

Major Policies for Circular Economy in Korea

 Ministry of Environment

1

Framework Act on Resource Circulation (January, '18)

1-1. The Framework Act on Resource Circulation

Foundation

Ground Rules and Responsibilities

Administration, Local Governments, Business, People

Master Plan

National goals, saving resources and waste prevention, Activation plan on recirculation and use

Build-up culture and International cooperation

Promotion Means

Waste Disposal Charge

Charge taxes on Landfill and incineration

Assessment on Recirculation ability

Recommend to improve recirculation availability through assessment of discouragement

Performance Management

Impose resource recirculation goal for enterprises with mass waste production and local authorities

Business Support

End of Waste

Exclude from waste when complying with technical criteria (Exemption from regulation)

Financial & Technical support

Industry Promotion, Technology Development, Small-scale business support

Recycled resources information center, Recycled resources certification

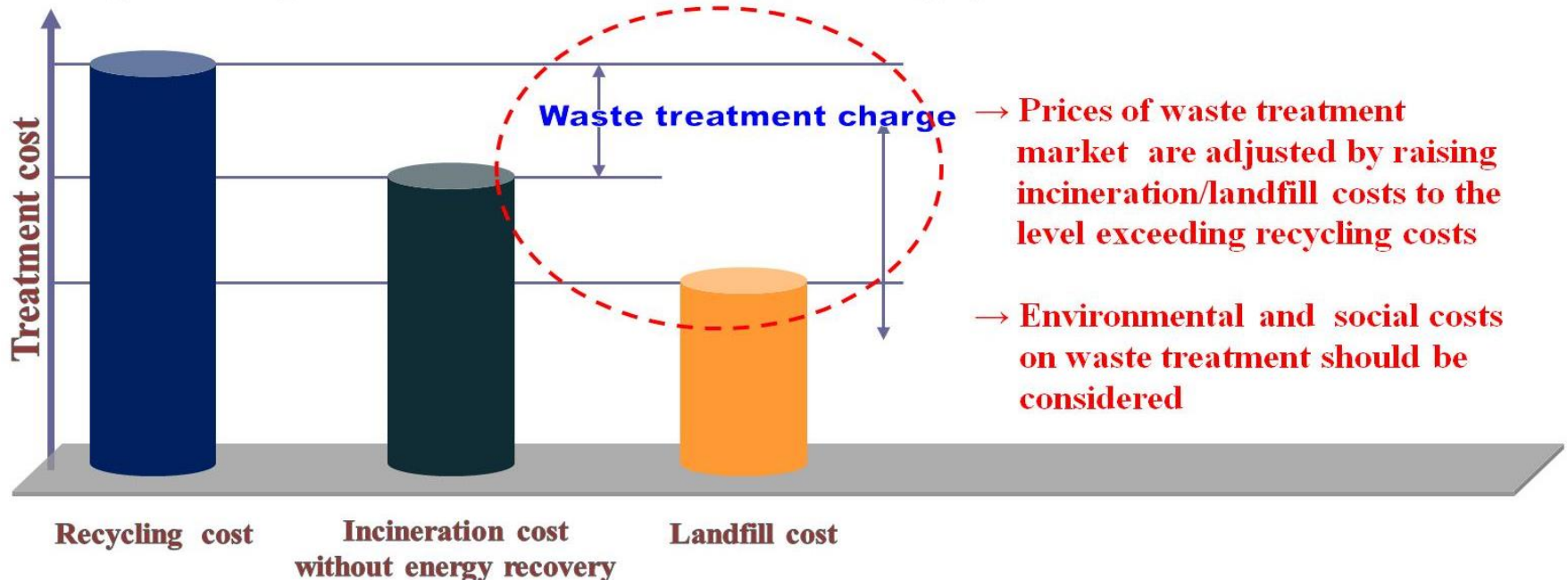
Minimization of Landfill/Incineration
Maximization of Recycling

1-2. The Framework Act on Resource Circulation

Waste Disposal Charge

- 1 Impose **waste disposal charge** when it is **incinerated or landfilled** (\$9-27/ton)
- 2 Induce financially to prevent incineration/landfill and choose to recycle

[Concept of Wastes Treatment Charge]



1-3. The Framework Act on Resource Circulation

Harmfulness & Recirculation Availability assessment

- 1 Assess **recyclability** through assessment of discouragement if it turns into waste (Packing container → Electric & Automobile → Furniture)
- 2 Recommend to **improve recyclability** if it is determined to be recycled hardly

Criteria

1. **Recyclability** and **repairable possibility** to be treated properly of waste
2. Weight, volume, quality, component of waste
3. Type and quantity of **hazardous material** in the product
4. **Durability** of product

1-4. The Framework Act on Resource Circulation

● Performance Management System

Impose **resource recirculation goal** for enterprises with mass waste production and local authorities to achieve the national goal

- ✓ **National goal for resource recirculation** : Set up medium and long-term goal of the rate of final disposal, recycling and energy recovery to prevent waste reduction and promote recycling

* Total waste amount above 1,000 tons a year or hazardous wastes above 100 tons a year (3,500 business sites nationwide)

Process



✓ Set up and impose the goal

✓ Establish implementation plan

✓ Evaluate the performance

✓ Provide incentives and technical guidance

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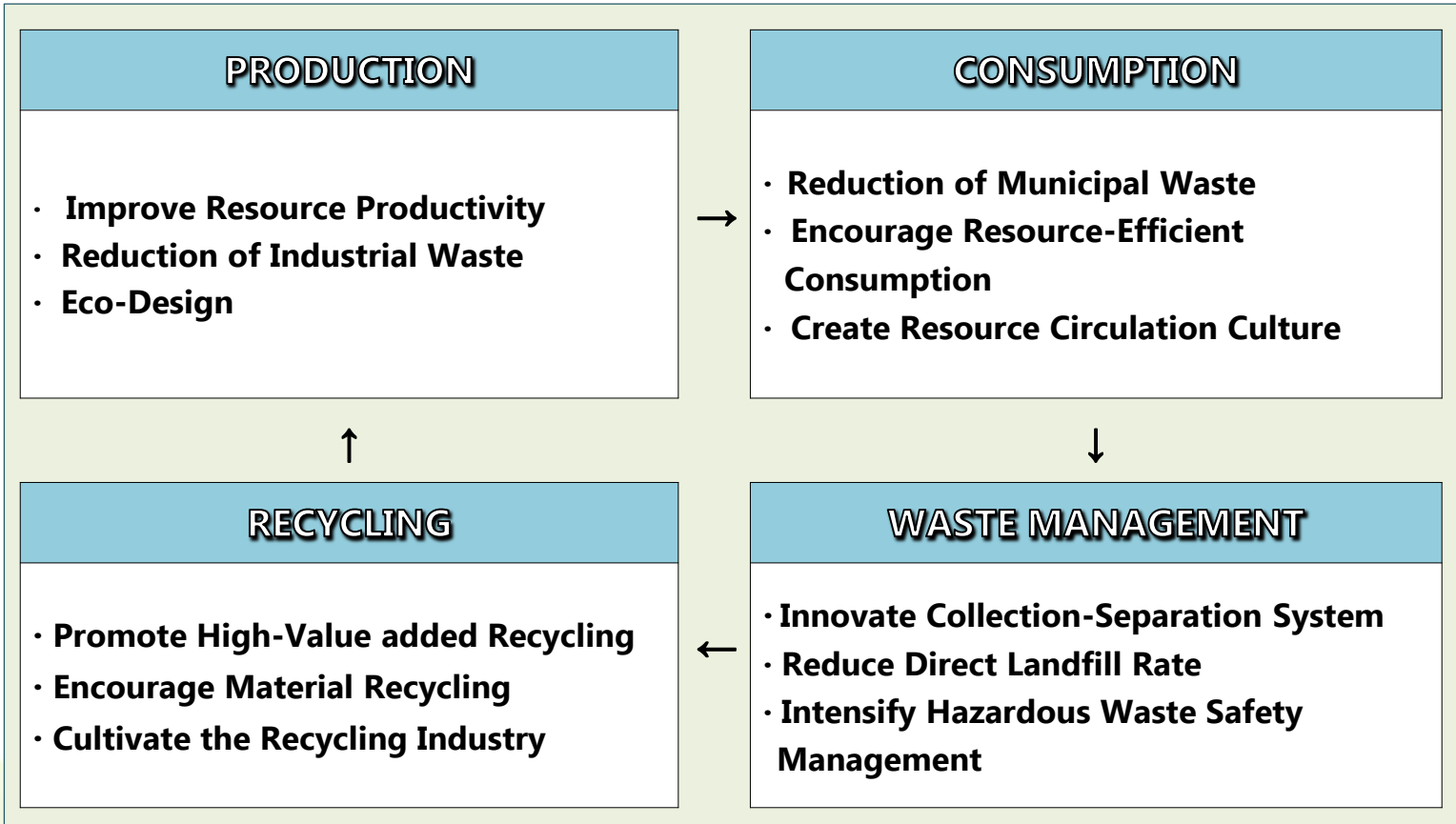
**Master Plan for Resource Circulation for
Establishing the Circular Economy
(September, '18)**

2-1. Master Plan of Resource Circulation for CE

GOAL
(2018~27)

ESTABLISHING A CIRCULAR ECONOMY SYSTEM
Reduce Waste Generation(per GDP) by **20%**,
Circulation Rate: 70.3%→**82%**, Landfill Rate: 9.1%→**3%**

MAJOR TASK



2-2. Master Plan of Resource Circulation for CE

Production

1 Improve Resource Productivity

- **(Develop resource efficiency index)** Establish the management system for **Resource productivity and Resource efficiency** for each industrial sector
- **(Increase productivity versus inputs)** Material flow analysis for major resources, Promote material flow analysis for 18 industrial sectors ('20~22)

2 Waste Reduction at Production stage

- **(Performance management)** Set recycling or reduction targets for businesses that discharge large quantities of waste (**3500 facilities**)
- **(Technology development)** Invest in waste reduction technology, spread the Best Available Technology(BAT) and provide technical consulting

3 Eco-Design Considering Resource Circulation

- **(Recirculation availability assessment)** Identify recycling inhibition factor of product (plastic packaging material, etc.) and improve it(design or material conversion)
- (Assessment Items) **Recirculation availability, Durability, Reparability**

2-3. Master Plan of Resource Circulation for CE

Consumption

1 Suppression of municipal waste generation

- **(Reduce the use of disposables)** Prohibit the use of replaceable disposable products step by step



- **(Resource efficient packaging)** Prohibit **excessive packaging** and replace existing packaging with eco-friendly packaging materials

2 Encourage resource-efficient consumption

- **(Spread eco-friendly consumption)** Increase **green stores** that sell recyclables
- **(Recycling network)** Establish a network that connects 'Recycle information center' and green stores so that provide information on recyclables efficiently

3 Creating the resource circulation culture

- **(Campaign-Town-Education)** Expend resource recycling campaigns and education and increase 'Resource recycling town'

2-4. Master Plan of Resource Circulation for CE

Waste management

1 Innovate the waste collection system

- **(Improve the separation and discharge methods)** Apply optimal separation and emission model considering regional characteristics



Demonstration project of apartment



Rural recycling spot

2 Reduce the direct landfill rate

- **(Minimize direct landfill)** Impose charges(9\$-27/ton) on waste landfill and incineration and introduce direct landfill-ban for combustible waste
- **(Optimize treatment facility efficiency)** Establish local resident governance to derive optimal waste management plan and modernize existing waste treatment facilities

3 Intensify the hazardous waste management

- **(Life cycle waste(including imported waste) management)** Build the life cycle IT based management system and strengthen on-site audit of imported waste

2-5. Master Plan of Resource Circulation for CE

Recycling

1 Promote the high-value added recycling

- **(Future potential waste)** Establish a basis for the recycling of future potential waste : Sola photovoltaic module, waste batteries of electric cars, etc.
- **(Advanced recycling technology)** Invest in R&D for improving recycling technology to produce High quality recycled products
- **(Recycled raw material quality standard)** Contribute to quality improvement by establishing **recycled raw** material quality standard

2 Encourage the material recycling system

- **(EPR system improvement)** Expand the range of current EPR system of **plastics automobiles and electronic products**
- **(Improve waste energy efficiency)** Biogas production of organic waste treatment facility

3 Cultivate the Recycling industry

- **(General administrative agency)** Establish general administrative agency to monitor the recycling market
- **(Activation the small recycling companies)** Support recycling facility installation cost and pioneering overseas markets for recycled products



**Towards a
Circular Economy**