

Recycling Policy and Activities



Ministry of Environment
Republic of Korea

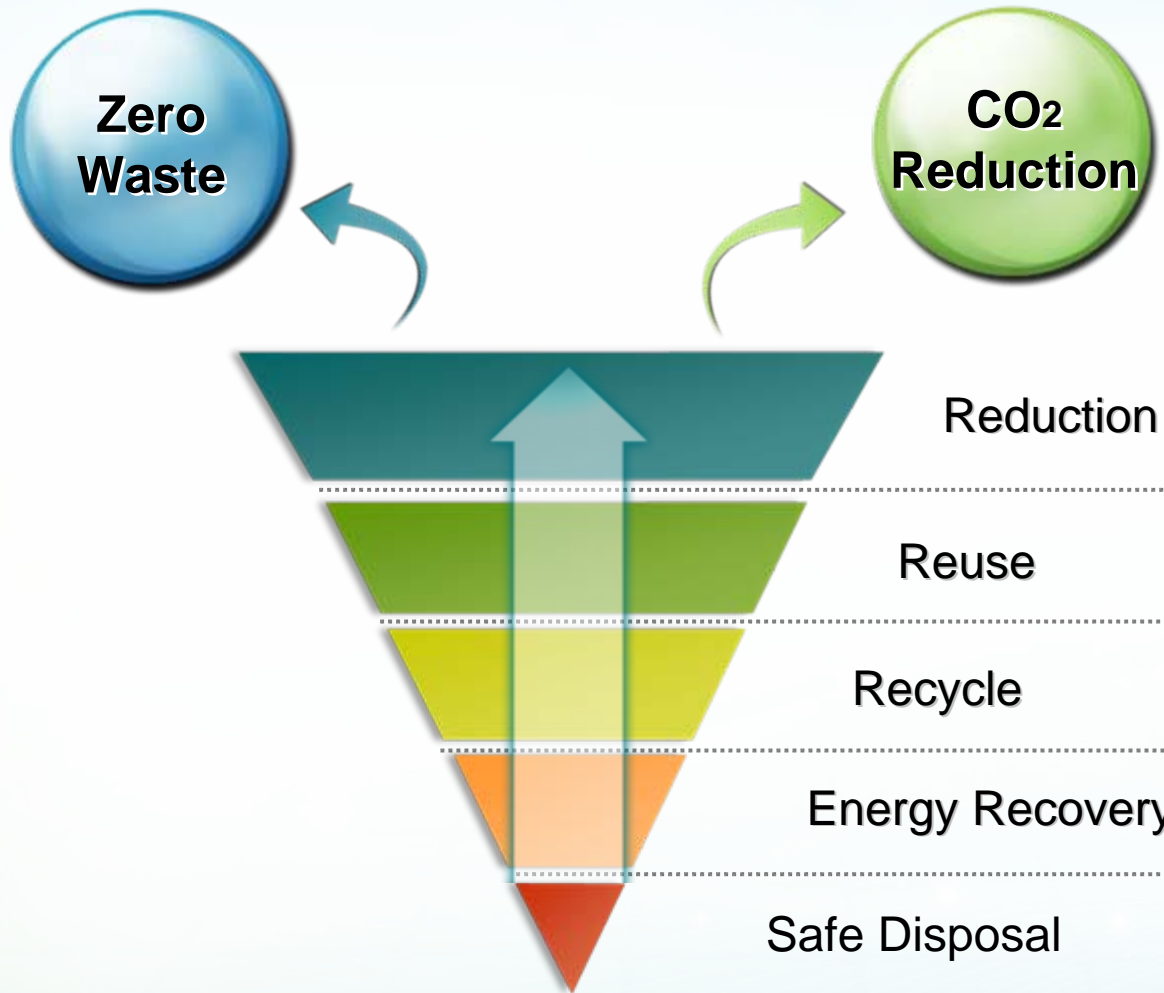


1. Paradigm Shift

From 'Waste Management' to 'Promotion of Resource Recirculation'

	Past	New Paradigm
Condition	Pollution from wastes	Shortage of Resource/Energy Climate Change
Goal	Pleasant living environment	Green Growth through the enhancement of resource productivity
Approach	Reduction of waste generation, Recycle and safe disposal	Effective production, distribution and consumption, Material recycle, Energy Recovery
Tools	Volume-based waste fee system, EPR & installation of WTF	Evaluation of resource recirculation rate, promotion of urban mining, Expansion of energy recovery facilities, conurbation of collection and treatment

2. Priority of the Policies



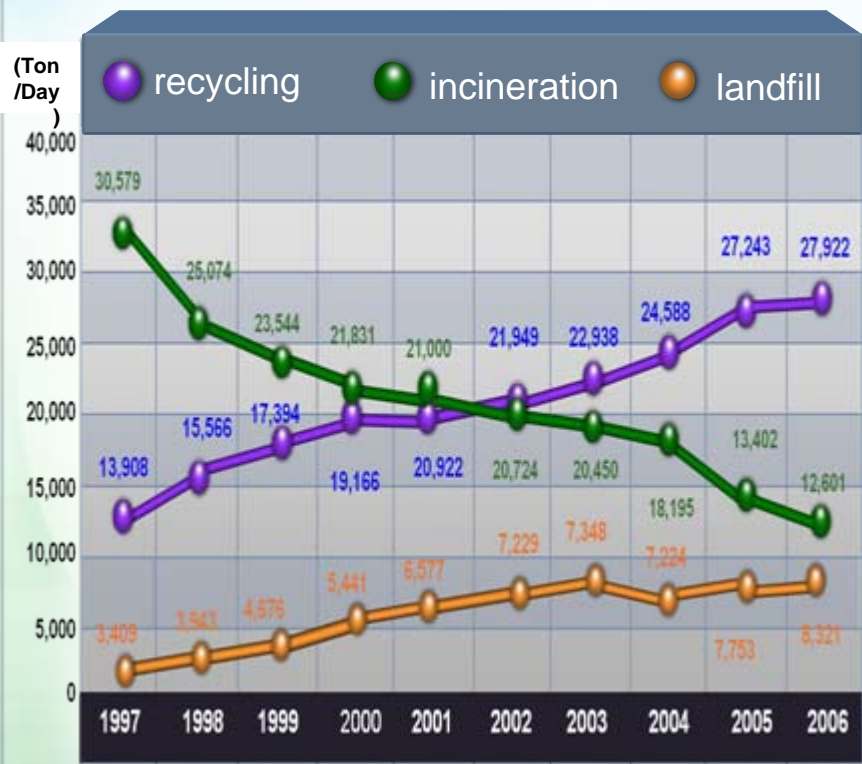
3. Waste Management Status

Generation of wastes



4. Waste Treatment

MSW



Industrial Wastes



5. 3R Policy Goals (2012)

Reduction

- Municipal waste generation per capita : 0.9kg/day
- Recycle of plastic : 50%
- Industrial waste generation per unit weight : 50kg/ton

Reuse & Recycle

- Reuse of containers : 93%
- Recycle of wastes subject to EPR :60%
- Revenue of recycling industry : over 6 tril. KRW
- Recycle of wood waste : Municipal 90%, Industrial 95%

Energy Recovery

- Anaerobic digestion facilities : 5 sites
- Pre-treatment facilities : 8 sites
- Energy recovery from incinerators :95%
- Landfill gas-to-energy facilities : 12sites

Zero-Waste

CO₂ Reduction (ton/year)

950,000

100,037

-

3,772

-

1,126,000

-

711,000

357,000

50,000

960,000

6. Material recycling

Promotion of Urban Mining

- Recovery of gold, silver and bronze from wasted mobile phone, TV, refrigerator etc.(more than 10% by 2013)
- Recovery of recyclable materials e.g. metals and synthetic resins from ELV (more than 95% of recovery by 2015)

Support on Landfill Refining

- Securing renewable energy through re-sorting, recycling of wastes in landfill
 - 0.1% of combustible wastes into solid fuel by 2015 (equals to 100 thousand tons of anthracite)
- Extending the durability of landfill by re-sorting of wastes (15~20%)

Expansion of recycling infra structure & Certification on recycled goods

- Recycling Infra Structure: Eco-Recycling-Center, Public recycling center, Local recycling center
- Certifying system on recycled goods → reliable & safe goods
 - Certification standard on 33 byproducts by 2011,
 - Establishing Quality Certification Center in 2009

Extended Producer Responsibility(EPR)

- long-term plans for EPR
 - Specialized collection, recycling system
 - Expansion of individual industries and goods in accordance with each industry's condition

- 15 items including metal cans, glass bottles, TV in 2003, and expanded to 24 items in 2008
- Total recycling amount in 2007 was 1.385 million tons
 - * 32% increase compared to 0.94mil. Ton in 2002

Promotion of EEV Recycling

- Enforcement of Acts on EEV (Electrical/Electronic equipment and Vehicles) resource circulation('08)
 - Improvement of materials and design for EEV
 - Achievement of mandatory recycling rates

- Assessing and publicizing the use of recyclable materials and readiness to separate and disassemble
- Increasing recycling rates to 65–80% for end-of-life electrical/electronic equipment
- Imposing mandatory recycling rates for end-of-life vehicles of over 85%

7. Energy Recovery

Waste-energy town, Bio-energy village

- Construction of Waste Energy Town by 2112 (1~2 towns per each 10 great wide areas)
 - RDF plant (20 plants) & relevant power plant(10 plant)
- 'Low Carbon & Green Growth Town' in rural area (600 by 2020)
 - 4 pilot projects(2010), Self-energy-support in rural areas into 40~50%

Installation of energy recovery facilities

- Number of energy recovery facilities to 57(14,160ton/day) by 2012
- Improvement of local landfill gas power plant & exhaust heat recovering system by 2012
 - Installation of exhaust heat recovering system in existing 44 incinerators & landfill gas refining system in 27 landfill sites

Expansion of R&D & capacity building

- Enhancing the waste-to-energy technology up to 90~95% to the level of advanced counties
- Human resource development in the fields of waste-to-energy (10,000 experts by 1013)
 - Support on relevant colleges, facilities and institutes

Promotion of Food Waste-to-Energy System

- Considering that 95% of feed and/or feed ingredients are being imported into Korea
 - Mandatory installation of food waste-to energy facilities by residential land/resort developers from 1997
 - Design of roadmap for food waste-to-energy system in 1998 to reduce 10% of food wastes and to recycle 60% of those generated by 2002
 - As a result, 81.3% of food waste was recycled as feed/compost in 2004

Expansion of Food Waste-to-Energy System

- Setting quality assurance system and distribution channels of recycled feed/compost
 - Pursuing quality assurance system for each producer, a public procurement of recycled products, and a distribution management information system for recycled products
 - * constant increase in the use of recycled feed : 3,169 ton/day (2000) 5,353 ton/day (2006)
 - Expansion and improvement of food waste treatment facilities
 - Gradual increment in food waste treatment by public facilities: 29%(2005) 60%(2011)

Thank You

Ministry of Environment
Republic of Korea

