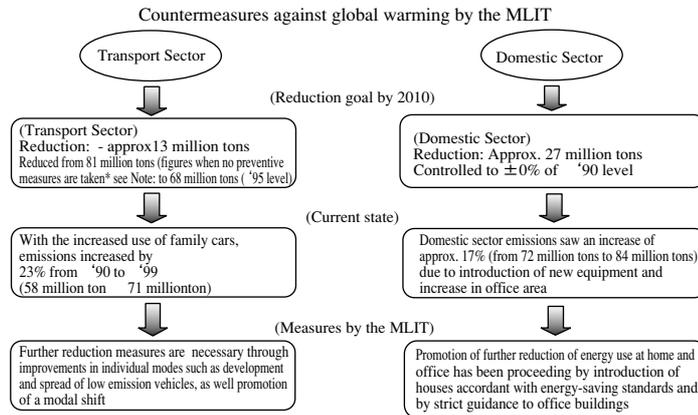


Chapter 4. Measures to Realize Environment-Friendly Society

[Implementation of countermeasures against global warming]

As countermeasures to global warming, the MLIT has been actively implemented measures for reducing exhaust greenhouse effective gasses emitted by the transport sector and domestic sector (composed of housing and building).

74. Countermeasures against global warming by the MLIT

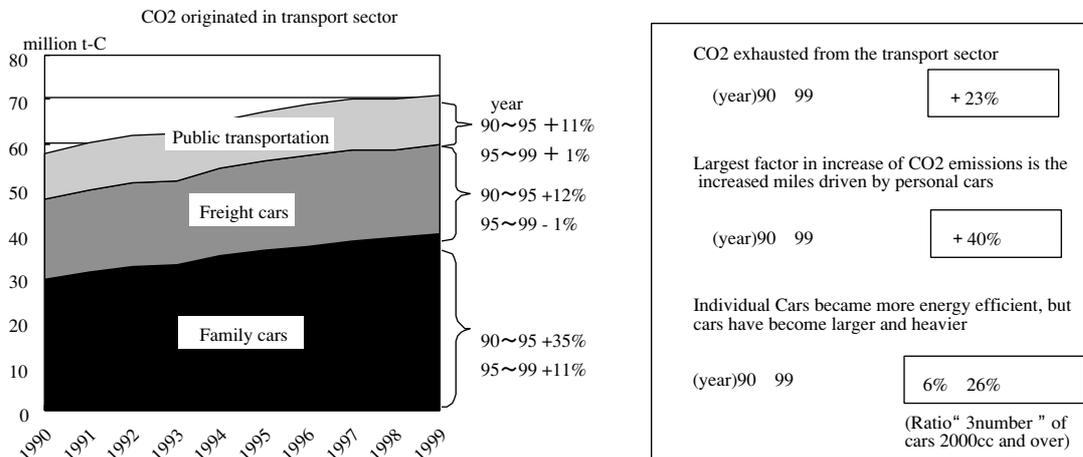


Note: Figures are calculated on the premise of emission reduction (10 million tons) resulting from increased speed thanks to improvement of roads

○ Countermeasures in transport sector

In this sector, due to increase in miles driven and size of cars, CO2 emissions have greatly increased. Further measures need to be taken to reduce emissions from personal cars.

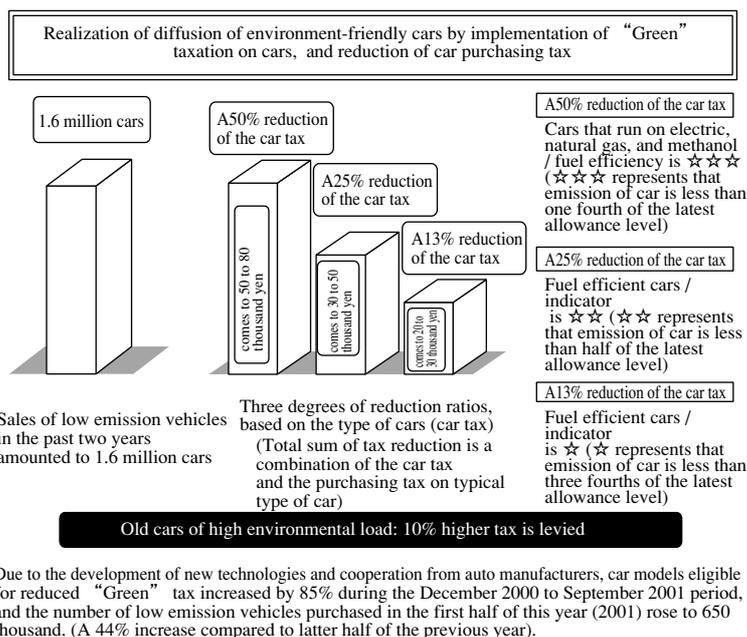
75. CO2 emission Originated in transport sector



Note : Compiled from MLIT data

The following countermeasures have been in progress in the transport sector to reduce emissions of CO2: (1) countermeasures in cars(major measure of all) ; development and promotion of R&D for lower cost and better performance, of low emission vehicles and high fuel efficiency vehicles including clean energy cars; (2) realization of smooth flow of traffic; (3) streamlining of logistics; (4) promotion of wider use of public transportation; and (5) development of new technologies and effective implementation of regulations etc.

## 76. (Introduction of “Green” taxation on car, & reduction of car purchasing tax)



### ○ Promotion of energy-saving and “green” houses and buildings

Energy-efficiency of houses and buildings has been promoted by implementing tougher energy-saving standards. Also at government buildings and facilities, efforts to lower the environmental load have been expedited. ( “Green” government buildings)

## [Improvement of residential environment by reduction of air and noise pollution]

### ○ Countermeasures against road transport environmental problems

## 77. Present condition of air (2000)

Present condition of air (2000)		
【Attained level of NO <sub>2</sub> concentration regulation: (Exhaust gas measurement point)】		
Nationwide	Attained 80% 316points	Not attained 20% 79points
Designated areas	Attained 63% 108points	Not attained 37% 64points
【Attained level of SPM (Suspended Particulate Matter) concentration regulation:(Exhaust gas measurement point)】		
Nationwide	Attained 66% 199points	Not attained 34% 102points
Designated areas	Attained 52% 77points	Not attained 48% 71points

Note1: Designated areas: 196 towns and cities in Tokyo Metropolitan Area, Osaka, and Hyogo, designated in accordance with the “Law concerning Special Measures for Total Emission Reduction of Nitrogen Oxides from Automobiles in Specified Areas”

Note2: Compiled from data of the Ministry of the Environment

One of the urgent problems that need to be tackled is air and noise pollution by cars. There are many districts, particularly in big cities, where the level of air and noise pollution does not meet environmental standards.

In order to mitigate the effects of this problem, regulations have been introduced on car emissions, and measures to create smooth traffic flow have also been promoted. Other measures that have been taken include the use of noise-absorbing pavement, sound-proof walls, and “Green belt” along the road, and greening of roads, which will provide better living conditions for nearby residents.

○ Countermeasures against environmental problems around airports

Various effective measures continue to be taken in to order reduce and eliminate aircraft noise issues, as well as promoting good relations between airports and neighboring communities.

○ Countermeasures against recent chemical substance-induced environmental problems

Researches and disposals on dioxin, environmental hormones and other hazardous chemical substances have been conducted in various sectors. In the housing area, the problem of the “sick house syndrome” has been addressed actively.

**[Preservation and revitalization of land full of rich and beautiful nature]** 78. (Nature-oriented river works (Nuki River, Kitakyusyu City, Fukuoka))

River improvement has been conducted on principle of neo-natural river reconstruction aimed to conserve and recreate riverside environment, as well as to secure the safety regarding flood control. Measures have been taken for revival of natural rivers, wetland, and tideland and for ensuring water flow through the flexible management of dams. Also promoted are: comprehensive coastal management to maintain a balance among coastal protection, environmental conservation and utilization; establishment of ports that are designed with natural surrounding conditions in mind; and installation of greenbelt along roads.



**79. Participation in nature preservation activities**

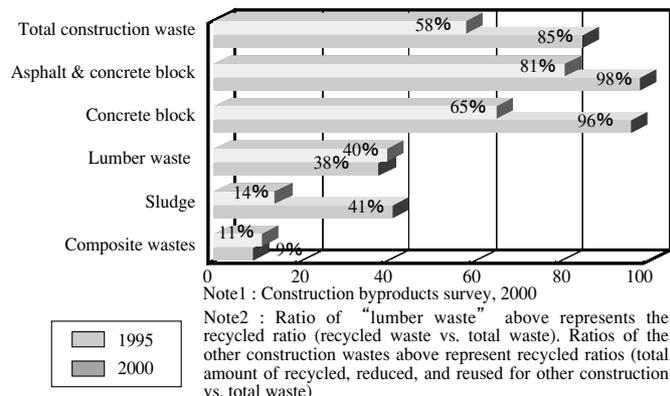


Data: “Polls on the preservation and use of nature”, 2001, Cabinet Office

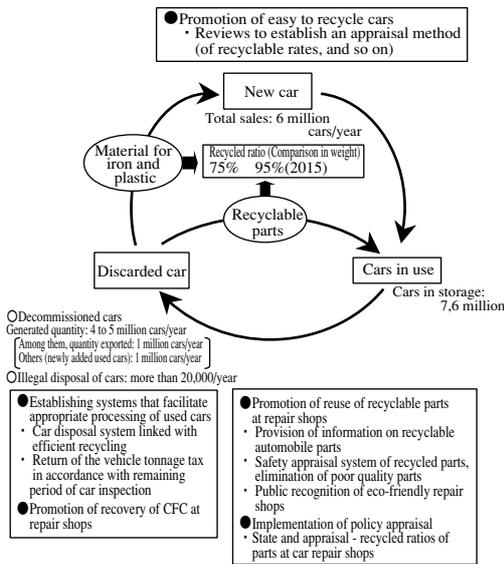
**[Promotion of developing a recycling-oriented society]**

In order to promote recycling and to limit the generation of construction waste, which accounts for approximately 20% of total industrial waste, proper fractional scrapping and reuse have been promoted. The MLIT is also active in promoting the procurement of construction materials whose environmental load is relatively small, such as that under the name of “Green Procurement” of public works projects.

**80. (Ratios of recycled construction waste by item)**



## 81. Measures for car recycling efforts by the MLIT



The automobile disposal report system has been revised in order to create a car recycling system. Also active researches have been conducted to establish technologies that will enable less expensive reuse and recycling of recreational boats made of FRP, Fiberglass Reinforced Plastic.

### [Establishment of a healthy hydrological cycle]

With the cooperation of various government ministries and agencies, drafting of guidelines and other comprehensive steps have been in progress for the establishment of a healthy hydrological cycle. The “pure water renaissance” program is being urgently conducted to improve water environment of rivers and their basins. Also, in closed sea areas, the conservation, revival and creation of tidal land algae areas and sludge dredging have been promoted to improve quality of water and seabed.

### [Prevention of marine pollution]

The elimination of substandard ships to prevent large-scale oil pollution has been promoted. The prohibition of the use of harmful anti-fouling systems has been implemented. In addition, the issue of harmful aquatic organisms and pathogens in ballast water has been promoted.

### [Observing and monitoring the global environment]

Under international cooperation, global-scale oceanographic observation has been carried out (ARGO project). Also, a project to upgrade the map of the land by reflecting the latest information has been in progress.

## 82. (Overview of ARGO project for integrated oceanographic observation)

