

# **9th Regional EST Forum in Asia, 17-20 November 2015, Kathmandu, Nepal**

## **Intergovernmental Ninth Regional Environmentally Sustainable Transport (EST) Forum in Asia**

**EST for Resiliency – Building Safe, Smart, Low-carbon and Resilient Cities in Asia**

### **Country Report**

**(Draft)**

**<Japan>**

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This country report was prepared by Japan as an input for the Ninth Regional EST Forum in Asia. The views expressed herein do not necessarily reflect the views of the United Nations.

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## **Country EST Report (covering last 5 years / 2010-15)**

**a) Japan**

**b) Ministry of the Environment**

**c) Ministry of Land, Infrastructure, Transport and Tourism**

### **Notes to This Report:**

- 1, The measure are taken currently under multiple involvements and various ways among national, local government and private sector for many challenges confronting at city and regional level**
- 2. The report is composed by the way of introducing each measure individually related to the Ministry of the Environment and the Ministry of Land, Infrastructure, Transport and Tourism to contribute to the goal directly or indirectly.**

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Goal No.	Goal Description	Voluntary Progress/Achievements/Major Initiatives, including any transport master plans, development of special transport corridors, in Implementing the Bangkok 2020 Declaration over last 5 years (2010-2015)		
<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	<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) From the viewpoint of realizing a desirable urban and rural image, promotion of comprehensive and strategic transport policy linked up with transport business and urban development is required.</p> <p>(2) From the perspective of promoting low carbon city development in urban areas where the population and buildings are concentrated in a substantive degree, to create sustainable and vigorous communities is required by promoting the implementation of low carbonization measures for urban structure and transport sector.</p> <p>(3) In the rural areas, by the decrease of passengers carried by the public transport, reduction of the public transport network and downgrade of service level is concerned. Therefore it is necessary to build a compact city that ensures local public transport network in cooperation.</p>

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		<p>Examples of pilot projects and/or policies developed or under development – include URLs where relevant</p> <p>(1) Implementation of formulating comprehensive urban and regional transport strategies and overall support for efforts based on these strategies. 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 centres or along the public transportations. &lt;<a href="http://www.mlit.go.jp/toshi/toshi_gairo_fr_000015.html">http://www.mlit.go.jp/toshi/toshi_gairo_fr_000015.html</a>&gt;</p> <p>(2) Based on the “Low Carbon City Act” the planning of “Low Carbon City Plan ” in terms of promoting low-carbon urban development by intensifying urban function and the use of collaborative public transportation has been drawn up and established by 19 municipal governments currently as of September 2015.</p> <p>(3) Local governments play a central role, in cooperation with the urban development, in order to rebuild the whole area public transport network, amended the “Law on Activation and Regeneration of Local Public Transport in May 2014, sustainable local public transport network to support the efforts to achieve the formation."Regional Public Transport Network Formation Plan", created by the local governments of which currently 55 are established as of September 2015.</p>
		Important actions you will carry out in next 5 years (2015~2020)

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“Avoid” Strategy	2 Achieve <b>mixed-use development</b> and medium-to-high densities along key corridors within cities through appropriate land - use policies and provide people - oriented local access, and actively promote transit-oriented development (TOD) when introducing new public transport infrastructure	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 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	
		Important actions you will carry out in next 5 years (2015~2020)	
“Avoid” Strategy	3 Institute policies, programmes, and projects supporting <b>Information and Communications Technologies</b> (ICT), such as internet access, teleconferencing, and telecommuting, as a means to reduce unneeded travel	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 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	
		Important actions you will carry out in next 5 years (2015~2020)	

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<b>II. Strategies to <u>Shift</u> towards more sustainable modes</b>				
“Shift” Strategy	4	Require <b>Non-Motorized Transport</b> (NMT) components in transport master plans in all major cities and prioritize transport infrastructure investments to NMT, including wide-scale improvements to pedestrian and bicycle facilities, development of facilities for intermodal connectivity, and adoption	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)Although the construction of free passages is based on “Guidelines for the Maintenance and the Management of Free Passages (June 2009)” there are often cases when discussions with the railway business operators run into difficulties to decide the cost allocation. (2)The number of bicycle versus pedestrian accidents, has increased about 30% in these 10 years.

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	of complete street design standards, wherever feasible	<p>Examples of pilot projects and/or policies developed or under development – include URLs where relevant</p> <p>(1) The Promotion of Upgrading Transport Nodes</p> <p>○ For example, maintenances have been performed to the station square of Matsumoto Station, Nagano pref. and Hatsukaichi City Office Station in Hiroshima pref. to devise the line of flow to transfer trolleys and busses.</p> <p>&lt;<a href="http://www.mlit.go.jp/toshi/toshi_gairo_tk_000019.html">http://www.mlit.go.jp/toshi/toshi_gairo_tk_000019.html</a>&gt;</p> <p>○Upgrading Transport Nodes in Shinjuku</p> <p>By creating an artificial ground up in the air over the JR East railway track, constructing buildings that offer functions of a station facility pedestrian square, a taxi berth, a space for people getting on and out of private passenger vehicles and Highway buses related facilities in front of the south exit of Shinjuku Station, we are promoting to upgrade the space in front of the station as a comprehensive transport node.</p> <p>&lt;<a href="http://www.ktr.mlit.go.jp/toukoku/saisei/shinjuku/shinjuku.htm">http://www.ktr.mlit.go.jp/toukoku/saisei/shinjuku/shinjuku.htm</a>&gt;</p> <p>&lt;<a href="http://www.ktr.mlit.go.jp/toukoku/saisei/shinjuku/index.htm">http://www.ktr.mlit.go.jp/toukoku/saisei/shinjuku/index.htm</a>&gt;</p> <p>(2) Measure of Active Use of Bicycle</p> <p>○The development of "Bicycle Parking Attachment Duty Regulations", the development of "Guidelines on Maintenance of Bicycle Parking Facilities" the business support community cycle implementation.</p> <p>○For a purpose to create a safe and comfortable environment for the utilization of bicycles, MLIT and the National Police Agency (NPA) jointly formulated the “Guideline for Creating a Safe &amp; Comfortable Bicycle-Use Environment” in November 2012. Thus support formulation of bicycle network planning and upgrading the spaces for bicycle traffic.</p>

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		Important actions you will carry out in next 5 years (2015~2020)	
“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	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) Promotion of standardization and reciprocal usage of Public Transport IC Cards: Since each operator had different IC Cards, there were troubles not to be able to use the same card as usual at the same time when transferring to public transports of different operators. (2) Local public transport network is falling in decline due to higher dependence on the private owned vehicles in provincial cities.



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		<p>Examples of pilot projects and/or policies developed or under development – include URLs where relevant</p> <p>(1) To enhance the convenience for the users, interoperation as well as expansion of versatility of Public Transport IC Cards for other purposes has been introduced. On 23 March 2013, the interoperation of 10 IC Cards published by JR Companies and major private railways in Tokyo Metropolitan, Nagoya, Osaka, and Kyushu Areas was launched. &lt;<a href="http://www.mlit.go.jp/tetudo/tetudo_tk6_000015.html">http://www.mlit.go.jp/tetudo/tetudo_tk6_000015.html</a>&gt;</p> <p>(2) Public transport usage conversion business toward a low-carbon community For promotion of using public transportation of less CO2 emission than private owned vehicles, we support to improve convenience, reconstruction and the expansion of the public transportation network system, such as the adoption of LRT, BRT, etc.</p>	
		Important actions you will carry out in next 5 years (2015~2020)	
“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	<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>	Challenges faced in implementation:

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	reducing price distortions that directly or indirectly encourage driving, motorization, and sprawl	<p>Examples of pilot projects and/or policies developed or under development – include URLs where relevant</p> <p>(1) Promoting the implementation of TDM: Promoting the implementation of TDM to better utilize transport system by promoting Park &amp; Ride, enhancing the provision of information, to improve transport efficiency and standardize traffic volume in terms of time and space.</p> <p>(2) TDM Operation Test (Relevant to Goal 19): For further implementation of TDM such as promotion of using public transportation as well as improving the efficiency of distribution system in urban areas and financial support was provided to the approved project plans.</p> <p>&lt;<a href="http://www.mlit.go.jp/sogoseisaku/tdm/tdm_.html">http://www.mlit.go.jp/sogoseisaku/tdm/tdm_.html</a>&gt;</p>
		Important actions you will carry out in next 5 years (2015~2020)

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“Shift” Strategy	<p>7</p> <p>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</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) The anxiety of the consignors for the expense burden and transportation quality (i.e. punctuality, damage, etc.) is being an obstacle on promoting modal shift.</p> <p>(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.</p> <p>(3) It is necessary to attempt the reduction of CO2 emission of large sized vehicles which account for one third of CO2 emissions in the transportation sector, by an alternative promotion to environmentally friendly vehicles with fewer CO2 emissions which are too expensive for small and medium sized carriers with limited investment capability to afford who therefore tend to keep on using aging vehicles with lower fuel efficiency.</p> <p>(4) Shinkansen Railway Development Program: This project is aimed at developing the national and regional economy, expanding people’s living sphere.</p>

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		<p>Examples of pilot projects and/or policies developed or under development – include URLs where relevant</p> <p>(1) Promotion of Modal Shift:  <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) Promotion of Low Carbonization of Freight Using Railways (Beginning in 2012):            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) Promotion of Low Carbonization for small and medium operators            In order to reduce CO2 emission of truckload transportation, support small and medium operators to alter aging vehicles to fuel efficient environmentally friendly vehicles.  <a href="http://www.env.go.jp/guide/budget/h27/h27-gaiyo/022.pdf">http://www.env.go.jp/guide/budget/h27/h27-gaiyo/022.pdf</a></p> <p>(4) Hokkaido Shinkansen (between Shinjohjima – Shinakodate-hokuto) is steadily on its way of construction aiming to completion and to start the operation by the end of FY2015, while development of the 5 new construction lines, i.e. Hokkaido Shinkansen (between Shinakodate-hokuto – Sapporo), Hokuriku Shinkansen (between Kanazawa – Suruga) and Kyushu Shinkansen (between Takeo-onnosen – Nagasaki) are steadily being promoted.</p>

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		<p>Important actions you will carry out in next 5 years (2015~2020)</p> <p>(3) Advanced Environmentally-friendly Trucks and Buses Introduction Acceleration Business From FY2016, in cooperation with relevant ministries and agencies, we will support accelerating the introduction of environment-friendly vehicles with highly advanced environmental performance in the early stage to be spread, targeting the businesses that own trucks and buses (EV, FCV, HV, high-speed running CNG) that lead to mass dissemination of advanced environment-friendly vehicles.</p> <p>(4) Under the Nationwide Shinkansen Railway Development Law, Hokkaido Shinkansen (between Shinaomori – Shinhakodate-hokuto) is steadily on its way of construction aiming to completion and to start the operation by the end of FY2015</p>	
<b>III. Strategies to <u>Improve</u> transport practices and technologies</b>			
“Improve” StrategyT	8	<p>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</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>Next-generation automobiles such as Electric Vehicles (EVs) have limitations in implementation due to obstacles such as costs, cruising distance, and insufficient supply of recharging stations.</p> <p>We set a goal to raise the ratio of the next generation vehicles of the total new vehicle sales that was 24% in FY2014 to be 50-70% by FY2030. We need to double the number of such vehicles to be spread.</p>	

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		<p>Examples of pilot projects and/or policies developed or under development – include URLs where relevant</p> <p>(1) The Government aims to capture 50-70% of next-generation automobiles such as FCVs and EVs to total new car sales by 2030, to this end, the Government has taken measures such as tax breaks, subsidy for creating initial demand and supporting R&amp;D.</p> <ul style="list-style-type: none"> <li>• Implementation of Tax Reduction for Automobiles, etc. to support buying new next generation cars.</li> <li>• Toward the diffusion and promotion of next-generation vehicles such as EVs including Ultra Light-weight Vehicles, we will focus to support pioneering measures that are integrated to urban development of the local governments.</li> <li>• Technological development of fuel cell buses, fuel cell forklifts, fuel cell waste collection vehicles and renewable energy derived from fuel supply stations, etc.</li> <li>• In order to further promote greening the Motor Vehicle Taxation and by other taxations according to the environmental performance,</li> </ul> <p>①Reduction of effective environmental burden through the improvement and dissemination of environmental technology</p> <p>②Simultaneously realize reducing the burden for a person who choose to purchase vehicles of superior environmental performance.</p>

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		<p>Important actions you will carry out in next 5 years (2015~2020)</p> <ul style="list-style-type: none"> <li>• FCVs have been introduced sequentially from December 2014. We are planning to introduce fuel cell buses and fuel cell forklifts during FY2016, while fuel cell waste collection vehicles are due to be introduced during FY 2018/</li> <li>• By FY2019, fuel supply stations derived from renewable energy are expected to be equipped (in about 100 locations nationwide).</li> </ul>	
9	<p>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) Taking the atmospheric environment of our country into account, we need to adopt vehicle emissions control. Besides, its regulation should meet the global standard in light of the motor industry being a global industry.</p> <p>(2) Establishment of new fuel efficiency standards for heavy duty vehicles (i.e. buses, trucks, etc.)</p>
“Improve” Strategy		<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) Review of the Automobile Fuel Efficiency Targets (the Top Runner Approach based on the Energy Saving Law) under consideration.</p>	

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		<p>Important actions you will carry out in next 5 years (2015~2020)</p> <p>(1) We are planning to introduce the Worldwide Motorcycle Testing Cycle (WMTC) and Worldwide harmonized Heavy-Duty emission Certification (WHDC) from FY2016. Furthermore from FY 2018, we are planning to introduce Worldwide harmonized Light vehicles Test Procedures (WLTP).</p> <p>(2) We are planning to introduce stricter vehicle efficiency regulations from FY2020.</p>	
“Improve” Strategy	<p>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</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>(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 99% in 2013), there remain polluted spots that are not meeting EQSs within the metropolitan areas along the arterial roads.</p>



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	polluting commercial vehicles being gradually phased-out from the vehicle fleet, as well as testing and 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>            By being registered to the government, taking hold of the actual state of ownership and the authentication of proprietary rights are performed securely. The government confirms the compliance of safety and environmental standards by inspecting each vehicle regularly.  <a href="http://www.mlit.go.jp/jidosha/jidosha_fr6_000007.html">http://www.mlit.go.jp/jidosha/jidosha_fr6_000007.html</a></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 FY2015 and implement measures for emissions from in-use vehicles in order to achieve EQSs at all monitoring stations by FY2020 in collaboration of national and local governments and road administrators.  <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></p> <p>Important actions you will carry out in next 5 years (2015~2020)</p> <p>(2) We set a goal to meet the target of air quality standards pertaining to NO<sub>2</sub> and SPM in every monitoring station by FY2015, of which accomplishment situation and check evaluation of the future approach will be performed in the 2015-2016 year. Additionally, the evaluation method of the target for securing the air quality standard of the target area which is the FY2020 goal will be considered.</p>

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“Improve” Strategy	11 Adopt <b>Intelligent Transportation Systems</b> (ITS), such as electronic fare and road user charging systems, transport control centres, and real-time user information, when applicable	Any action had been taken so far?	Challenges faced in implementation:
		<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)	
		Examples of pilot projects and/or policies developed or under development – include URLs where relevant ETC2.0: By introducing ETC2.0, expansion of new services such as utilizing the routing information gathered through ITS spots, as well as to avoid traffic jams and safety drive supporting services. <a href="http://www.mlit.go.jp/road/ITS/j-html/etc2/index.html">http://www.mlit.go.jp/road/ITS/j-html/etc2/index.html</a>	
		Important actions you will carry out in 2014~2015 Promotion of ETC2.0:	

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“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: By transforming inefficient distribution system of the conventional facilities to those that are comprehensive, efficient, and environment-friendly, reduction of distribution costs as well as impact on the environment must be accomplished.
		Examples of pilot projects and/or policies developed or under development – include URLs where relevant Act on Advancement of Integration and Streamlining of Distribution Business: < <a href="http://www.mlit.go.jp/seisakutokatsu/freight/butsuryu05300.html">http://www.mlit.go.jp/seisakutokatsu/freight/butsuryu05300.html</a> >	
		Important actions you will carry out in next 5 years (2015~2020)	
		<b>IV. <u>Cross-cutting</u> strategies</b>	

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“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 checked="" type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in implementation: Around 50% of all road fatalities, consist of pedestrians and cyclists, which is extremely high comparing to 16-17% in Europe and the United States. .

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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>(1) Measures to Prevent Traffic Accidents</p> <ul style="list-style-type: none"> <li>• In arterial roads in areas with high traffic accident risk according to the data and from the local input, effective measures responding to accident factors are implemented intensively.</li> <li>• In community roads, road design with priority for pedestrians is promoted by controlling traffic volume using Speed Bump etc. as well as improving arterial roads.</li> </ul> <p>(2)Automobile Liability Security System:</p> <ul style="list-style-type: none"> <li>• Under the Automobile Liability Security Act, in order to secure liability of the responsible and relief of the victims on automobile accidents, compulsory automobile liability insurance (CALI) for those who operate automobiles for their benefit is implemented. Carrying CALI is a requirement to complete vehicle registration and renewal inspection.</li> <li>• Japanese government implements indemnity services for victims involved in accidents caused by an uninsured or unidentified automobile and cannot be compensated by CALI, offering the same level compensation. This is financed by a levy that is charged on the premiums of CALI.</li> </ul> <p>&lt;<a href="http://www.mlit.go.jp/jidosha/anzen/04relief/index.html">http://www.mlit.go.jp/jidosha/anzen/04relief/index.html</a>&gt;</p>
		Important actions you will carry out in next 5 years (2015~2020)

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“Cross-Cutting” Strategy	14 Promote monitoring of the <b>health</b> impacts from transport emissions and noise, especially with regard to incidences of asthma, other pulmonary diseases, and heart disease in major cities, assess the economic impacts of air pollution and noise, and devise mitigation strategies, especially aiding sensitive populations near high traffic concentrations	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 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	
		Important actions you will carry out in next 5 years (2015~2020)	
“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	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) Although the status of achievement of EQSs for air has slowly improved, there still remain substances that are not meeting EQSs. (2) While the status of achievement of EQSs for Noise is gradually improving, there remain 7% not achieved and particularly 12% surrounding urban highways in large cities.

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	<p>levels of particulate matter, nitrogen oxides, sulphur oxides, carbon monoxide, and ground-level ozone exceed the national standards or zones where noise levels exceed the national standards, especially with regard to environments near high traffic concentrations</p>	<p>Examples of pilot projects and/or policies developed or under development – include URLs where relevant</p> <p>(1) Constant Monitoring of Air Pollution by Local Governments under Air Pollution Control Law: 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) Constant Monitoring of Motor Vehicle Traffic Noise by Local Governments under Noise Regulation Law: 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 aggregated by the national government and made public annually via the website (note: annually updated). &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 carry out in next 5 years (2015~2020)</p>

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Goal No.	Goal Description	Voluntary Progress/Achievements/Major Initiatives, including any transport master plans, development of special transport corridors, in Implementing the Bangkok 2020 Declaration over last 5 years (2010-2015)	
“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: It is necessary to continuously submit quadrennial National Communications and biannual GHG inventories that reflect the measures and policies of Japan precisely.
		Examples of pilot projects and/or policies developed or under development – include URLs where relevant <b>● <u>The Sixth National Communication:</u></b> < <a href="http://www.env.go.jp/earth/ondanka/nabr.html">http://www.env.go.jp/earth/ondanka/nabr.html</a> > < <a href="http://unfccc.int/national_reports/annex_i_natcom/submitted_natcom/items/7742.php">http://unfccc.int/national_reports/annex_i_natcom/submitted_natcom/items/7742.php</a> >	
		<b>● <u>The 2013 GHGs Inventory:</u></b> < <a href="http://www.env.go.jp/earth/ondanka/ghg/index.html">http://www.env.go.jp/earth/ondanka/ghg/index.html</a> > < <a href="http://unfccc.int/national_reports/annex_i_ghg_inventories/national_inventories_submissions/items/8812.php">http://unfccc.int/national_reports/annex_i_ghg_inventories/national_inventories_submissions/items/8812.php</a> >	
Important actions you will carry out in next 5 years (2015~2020)			



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“Cross-Cutting” Strategy	17 Adopt <b>social equity</b> as a planning and design criteria in the development and implementation of transport initiatives, leading to improved quality, safety and security for all and especially for women, universal accessibility of streets and public transport systems for persons with disabilities and elderly, affordability of transport systems for low-income groups, and up-gradation, modernization and integration of intermediate public transport	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: Mobility issues in an aging society affects not only to the lives of the basic needs of those who live there but also has become an important issue for giving them a meaningful life and creating a vibrant Japanese society .
		Examples of pilot projects and/or policies developed or under development – include URLs where relevant <ul style="list-style-type: none"> <li>• Promotion of making public transport facilities, and buildings barrier-free.</li> <li>• Promotion of prioritized, integral barrier-free design in the region.</li> <li>• Promotion of “psychologically barrier free” society.</li> <li>• Preparation of personnel development programs, promotion of spreading public awareness of displaying baby carriage marks, etc..</li> </ul>	
		Important actions you will carry out in next 5 years (2015~2020)	

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“Cross-Cutting” Strategy	18 Encourage innovative <b>financing</b> mechanisms for sustainable transport infrastructure and operations through measures, such as parking levies, fuel pricing, time-of-day automated road user charging, and public-private partnerships such as land value capture, including consideration of carbon markets, wherever feasible	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 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	
		Important actions you will carry out in next 5 years (2015~2020)	

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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: About 20% CO2 emission inland is derived from the transport sector of which 80% are from automobiles. (1) Review the mobility and switch to modes of travel with less CO2 emissions such as public transportation, bicycles and walking to accelerate the public awareness of smart mobility to challenge preventing the global warming. (2) Implementation of environmentally-friendly driving methods is necessary (i.e. by restraining sudden acceleration, hard braking and idling, etc.) to reduce CO2 and air pollutants emissions. Although the usage of Eco-drive Management Systems are becoming popular among transport operators which show certain positive effects, the dissemination of public awareness among individual drivers still remain a challenge. (3) By the development of suburban housing in provincial cities in Japan, usage of private vehicles increased which consequently lead to hollowing out of the central city areas, abolishment of the public transport due to reduced number of passengers, and <b>decline in mobility of elderlies and the youth.</b> transport

“Cross-Cutting” Strategy

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			the declining mobility of elderlies and the youths.

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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 “Smart Move”:</u></b>            Promotion of 5 approaches for smart move: recommended use of public transportation; encourage using bicycles and to walk; promotion of car sharing, bike sharing and other means of transportation; innovation in long-distance travel and recommendation of Eco-Driving and driving environmentally-friendly cars. These are listed online and introduced at some events.  <a href="http://funtoshare.env.go.jp/smartmove/about/index.html">http://funtoshare.env.go.jp/smartmove/about/index.html</a></p> <p>(2) <b><u>Establishment and Promotion of “10 Eco-Driving Tips”:</u></b>            Every November is designated as “Eco-Driving Promotion Month” and relevant organizations and local governments hold lectures and other promotional events.  <a href="http://www.env.go.jp/air/car/ecodrive/index.html">http://www.env.go.jp/air/car/ecodrive/index.html</a>  <a href="http://funtoshare.env.go.jp/ecodriver/action.html">http://funtoshare.env.go.jp/ecodriver/action.html</a>  <a href="http://www.mlit.go.jp/sogoseisaku/environment/sosei_environment_tk_000013.html">http://www.mlit.go.jp/sogoseisaku/environment/sosei_environment_tk_000013.html</a></p> <p>(3) <b><u>Human Development:</u></b>            In order to train human resources to lead the transportation environmental measures in the region, the training and seminars are implemented. In addition, superior measures of the regions are awarded.  <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>(4) Database:            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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		For regions that voluntarily work on realizing EST, we constructed a database to show the current information of the EST approach outcomes. <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>		
		Important actions you will carry out in next 5 years (2015~2020)		
“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	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.

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	<p><b>governance</b> through implementation of environmental impact assessments for major transport projects</p>	<p>Examples of pilot projects and/or policies developed or under development – include URLs where relevant</p> <p>The following research is conducted at National Institute for Land and Infrastructure Management, MLIT:</p> <p>(1) Research for the Reduction of CO2 Emissions in Road Transportation: Research on reduction of CO2 emission when driving and CO2 emission process models of the transport sector. &lt;<a href="http://www.nilim.go.jp/lab/dcg/kadai/kadai2.htm">http://www.nilim.go.jp/lab/dcg/kadai/kadai2.htm</a>&gt;</p> <p>(2) Research of Implementation and Promotion of Life-Cycle Assessment of Social Capital: To assist low-carbon, sound material-cycle, sustainable social capital development technically, we conduct research for practical use and spread of social capital LCA (Life Cycle Assessment). &lt;<a href="http://www.nilim.go.jp/lab/dcg/lca/top.htm">http://www.nilim.go.jp/lab/dcg/lca/top.htm</a>&gt;</p> <hr/> <p>Important actions you will carry out in next 5 years (2015~2020)</p> <p>(1) Developing the way of quantitative assessment for effect of CO2 reduction by monitoring the CO2 emissions change and improvement of road traffic using measured data of each vehicle.</p> <p>(2) Saving labour of the calculation method and formulating an Application Manual when comparing to predict the CO2 emissions by construction project including collection of raw material, manufacturing, transportation at the planning phase</p>