

Japan's Policy Practices for 3R

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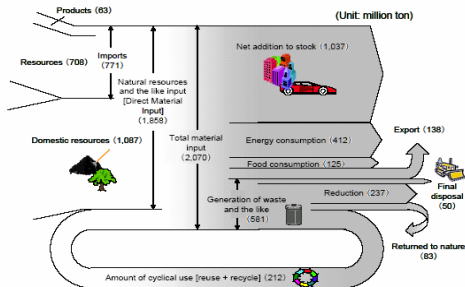
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I. Background

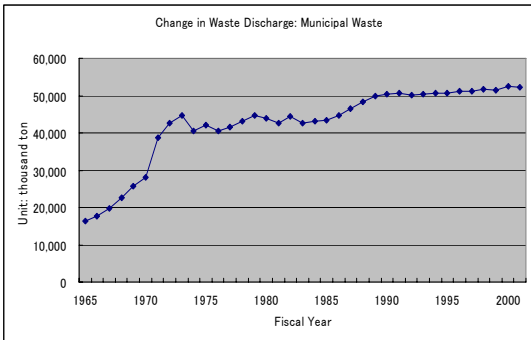
1. Increasing volume of wastes
2. Difficulties in finding places for disposal
3. Significance of the role-sharing among various stakeholders in solid waste management

1.1 Material Flow Accounts of Japan(FY2002)

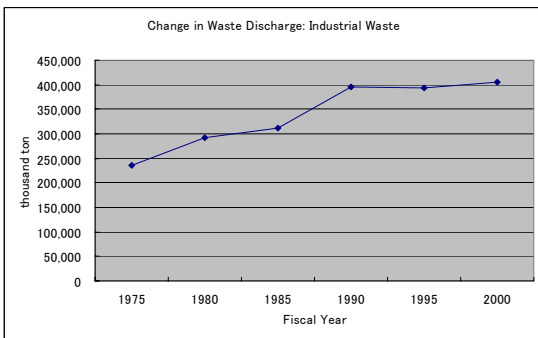
The material flow accounts for FY2002



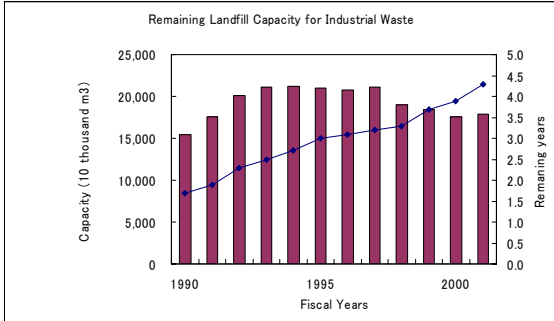
I-2. Waste Statistics: Municipal Waste



I-3. Waste Statistics: Industrial Waste

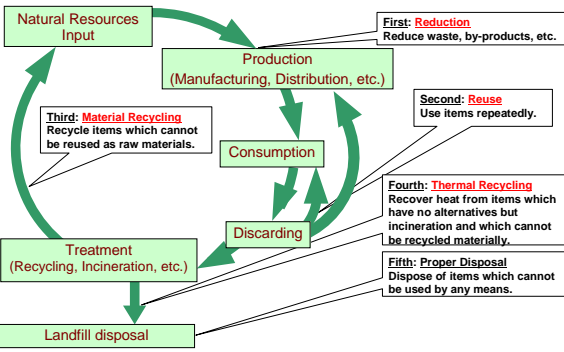


I-4. Waste Statistics: Remaining Landfill Capacity for Industrial Waste



II. Toward a Sound Material-Cycle society

II. Toward a Sound Material-Cycle society: Concept



II. Toward a Sound Material-Cycle society: Fundamental Law

Fundamental Law for Establishing a sound Material-Cycle Society
(Enacted in June 2000)

●Basic Principles

- Realize a sound material cycle society
- Prioritize ways to promote reduce, reuse, and recycling

II. Toward a Sound Material-Cycle society: Fundamental Plan

Fundamental Plan for Establishing a sound Material-Cycle Society
(Enacted in June 2000)

●Possible applications to a sound material-cycle society

- Manufacturing : -DIE (design for environment)
 - Long-life Products
 - Lease and rental
- Waste management: Cyclical use
 - Remanufacturing
 - Material recycling
 - Thermal recycling
 - Appropriate disposal system

II. Toward a Sound Material-Cycle society: Fundamental Plan

Fundamental Plan for Establishing a sound Material-Cycle Society
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●Quantitative Targets: FY2000-FY2010

1.Targets for indicators based on material flow accounts

- Resource Productivities : 40% improvement from FY2000
- Cyclical Use Ratio : 40% improvement from FY2000
- Final Disposal amount : 50% improvement from FY2000

2.Targets for indices related to efforts

- Reducing the quantity of municipal solid waste :
20% reduction of garbage discharged from household per person per day
- Promoting sound material-cycle related businesses :
Doubling the size of the related market and the number of relate jobs

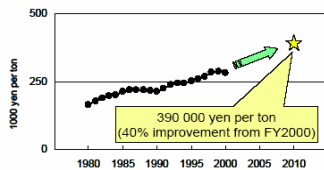
II. Toward a Sound Material-Cycle society: Fundamental Plan

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1) Resource productivity

Approximately 289 thousand yen per ton in FY2002, compared to approximately 281 thousand yen per ton in FY2000, representing a 2.8% increase

Note: Resource productivity = GDP divided by direct material input



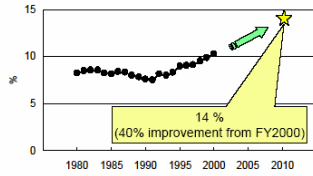
II. Toward a Sound Material-Cycle society: Fundamental Plan

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2) Cyclical use rate

Approximately 10.2% in FY2002, compared to approximately 10.0% in FY2000, representing a 0.2% improvement

Note: Cyclical use rate = Total reused and recycled material input divided by material input

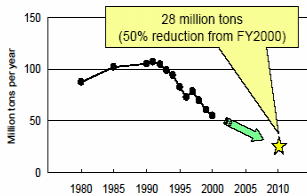


II. Toward a Sound Material-Cycle society: Fundamental Plan

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3) Final disposal amount

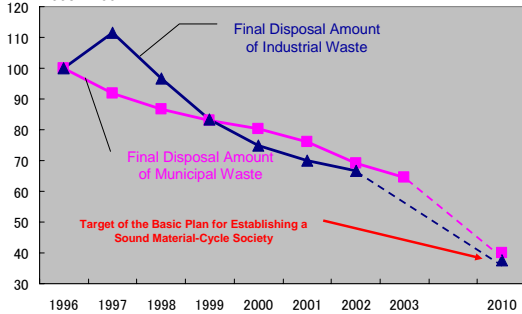
Approximately 50 million tons in FY2002, compared to approximately 57 million tons in FY2000, representing a 12.3% reduction



II. Toward a Sound Material-Cycle society: Fundamental Plan

Reduction of the Final Disposal Amount in Japan

1996 = 100



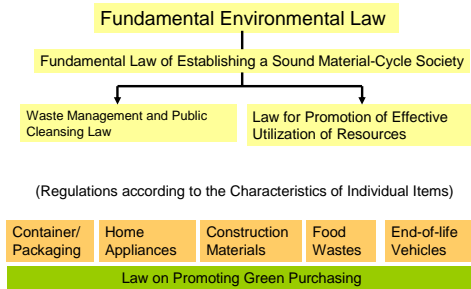
II. Toward a Sound Material-Cycle society: Role of Stakeholders

Fundamental Plan for Establishing a sound Material-Cycle Society
(Enacted in June 2000)

- **National Government**
Fostering partnership among stakeholders
- **Citizens**
Changing their life-style
- **NPOs and NGOs**
Promotion of their activities
- **Business Organizations**
Promoting 3R based on EPR (Extended Producer Responsibility)
- **Local Governments**
Enhancing laws and legislations : acting as coordinators

II. Toward a Sound Material-Cycle society:

Legislative Framework to Establish a Sound Material-Cycle Society



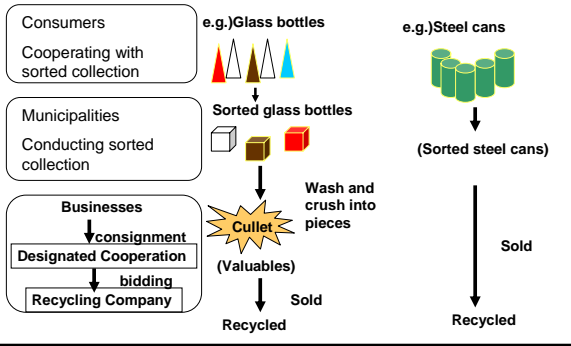
II. Toward a Sound Material-Cycle society:

Containers and Packaging Recycling Law of 1995

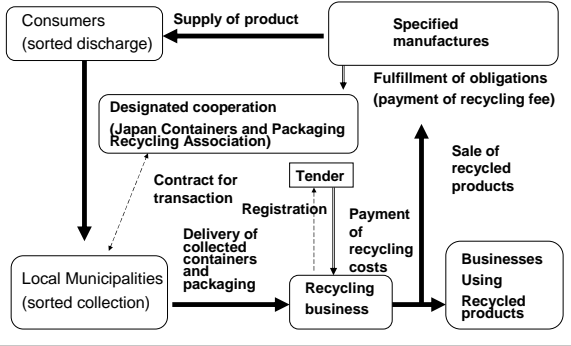
Containers and Packaging Recycling Law of 1995

- **Objective**
-Clarifying the role-sharing in managing waste of containers and packaging discharged as municipal waste from household
- **Regulated packaging and containers**
-For compulsory recycling
glass/PET bottles, paper/plastic containers and packaging
-other
aluminum/steel cans, cardboard, paper cartons

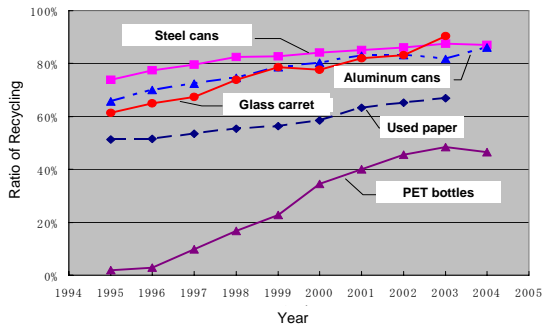
II. Toward a Sound Material-Cycle society:
Containers and Packaging Recycling Law of 1995



II. Toward a Sound Material-Cycle society:
Containers and Packaging Recycling Scheme



II. Toward a Sound Material-Cycle society:
Containers and Packaging Recycling Scheme



**II. Toward a Sound Material-Cycle society:
Home Appliance Recycling Law of 1998**

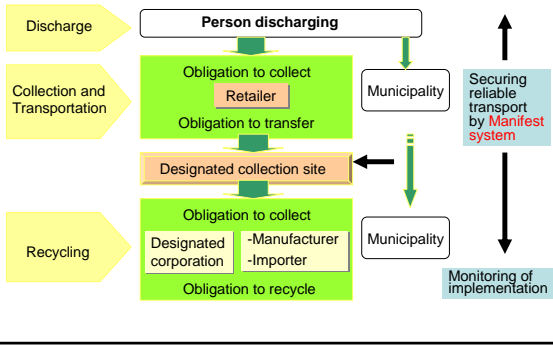
●Objective

-Clarifying the role-sharing among consumers, retailers and manufacturers in managing used home appliances discharged from households

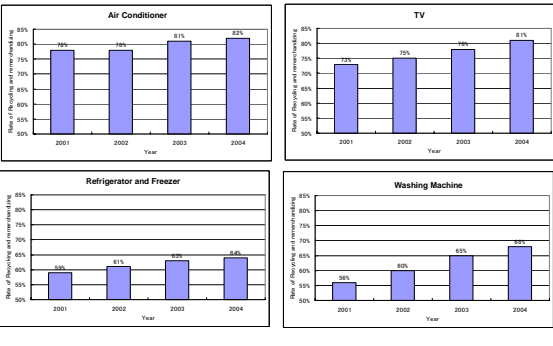
●Regulated Home Appliances

- Air Conditioners
- Television sets (CRT types only)
- Refrigerators, freezers
- Washing machines

**II. Toward a Sound Material-Cycle society:
Home Appliance Recycling System**



**II. Toward a Sound Material-Cycle society:
Home Appliance Recycling**



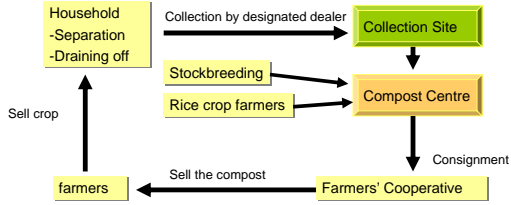
II. Toward a Sound Material-Cycle society:

Food Wastes Recycling System

■ Expected Products made through recycling food wastes

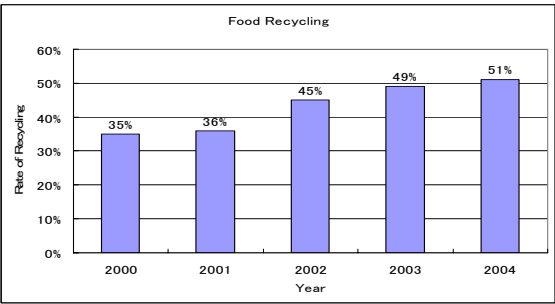
e.g. Compost, Forage, Mash, Methane

Example of food wastes recycling system for compost



II. Toward a Sound Material-Cycle society:

Food Wastes Recycling System



II. Toward a Sound Material-Cycle society:

Construction Materials Recycling Law of 2000

● Objective

- Obligating construction industry to collect, separate, and recycle construction materials generated from taking down buildings

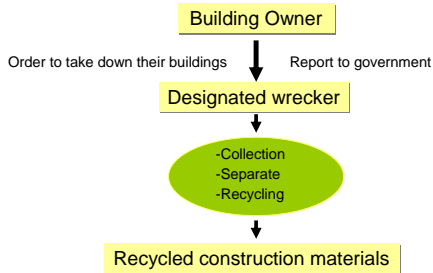
● Target Materials for recycling

- Concrete, construction materials made from concrete and steel
- Asphalt
- Timber

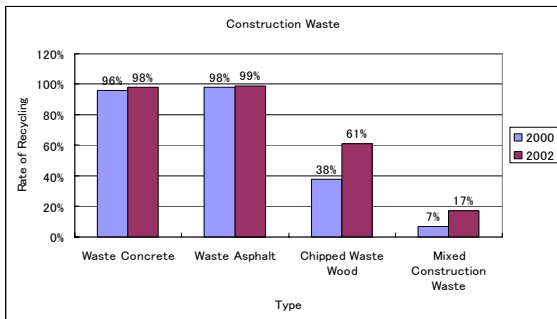
● Feature of the Law

- Designated wreckers

II. Toward a Sound Material-Cycle society:
Construction Materials Recycling system



II. Toward a Sound Material-Cycle society:
Construction Materials Recycling system



II. Toward a Sound Material-Cycle society:
Green Purchasing Law of 2001

●Objective

-Obligating public sector such as central government and municipalities ,and other governmental agencies to purchase environmental sound products, in order to promote demand for environmental sound products

●Features of the Law

- Encouraging private company to share environmental information on their own products incorporating ECO-labeling
- Encouraging consumer to purchase environmental sound products preferably

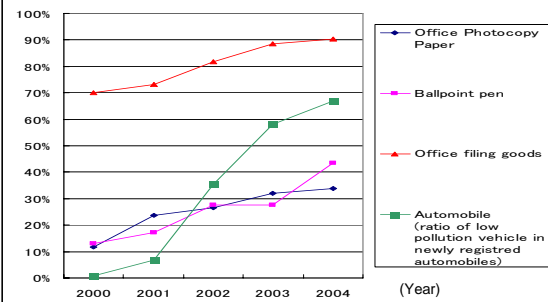
● Expected impact

- Cost reduction through scale of economics
- Increasing recognition of such products

II. Toward a Sound Material-Cycle society:

Green Purchasing Law of 2001

Market Share of designated procurement goods defined in Green Purchasing Law (Sales Volume)



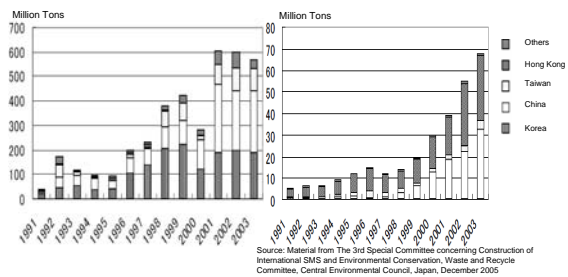
III. 3R Initiative

Growing trade on recyclables

- Since 2001, the export of scrap steel in Japan has almost doubled compared to 2000.
- The export of recyclables in Japan is mainly to East Asian region. More than 90% of The export of scrap plastic is to China and Hong Kong.

Scrap Steel

Scrap Plastic



Development of the 3R Initiative

- 2004 • G8 Sea Island Summit (USA)
"3R" Action Plan and the Progress of Implementation
- 2005 • Ministerial Conference on the 3R Initiative (Tokyo)
• G8 Gleneagles Summit (UK)
• 2nd Int'l Expert Meeting on a 10-year Framework of Programmes for Sustainable Consumption and Production (Costa Rica)
- 2006 • **Senior Officials Meeting on the 3R Initiative (Tokyo)**
• G8 Saint Petersburg Summit (Russia)
- 2007 • G8 Summit (Germany)
• 3rd Int'l Expert Meeting on a 10-year Framework of Programmes for SCP (Sweden)
- 2008 • G8 Summit (Japan)

Ministerial Conference on the 3R Initiative

Date: April 28-30, 2005

Venue: Tokyo, Japan

Participants:

G8 countries

Asian countries

China, Indonesia, Malaysia, Philippines, Republic of Korea, Singapore, Thailand, Vietnam

Other countries; relevant organizations

Brazil, Mexico, South Africa; OECD, UNEP, Basel Convention Secretariat, the League of Arab States

Source: Ministry of Environment, Japan



Ministerial Conference on the 3R Initiative

Discussion Topics

1. Strengthening of domestic policies to implement the 3Rs
2. Reduction of trade barriers against the international flow of goods and materials
3. Cooperation between developed and developing countries
4. Cooperation among various stakeholders
5. Promotion of science and technology suitable for the 3Rs

Source: Ministry of Environment, Japan

Senior Officials Meeting (SOM) on the 3R Initiative

- Date: 6-8 March 2006
- Participating countries and organizations:
 - 20 countries and the European Commission
 - 7 international organizations
- Objective: Discuss how to implement the 3Rs as a follow up to the Ministerial Conference

Senior Officials Meeting (SOM) on the 3R Initiative

● Discussion Topic

Implementation of the 3R Initiative within each country

- ◆ Share good practices and highlight the key to success
- ◆ Identify obstacles in promoting the 3Rs, and present measures to overcome such obstacles
- ◆ Present roles of stakeholders in promoting the 3Rs and environmentally sound management of waste

International Promotion of the 3Rs

- ◆ Identify measures, including international cooperation and cooperation among stakeholders, to enhance the positive effects and mitigate the negative effects with the international flow of the 3R-related goods, materials and products

Further Promotion of the 3Rs in Asia

- To host an international Conference for the promotion of the 3Rs in Asia
- To cooperate with developing countries
 - Supporting the formulation of a national 3R strategy through continuous policy dialogue
 - Disseminating a report on Japan's experiences in waste management and 3R activities
- To implement research on environmentally friendly 3R systems in Asia

Thank you for your attention
