

# **Country Report**

**(Draft)**

**<Japan>**

# Country Report

- Japan
- Environmental Transport Policy Division, Environmental Management Bureau, Ministry of the Environment
- Ministry of Land, Infrastructure, Transport and Tourism

## Notes to This Report:

### 1. Overview:

Projects and policies listed here are examples of direct or indirect contributions to, but not necessarily representative or comprehensive of, each goal. Therefore, the selection of “Any action had been taken so far?” remains the evaluation of what is written here as an example and not the overall evaluation of each goal.

### 2. Regarding “Avoid” and “Shift” Strategies:

Each city has different challenges with different solutions. Further, the involvement of national government as well as the main agent of each project would be different. The combination of agents would include the following:

- 1) Local governments select appropriate measures from a list of EST projects provided by the national government.
- 2) Local governments conduct policies autonomously.
- 3) Private sector conduct projects voluntarily.
- 4) Any combination of above all.

As of now, we are unable to evaluate these groups of projects comprehensively and thus we either tried to introduce examples as much as possible or refrained from listing at all.

Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration	
<b>I. Strategies to <u>Avoid</u> unnecessary travel and reduce trip distances</b>			
“Avoid” Strategy	1 Formally integrate <b>land-use and transport planning</b> processes and related institutional arrangements at the local, regional, and national levels	Any action had been taken so far? <input type="checkbox"/> Not yet <input type="checkbox"/> Some (design – piloting) <input checked="" type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in implementation:
		Examples of pilot projects and/or policies developed or under development – include URLs where relevant <b><u>Strategies for Urban and Regional Comprehensive Transport:</u></b> Implemented in 59 local governments, other 19 under formulation, as of October 2012. In the City of Toyama, for instance, integration of land-use and transport is in progress, with public transportation as the central axis and promotion of dwelling in city center and near public transportation. < <a href="http://www.mlit.go.jp/crd/tosiko/pttebiki.html">http://www.mlit.go.jp/crd/tosiko/pttebiki.html</a> >	
		Important Actions you will take in 2013	

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<b>II. Strategies to <u>Shift</u> towards more sustainable modes</b>				
“Shift” Strategy	5	Improve <b>public transport</b> services including high quality and affordable services on dedicated infrastructure along major arterial corridors in the city and connect with feeder services into residential communities	<p>Any action had been taken so far?</p> <input type="checkbox"/> Not yet <input type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input checked="" type="checkbox"/> Fully Completed (Please Check the box)	<p>Challenges faced in implementation:            [For Reference (Example of Private Sector Initiative)]            Public Transport IC Cards were unable to use in different areas controlled by different business operators due to different standard used for each operator.</p>
	<p>Examples of pilot projects and/or policies developed or under development – include URLs where relevant            [For Reference (Example of Private Sector Initiative)]  <b><u>Promotion of Standardization and Interoperation of Public Transport IC Cards:–</u></b>            For improvement of user-friendliness, interoperation as well as expansion of usability of Public Transport IC Cards to other purposes has been introduced. Beginning on 23 March 2013, 10 IC Cards published by JR Companies and major private railways in Tokyo Metropolitan, Nagoya, Osaka, and Kyushu Areas become interoperable.  <a href="http://www.mlit.go.jp/tetudo/tetudo_tk6_000015.html">http://www.mlit.go.jp/tetudo/tetudo_tk6_000015.html</a></p>			
	Important Actions you will take in 2013			

Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration	
“Shift” Strategy	6 Reduce the urban transport mode share of private motorized vehicles through <b>Transportation Demand Management</b> (TDM) measures, including pricing measures that integrate congestion, safety, and pollution costs, aimed at gradually reducing price distortions that directly or indirectly encourage driving, motorization, and sprawl	Any action had been taken so far? <input type="checkbox"/> Not yet <input type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input checked="" type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in implementation:
		Examples of pilot projects and/or policies developed or under development – include URLs where relevant <b><u>TDM Operation Test (Relevant to Goal 19):</u></b> For further implementation of TDM such as promotion of use of public transportation as well as optimization of distribution in urban areas, financial support was provided to the approved project plans. <a href="http://www.mlit.go.jp/sogoseisaku/tdm/tdm_.html">http://www.mlit.go.jp/sogoseisaku/tdm/tdm_.html</a>	
		Important Actions you will take in 2013	

Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration	
“Shift” Strategy	7 Achieve significant shifts to more sustainable modes of <b>inter-city passenger and goods transport</b> , including priority for high-quality long distance bus, inland water transport, high-speed rail over car and air passenger travel, and priority for train and barge freight over truck and air freight by building supporting infrastructure such as dry inland ports	Any action had been taken so far? <input type="checkbox"/> Not yet <input type="checkbox"/> Some (design – piloting) <input checked="" type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in implementation: (1) Anxiety of consignors about costs and transport quality (i.e. timeliness, damages, etc.) was an obstacle to promotion of modal shift. (2) For promotion of modal shift from tracks to railways, a number of 31ft container trains (the same size as 10t tracks often used for long distance freight) were needed and a large investment in equipment installation was an obstacle to the implementation. (3) This project is expected to contribute to development of national and local economy as well as expansion of living sphere.

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		<p>Examples of pilot projects and/or policies developed or under development – include URLs where relevant</p> <p>(1) <b><u>Promotion of Modal Shift:</u></b>  <a href="http://www.mlit.go.jp/seisakutokatsu/freight/seisakutokatsu_freight_tk1_000003.html">http://www.mlit.go.jp/seisakutokatsu/freight/seisakutokatsu_freight_tk1_000003.html</a></p> <p>(2) <b><u>Promotion of Low Carbonization of Freight Using Railways (Beginning in 2012):</u></b>  Support modal shift from trucks to railways with provision of partial funding for purchasing 31ft container trains to freight railway business operators.  <a href="http://www.env.go.jp/press/press.php?serial=15151">http://www.env.go.jp/press/press.php?serial=15151</a></p> <p>(3) <b><u>Shinkansen Railway Development Program:</u></b>  In accordance with the Nationwide Shinkansen Railway Development Law, the Shinkansen Network is completed from Aomori to Kagoshima in 2011. The construction plan for 3 other sections was approved and the works began in 2012.  <a href="http://www.mlit.go.jp/tetudo/tetudo_fr1_000041.html">http://www.mlit.go.jp/tetudo/tetudo_fr1_000041.html</a></p> <p>Important Actions you will take in 2013</p>
<b>III. Strategies to <u>Improve</u> transport practices and technologies</b>		

Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration	
“Improve” Strategy	8 Diversify towards more sustainable <b>transport fuels and technologies</b> , including greater market penetration of options such as vehicles operating on electricity generated from renewable sources, hybrid technology, and natural gas	Any action had been taken so far? <input type="checkbox"/> Not yet <input type="checkbox"/> Some (design – piloting) <input checked="" type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in implementation: (1) Electric Vehicles (EVs) have limitations in implementation due to such obstacles as costs, cruising distance, and insufficient supply of recharging stations. (2) Micro Mobility is a kind of vehicle unprecedented and unknown to people, and thus difficult to implement in local transportation.
		Examples of pilot projects and/or policies developed or under development – include URLs where relevant (1) <b><u>Accelerated Promotion of EVs:</u></b> Focus support on advanced and unprecedented programs of EV implementation by local governments or freight operators using automobiles (incl. buses, taxis, and trucks) that would induce participation of other municipalities and business operators. (2) <b><u>Promotion of Micro Mobility:</u></b> Focus support on lead and pilot programs of excellence in promotion of micro mobility as well as consideration of relevant regulations that are tied to community design with local initiative, in view of creating a model case as well as building public awareness.	



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		<p>Important Actions you will take in 2013</p> <p>(2) Begin focused support on lead and pilot programs of excellence in promotion of micro mobility that are tied to community design with local initiative.</p>	
“Improve” Strategy	<p>9 Set progressive, appropriate, and affordable <b>standards</b> for fuel quality, fuel efficiency, and tailpipe emissions for all vehicle types, including new and in-use vehicles</p>	<p>Any action had been taken so far?</p> <p><input type="checkbox"/> Not yet</p> <p><input type="checkbox"/> Some (design – piloting)</p> <p><input checked="" type="checkbox"/> Largely in Place</p> <p><input type="checkbox"/> Fully Completed</p> <p>(Please Check the box)</p>	<p>Challenges faced in implementation:</p> <p>(1) There is a need for emission regulations that improve ambient air condition of the country. At the same time, a challenge to harmonization with international regulations must be risen in the globalized world.</p> <p>(2) For promotion of use of non-road special motor vehicles conforming to the reinforced emissions regulations, further development of compliant vehicles by auto makers as well as replacement of old vehicles by users are necessary.</p> <p>(3) Establishment of new fuel efficiency standards for small trucks and heavy duty vehicles (i.e. buses, trucks, etc.)</p>

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		<p>Examples of pilot projects and/or policies developed or under development – include URLs where relevant</p> <p>(1) Participate in the United Nations Economic Commission for Europe (UN-ECE) World Forum for Harmonization of Vehicle Regulations (WP29) and contribute to the global harmonization of vehicle emissions regulations.</p> <p>(2) For promotion of compliant vehicles to reinforced regulations, provide a variety of funding for users on purchase (i.e. tax benefits, low-interest loans, and subsidies).</p> <p>(3) Review of the Automobile Fuel Efficiency Targets (the Top Runner Approach based on the Energy Saving Law) under consideration</p> <hr/> <p>Important Actions you will take in 2013</p> <p>(2) Amendment of regulations for the reinforced 2014 Regulation, provision of financial support for purchasing compliant vehicles (i.e. tax benefits, low-interest loans, etc.)</p>

Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration	
“Improve” Strategy	10 Establish effective vehicle testing and compliance regimes, including formal vehicle registration systems and appropriate periodic vehicle <b>inspection and maintenance</b> (I/M) requirements, with particular emphasis on commercial vehicles, to enforce progressive emission and safety standards, resulting in older polluting commercial vehicles being gradually phased-out from the vehicle fleet, as well as testing and	Any action had been taken so far? <input type="checkbox"/> Not yet <input type="checkbox"/> Some (design – piloting) <input checked="" type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in implementation: (1) There is a need for grasping the actual number of vehicle ownership as well as authentication of the ownership. In addition, users are obliged to comply with safety and environmental standards. (2) Although achievement rates of Environmental Quality Standards (EQSs) for Air of roadside nitrogen dioxide (NO <sub>2</sub> ) and Suspended particulate matter (SPM) have largely increased (i.e. NO <sub>2</sub> improved from 80% in 2000 to 98% in 2012), there remain spots that are not meeting EQSs within the metropolitan areas along the arterial roads.

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	compliance regimes for vessels	<p>Examples of pilot projects and/or policies developed or under development – include URLs where relevant</p> <p>(1) <b><u>Vehicle Registration and Inspection System:</u></b>  The government confirms the compliance of safety and environmental standards by inspecting each vehicle regularly.  &lt;<a href="http://www.mlit.go.jp/jidosha/jidosha_fr6_000007.html">http://www.mlit.go.jp/jidosha/jidosha_fr6_000007.html</a>&gt;</p> <p>(2) <b><u>Measures based on the Automobile NOx-PM Law:</u></b>  In accordance with Guideline for Total Emissions Control (amended in March 2011), 8 prefectures in metropolitan areas are to formulate Total Emissions Control Plan by Spring 2013 and implement measures for emissions from in-use vehicles in order to achieve EQSs at all monitoring stations by 2015 in collaboration of national and local governments and road administrators.  &lt;<a href="http://www.env.go.jp/air/car/noxpm/H23-3kihonhousin.html">http://www.env.go.jp/air/car/noxpm/H23-3kihonhousin.html</a>&gt;</p> <hr/> <p>Important Actions you will take in 2013</p> <p>(2) Equip local governments with monitoring stations for PM2.5 and notify the results to the public.</p>

Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration	
“Improve” Strategy	12 Achieve improved <b>freight transport</b> efficiency, including road, rail, air, and water, through policies, programmes, and projects that modernize the freight vehicle technology, implement fleet control and management systems, and support better logistics and supply chain management	Any action had been taken so far? <input type="checkbox"/> Not yet <input type="checkbox"/> Some (design – piloting) <input checked="" type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in implementation: (1) By transforming inefficient distribution system in the existing facilities to one that is comprehensive, efficient, and environment-friendly, reduction of distribution costs as well as impact on the environment must be accomplished. (2) 20% of domestic CO2 emissions come from transportation sector and there needs to be modal shift from automobile to other means of transportation that emit less exhaust gases such as railways. Due to insufficient network infrastructure of railways and economic efficiency, the modal shift has not been progressed particularly in the mid-range distribution transport. As an alternative, transfer of diesel to CNG vehicles is in progress, though the promotion is inhibited due to the high investment cost for vehicle replacement.

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		<p>Examples of pilot projects and/or policies developed or under development – include URLs where relevant</p> <p>(1) <b><u>Act on Advancement of Integration and Streamlining of Distribution Business:</u></b>  <a href="http://www.mlit.go.jp/seisakutokatsu/freight/butsuryu05300.html">http://www.mlit.go.jp/seisakutokatsu/freight/butsuryu05300.html</a></p> <p>(2) <b><u>Model Program on Low-Carbonization of Mid-Range Distribution Transport (begins in FY2013):</u></b>            Provide funding for implementation of large CNG trucks for transportation operator.</p> <p>Important Actions you will take in 2013</p>		
<b>IV. Cross-cutting strategies</b>				
“Cross-Cutting”	13	Adopt a zero-fatality policy with respect to road, rail, and waterway <b>safety</b> and implement appropriate speed control, traffic calming strategies, strict driver licensing, motor vehicle registration, insurance requirements, and better post-accident	Any action had been taken so far? <input type="checkbox"/> Not yet <input type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input checked="" type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in implementation: There is a need for relief measures for victims of automobile accidents.

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	care oriented to significant reductions in accidents and injuries	<p>Examples of pilot projects and/or policies developed or under development – include URLs where relevant</p> <p><b><u>Automobile Liability Security System:</u></b></p> <p>Under the Automobile Liability Security Law, in order to secure liability of the responsible and relief of the victims on automobile accidents, compulsory automobile liability insurance for all automobile owners is implemented. In addition, voluntary insurance is supplemented by the government for compensation which are not covered by automobile liability insurance involving hit-and-run and uninsured vehicles.</p> <p><a href="http://www.mlit.go.jp/jidosha/anzen/04relief/index.html">http://www.mlit.go.jp/jidosha/anzen/04relief/index.html</a></p> <p>Important Actions you will take in 2013</p>

Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration		
“Cross-Cutting”	15	Establish country-specific, progressive, health-based, cost-effective, and enforceable <b>air quality and noise</b> standards, also taking into account the WHO guidelines, and mandate monitoring and reporting in order to reduce the occurrence of days in which pollutant levels of particulate matter, nitrogen oxides, sulphur oxides, carbon monoxide, and ground-level ozone exceed the national standards or	<p>Any action had been taken so far?</p> <input type="checkbox"/> Not yet <input type="checkbox"/> Some (design – piloting) <input checked="" type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	<p>Challenges faced in implementation:</p> <p>(1) While the status of achievement of EQSs for Air is largely improved, the achievement rate of suspended particulate matter (SPM) is relatively low particularly along the arterial roads in large cities. In addition, particulate matter 2.5 (PM2.5) is added to EQSs in 2009 and its monitoring structure and the network system are still under construction.</p> <p>(2) While the status of achievement of EQSs for Noise is gradually improving, there remain 10% not achieved and particularly 25% near urban highways in large cities.</p>



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	zones where noise levels exceed the national standards, especially with regard to environments near high traffic concentrations	<p>Examples of pilot projects and/or policies developed or under development – include URLs where relevant</p> <p>(1) <b><u>Constant Monitoring of Air Pollution by Local Governments under Air Pollution Control Law:</u></b>  For systematic implementation of measures for air pollution, constant monitoring of local air pollution is conducted by local governments and the data is gathered by the national government. Results are available real-time via online (“Soramame-kun”).  &lt;<a href="http://soramame.taiki.go.jp/">http://soramame.taiki.go.jp/</a>&gt;</p> <p>(2) <b><u>Constant Monitoring of Motor Vehicle Traffic Noise by Local Governments under Noise Regulation Law:</u></b>  For systematic implementation of measures for road traffic noise, constant monitoring of local traffic noise is conducted by local governments at sampling stations. The data is simulated for all residential buildings to see sound propagation paths for evaluation of noise exposure. The data is gathered by the national government and made public annually.  &lt;<a href="http://tenbou.nies.go.jp/gis/monitor/?map_mode=monitoring_map&amp;field=8">http://tenbou.nies.go.jp/gis/monitor/?map_mode=monitoring_map&amp;field=8</a>&gt;</p> <p>Important Actions you will take in 2013</p>

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“Cross-Cutting” Strategy	16 Implement sustainable low-carbon transport initiatives to mitigate the causes of <b>global climate change</b> and to fortify national <b>energy security</b> , and to report the inventory of all greenhouse gases emitted from the transport sector in the National Communication to the UNFCCC	Any action had been taken so far? <input type="checkbox"/> Not yet <input type="checkbox"/> Some (design – piloting) <input checked="" type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in implementation:
		Examples of pilot projects and/or policies developed or under development – include URLs where relevant  Continue on reporting to the UNFCCC Secretariat the annual GHGs Inventory as well as the quadrennial National Communications encompassing national measures. In addition, proceed with preparation and consideration for the biannual Supplementary Information for Annex I Parties. <ul style="list-style-type: none"> <li>● <b><u>The Fifth National Communication:</u></b>  <a href="http://www.env.go.jp/en/earth/cc/framework.html">http://www.env.go.jp/en/earth/cc/framework.html</a>  <a href="http://unfccc.int/national_reports/annex_i_natcom/submitted_natcom/items/4903.php">http://unfccc.int/national_reports/annex_i_natcom/submitted_natcom/items/4903.php</a> </li> <li>● <b><u>The 2010 GHGs Inventory:</u></b>  <a href="http://www.env.go.jp/en/headline/headline.php?serial=1763">http://www.env.go.jp/en/headline/headline.php?serial=1763</a>  <a href="http://unfccc.int/national_reports/annex_i_ghg_inventories/national_inventories_submissions/items/6598.php">http://unfccc.int/national_reports/annex_i_ghg_inventories/national_inventories_submissions/items/6598.php</a> </li> </ul>	
		Important Actions you will take in 2013	

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“Cross-Cutting” Strategy	19 Encourage widespread distribution of <b>information and awareness</b> on sustainable transport to all levels of government and to the public through outreach, promotional campaigns, timely reporting of monitored indicators, and participatory processes	Any action had been taken so far? <input type="checkbox"/> Not yet <input type="checkbox"/> Some (design – piloting) <input checked="" type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in implementation: 20% of domestic CO2 emissions come from transport sector, 80% of which is from automobiles. (1) There is a need for implementation of environment-friendly driving methods (i.e. pressing accelerator softly, drive with moderate acceleration, stop idling, etc.) so as to reduce the CO2 emissions from automobile emissions. (2) Review the mobility and switch to modes of travel with less CO2 emissions such as public transportation, bicycles, and walking, in order to accelerate the prevention of global warming. (3) Urban transport problems are prevalent in local cities, such as increase in use of automobiles as a result of development of suburban residence and thus hollowing of the city center, termination of route bus lines due to reduced number of passengers, and decline in mobility of elderlies and the youth.

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		<p>Examples of pilot projects and/or policies developed or under development – include URLs where relevant</p> <p>(1) <b><u>Establishment and Promotion of “10 Eco-Driving Tips”:</u></b>  Every November is designated as “Eco Drive Promotion Month” and relevant organizations and local governments hold lectures and other promotional events.  <a href="http://www.env.go.jp/air/info/ecodrive_m/">http://www.env.go.jp/air/info/ecodrive_m/</a></p> <p>(2) <b><u>Promotion of “Smart Move”:</u></b>  Promotion of 5 approaches for Smart Move: use of public transportation; recommended use of bicycles and walking; promotion of car sharing, bike sharing, and other means of transportation; innovation in long-distance travel; and recommendation of Eco Drive and eco-friendly cars. These are listed online and introduced at promotional events.  <a href="http://www.challenge25.go.jp/smartmove/">http://www.challenge25.go.jp/smartmove/</a></p> <p>(3) <b><u>Human Development:</u></b>  For training of human resources for leading the local measures for transport environment, implemented training programs and seminars as well as awarded local efforts of excellence.  <a href="http://www.estfukyu.jp/training2012.html">http://www.estfukyu.jp/training2012.html</a>  <a href="http://www.estfukyu.jp/sohatsu2012.html">http://www.estfukyu.jp/sohatsu2012.html</a>  <a href="http://www.estfukyu.jp/forum_kekka8.html">http://www.estfukyu.jp/forum_kekka8.html</a></p> <p>(3) <b><u>Database:</u></b>  Created database of previous EST measures and outcomes for information sharing for interested local communities.  <a href="http://www.mlit.go.jp/sogoseisaku/environment/est_database/index.html">http://www.mlit.go.jp/sogoseisaku/environment/est_database/index.html</a></p>

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“Cross-Cutting” Strategy	20 Develop dedicated and funded <b>institutions</b> that address sustainable transport-land use policies and implementation, including research and development on environmentally-sustainable transport, and promote good <b>governance</b> through implementation of environmental impact assessments for major transport projects	Any action had been taken so far? <input type="checkbox"/> Not yet <input type="checkbox"/> Some (design – piloting) <input checked="" type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in implementation: Further research is needed for reduction of GHGs as well as establishment of EST.
		Examples of pilot projects and/or policies developed or under development – include URLs where relevant The following research is conducted at National Institute for Land and Infrastructure Management, MLIT: 1. <b><u>Reduction of CO2 Emissions in Road Transportation:</u></b> Research on reduction of CO2 emissions when driving and modeling of CO2 emissions processes of traffic sector. < <a href="http://www.nilim.go.jp/lab/dcg/kadai/kadai2.htm">http://www.nilim.go.jp/lab/dcg/kadai/kadai2.htm</a> > 2. <b><u>Implementation and Promotion of Life-Cycle Analysis of Social Capital:</u></b> For technical support on construction of low-carbon and sound-material-cycle sustainable social capital. < <a href="http://www.nilim.go.jp/lab/dcg/lca/top.htm">http://www.nilim.go.jp/lab/dcg/lca/top.htm</a> >	
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