

# **3R Initiative and the Experience of Japan in Sanitation and Wastewater Management**

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# 1. 3R Initiative

# Background of the 3R initiative

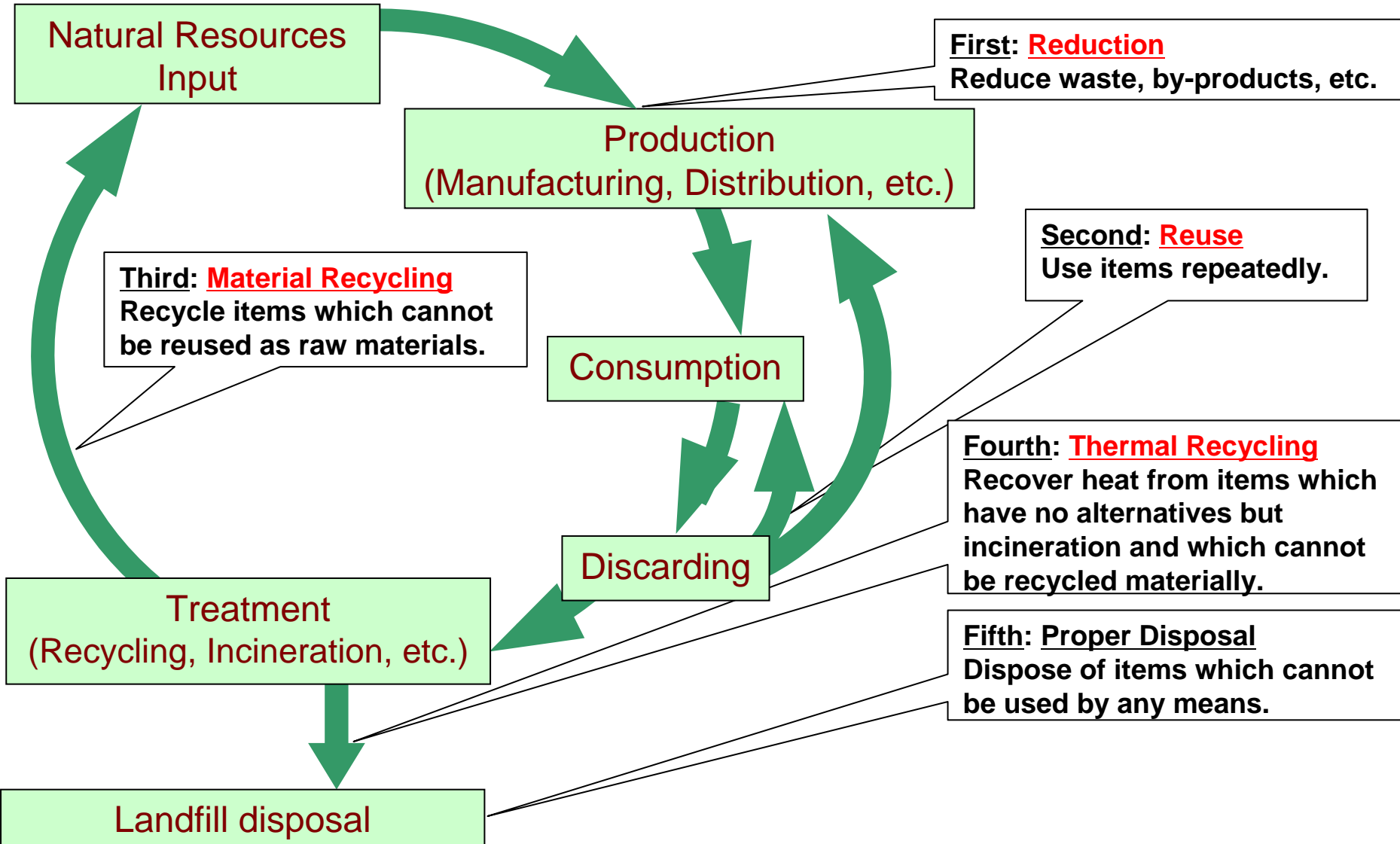
**The 3R Initiative was endorsed at the G8 Summit held in 2004 at Sea Island, USA.**

## **Reduce, Reuse, and Recycle Initiative**

We will launch the Reduce, Reuse, and Recycle (“3R”) Initiative at a Ministerial Conference in spring 2005 hosted by the Government of Japan

*(Source) G8 action Plan on Science and Technology for Sustainable Development adopted at the G8 Sea Island Summit*

# Concept of 3 Rs



# 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



# Issues Discussed

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

# Outcome of the Ministerial Conference

## Adoption of Chair's Summary

- Agree on further strengthening of a worldwide promotion of 3Rs under international cooperation
- Report to the G8 Government Summit at Gleneagles in the UK
- Hold a senior official level follow-up meeting



# Japan's Action Plan for Developing Global Zero Waste Society

## Realization of Zero Waste in Japan

- Review of the Fundamental Plan for Establishing a SMC Society
- Review of 3R-relevant policy

## Support to Developing Countries for Developing Zero Waste Society

- Assistance to capacity building of developing countries

## Collaborative Efforts toward Global Zero Waste Society

- Organizing an official-level meeting for 3R Initiative follow-up
- Development of 3R-relevant policy towards zero waste
- Knowledge and Technology Development in Asia towards zero emissions
- Enhancement of actions toward zero waste through information sharing and networking

## **2. Japan's Experience in Solid Waste Management**

# **Keys to Success**

Law and Regulation

Technology

Economic Incentives

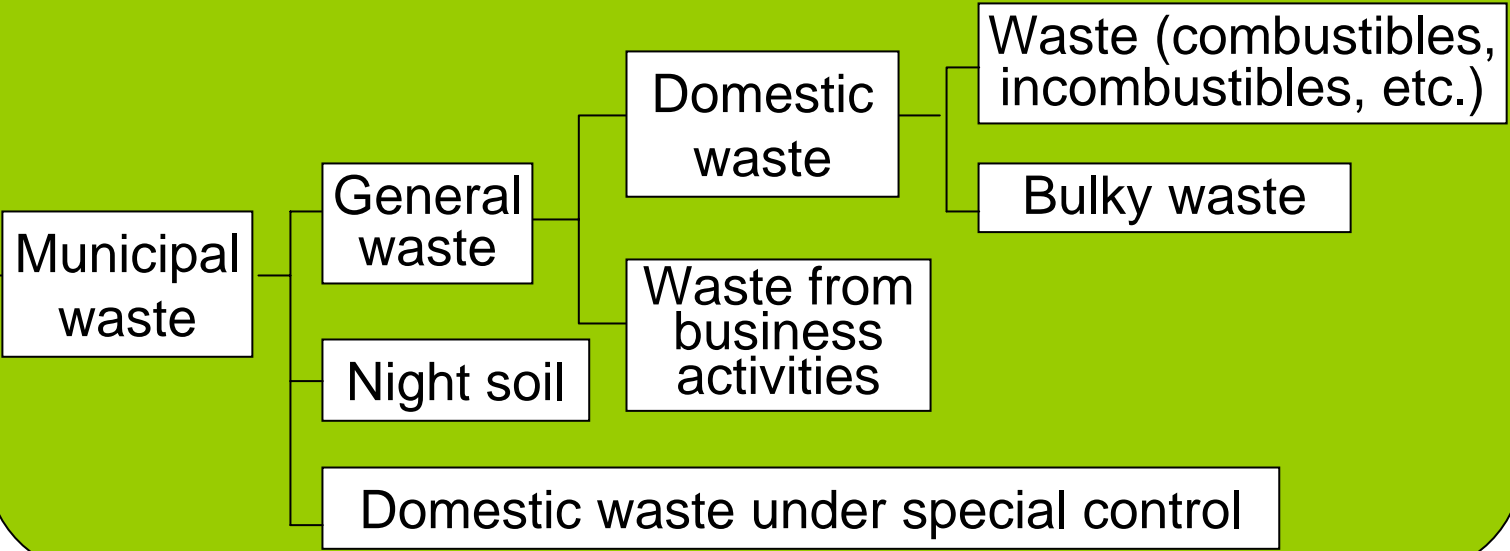
Partnership

# Law and Regulation

1954	Public Cleansing Law	Improvements in public health
1971	Waste Management Law	Environmental protection
1991	Law for Promotion of Utilization of Recyclable Resources	Recycle
2000	Fundamental Law on the Establishment of a Sound Material- Cycle Society	Establishment of a sound material-cycle society

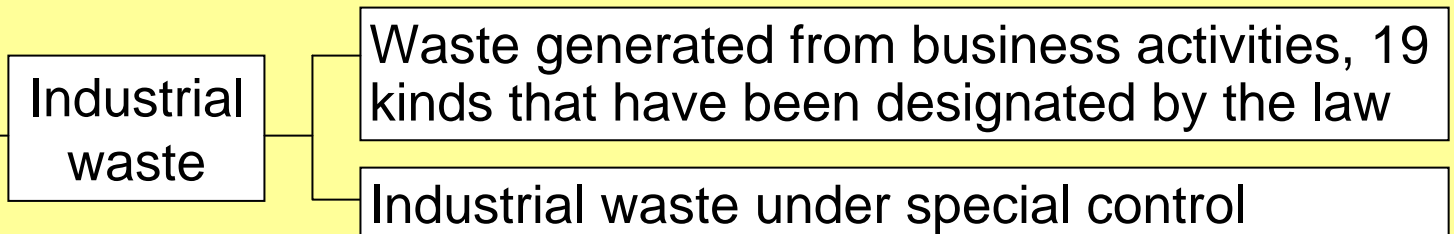
# Waste Classification

<Responsibilities for disposal, of the municipalities>

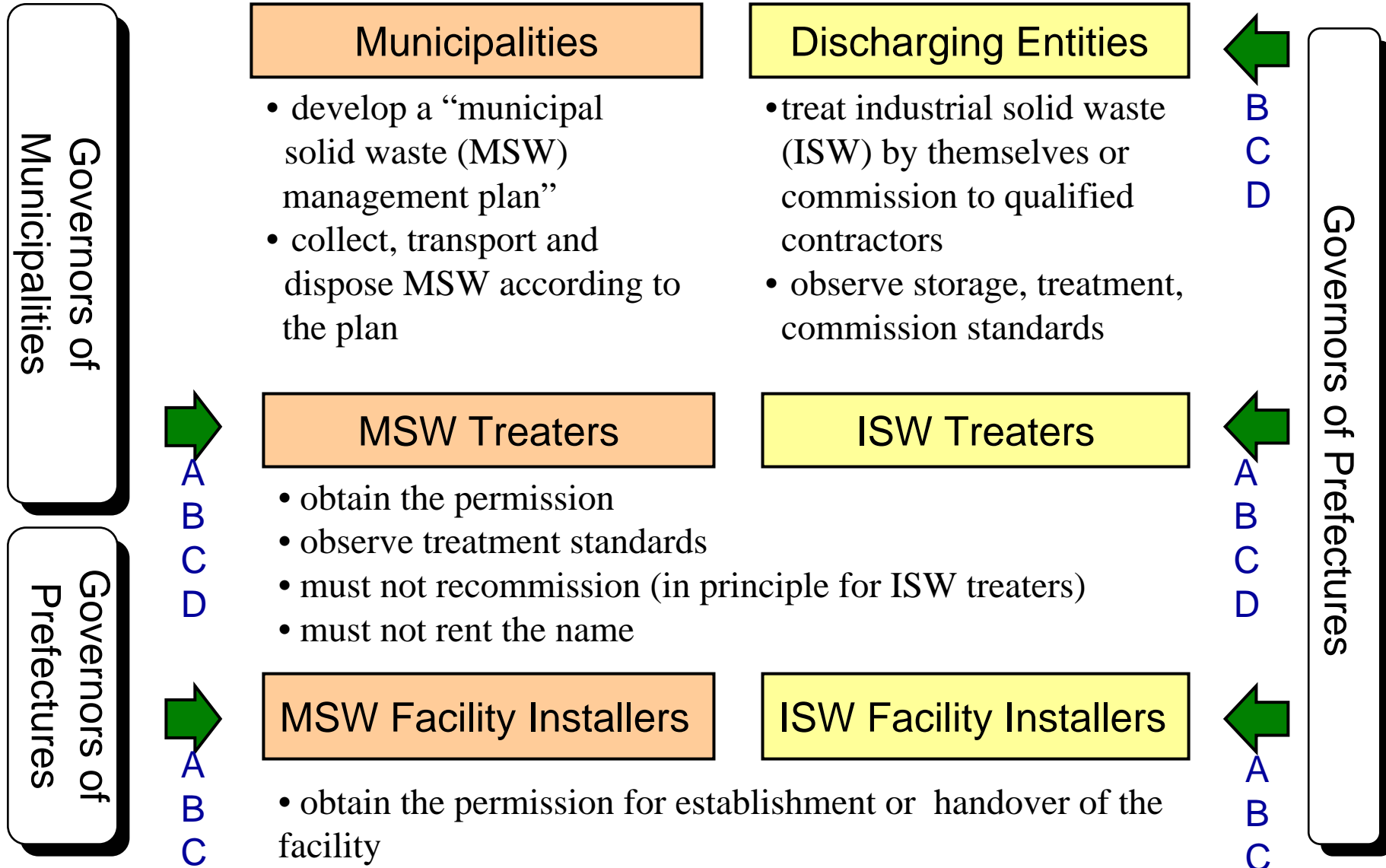


Waste

<Responsibilities for disposal, of business establishments>

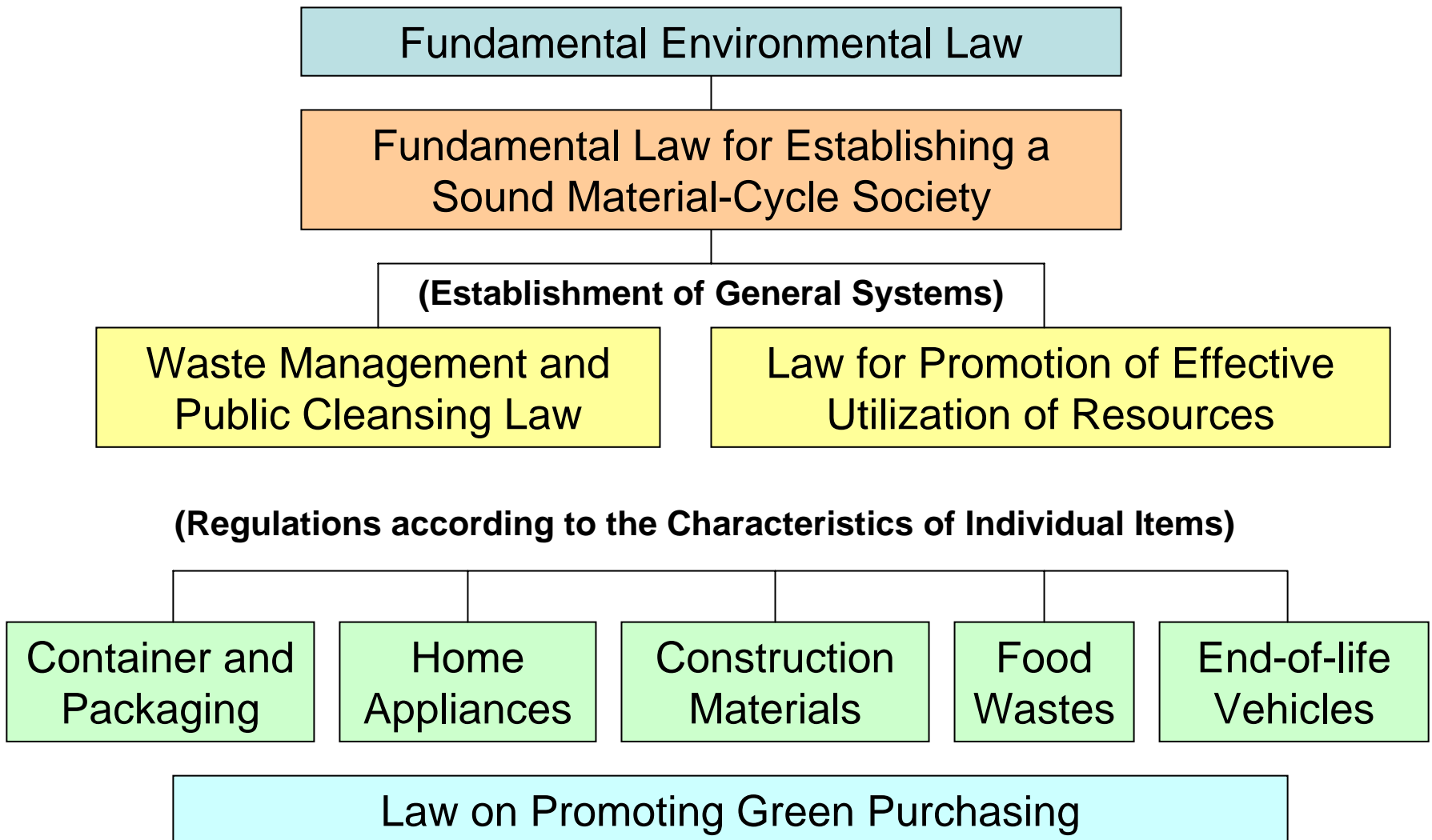


# Major Regulations on Waste Management



A: permission, B: collection of reports, C: order for improvement, D: order for actions

# Legislative Framework to Establish a Sound Material-Cycle Society



# Technology

Technology enables us to manage waste in a sanitary manner.

- Waste collection
  - Manual → Packer Trucks
- Incineration
  - Batch-loading → Continuous-loading
- Sanitary landfills
  - Introduction of semi-aerobic landfill and liner sheets
- Reuse and recycle technologies

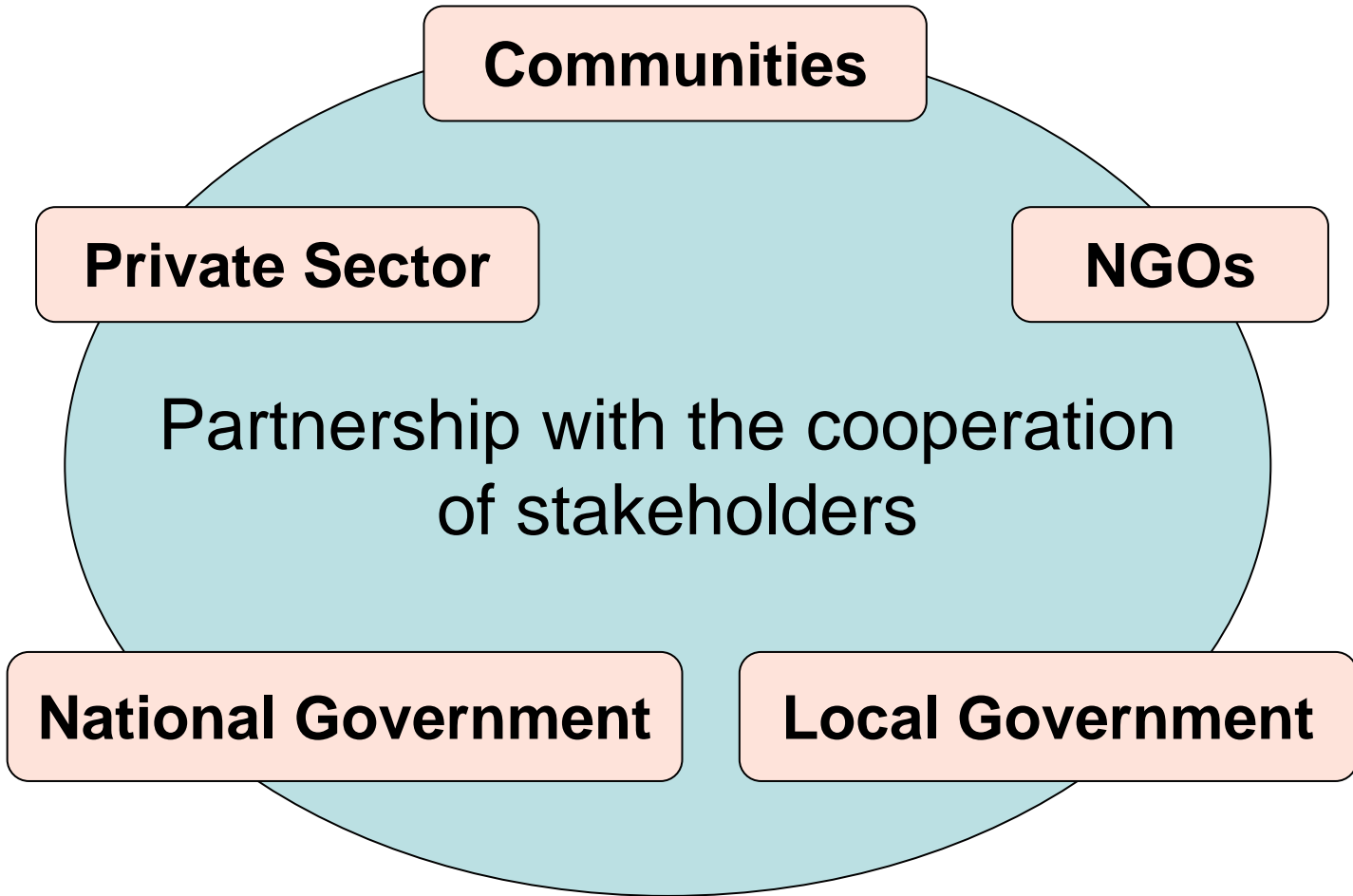


# Economic Incentives

Economic incentives work as a driving force for sound waste management.

- Preferential taxation
- Low interest loans
- Subsidies
- Debt guarantee

# Partnership



# **3. Japan's Experience in Wastewater Management**

# History of Japan's Wastewater Management

- Mid-1950 Methyl-mercury induced Minamata disease
- 1958 The Water Quality Control Law  
The Industrial Effluent Control Law
- 1967 The Basic Law Environmental Pollution Control
- 1971 The Water Pollution Control Law
- 1993 The Basic Environment Law

# Japan's Wastewater Management

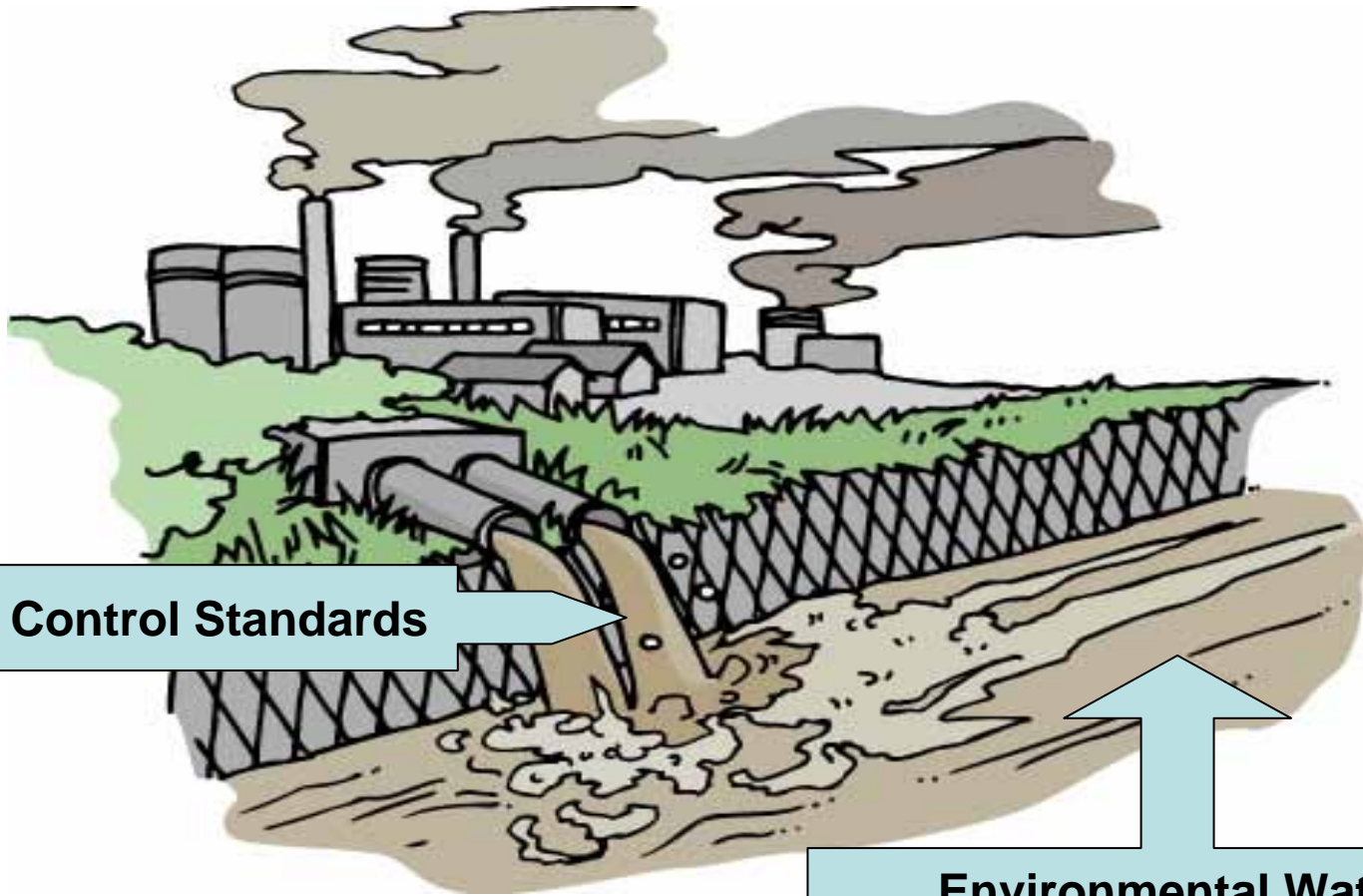
## Objective:

- Improvements in public health
- Environmental protection (achievement of environmental water quality standards)

## Approaches

- Control of factory effluents
- Maintenance and construction of sewage systems and septic tanks

# Water Quality Control



**Effluent Control Standards**

**Environmental Water  
Quality Standards**

# 4. Conclusion

# Conclusion

- ◆ Japan suffered from environmental pollution and solid waste problems.
- ◆ After overcoming those problems, Japan is moving towards the establishment of a Sound Material-Cycle Society through 3R Initiatives.
- ◆ Keys to success are:
  - Law and Regulation
  - Technology
  - Economic Incentives
  - Partnership