

# Fundamental Plan for Establishing a Sound Material-Cycle Society (Outline)

## Image of a Sound Material-Cycle Society

Manufacturing: DfE (Design for Environment), long-life products, lease & rental

Waste management: cyclical use, appropriate disposal system

## Quantitative Targets: FY2000-2010

### 1 Targets for Indicators Based on Material Flow Accounts

- a) Resource Productivity
- b) Cyclical Use Rate
- c) Final Disposal Amount

### 2 Targets for Indices Related to Efforts

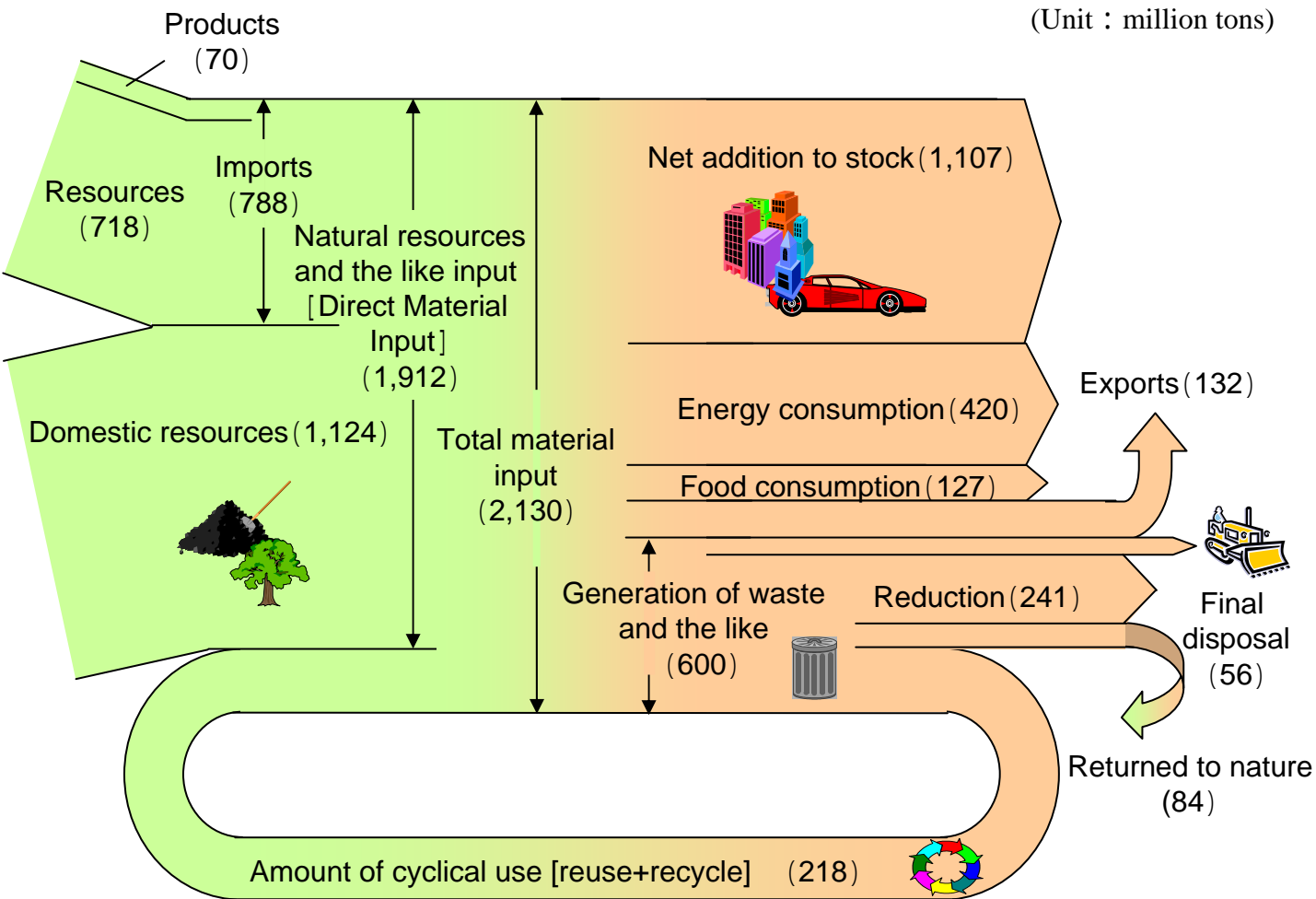
- Reducing the quantity of municipal solid waste  
*20% reduction of garbage discharged from households per person per day compared with FY2000*
- Promoting sound material-cycle related businesses  
*Doubling the size of the related market and the number of related jobs compared with FY 1997*

## Efforts Required of Entities

- National Government  
*Fostering partnerships among stakeholders*
- Citizens  
*Changing their lifestyle*
- NPOs and NGOs  
*Promotion of their activities*
- Business Organizations  
*Promoting the "3Rs" based on EPR (Extended Producer Responsibility)*
- Local Governments  
*Enforcing laws and regulations; acting as coordinators*

# Illustration of material flow in Japan in the FY2000

(prepared by Ministry of the Environment in Japan)



The material flow accounts in FY2000 roughly shows:

- A) The total material input is about 2.1 billion tons.
- B) Of the total material input, the amount of cyclical use (reusing+recycling) is 218 million tons.
- C) The amount of final disposal (landfill) is 56 million tons.

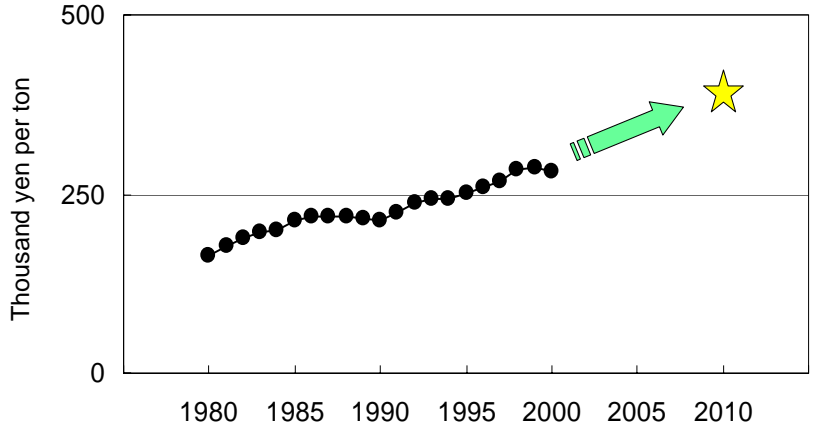
# Targets for Indicators based on Material Flow Accounts

(target year: FY2010)

## Resource Productivity

$$= \frac{\text{GDP}}{\text{Input of natural resources and the like (Direct Material Input)}}$$

390 thousand yen per ton  
(40% improvement from FY2000)

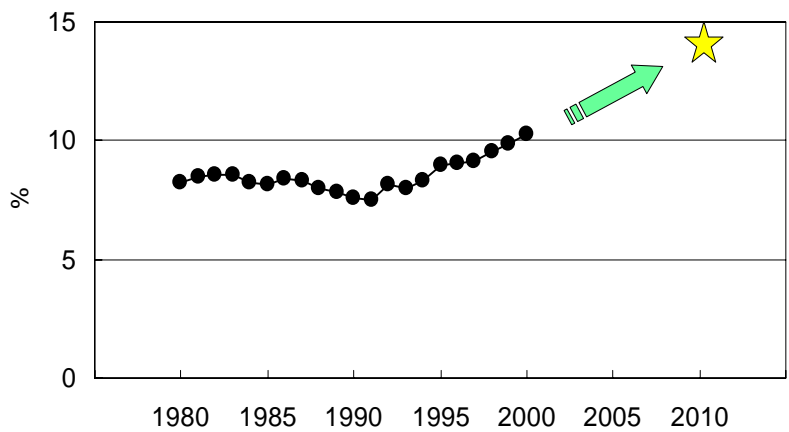


(a) Resource Productivity

## Cyclical use rate

$$= \frac{\text{Amount of cyclical use (reusing + recycling)}}{\text{Amount of cyclical use + Input of natural resources and the like (Total material input)}}$$

14%  
(40% improvement from FY2000)

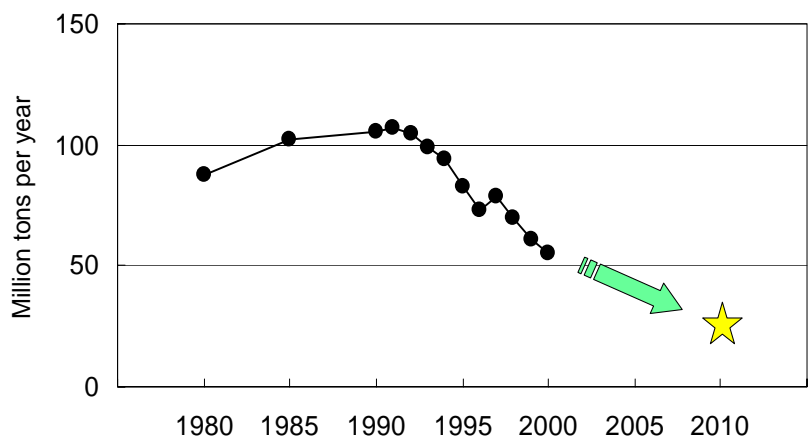


(b) Cyclical use rate

## Final disposal amount

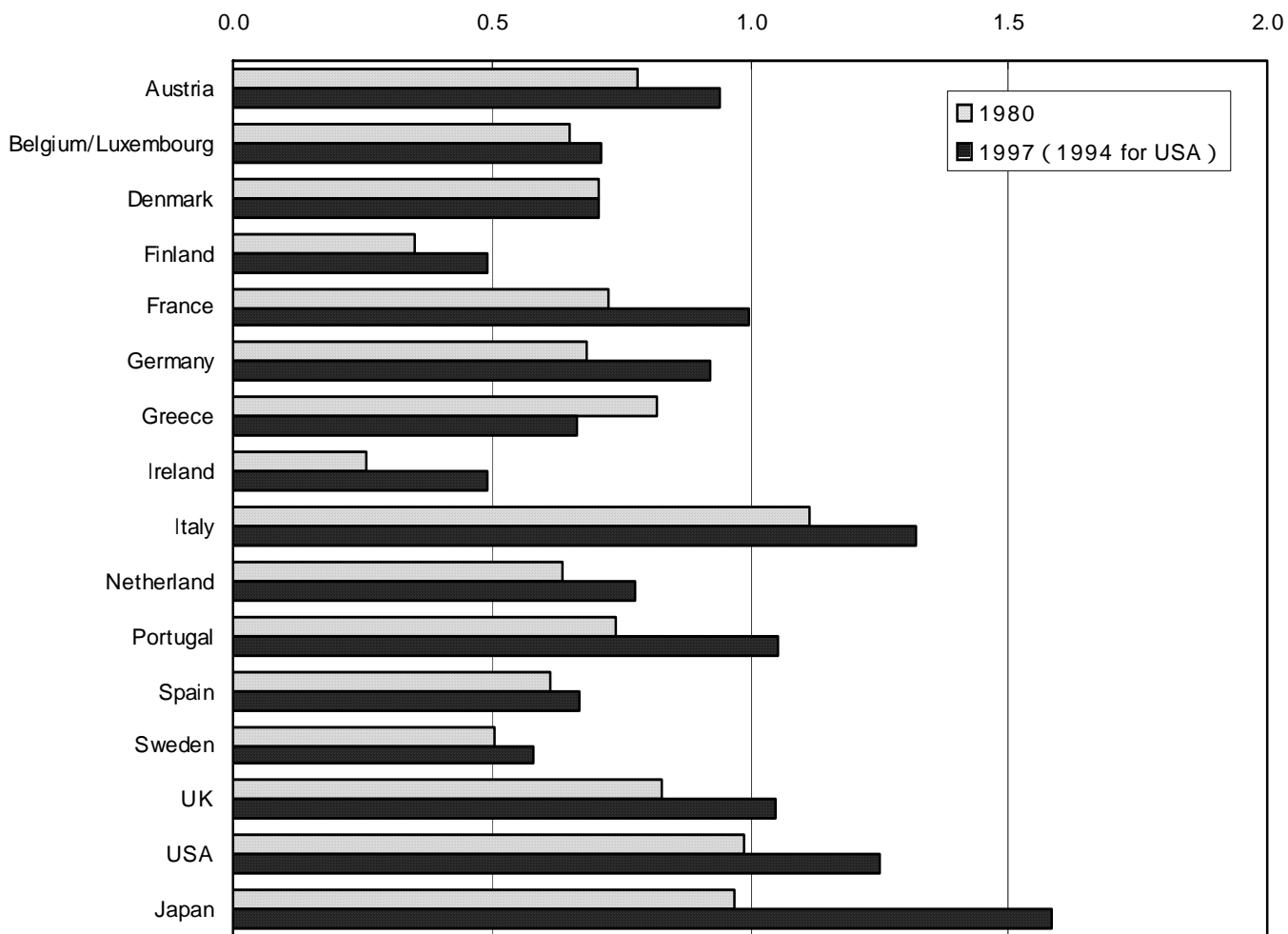
$$= \text{Final disposal amount of waste (landfill)}$$

28 million tons  
( 50% reduction from FY2000 )



(c) Final disposal amount

## International comparison of resource productivity



(US \$ 1,000/ton, based on purchasing power parity in 1995, estimated by the Ministry of the Environment using data from the OECD, World Resources Institute (United States), etc.)