

Chapter 8: Creating and Conserving a Beautiful and Favorable Environment

[Promoting a recycling-oriented society]

○Construction materials recycling

MLIT is committed to promoting recycling construction waste, which account for about 20 percent of waste discharged from all industries. To that end, the ministry requires compliance with the “recycling-as-a-matter-of-course rules” and with the “principle on the appropriate treatment of construction byproducts.” It also strives to reduce and recycle sewage sludge.

Recycling rates of construction waste by item

	FY2002	Goal for FY2005	Goal for FY2010
Recycling (R) and volume reduction (VR) rate	92%	Achieved 88%	Achieved 91%
(R) rate for asphalt concrete blocks	99%	Achieved 98% or more	Achieved 98% or more
(R) rate for Concrete blocks	98%	Achieved 96% or more	Achieved 96% or more
(R) & (VR) rate for construction sludge	69%	Achieved 60%	Not achieved 75%
(R) & (VR) rate for construction-derived wood chips	89%	Not achieved 90%	Not achieved 95%
(R) rate for construction-derived wood chips	61%	Achieved 60%	Not achieved 65%
Reduction in mixed construction waste emissions from 2000 (%)	30%	Achieved 25%	Not achieved 50%

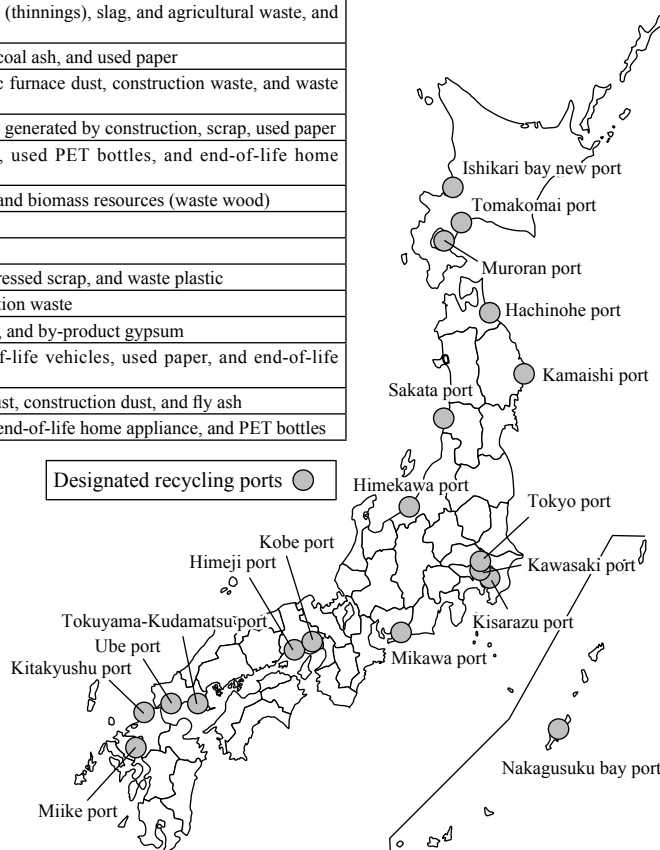
Source: MLIT, “2002 survey on the state of construction byproducts”

○Developing venous logistics systems

MLIT strives to develop an efficient venous logistics networks. To this end, the ministry encourages a less-polluting and more efficient trucking. In addition to this, MLIT promotes the development of access roads to freight stations, ports, and other transshipment/storage facilities, together with the development of trucking yards in their vicinities. Recently, the ministry has designated the qualified ports in the country as “integrated venous logistics hub ports (recycling ports)” for comprehensive support measures.

Integrated venous logistics hubs

Port	Key recycling items
Muroran	Waste plastic (for packaging or agriculture), scrap tires, coal ash, and end-of-life vehicles
Tomakomai	Used paper, waste plastic, coal ash, and end-of-life vehicles
Ishikari bay new	End-of-life vehicles, construction waste, and scrap
Hachinohe	Soybean cakes, fly ash, coal ash, and slag
Kamaishi	Coal ash, biomass resources (thinnings), slag, and agricultural waste, and fishery waste
Sakata	End-of-life vehicles, scrap, coal ash, and used paper
Kisarazu	End-of-life vehicles, electric furnace dust, construction waste, and waste plastic
Tokyo	Waste home appliances, soil generated by construction, scrap, used paper
Kawasaki	Waste plastic, used paper, used PET bottles, and end-of-life home appliance
Himekawa	Slag, coal ash, copper slag, and biomass resources (waste wood)
Mikawa	End-of-life vehicles
Kobe	End-of-life vehicles
Himeji	Scrap tires, steel cans, car pressed scrap, and waste plastic
Tokuyama-Kudamatsu	Slag, coal ash, and construction waste
Ube	Slag, coal ash, waste plastic, and by-product gypsum
Kitakyushu	Construction waste, end-of-life vehicles, used paper, and end-of-life home appliance
Miike	Coal ash, electric furnace dust, construction dust, and fly ash
Nakagusuku bay	Scrap, end-of-life vehicles, end-of-life home appliance, and PET bottles



○Recycling of vehicles and FRP boats

Apart from the recycling system for vehicles, MLIT aims to establish the technology to recycle or reuse FRP (fiberglass reinforced plastics) pleasure boats and the system to recycle them.

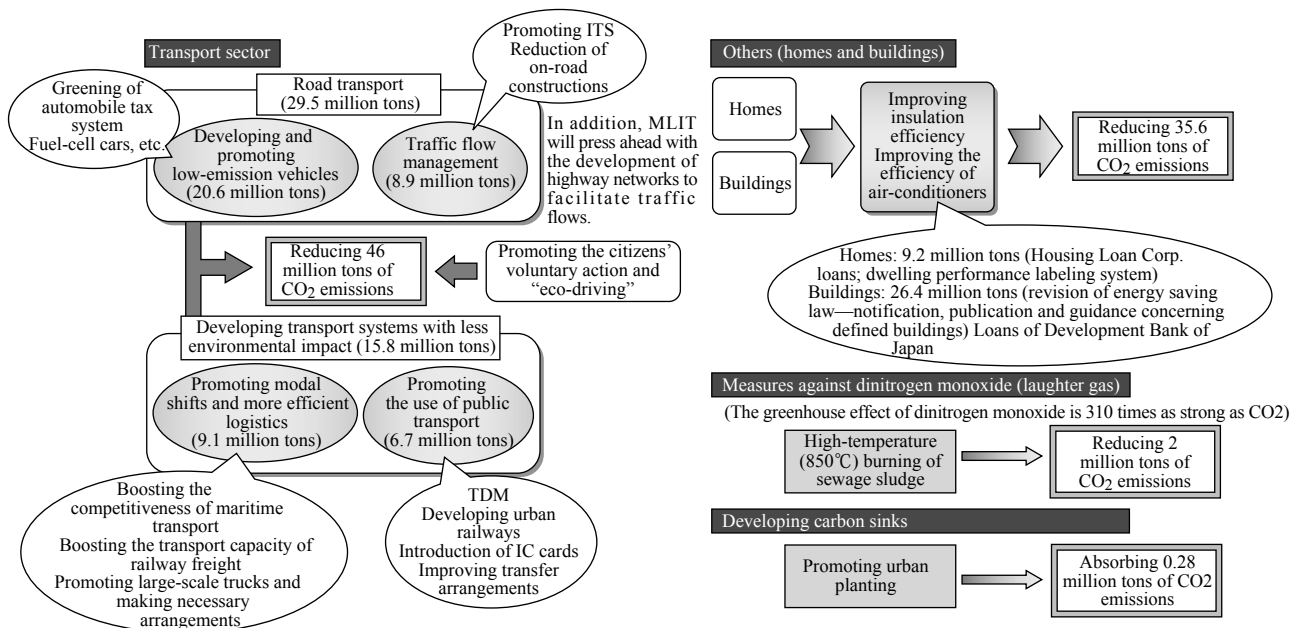
○Promoting procurement of eco-friendly goods

MLIT is promoting procurement of eco-friendly goods and services and wider use of wood in public works projects.

[Combating global warming]

MLIT is committed to reducing greenhouse gas emissions from the transport sector and those from the minsei sector (i.e., emissions from homes, offices, etc.).

MLIT's measures to combat global warming



○Developing and promoting fuel cells

MLIT is promoting the development of fuel-cell vehicles, which are expected to play a leading role in a motorized society that harmonizes with nature in the 21st century. The ministry is also taking the initiative in the introduction of such cars. By the end of FY2004, MLIT plans to establish safe standards for fuel-cell cars. It is also promoting the development of fuel cells for home use.

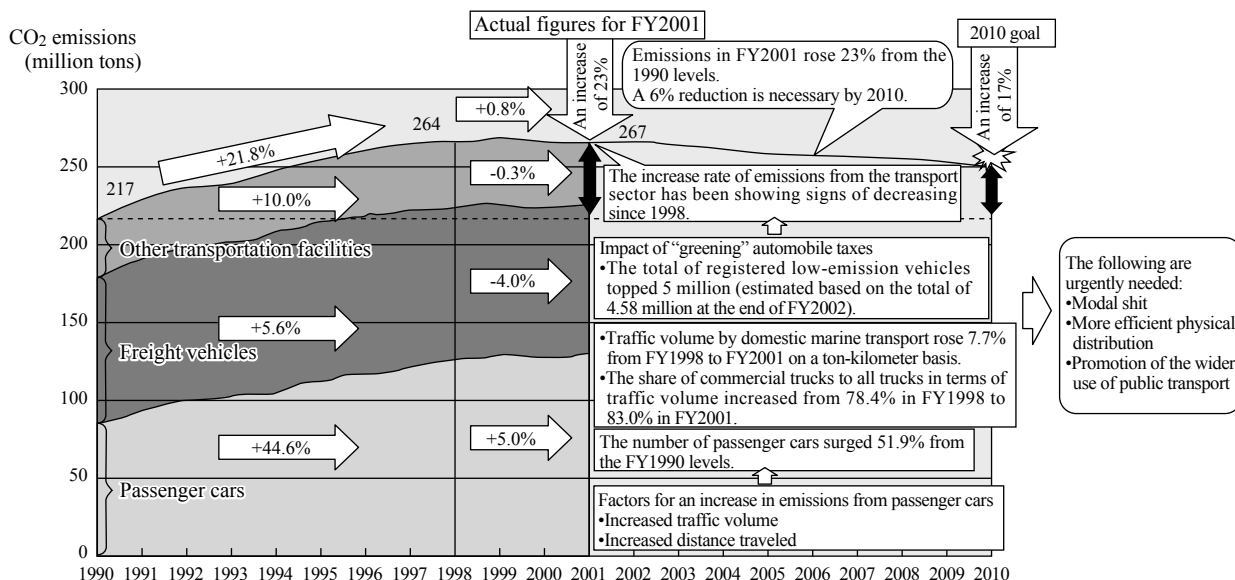
Fuel-cell vehicles (bus and passenger car)



○Measures in the transport sector

MLIT's efforts to reduce CO₂ emissions from the transport sector include: the development and promotion of low-emission vehicles through greening of automobile tax system and new arrangements designed to help reduce auto emissions and enhance fuel efficiency; promotion of traffic flow management; boosting the efficiency of physical distribution through modal shifts and other means; and support for the reduction of greenhouse gas emissions from vessels.

Changes in CO₂ emissions from the transport sector



Note: Other transportation facilities include buses, taxis, railways, domestic marine transport, and domestic airlines.

○Measures concerning homes, buildings, sewages, and urban planting

MLIT is promoting energy saving for homes and buildings with stricter standards for energy consumption. Other measures to reduce CO₂ emissions include the development of environment-friendly government buildings (green government buildings), urban planting, and eco-friendly operation of sewages.

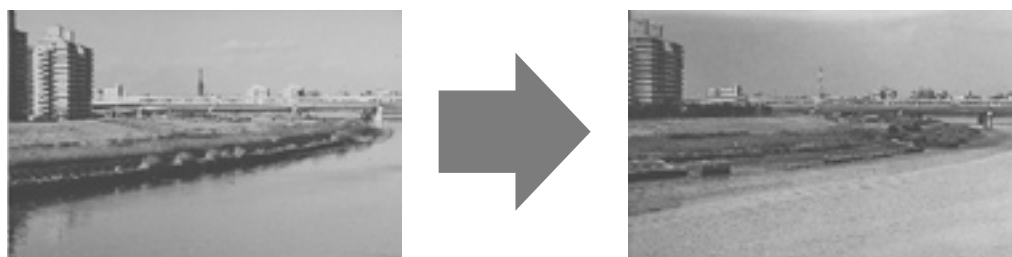
[Observation and monitoring of the global environment]

MLIT's efforts in this field include 1) the promotion of the AGRO project (which aims to develop a broad-scale global array of temperature and salinity profiling floats in the oceans), 2) monitoring the sea level rise caused by global warming, 3) the development of global maps and the global geodetic observation network. In January 2004, the ministry started to offer information on Asian dust.

[Conserving and regenerating an affluent and beautiful natural environment]

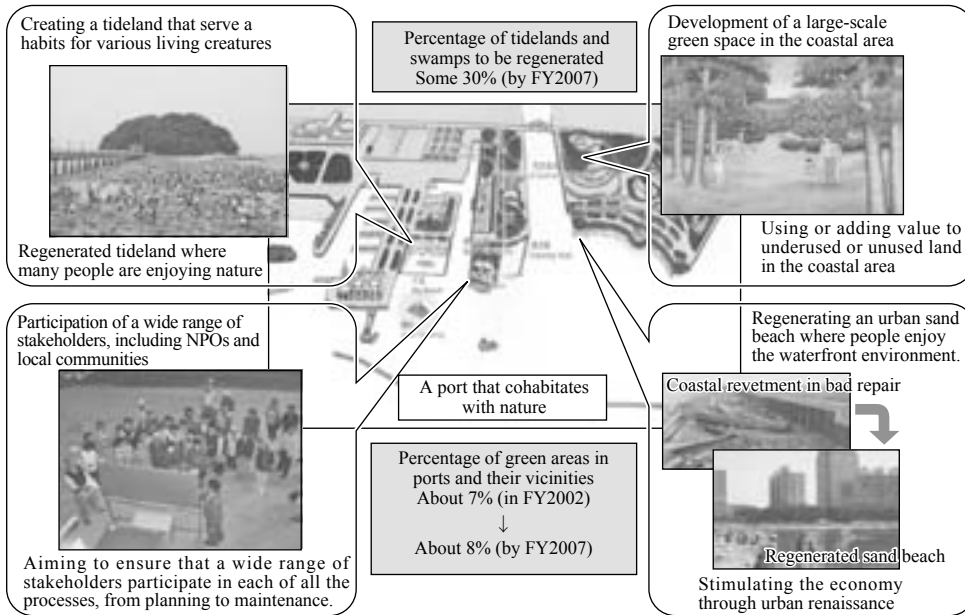
MLIT is promoting "Renaturalization of rivers" and working to conserve, regenerate and even create waterfront environments in cooperation with local communities and NPOs. The ministry is also developing roads with full of shade.

An example of regenerated tideland (in the lower reach of Ara River in Tokyo)



Project to regenerate a natural environment in an urban coastal area

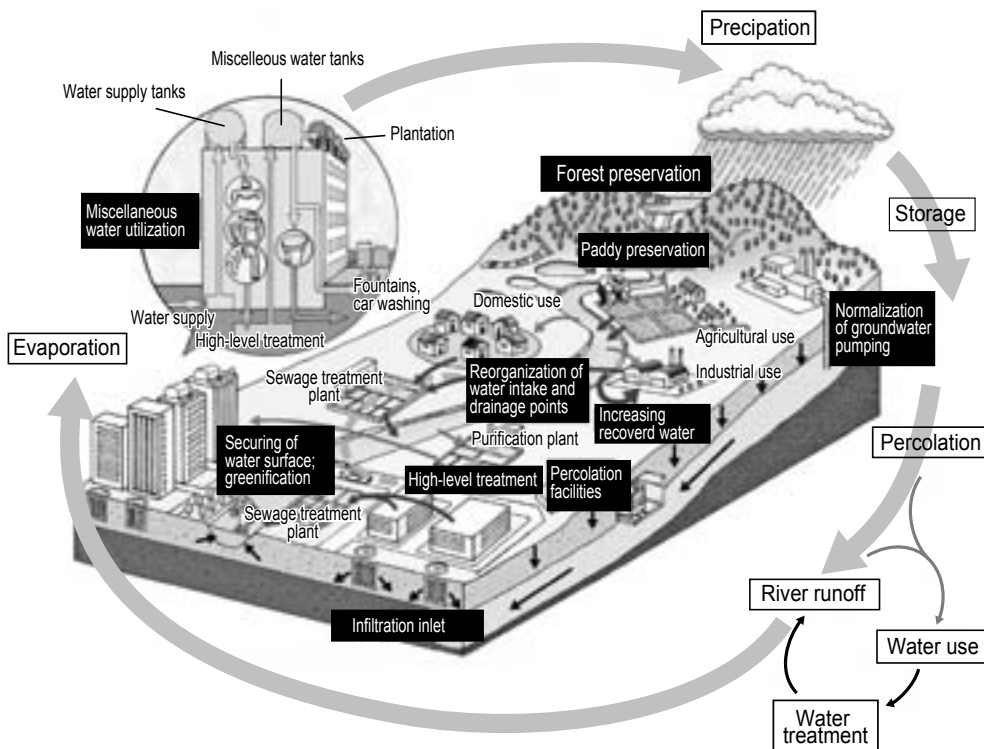
~ Regenerating and creating a natural environment that adds color to the city ~



[Promoting Sound Hydrological Cycles]

MLIT is working on Promoting Sound Hydrological Cycles in association with other ministries and agencies concerned. The ministry is also implementing the phase II emergency action program to improve the water environment called "Clear Stream". Other efforts by MLIT include improving the water environment in closed sea areas and developing sewerages designed to improve the water environment.

Promoting Sound Hydrological Cycles



[Improving the living environment through measures against air and noise pollution]

○Addressing environmental degradation associated with road transport

MLIT has adopted the most strict auto emission standards. For special diesel vehicles, the ministry introduced new emission standards. Other efforts in this field include: the development and promotion of low-emission vehicles, traffic flow management, Transportation Demand Management (TDM), and improvement of the roadside environment by modifying the road structure.

○Airports and its vicinity

MLIT is proactively promoting the development of “eco airports,” designed to conserve and even improve the local environment.

○Measures against sick houses syndromes and land pollution

MLIT is addressing a number of issues, including sick houses syndromes, land pollution and dioxins.

[Prevention marine pollution]

MLIT’s efforts to prevent marine pollution include: averting large-scale oil pollution by eliminating substandard ships that fail to meet requirements prescribed in laws concerning maritime safety and marine environment conservation; regulation of emissions from vessels; and control of pests in ballast water.