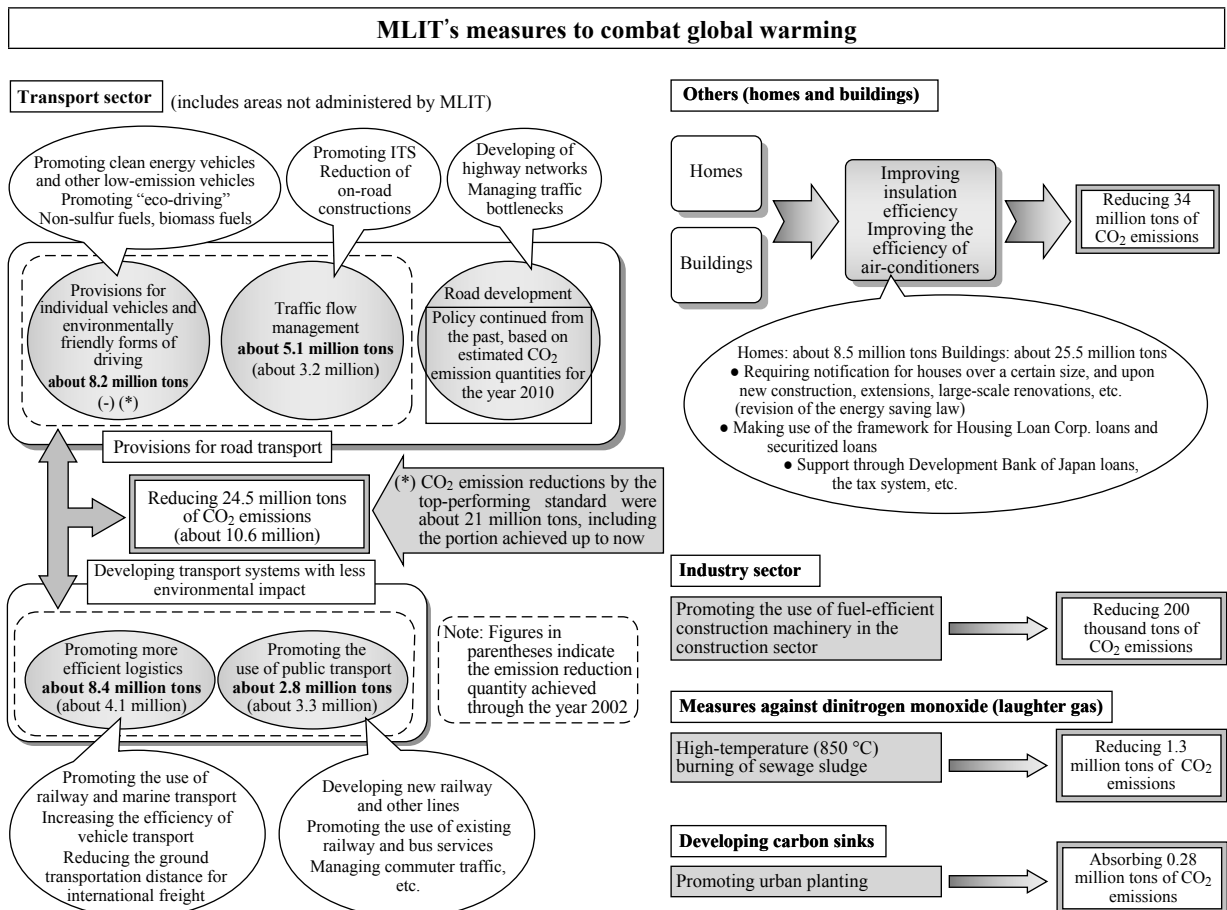


Chapter 7: Creating and Conserving a Beautiful and Favorable Environment

[Combating global warming]

To achieve its goal in the Kyoto Protocol, Japan is working to curb greenhouse gas emissions from the transport sector as well as from the minsei sector (i.e., emissions from homes, offices, etc.). With the Kyoto Protocol having gone into force in February 2005, the Kyoto Protocol Goal Achievement Plan was endorsed by the Cabinet in April of the same year. MLIT, however, had already evaluated and reviewed global warming measures in 2004, compiling its measures to combat global warming in March 2005.



○ Measures in the transport sector

MLIT is promoting new cross-sectional policy measures designed to reduce CO₂ emissions from the transport sector. Such measures involve: the creation of a mechanism that gives incentive for more low-emission and fuel-efficient vehicles; the Automobile Green Taxation; provisions for individual vehicles and environmentally friendly forms of driving through development of next-generation eco-friendly vehicles and similar products; achieving smooth road traffic flows through the formulation of the "Action Program for CO₂ Reduction in Road Policy" and other measures; promotion of environmental policy measures in the physical distribution sector through the holding of "Green Physical Distribution Partnership Conferences" and similar initiatives; promoting the use of public transportation by improving convenience and other measures; and supporting local efforts by applying the energy saving law to transport businesses and through the "Environmentally Sustainable Transport (EST) Model Program."

Promoting Efforts through Green Physical Distribution Partnership Conferences

- ◆ Broaden the base of efforts through the active participation of corporate shippers
- ◆ Formulate a CO₂ emission reduction plan through the concerted efforts of shipping and physical distribution businesses
- ◆ Active support through the coordination of ministries and agencies concerned

Green Physical Distribution Partnership Conference

JILS Japan Federation of Freight Industries Ministry of Economy, Trade and Industry MLIT Nippon Keidanren

Corporate shippers, distribution businesses, organizations in each industry

Physical distribution businesses and business organizations

Auditing corporations, etc. Think tanks Research institutions Researchers

Local offices of the central government Local authorities Others

Green Physical Distribution Model Program

- Support through subsidies (Ministry of Economy, Trade and Industry / MLIT)

Creation of methods for calculating CO₂ emissions

- Formulate and standardize calculation methods to accommodate diverse efforts

Promotion and publicizing

- Selection and publicizing of excellent case examples
- Publicizing for the purpose of dissemination

Increasing trucking efficiency



Main-line transport and partnership for many shippers through effective use of different racks for different shippers and larger sized trucks

International intermodal transport



Making use of flat rack containers and conducting international intermodal transport with JR's 12-foot multi-purpose containers.

Modal shift using multiple shippers



Implementation of large-scale modal shift through the participation of multiple shippers

Optimizing physical distribution through 3PL programs



Optimizing physical distribution systems by comprehensively making storage, transport, and distribution more efficient through the development of physical distribution centers

Environmentally Sustainable Transport (EST) Model Program

- ◆ Recruit pioneering regions that are aiming to achieve EST and provide them with intensive support through the coordination of concerned ministries, agencies, and departments
- ◆ For model programs, require assurance of the setting and verification of environmental goals as well as the lasting effects of efforts, ensuring the effectiveness of policy from the environmental standpoint
- ◆ A wide range of local entities participate to advance the program, including local municipalities, local business circles, transportation operators, road administrators, police officials, and NPOs

Menu example for the model program

Environmental Improvement

Promoting the use of public transportation

Commuter traffic management

Employees voluntarily refraining from driving to work, etc.
Park-and-ride

Developing LRT and making more effective use of railways, etc.

Advancing LRT projects
Implementing IC cards
Improving traffic nodes

Making more effective use of buses

Omnibus town
Improving services
PTPS
Improving bus stops
Bus location system
Non-step buses
Universal IC cards

Making automobile traffic flow more smoothly

Road development Improving services intersections, etc.

Reducing road construction
Eliminating bottleneck
highway-railroad grade crossings

Traffic regulations, etc.

Exclusive lanes and priority lanes for buses
Advancing measures against unlawful parking

Provisions for pedestrians and bicycles

Developing related infrastructure

Developing sidewalks, bicycle lanes, bicycle parking lots, etc.
Introducing transit malls based on local agreement

Introducing eco-friendly vehicles

Introducing eco-friendly vehicles, etc.

Promoting the implementation of CNG buses
Preferential treatment for eco-friendly vehicles

Promotion and awareness-raising

Promotion and awareness-raising activities

Launching information drives
Holding symposiums and other events



Promoting LRT projects



Bus location systems



Exclusive lanes and priority lanes for buses



Developing sidewalks and bicycle lanes



Implementing CNG buses and other eco-friendly vehicles

Setting environmental improvement goals (reduction of CO₂ emissions, etc.)

Ensuring continuing and independent efforts by those organizations involved (businesses, etc.)

➡ Propagate pioneering case examples of local environmental transport improvements to the whole country

- Measures concerning homes, buildings, sewerage, and urban greening (planting)

In accordance with the revision of the “Law concerning the Rational Use of Energy,” MLIT has made notification of energy-saving measures mandatory for houses over a certain size, as well as upon new construction, extensions, large-scale renovations, and similar work.

The ministry is also promoting the reduction of the environmental burden from government facilities, advancing the popularization of symbiosis housing, taking steps to reduce global warming effects from sewerage systems, and promoting urban greening (planting) and other provisions for carbon sinks, among other environmental measures.

[Promoting a recycling-oriented society]

- Construction materials recycling

MLIT is committed to promoting recycling construction waste, which accounts for about 20 percent of waste discharged from all industries. To that end, the ministry is taking measures to ensure the performance of the Law for the Recycling of Construction Materials and developing a joint mobile collection system for small-lot construction byproducts. It is also making efforts to reduce and recycle sewage sludge and promoting solid waste management in the housing and construction fields.

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% and more	Achieved	98% and more
(R) rate for concrete blocks	98%	Achieved	96% and more	Achieved	96% and 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 FY2000 (%)	30% reduction	Achieved	25% reduction	Not achieved	50% reduction

Note: The targets are according to *Construction Recycling Promotion Plan 2002*.

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

- Developing recyclable resources logistics systems

MLIT is committed to developing an appropriate and efficient venous logistics networks. To this end, the ministry has recently designated Recycle Ports (integrated recyclable resources logistics hub ports).

- Recycling of vehicles and FRP boats

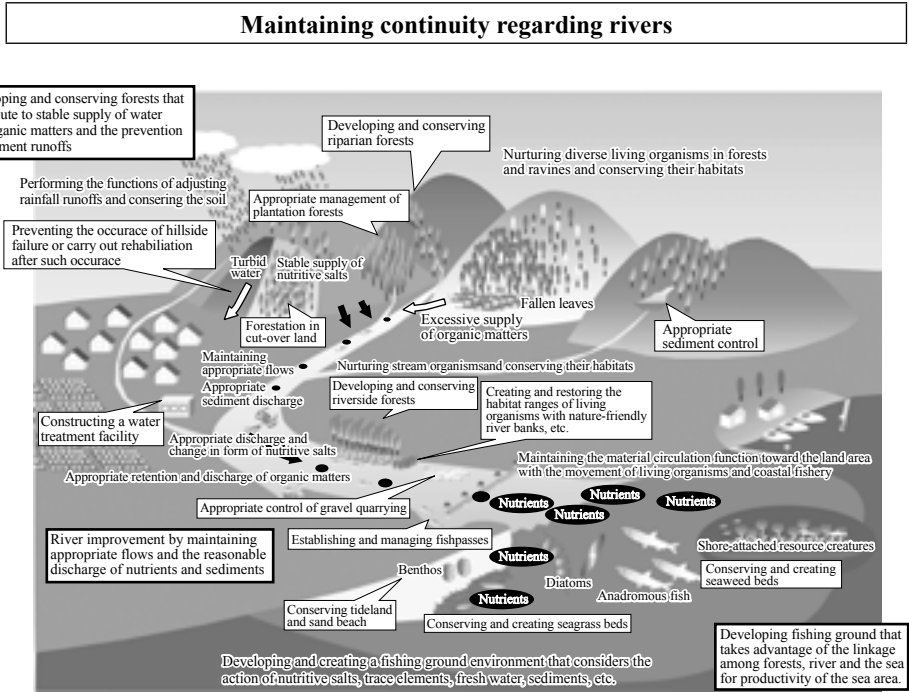
MLIT is working to promote appropriate treatment of end-of-life vehicles and thus prevent illegal dumping with the implementation of the new vehicle recycling system and the enforcement of the amended Road Transport Vehicle Law. The ministry is also working for the development of a recycling system for FRP (Fiberglass Reinforced Plastics) boats.

- 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.

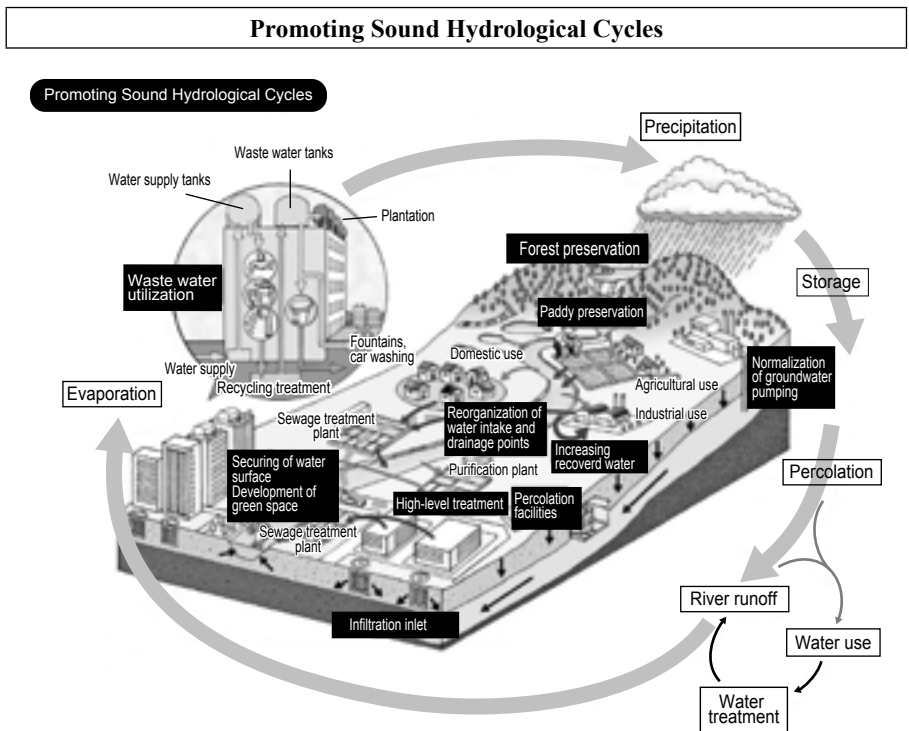
[Conserving and regenerating an affluent and beautiful natural environment]

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 working on other initiatives such as making port administration more environmentally friendly and developing roads with full of shade.



[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 plan for improvement of water environment called “Clear Water Renaissance II”. Other efforts by MLIT include improving the water environment in closed sea areas and developing sewerages designed to improve the water environment.



[Management of the marine environment]

MLIT's efforts in this field include: averting large-scale oil pollution and control of harmful aquatic organisms in ballast water.

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

○ Addressing environmental degradation associated with road transport

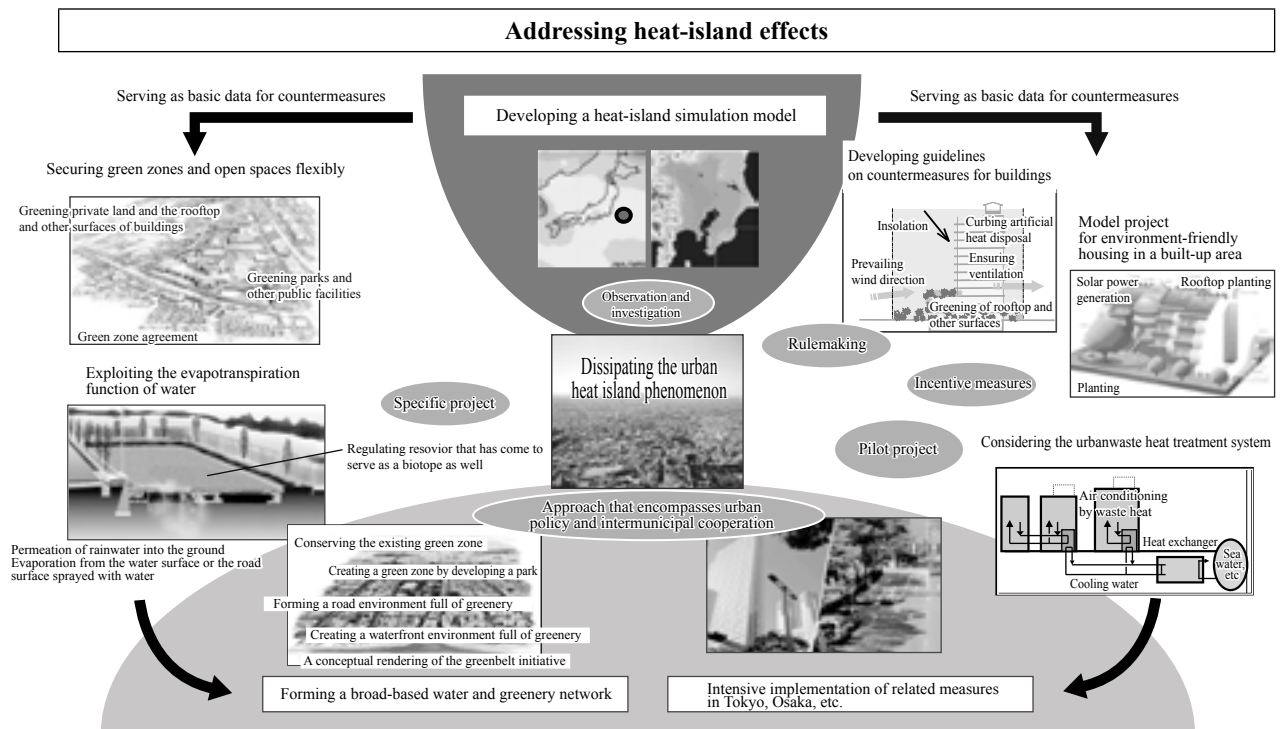
With regard to vehicles themselves, MLIT is promoting strict auto emission standards and other environmental-related measures. The ministry is also focusing on: traffic flow management through TDM; road use that is less harmful to the environment with the introduction of various and flexible toll-charge policies; and the improvement of the roadside environment by modifying the road structure.

○ Airports and its vicinity

MLIT is taking steps to eliminate or reduce aircraft noise, as well as making efforts to preserve and create more favorable environments in airports and surrounding areas.

○ Addressing heat-island issues

MLIT is focusing on specific countermeasures identified in the policy statement of the Outline of the Policy Framework to Reduce Urban Heat Island Effects formulated in March 2004 by the Inter-Ministry Coordination Committee to Mitigate Urban Heat Island.



[Observation, monitoring, and projection of the global environment]

MLIT's efforts in this field include: observing and monitoring climate change, oceans, the ozone layer, and other environmental factors; conducting global environment projections, including research on global warming; and developing global maps and the global geodetic observation network.