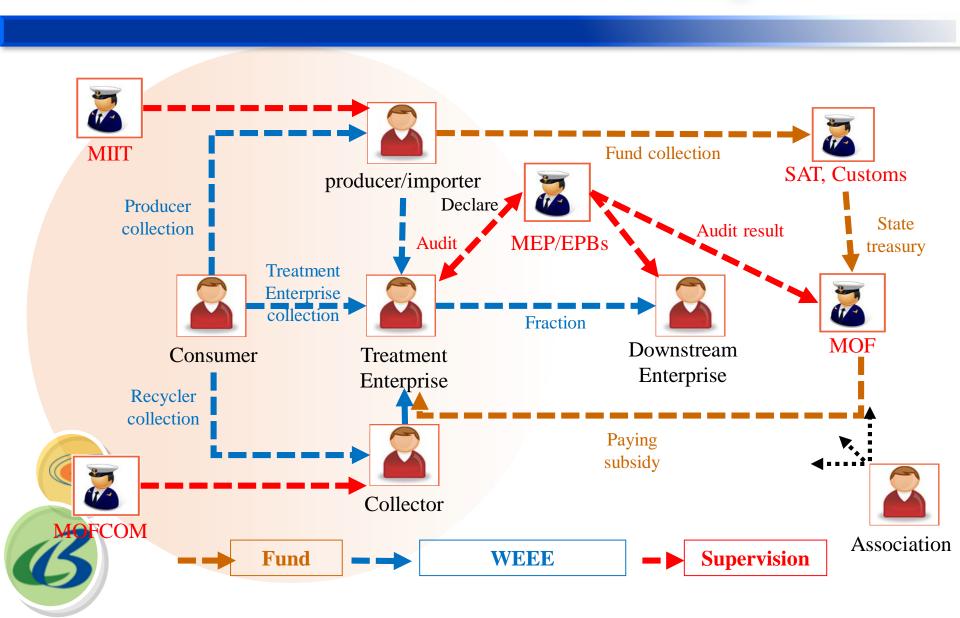
The state establishes a fund for the treatment of WEEE to subsidize the recoverr and disposal of WEEE



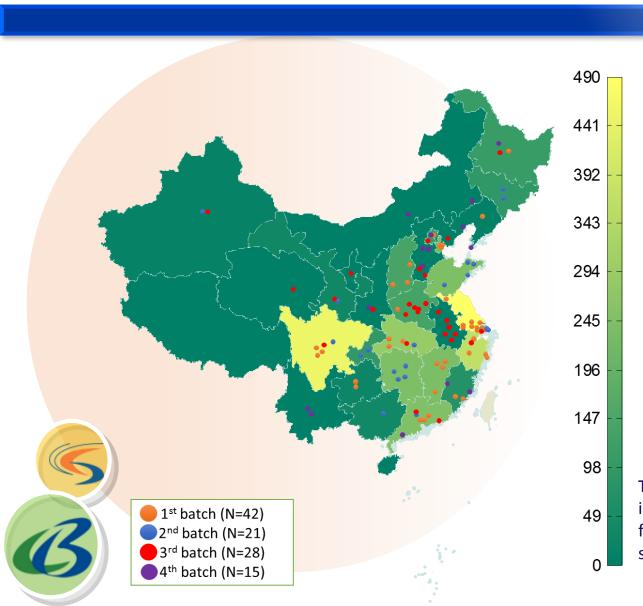
# Standard of fund levying and granting for WEEE recycling (RMB/unit)

V	VEEE	TV	Refrigerato r	Washing machine	Air conditioner	Microcomp uter
	Levying from producer	13	12	7	7	10
S	Subsidy for recycler	85	80	35	35	85

# **Treatment fund subsidy**



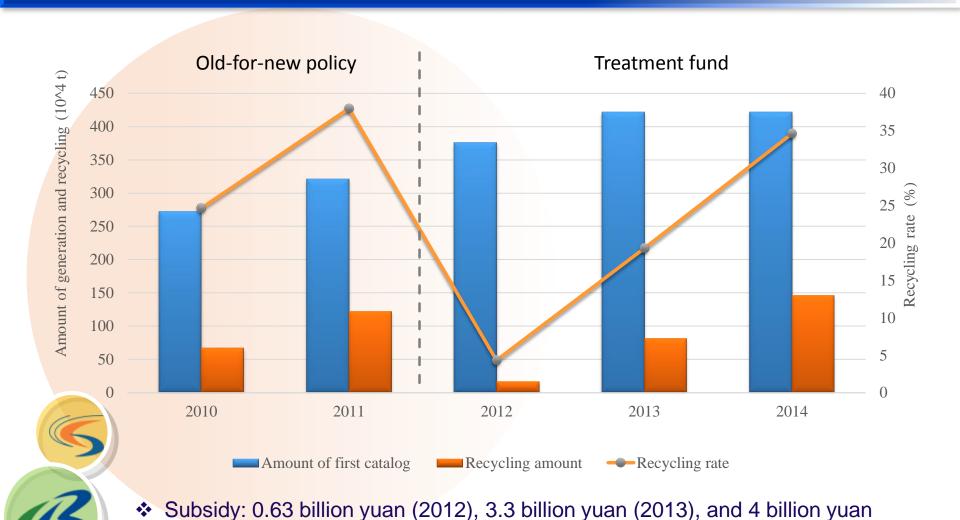
## Current Practice of WEEE treatment fund



1. Distribution map of WEEE treatment amount and enterprises in China (2015)
2. In 2014, the treatment amount was 70.454 million unit, and the total subsidy reached 4 billion yuan to obtain 1.42 million tonnes materials.

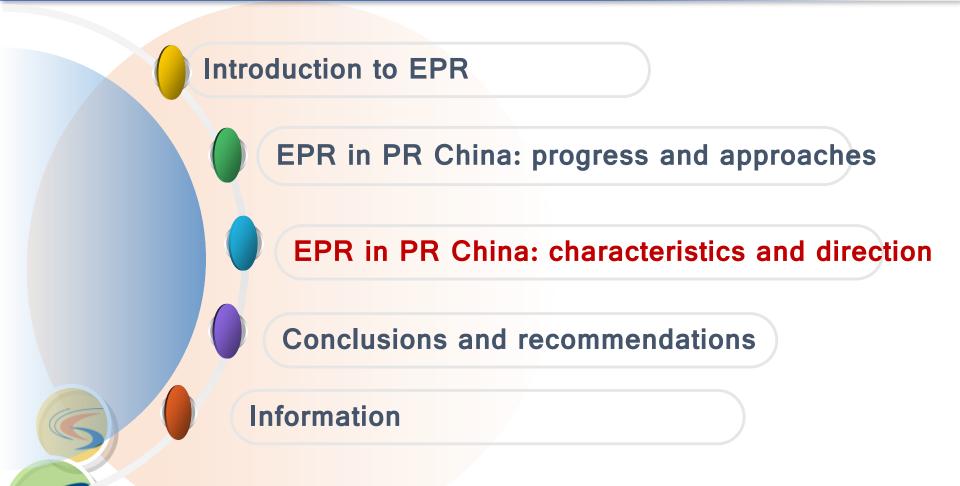
The unit is  $\times 10^4$ , and color circles indicate the batches that recycling facilities obtained the license of subsidy.

### **Current Practice of WEEE treatment fund**



(2014)

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# Characteristics of EPR in PR China

- □ Core: recycling and dismantling treatment
- ☐ Main orient for resource recovery, and auxiliary orient
- for environmental protection
- **☐ Main Approach:** through fund to eliminate the
- informal sector
- ☐ Operational mechanism: government leading
- ☐ Responsibility: Dominant responsibility from producer

# Challenge of EPR implementation in PRChina

- Legislation is not completed. only the products in a catalog is covered. The catalog, such as the catalogue of products and packages is not issued.
- Policy system is not smooth. Details policy is not well designed and often changed.
- □ The situation to implementing EPR is not experienced from the central government to local government, and for companies.
- ☐ Current fund model: cost is affordable for producers in future?

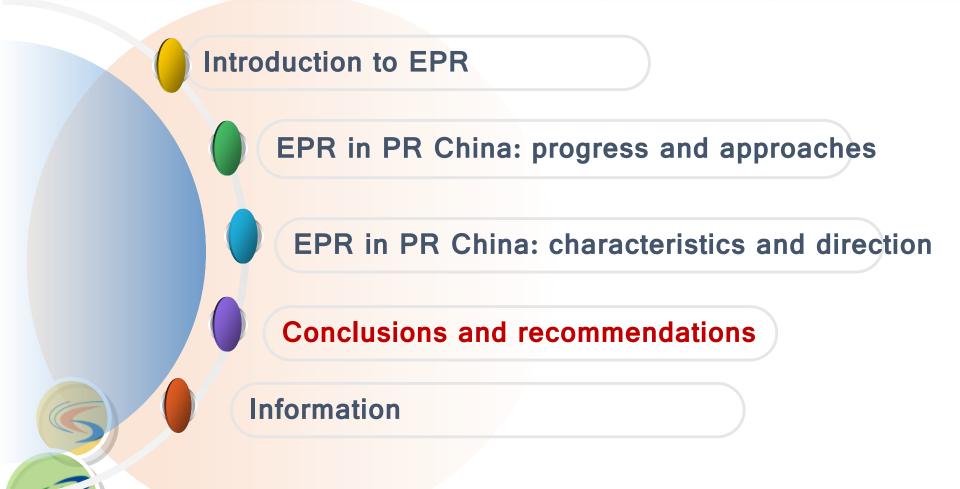
# The hot topic under discussion

- Law and regulation: the EPR should be combined into law clearly? Single implementing model can fit for various products?
- The mandated recycling catalog: which products should be covered? packaging, vehicle, tire, batteries?
- The main players: central government, local government, and association, producers?
- WEEE fund: the products covered by the catalog are too much?
- New technologies: Internet things and big data can make EPR





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# Conclusions and recommendations (1)

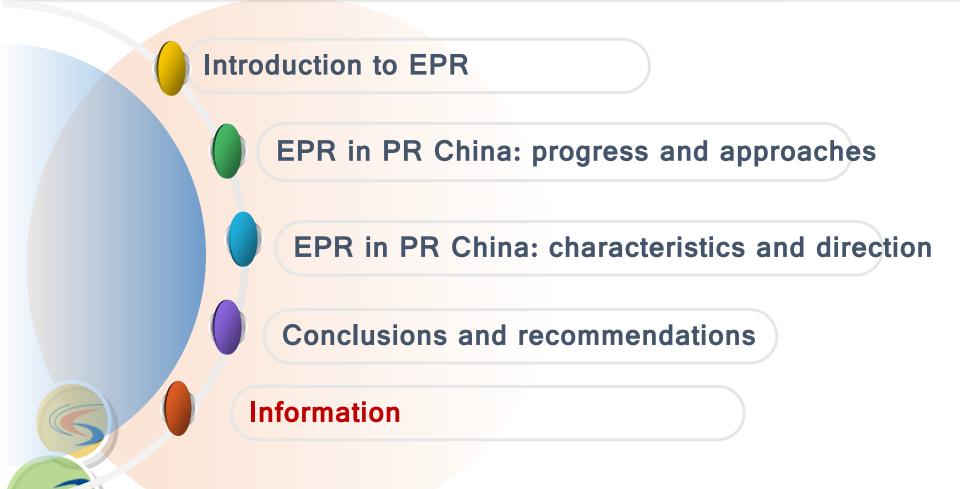
- EPR should be intensified to enhance eco-design and green production, and information releasing towards taking-back.
- Industry associations related to producers should be placed on a more important role.
- Propaganda and guidance should be strengthened in order to get support from the Public.

# Conclusions and recommendations (2)

- Policy design on EPR should be embarked and completed as soon as possible.
- Dialogue system among stakeholders should be built for EPR.
- The current EPR system may be updated along with the development of the social and economic conditions of the country.



## Content



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