

Material Flow and Material Flow Indicators of Japan

1. Material Flow Accounts of Japan in FY 2002 and FY 2001

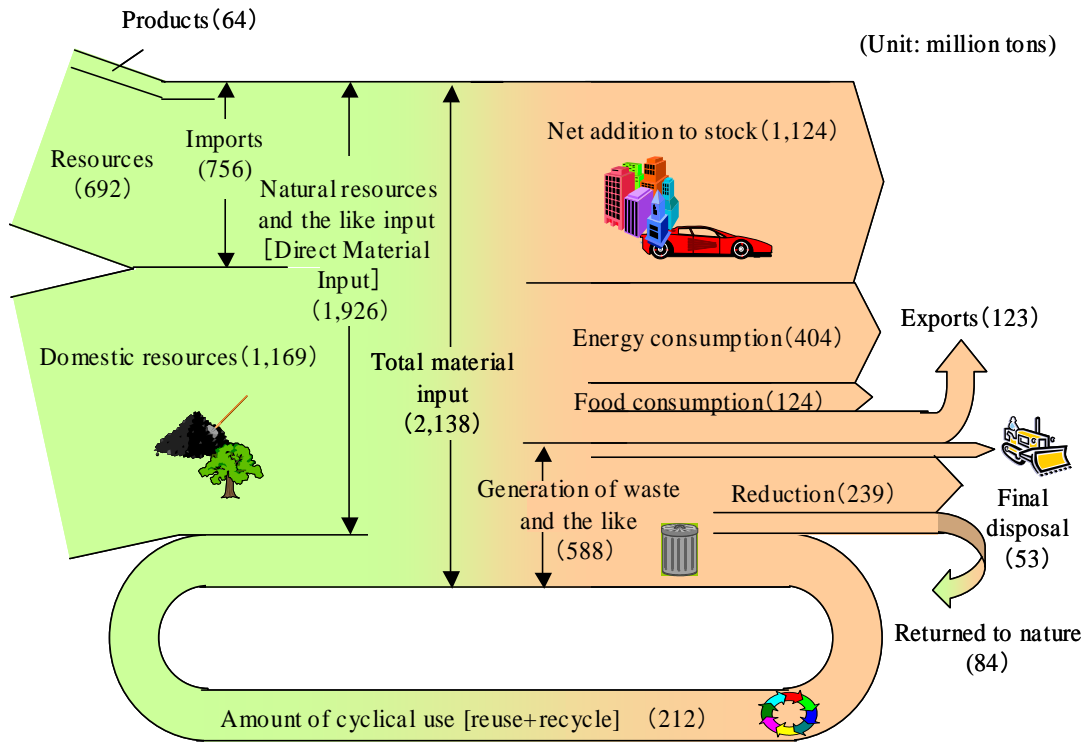


Fig. 1-1 Schematic Diagram of Material Flow in Japan (FY 2001)

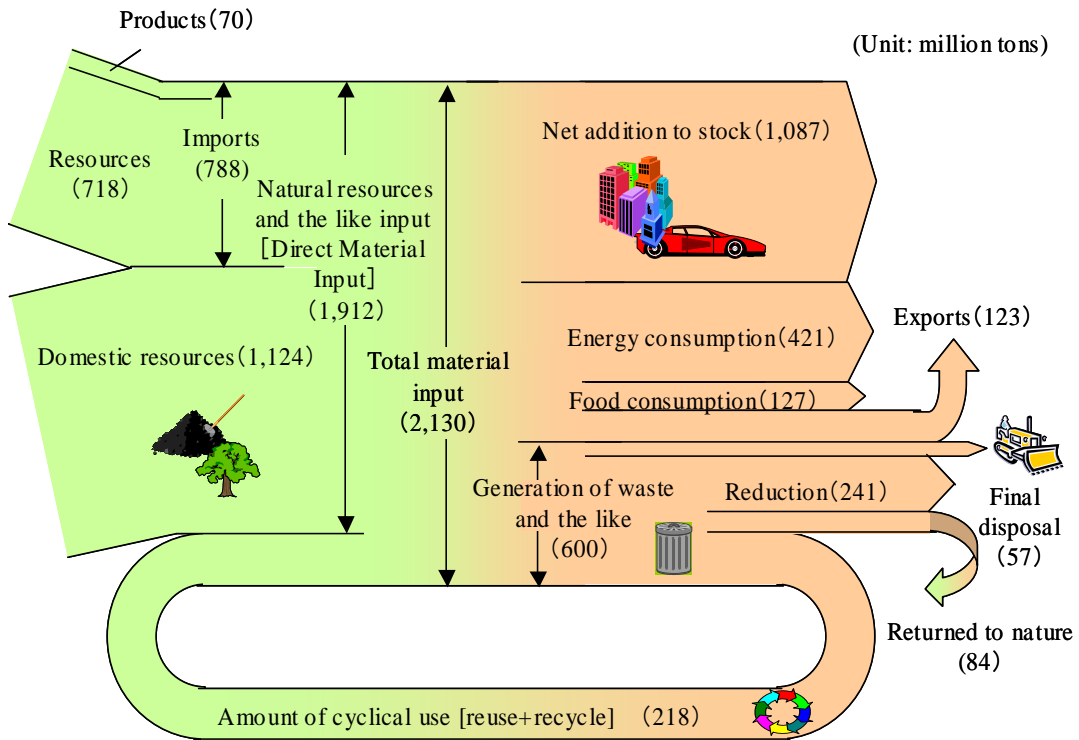


Fig. 1-2 Material Flow in Japan (FY 2000)

Note: Due to intake of moisture, etc., total output shall be larger than total material input.

2. Changes in Material Flow Indicators

Input: Resource Productivity (= GDP/DMI* - Natural resources & the like)

Resource productivity decreased from 281 thousands yen/ton in FY 2000 to 275 thousands yen/ton in FY 2001.

*DMI: Direct Material Input

((ten thousands/t))

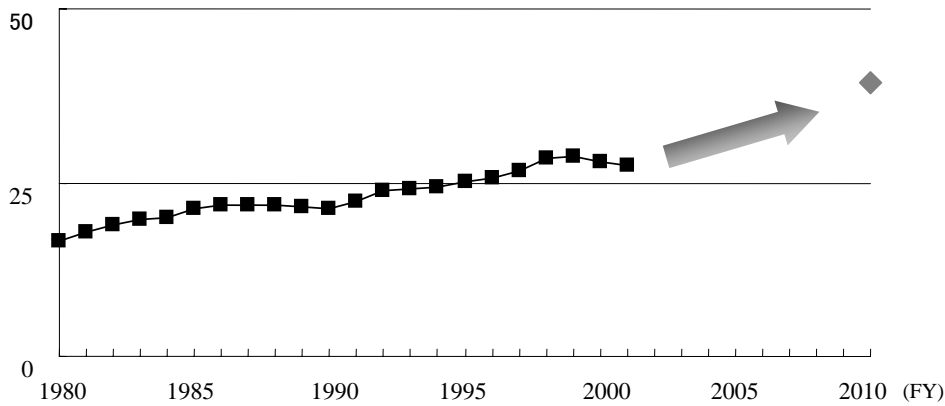


Fig. 2-1 Changes in Resource Productivity

【Target】 To increase resource productivity to 390 thousands yen/ton in FY 2010. This will be almost twofold increase from FY1990 (210 thousand yen) and 40% increase from FY 2000 (280 thousands yen).

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

Recycle: Cyclical use rate (= Amount of cyclical use (reuse + recycling) / (Amount of cyclical use + DMI))

Cyclical use rate decreased from 10.2% in FY 2000 to 9.9% in FY 2001.

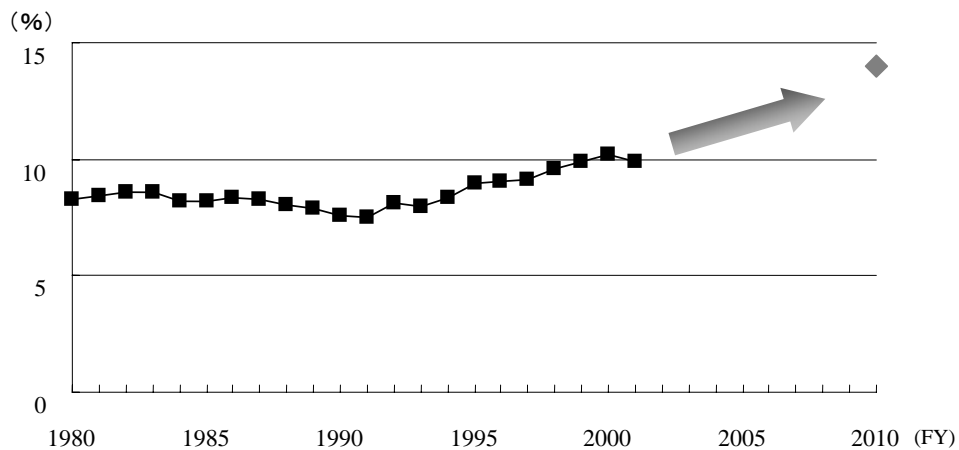


Fig.2-2 Transition of Cyclical Use Rate

【Target】 To increase cyclical use rate to 14% in FY 2010. (Increase by 80% from FY 1990 (8%) and 40% from FY 2000 (10%))

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

Output: Final Disposal Amount

Final disposal amount decreased from 57 million tons (FY 2000) to 53 million tons (FY 2001).

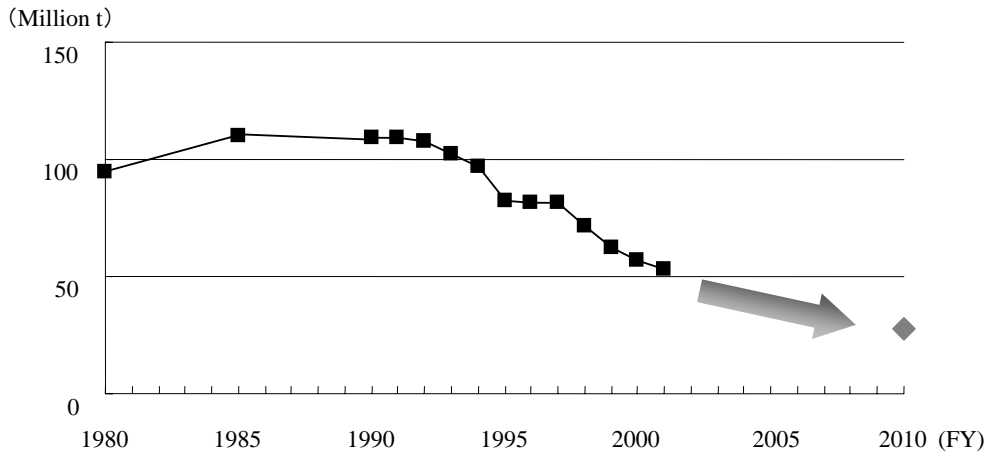


Fig.2-3 Transition of Final Disposal Amount

【Target】 To decrease final disposal amount to 28 million tons in FY 2010. (Decrease by 75% from FY 1990 (110 million tons) and 50% from FY 2000 (56 million tons) (Fundamental Plan for Establishing a Sound Material-Cycle Society)

3. Breakdown of DMI (Direct Material Input- Input of natural resources and the like)

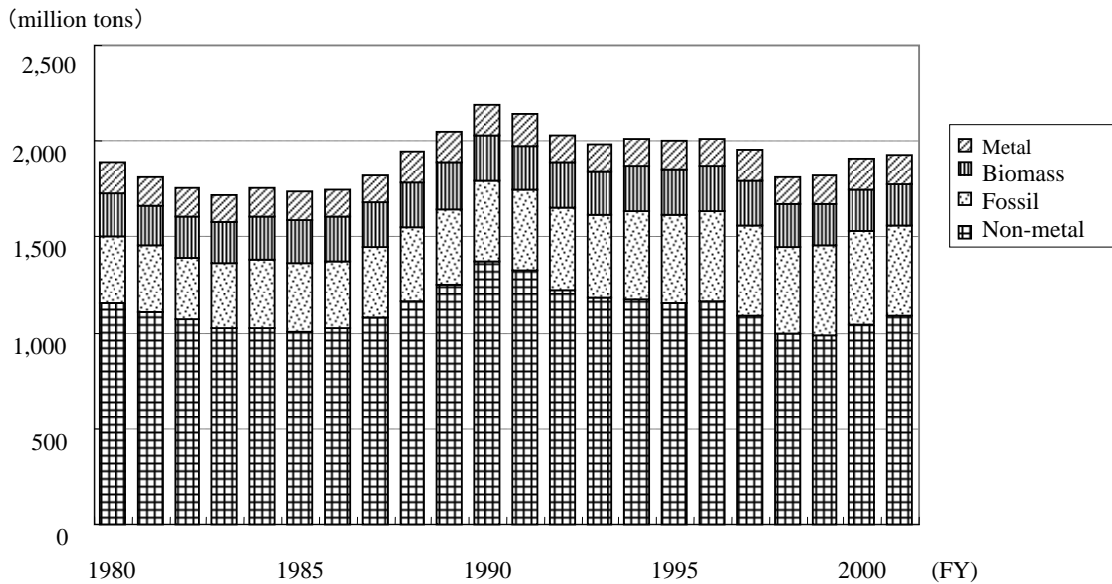


Fig.3-1 Breakdown of DMI by Type of Resources

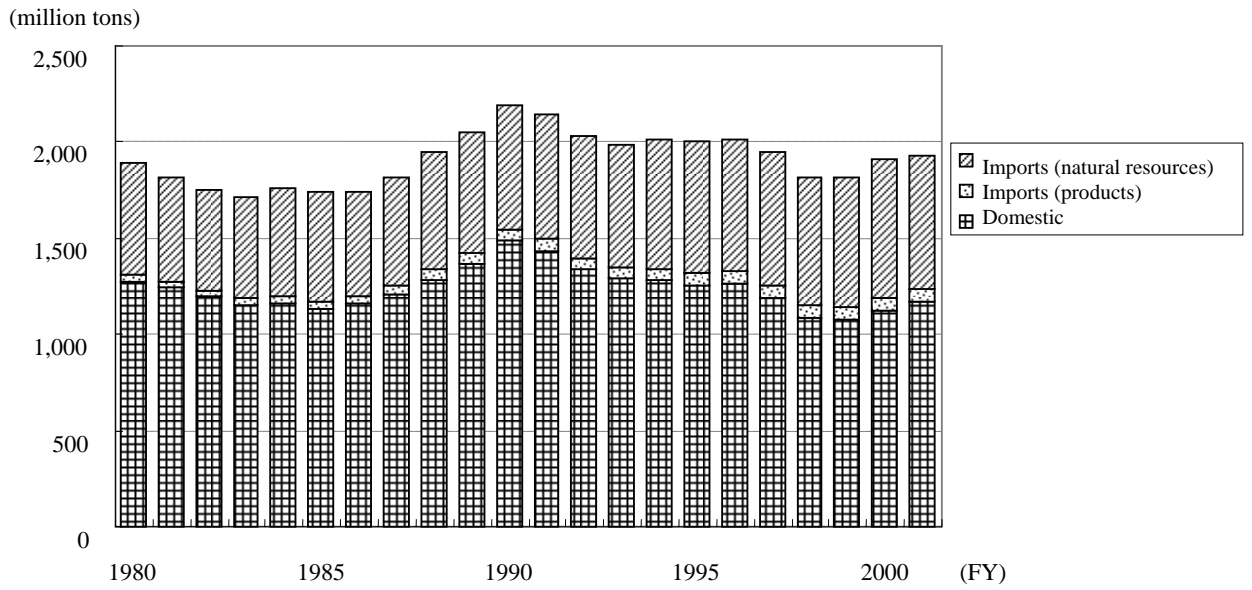


Fig.3-2 Breakdown of DMI - Domestic or Imported (Natural Resources/Products)

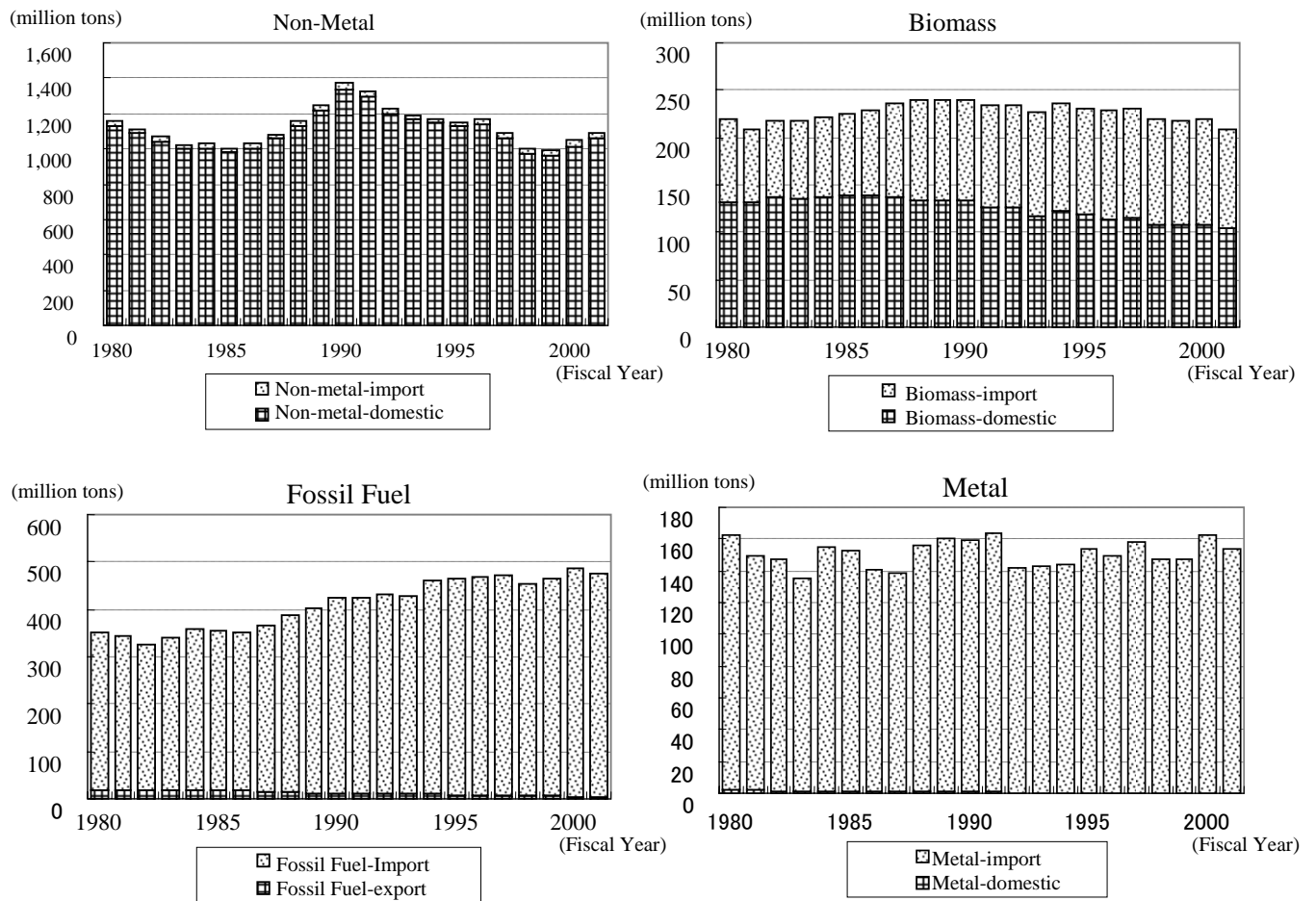


Fig. 3-3 Breakdown of DMI - Domestic or Imported by Type of Resources and Products

4. Others (Changes in GDP, Non-metal Input and Cyclic Rate Use)

Table 4-1 Changes in GDP

(Unit: billion yen)

	FY 2000	FY 2001	Difference
GDP (93SNA, substantial year)	536,806	530,370	-6,436

Source: Economic and Social Research Institute, Cabinet Office

Table 4-2 Transition of Non-metal DMI by Material

(Unit: million tons)

	FY 2000	FY 2001	Difference
DMI	1,912	1,926	14
Non-metal DMI	1,046	1,088	42
Domestic rocks	525	595	70
Others	521	492	-28

Table 4-3 Changes in Amount of Cyclical Use

(Unit: million tons)

	FY 1999	FY 2000	FY 2001	Difference between 2000 and 2001
Amount of cyclical use	199.9	218.2	211.7	-6.4
Consumption of iron scrap used for domestic pig iron (1)	41.4	43.7	40.6	-3.1
Raw steel production	98	106.9	102.1	-4.8
Export of iron scrap (2)	3.9	3.1	6.9	3.8
(Reference) (1)+(2)	45.3	46.8	47.5	0.7

Source: Figures for consumption of iron scrap used for domestic pig iron and raw steel production derived from "Monthly Bulletin on Iron and Steel, Non-Ferrous Metal and Fabricated Metals Products", the Ministry of Economy, Trade and Industry. Figures for export of iron scrap derived from "Trade Statistics", the Ministry of Finance.