Intergovernmental Twelfth Regional Environmentally

Sustainable Transport (EST) Forum in Asia

28-31 October 2019 Hanoi, Viet Nam

Achieving Smart and Resilient Cities Through Low-Carbon and Intelligent Transport System

Country Report

(Draft)

<Japan>

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

Country EST Report (covering from Mongolia

EST Forum 2018 to Viet Nam EST Forum 2019)

- a) Japan
- b) Ministry of the Environment
- c) Ministry of Land, Infrastructure, Transport and Tourism
- d) Reporting period: 2018-2019

With the objective of demonstrating the renewed interest and commitment of Asian countries towards realizing a promising decade (2010-2020) of sustainable actions and measures for achieving safe, secure, affordable, efficient, and people and environment-friendly transport in rapidly urbanizing Asia, the participating countries of the Fifth Regional EST Forum in Asia discussed and agreed on a goodwill and voluntary declaration - "Bangkok Declaration for 2020 – Sustainable Transport Goals for 2010-2020." At the Seventh Regional EST Forum held in Bali in 2013, the participating countries adopted the "Bali Declaration on Vision Three Zeros- Zero Congestion, Zero Pollution and Zero Accidents towards Next Generation Transport Systems in Asia" reinforcing the implementation of Bangkok 2020 Declaration (2010-2020) with emphasis to zero tolerance towards congestion, pollution and road accidents in the transport policy, planning and development. Bali Vision Three Zeros calls for a paradigm shift in thinking on the role of motorization and mobility in realizing sustainable development in Asia. Subsequently, EST member countries adopted the "Colombo Declaration" for the promotion of next generation low-carbon transport solutions in Asia.

Each member country of the Forum is kindly requested to prepare a consolidated country report (by 15 September 2019) reflecting how EST trends and developments have taken place in the country from Mongolia EST Forum 2018 to Viet Nam EST Forum 2019 around the Goals of the Bangkok 2020 Declaration as an interim assessment following the below format. You are most welcome to add extra pages or sections to share any major on-going initiatives or future plans, including mega transport projects, transport master plans, special transport corridor development, expansion of railways and rail route developments, etc.

The objective of the Country Reporting is to share among international community the voluntary progress/achievements/initiatives include various challenges faced by countries in implementing each of the underlined goals of the Bangkok 2020 Declaration to realize the Bali Vision Three Zeros - Zero Congestion, Zero Pollution, and Zero Accidents towards Next Generation Transport Systems in Asia. This would help development agencies, donors, development banks in assessing the sustainable transport needs and challenges to better devise their existing as well as future capacity building programs and operations in sustainable transport areas.

Timeline for submission by 15 September 2019.

by email to: est@uncrd.or.jp

Go	al	Goal Description	Voluntary Progress/Achievements/Ma	ajor Initiatives, including any transport master plans,
No	•		development of special transport corr	ridors, in Implementing the Bangkok 2020 Declaration from
			Mongolia EST Forum 2018 to Viet Nan	n EST Forum 2019.
I. S	trate	gies to <u>Avoid</u> unnecessary travel and	reduce trip distances	
	1	Formally integrate land-use and	Any action had been taken so far?	Barriers/Challenges faced in implementation:
		transport planning processes and	☐ Not yet	From the viewpoint of realizing a desirable urban and rural
		related institutional arrangements at	☐ Some progress (design – piloting)	image, promotion of comprehensive and strategic transport
		the local, regional, and national	■ Largely in Place	policy, integrated transport business with urban development
		levels	☐ Fully Completed	is required.
			(Please Check the box)	From the perspective of promoting low carbon city
>				development in urban areas where the population and
Strategy				buildings are concentrated to a certain extent, it is required to
				create sustainable and vigorous city design by low
"Avoid"				carbonization measures for urban structure and transport
, Ave				sector.
,				In the regional areas, the decrease of the public transport
				passengers might cause a concern about shrinkage of the
				public transport network and degrade of service level.
				Therefore it is necessary to ensure local public transport
				network in cooperation with planning a compact city in the
				region.

Please add few specific examples of initiatives, pilot projects, major policies or programmes developed or under development (or) any major investment decisions. Please attach reports or include websites where relevant.

Urban and regional comprehensive transport strategy

Implemented to support planning the comprehensive urban and regional transport strategies and the overall measures based on these strategies. For instance, in the City of Toyama, city design with integration of land-use and transport is being implemented centering around public transportation such as inducing settlement to the center of the city or along the line of public transportation.

http://www.mlit.go.jp/toshi/toshi_gairo_fr_000015.html

Based on the "Low Carbon City Act", "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 established by 24 municipal governments currently as of March 2019.

Local governments, in order to rebuild the region-wide public transport network, in cooperation with the urban development, have amended the "Law on Activation and Regeneration of Local Public Transport" in August 2014, to support the efforts in formulating sustainable local public transport network "Regional Public Transport Network Formation Plan". As of June 2019, 519 local governments have currently established the plan.

http://www.mlit.go.jp/sogoseisaku/transport/sosei_transport_tk_000055.html http://www.mlit.go.jp/sogoseisaku/transport/sosei_transport_tk_000058.html

Examples of important actions that you plan to carry out in next year (2019~2020)

		What importance does this particular EST Goal attach in your country's on-going efforts in achieving the Sustainable Development Goals (SDGs) under the 2030 Agenda for Sustainable Development? Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable		
"Avoid" Strategy	Achieve mixed-use development 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	□ Not yet □ Some progress (design – piloting) □ Largely in Place □ Fully Completed (Please Check the box) Please add few specific examples of developed or under development (or) include websites where relevant. Examples of important actions that you What importance does this particular	initiatives, pilot projects, major policies or programmes any major investment decisions. Please attach reports or plan to carry out in next year (2019~2020) EST Goal attach in your country's on-going efforts in the Goals (SDGs) under the 2030 Agenda for Sustainable	

	3	Institute policies, programmes, and	Any action had been taken so far?	Barriers/Challenges faced in implementation:		
		projects supporting Information	☐ Not yet			
		and Communications Technologies	☐ Some progress (design – piloting)			
		(ICT), such as internet access,	☐ Largely in Place			
		teleconferencing, and	☐ Fully Completed			
		telecommuting, as a means to reduce	(Please Check the box)			
"Avoid" Strategy		unneeded travel	Please add few specific examples of initiatives, pilot projects, major policies or progra			
Stra			developed or under development (or) any major investment decisions. Please attach reports or			
id"			include websites where relevant.			
'Ave						
,			Examples of important actions that you plan to carry out in next year (2019~2020)			
			What importance does this particular	EST Goal attach in your country's on-going efforts in		
			achieving the Sustainable Developmen	t Goals (SDGs) under the 2030 Agenda for Sustainable		
			Development?			
II. S	Strate	egies to Shift towards more sustainab	le modes			
	4	Require Non-Motorized Transport	Any action had been taken so far?	Barriers/Challenges faced in implementation:		
ξĝ		(NMT) components in transport	□ Not yet	Although the construction of free passages is based on		
rate		master plans in all major cities and	\square Some progress (design – piloting)	"Guidelines for the Maintenance and the Management of Free		
." St		prioritize transport infrastructure	■ Largely in Place	Passages (June 2009)", there are often cases where discussions		
"Shift" Strategy		investments to NMT, including	☐ Fully Completed	with the railway business operators run into difficulties to		
3,		wide-scale improvements to	(Please Check the box)	decide the cost allocation.		
		pedestrian and bicycle facilities,				

development of facilities for	
intermodal connectivity, and	Please add few specific examples of initiatives, pilot projects, major policies or programmes
adoption of complete street design	developed or under development (or) any major investment decisions. Please attach reports or
standards, wherever feasible	include websites where relevant.
	Implementation of communicate transportation methods for transfer & transit facilities maintenance (The
	Promotion of Upgrading Transport Nodes)
	http://www.mlit.go.jp/road/sisaku/tdm/Top03-02-01.html
	About the promotion of transportation knotting point maintenance etc.
	The station square of Matsumoto Station, Nagano pref. and Hatsukaichi City Office Station in Hiroshima
	pref. devise the guideline for passenger flow in terms of interconnection between trolley and bus.
	BUSTA Shinjuku (Shinjuku station South exit transportation terminal)
	-It had developed in coordination between public (road administrator of National Highway No 20) and
	private(terminal business) sectors.
	And, 19 scattered expressway bus stops are aggregated in the terminal that is integrated with the railway
	station.
	https://www.mlit.go.jp/report/press/road01_hh_000884.html
	Active Use Measures of Bicycle
	- Formulating "Bicycle Parking Attachment Standard Obligation Regulations", and "Guidelines on
	Maintenance of Bicycle Parking Facilities", and supporting the promotion of usage patterns of
	bicycle-sharing system has been in place.
	http://www.mlit.go.jp/toshi/crd_gairo_tk_000015.html
	- Formulating "Bicycle Utilization Promotion Plan".
	http://www.mlit.go.jp/report/press/road01_hh_000987.html

Examples of imp			Examples of important actions that you	plan to carry out in next year (2019~2020)
Continue to develop facilit		Continue to develop facilities such as static	on square, pedestrian deck, free passage and public transport.	
			Plan" will be formulated (scheduled) to put the utilization of bicycles.	le Utilization Promotion Act, the "Bicycle Utilization Promotion promote comprehensive and systematic measures for promoting rdance with "Bicycle Utilization Promotion Plan".
			•	r EST Goal attach in your country's on-going efforts in
				nt Goals (SDGs) under the 2030 Agenda for Sustainable
			Development?	
			•	promote inclusive and sustainable industrialization and foster
			innovation	
			Goal 11. Make cities and human settlemen	its inclusive, safe, resilient and sustainable
	5	Improve public transport services	Any action had been taken so far?	Barriers/Challenges faced in implementation:
		including high quality and	☐ Not yet	Local public transport network is falling in decline due to
gy		affordable services on dedicated	☐ Some progress (design – piloting)	higher dependence on the private owned vehicles in provincial
"Shift" Strategy		infrastructure along major arterial	■ Largely in Place	cities.
l', SI		corridors in the city and connect	☐ Fully Completed	Promotion of standardization and reciprocal usage of Public
 Shiff		with feeder services into residential	(Please Check the box)	Transport IC Cards: Since each operator had different IC
3,1		communities		Cards, there were troubles not to be able to use the same card
				as usual at the same time when transferring to public or private
				transports by different operators.

Please add few specific examples of initiatives, pilot projects, major policies or programmes developed or under development (or) any major investment decisions. Please attach reports or include website Public transport usage conversion business toward a low-carbon community

Promotion of installation and usage of LRT/BRT 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.

Standardization on IC Cards (the end of 2014)

To enhance the convenience for the users' interoperation as well as expanding versatility of Public Transport, IC Cards was improved to make it possible the interoperation of 10 IC Cards issued by JR Companies and other major private railways in Tokyo Metropolitan, Nagoya, Osaka, and Kyushu Areas and started operation on 23rd March 2013.

http://www.mlit.go.jp/tetudo/tetudo_tk6_000015.html

Examples of important actions that you plan to carry out in next year (2019~2020)

What importance does this particular EST Goal attach in your country's on-going efforts in achieving the Sustainable Development Goals (SDGs) under the 2030 Agenda for Sustainable Development?

Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable

	6	Reduce the urban transport mode	Any action had been taken so far?	Barriers/Challenges faced in implementation:
		share of private motorized vehicles	□ Not yet	
		through Transportation Demand	☐ Some progress (design – piloting)	
		Management (TDM) measures,	☐ Largely in Place	
		including pricing measures that	☐ Fully Completed	
		integrate congestion, safety, and	(Please Check the box)	
t" Strategy		pollution costs, aimed at gradually	Please add few specific examples of	initiatives, pilot projects, major policies or programmes
		reducing price distortions that		any major investment decisions. Please attach reports or
		directly or indirectly encourage	include websites where relevant.	only mayor mivesoment decisions from a construction of
"Shift"		driving, motorization, and sprawl		
			Examples of important actions that you	plan to carry out in next year (2019~2020)
			•	EST Goal attach in your country's on-going efforts in
			•	t Goals (SDGs) under the 2030 Agenda for Sustainable
			Development?	

	7	Achieve significant shifts to more	Any action had been taken so far?	Barriers/Challenges faced in implementation:
		sustainable modes of inter-city	☐ Not yet	In promoting modal shift, the consignors have worries about
		passenger and goods transport,	☐ Some progress (design – piloting)	the expense burden and transportation quality (i.e. punctuality,
		including priority for high-quality	■ Largely in Place	damage, etc.), so that the coordination by the parties concerned
		long distance bus, inland water	☐ Fully Completed	such as logistics company, shipper should be required for the
		transport, high-speed rail over car	(Please Check the box)	solution.
gy		and air passenger travel, and priority		For promotion of modal shift from trucks to railways, the
Strategy		for train and barge freight over truck		introduction of 31ft container on trains (the same size as 10t
"St		and air freight by building		trucks often used for long distance freight) would be effective.
"Shift"		supporting infrastructure such as dry		But a large investment in equipment installation could be an
S,		inland ports		obstacle to expanding the implementation.
				To reduce CO2 emission of large sized vehicles which account
				for one third of CO2 emissions in the transportation sector, it
				is necessary to carry out the introduction of low carbonization
				for large sized vehicles.
				Developing the national economy, expanding people's living
				sphere, and local development permanently are required.

Please add few specific examples of initiatives, pilot projects, major policies or programmes developed or under development (or) any major investment decisions. Please attach reports or 12th Regional EST Forum in Asia. 28-31 October 29 specific examples of initiatives, pilot projects, major policies or programmes developed or under development (or) any major investment decisions. Please attach reports or include websites where relevant.

Modal shift for promotion project etc.

Support for initiatives such as modal shift implemented by a council consisting of shippers and logistics http://www.mlit.go.jp/seisakutokatsu/freight/ms_subsidy.html companies.

Promotion of CO2 reduction measures in logistics sector

In low carbonization in total logistics system, including modal shift to shippers, the introduction of facility or technology to constrain CO2 emission originated from energy consumption in logistics sector has been supported. http://www.env.go.jp/press/106678.html

http://www.env.go.jp/press/106678.html

Low carbon promotion planning, making use of railway(2012 through 2016) http://www.env.go.jp/press/press.php?serial=15151

Promotion of low carbonized large-sized vehicles

Accelerate the diffusion promotion of low-carbon type diesel truck

In order to reduce CO2 emissions in the large-sized Automobile field where diffusion of next-generation vehicles is more difficult than passenger cars, from fiscal 2016, for the transportation industry with a long mileage and high transportation efficiency, the introduction of low-carbon type diesel truck with advanced fuel efficiency performance for small and medium-sized enterprises with poor capital are intensively supported.

http://www.env.go.jp/earth/energy-taisaku/tokubetsu-kaikei/h30/h30_jigyogaiyo/037.pdf

Expediting introduction of advanced environmental trucks and busses

Supporting to expedite introduction of advanced ecological vehicles (EV, FCV, HV, High-Velocity CNG), still at the initial stage of spread, in conjunction with related ministries, could bring about a mass prevail of 11/34 advanced ecological vehicle in large sized vehicles sector which has been far behind passenger cars progress.

http://www.env.go.jp/guide/budget/h28/h28-gaiyo-2/025.pdf

- Shinkansen (super express train) networkShinkansen (super express train) network

Currently, the construction of three sections, Hokkaido Shinkansen (between Shin-Hakodate-Hokuto and Sapporo), Hokuriku Shinkansen (between Kanazawa and Tsuruga) and Kyushu Shinkansen (between Takeo-Onsen and Nagasaki), are steadily progressing.

http://www.mlit.go.jp/tetudo/tetudo_fr1_000041.html

Examples of important actions that you plan to carry out in next year (2019~2020)

Promotion of motorization of large-sized vehicles

Accelerating the introduction of electrified trucks and buses

It is important to reduce CO2 emissions from trucks and buses, which accounts for 30% of CO2 emissions in the transportation sector, in order to achieve the global warming countermeasure target. Not only are electric powered trucks and buses expensive compared to diesel trucks, but the fact that charging facilities for trucks and buses are not enough, and it impede popularization.

We also aid in the development of charging infrastructure indispensable for the spread of electrified trucks and buses, and we will start a project to support accelerating the introduction in the early stage of diffusion will be started (on budget request).

- Shinkansen (super express train) network

Currently, the construction of three sections, Hokkaido Shinkansen (between Shin-Hakodate-Hokuto and Sapporo), Hokuriku Shinkansen (between Kanazawa and Tsuruga) and Kyushu Shinkansen (between Takeo-Onsen and Nagasaki), are steadily progressing.

http://www.mlit.go.jp/tetudo/tetudo_fr1_000041.html

			What importance does this particular EST Goal attach in your country's on-going efforts in		
			achieving the Sustainable Development Goals (SDGs) under the 2030 Agenda for Sustainable		
			Development?		
			Goal 7. Ensure access to affordable, reliable	le, sustainable and modern energy for all	
III.	Strat	tegies to <u>Improve</u> transport practices	and technologies		
	8	Diversify towards more sustainable	Any action had been taken so far?	Barriers/Challenges faced in implementation:	
		transport fuels and technologies,	☐ Not yet	Next-generation automobiles such as Electric Vehicles (EVs)	
gs		including greater market penetration	☐ Some progress (design – piloting)	have limitations in implementation due to obstacles such as	
Strategy		of options such as vehicles operating	■ Largely in Place	costs, cruising distance, and insufficient supply of recharging	
"St		on electricity generated from	☐ Fully Completed	stations.	
ove		renewable sources, hybrid	(Please Check the box)	We set a goal for the ratio of the next generation vehicles of	
"Improve"		technology, and natural gas		the total new vehicle sales to be 50-70% by FY2030, which	
",				requires the raise from the existing of 35.6% in FY2016,	
				which implies the double increase in the ratio.	

Please add few specific examples of initiatives, pilot projects, major policies or programmes developed or under development (or) any major investment decisions. Please attach reports or include websites where relevant.

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&D.

Implementation of Tax Reduction for Automobiles, etc. to support buying new next generation cars.

Toward the diffusion and promotion of next-generation vehicles such as EVs including Super Light-weight Vehicles, we will focus on supporting pioneer measures that are integrated into urban development of the local governments.

Technological development of fuel cell forklifts, fuel cell waste collection vehicles and fuel supply stations derived from renewable energy etc.

In order to further promote greening the Motor Vehicle Taxation and by other taxations according to the environmental performance,

Reduction of effective environmental burden through the improvement and dissemination of environmental technology

Simultaneously realize reducing the burden for a person who choose to purchase vehicles with superior environmental performance.

Examples of important actions that you plan to carry out in next year (2019~2020)

We will continue to specifically subsidize the introduction of hydrogen stations derived from renewable energy.

Implement introduction assistance to disseminate and promote fuel cell buses and fuel cell forklifts.

			What importance does this particular EST Goal attach in your country's on-going efforts in achieving the Sustainable Development Goals (SDGs) under the 2030 Agenda for Sustainable Development? Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all	
			Goal 7. Elisure access to affordable, feliable	ie, sustainable and modern energy for an
"Improve" Strategy	9	Set progressive, appropriate, and affordable standards for fuel quality, fuel efficiency, and tailpipe emissions for all vehicle types, including new and in-use vehicles	☐ Not yet ☐ Some progress (design – piloting)	Barriers/Challenges faced in implementation: Based on the fact that CO2 emission from vehicles accounts for 15% of our total emission, by setting up vehicle fuel standard, it is required to promote improvement of fuel efficiency. From the viewpoint of further reducing CO2 emissions, it is important to formulate the next fuel economy standard for passenger vehicles. Taking our atmospheric environment into account, we need to regulate vehicle emissions, while our regulations would harmonize for UN regulations. It is important to promote international harmonization as the automotive industry is a global industry.

Please add few specific examples of initiatives, pilot projects, major policies or programmes developed or under development (or) any major investment decisions. Please attach reports or include websites where relevant.

The goal for vehicle fuel cost standard

http://www.mlit.go.jp/jidosha/jidosha_fr10_000005.html

We have participated in the United Nations Economic Commission for Europe (UN-ECE), World Forum for Harmonization of Vehicle Regulations (WP29) and contributed to the global harmonization of vehicle emissions regulations.

Examples of important actions that you plan to carry out in next year (2019~2020)

Formulation of passenger car fuel efficiency standard for 2030

From 2020, the regulation value for emissions considering the UN regulations will be applied to two-wheeled vehicles. From 2020, the regulation value for emissions considering the UN regulations will be applied to two-wheeled vehicles.

What importance does this particular EST Goal attach in your country's on-going efforts in achieving the Sustainable Development Goals (SDGs) under the 2030 Agenda for Sustainable Development?

Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable

	10	Establish effective vehicle testing	Any action had been taken so far?	Barriers/Challenges faced in implementation:
		and compliance regimes, including	☐ Not yet	There is no method for proper maintenance and inspection of
		formal vehicle registration systems	☐ Some progress (design – piloting)	electronic devices which can handle the safety equipment and
gy		and appropriate periodic vehicle	■ Largely in Place	exhaust gas control.
Strategy		inspection and maintenance (I/M)	☐ Fully Completed	
"St		requirements, with particular	(Please Check the box)	EQSs for Air at Roadside
ove		emphasis on commercial vehicles, to		Although achievement rates of Environmental
"Improve"		enforce progressive emission and		Quality Standards (EQSs) for Air at roadside nitrogen dioxide
] ,		safety standards, resulting in older		(NO2) and Suspended Particulate Matter (SPM) have largely
		polluting commercial vehicles being		increased (i.e. NO2 improved from 80% in 2000 to 99.5% in
		gradually phased-out from the		2017), there remain polluted spots that are not meeting EQSs
		vehicle fleet, as well as testing and		within the metropolitan areas along the arterial roads.

compliance regimes for vessels	Please add few specific examples of initiatives, pilot projects, major policies or programmes
	developed or under development (or) any major investment decisions. Please attach reports or
	include websites where relevant.
	Vehicle Registration and Inspection system
	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 inspects each vehicle periodically according
	to technical regulations and checks to meet safety and emission standards.
	http://www.mlit.go.jp/jidosha/jidosha_fr6_000007.html
	Practices based on Act on automobile NOx • PM
	Based on the strict regulations (Act on automobile NOx · PM), which prohibit the registration of
	old-fashioned trucks and buses (not pass vehicle inspections), we are trying to promote substitution of old
	vehicles, and improve the atmospheric environment.
	Furthermore, in compliance with "National Basic Policy for Total Reduction" (Mar. 2011). 8 prefectures
	located in metropolitan area have made total reduction plan to secure environment standard by 2020 in
	their regions and progress in the restriction for vehicles in use, in cooperation with the national
	government, local communities and road administrators.
	http://www.env.go.jp/air/car/noxpm/H23-3kihonhousin.htm
	Examples of important actions that you plan to carry out in next year (2019~2020)
	Method for maintenance and periodical inspection of electronic devices/systems are under consideration.
	Details of systems for maintenance and inspection of electronic devices are under consideration
	Roadside air environment measures
	Take necessary measures to secure environmental standards in the countermeasures area for the target of
	2020.

			What importance does this particular EST Goal attach in your country's on-going efforts in achieving the Sustainable Development Goals (SDGs) under the 2030 Agenda for Sustainable Development? Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable		
	11	Adopt Intelligent Transportation	Any action had been taken so far?	Barriers/Challenges faced in implementation:	
		Systems (ITS), such as electronic fare and road user charging systems,	☐ Not yet☐ Some progress (design – piloting)		
		transport control centres, and	■ Largely in Place		
		real-time user information, when	☐ Fully Completed		
		applicable	(Please Check the box)		
Strategy			Please add few specific examples of	initiatives, pilot projects, major policies or programmes	
Stra			developed or under development (or) any major investment decisions. Please attach reports or		
ve"			include websites where relevant.		
"Improve"			ETC2.0		
			In addition to the existing services such	h as the provision of the congested routes and road safety	
			information, new services has also been	inplemented by using vehicle running records and developing	
			roadside devices.		
			http://www.mlit.go.jp/road/ITS/j-html/pdf/ iyou.pdf	etc2gaiyou.pdf <u>http://www.mlit.go.jp/road/ITS/j-html/pdf/etc2ga</u>	

			Examples of important actions that you	plan to carry out in next year (2019~2020)
			Implementation of operation management	for all bus and truck companies using specified probe data of
			ETC 2.0, and offering delay information to	users at the bus terminal.
			Utilizing data information through public	c-private partnerships, so as to promote the creation of new
			services among the private sectors.	
			Sharing data owned both by the public an	d by the private sectors has been promoted by applying a wide
			range of measures, which are management	for arranging bus and freight transportation, for providing users
			with delay information at the bus terminals	and for creating new business from the private sectors.
			What importance does this particular	· EST Goal attach in your country's on-going efforts in
			achieving the Sustainable Developmen	t Goals (SDGs) under the 2030 Agenda for Sustainable
			Development?	
			Goal 9. Build resilient infrastructure, p.	romote inclusive and sustainable industrialization and foster
			innovation	
			Goal 11. Make cities and human settlemen	ts inclusive, safe, resilient and sustainable
gy	12	Achieve improved freight transport	Any action had been taken so far?	Barriers/Challenges faced in implementation:
Strategy		efficiency, including road, rail, air,	☐ Not yet	By transforming inefficient distribution system of the
"Stı		and water, through policies,	☐ Some progress (design – piloting)	conventional facilities to those that are comprehensive,
"Improve"		programmes, and projects that	■ Largely in Place	efficient, and environmental friendly, reduction of distribution
mpr		modernize the freight vehicle	☐ Fully Completed	costs as well as impact on the environment must be required.
		technology, implement fleet control	(Please Check the box)	

and management systems, and support better logistics and supply chain management Please add few specific examples of initiatives, pilot projects, major policies or programmes developed or under development (or) any major investment decisions. Please attach reports or include websites where relevant.

Implementation of providing support for projects that contribute to reduction of environmental load and labor-saving by integration and efficiency improvement through collaboration among businesses conducting multiple distribution businesses

Act on Advancement of Integration and Streamlining of Distribution Business http://www.mlit.go.jp/seisakutokatsu/freight/bukkouhou.html

Revision of the above Act

http://www.mlit.go.jp/report/press/tokatsu01_hh_000248.html

Examples of important actions that you plan to carry out in next year (2019~2020)

What importance does this particular EST Goal attach in your country's on-going efforts in achieving the Sustainable Development Goals (SDGs) under the 2030 Agenda for Sustainable Development?

Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable

IV. <u>Cross-cutting</u> strategies

,	13	Adopt a zero-fatality policy with	Any action had been taken so far?	Barriers/Challenges faced in implementation: Amongst G7
Jutting,		respect to road, rail, and waterway	□ Not yet	countries, Japan has the highest number of pedestrians and
Cutt		safety and implement appropriate	\square Some progress (design – piloting)	bicycle drivers fatalities, and a half of them come across the
Cross-C		speed control, traffic calming	■ Largely in Place	accidents within 500m away from their homes.
		strategies, strict driver licensing,	☐ Fully Completed	
•		motor vehicle registration, insurance	(Please Check the box	

	requirements, and better	Please add few specific examples of initiatives, pilot projects, major policies or programmes
	post-accident care oriented to	developed or under development (or) any major investment decisions. Please attach reports or
	significant reductions in accidents	include websites where relevant.
	and injuries	Measures to Prevent Traffic Accidents
		On 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.
		http://www.mlit.go.jp/road/road/traffic/sesaku/torikumi.html#2-1
		On community roads, by effectively and efficiently arranging Speed Bumps, etc., we are trying to
		control speed reduction and entry suppression of through-traffic in order to promote the creation of
		pedestrian-bicycle zone space.
		http://www.mlit.go.jp/road/road/traffic/sesaku/torikumi.html#2-2
		Automobile Accident Compensation Security System
		According to the Automobile Accident Compensation Security Act, in case of a car accident, all the
		automobile owners' service operators are obliged to take out automobile liability insurance for insuring
		compensation capability of damages and reliable relief for victims. To guarantee the insurance
		enforceability, the cooperative relationship with the vehicle inspection / registration system are
		interrelated.
		O In order to help victims of accidents caused by hit-and-run and/or uninsured vehicles that are not
		covered by automobile liability insurance, government is implementing a government security program
		that directly compensates for the damages. Business funds are levied as an included number of insurance
		premiums.
		http://www.mlit.go.jp/jidosha/anzen/04relief/index.html

			Identifying potential hazards such as eximplement effective measures by means of What importance does this particular achieving the Sustainable Development Development? Goal 3. Ensure healthy lives and promote versions are such as eximplement achieving the Sustainable Development?	EST Goal attach in your country's on-going efforts in at Goals (SDGs) under the 2030 Agenda for Sustainable well-being for all at all ages
"Cross-Cutting" Strategy	14	Promote monitoring of the health impacts from transport emissions and noise, especially with regard to incidences of asthma, other pulmonary diseases, and heart disease in major cities, assess the	Any action had been taken so far? ☐ Not yet ☐ Some progress (design – piloting) ☐ Largely in Place ☐ Fully Completed (Please Check the box)	Barriers/Challenges faced in implementation:
		economic impacts of air pollution and noise, and devise mitigation strategies, especially aiding sensitive populations near high traffic concentrations	developed or under development (or) include websites where relevant.	initiatives, pilot projects, major policies or programmes any major investment decisions. Please attach reports or plan to carry out in next year (2019~2020)
				EST Goal attach in your country's on-going efforts in at Goals (SDGs) under the 2030 Agenda for Sustainable

	15	Establish country-specific,	Any action had been taken so far?	Barriers/Challenges faced in implementation:
		progressive, health-based,	□ Not yet	Although the status of achievement of EQSs for air has slowly
		cost-effective, and enforceable air	☐ Some progress (design – piloting)	improved, there still remain substances that are not meeting
		quality and noise standards, also	■ Largely in Place	EQSs.
		taking into account the WHO	☐ Fully Completed	While the status of achievement of EQSs for Noise is
		guidelines, and mandate monitoring	(Please Check the box)	gradually improving, 6% has not yet achieved it and around
		and reporting in order to reduce the		10%, particularly on arterial roads in large cities.
		occurrence of days in which	Please add few specific examples of	initiatives, pilot projects, major policies or programmes
		pollutant levels of particulate matter,	developed or under development (or)	any major investment decisions. Please attach reports or
"ğı		nitrogen oxides, sulphur oxides,	include websites where relevant.	
"Cross-Cutting"		carbon monoxide, and ground-level	Constant Monitoring of Air Pollution by Lo	ocal Governments under Air Pollution Control Law:
S-C		ozone exceed the national standards	For systematic implementation of measure	es for air pollution, constant monitoring of local air pollution is
ros		or zones where noise levels exceed	conducted by local governments and the	e data is gathered by the national government. Results are
		the national standards, especially	available at real-time via online ("Soramar	me-kun").
		with regard to environments near	http://soramame.taiki.go.jp/	
		high traffic concentrations		
			Constant Monitoring of Motor Vehicle Tra	ffic Noise by Local Governments under Noise Regulation Law:
			For systematic implementation of measure	s for road traffic noise, constant monitoring of local traffic noise
			is conducted by local governments at samp	pling stations. The data is simulated for all residential buildings
			to see sound propagation paths for evalua-	ation of noise exposure. The data is aggregated by the national
			government and made public annually via	the website (note: annually updated).
			http://tenbou.nies.go.jp/gis/monitor/?map_	mode=monitoring_map&field=8

			Examples of important actions that you	plan to carry out in next year (2019~2020)	
What importance does this particular EST Goal attach in your coachieving the Sustainable Development Goals (SDGs) under the 203 Development?		FST Coal attach in your country's on-going afforts in			
		t Goals (SDGs) under the 2030 Agenda for Sustamable			
			_		
			-	romote inclusive and sustainable industrialization and foster	
			innovation		
			Goal 11. Make cities and human settlement	ts inclusive, safe, resilient and sustainable	
	16	Implement sustainable low-carbon	Any action had been taken so far?	Barriers/Challenges faced in implementation:	
		transport initiatives to mitigate the	☐ Not yet		
		causes of global climate change and	☐ Some progress (design – piloting)		
		to fortify national energy security,	■ Largely in Place		
		and to report the inventory of all	☐ Fully Completed		
SS S		greenhouse gases emitted from the	(Please Check the box)		
rate		transport sector in the National	Please add few specific examples of	initiatives, pilot projects, major policies or programmes	
". St		Communication to the UNFCCC	developed or under development (or)	any major investment decisions. Please attach reports or	
ing			include websites where relevant.		
'Cross-Cutting', Strategy			To be addressed in the other related subject	t	
)-SSC			Examples of important actions that you	plan to carry out in next year (2019~2020)	
,Crc					

			What importance does this particular EST Goal attach in your country's on-going efforts in	
			achieving the Sustainable Development Goals (SDGs) under the 2030 Agenda for Sustainable	
			Development?	
			Goal 9. Build resilient infrastructure, pr	romote inclusive and sustainable industrialization and foster
			innovation	
			Goal 11. Make cities and human settlemen	ts inclusive, safe, resilient and sustainable
	17	Adopt social equity as a planning	Any action had been taken so far?	Barriers/Challenges faced in implementation:
		and design criteria in the	☐ Not yet	For realizing "convivial society", City planning with universal
δg	3	development and implementation of	☐ Some progress (design – piloting)	design should be required to devise removing physical and
Strategy		transport initiatives, leading to	■ Largely in Place	informative hazards for hampering handicapped people to
St		improved quality, safety and security	☐ Fully Completed	freely move, enjoy sports.
ē,		for all and especially for women,	(Please Check the box)	For highly senior society, high level of barrier-free design
ıttir		universal accessibility of streets and		should be required for city planning as well at every corner of
\ \frac{1}{2} \cdot \frac{1}{2}		public transport systems for persons		the country.
"Cross-Cutting"		with disabilities and elderly,		On the occasion of Olympic/Paralympic Games 2020,
\int_{0}^{∞}		affordability of transport systems for		substantial number of barrier free designed facilities at the
		low-income groups, and		site, as well as its enhancement all over the country including
		up-gradation, modernization and		the promotion of barrier-free minds are definitely required.

integration of intermediate public	Please add few specific examples of initiatives, pilot projects, major policies or programmes
transport	developed or under development (or) any major investment decisions. Please attach reports or
	include websites where relevant.
	Promoting barrier-free minds and universal design for community development throughout the country by
	the following efforts:
	- Revision of traffic barrier-free standards and guidelines
	http://www.mlit.go.jp/sogoseisaku/barrierfree/sosei_barrierfree_mn_000001.html
	- Full-scale enforcement of the Revised Barrier-Free Law which indicated the partial amendment of the
	Law concerning promotion of movement of elderly people and persons with disabilities. Il-scale
	enforcement of the Revised Barrier-Free Law which indicated the partial amendment of the Law
	concerning promotion of movement of elderly people and persons with disabilities.
	http://www.mlit.go.jp/report/press/sogo09_hh_000173.html
	- Based on the Revised Barrier-Free Law, holding a facilitation of evaluation conference for the
	participation of persons with disabilities
	- Announcement of reception guideline / service training model program for the transport operators
	http://www.mlit.go.jp/sogoseisaku/barrierfree/sosei_barrierfree_tk_000180.html
	Examples of important actions that you plan to carry out in next year (2019~2020) · Steady
	enforcement of Revised Barrier-Free Law, thoroughly disseminating the traffic barrier-free standards and
	guidelines, aiming to raise the barrier-free level nationwide.
	- • Steady enforcement of Revised Barrier-Free Law, thoroughly disseminating the traffic barrier-free
	standards and guidelines, aiming to raise the barrier-free level nationwide.
	• Dissemination of reception training model programs for improving service for the transport operators

			What importance does this particular	EST Goal attach in your country's on-going efforts in
			achieving the Sustainable Development Goals (SDGs) under the 2030 Agenda for Sustainable	
			Development?	
			Goal 9. Build resilient infrastructure, pr	comote inclusive and sustainable industrialization and foster
			innovation	
			Goal 11. Make cities and human settlemen	ts inclusive, safe, resilient and sustainable
	18	Encourage innovative financing	Any action had been taken so far?	Barriers/Challenges faced in implementation:
		mechanisms for sustainable transport	☐ Not yet	
		infrastructure and operations through	☐ Some progress (design – piloting)	
		measures, such as parking levies,	Largely in Place	
\		fuel pricing, time-of-day automated	☐ Fully Completed	
Strategy		road user charging, and	(Please Check the box)	
Stra		public-private partnerships such as	Please add few specific examples of	initiatives, pilot projects, major policies or programmes
		land value capture, including	developed or under development (or)	any major investment decisions. Please attach reports or
ting		consideration of carbon markets,	include websites where relevant.	
-Cn		wherever feasible		
"Cross-Cutting"				
ļ,			Evamples of important actions that you	plan to carry out in next year (2019~2020)
			Examples of important actions that you	pian to carry out in next year (2019~2020)
				ECTE C 1 44 1
				EST Goal attach in your country's on-going efforts in
				t Goals (SDGs) under the 2030 Agenda for Sustainable
			Development?	

	19	Encourage widespread distribution	Any action had been taken so far?	Barriers/Challenges faced in implementation:
		of information and awareness on	☐ Not yet	Barriers/Challenges faced in implementation:
		sustainable transport to all levels of	☐ Some progress (design – piloting)	Challenges faced in implementation:
		government and to the public	■ Largely in Place	Review the mobility to switch it smart by promoting travel
		through outreach, promotional	☐ Fully Completed	modes with less CO2 emissions such as public transportation,
		campaigns, timely reporting of	(Please Check the box)	bicycles and walking.
_		monitored indicators, and		
Strategy		participatory processes		Implementation of environmental-friendly driving methods is
Stra				necessary (i.e. by restraining sudden acceleration, hard
				braking and idling, etc.) to reduce CO2 and air pollutants
ting				emissions.
Cut				Although the usage of Eco-drive Management Systems are
"Cross-Cutting"				becoming popular among transport operators which show
"Cr				certain positive effects, the dissemination of public awareness
				among individual drivers still remain a challenge.
				About 20% of CO2 emission inland is derived from the
				transport sector of which 80% are from automobiles.
				By way of using automobiles, considering environmental
				impact (preventing from rapid acceleration, rapid brake,
				idling, etc.), CO2 emission derived from exhaust gas and air
				pollution particles should be reduced.

Please add few specific examples of initiatives, pilot projects, major policies or programmes developed or under development (or) any major investment decisions. Please attach reports or include websites where relevant.

Promotion of "Smart Move":

Promotion of 5 approaches for smart move: recommended use of public transportation; encourage to use bicycles and walk; promotion of car sharing, bike sharing and other means of transportation; innovation in long-distance travel and recommendation of Eco-Driving and driving environmental-friendly cars. These are listed online and introduced at some events.

https://ondankataisaku.env.go.jp/coolchoice/smartmove/index.html

Formulation and dissemination of "Recommendation for Eco-Drive 10"

Every November is designated as "Eco-Drive Promotion Month" so that relevant organizations and local governments hold lectures and other promotional events regularly. http://www.env.go.jp/air/car/ecodrive/index.htm

http://www.mlit.go.jp/sogoseisaku/environment/sosei_environment_tk_000013.html https://ondankataisaku.env.go.jp/coolchoice/ecodriver/

Training human resources

In order to train human resources to lead the transportation by environmental measures in the region, the training and seminars are implemented. In addition, excellent measures of the regions are awarded.

http://www.estfukyu.jp/training2018.html

http://www.estfukyu.jp/sohatsu2018.html

http://www.estfukyu.jp/kotsukankyotaisho2018.html

			Examples of important actions that you plan to carry out in next year (2019~2020)	
			•	EST Goal attach in your country's on-going efforts in t Goals (SDGs) under the 2030 Agenda for Sustainable
			Development?	
			Goal 9. Build resilient infrastructure, pr	romote inclusive and sustainable industrialization and foster
			innovation	
			Goal 11. Make cities and human settlement	ts inclusive, safe, resilient and sustainable
•	20	Develop dedicated and funded	Any action had been taken so far?	Barriers/Challenges faced in implementation:
ing		institutions that address sustainable	☐ Not yet	
Cutt		transport-land use policies and	☐ Some progress (design – piloting)	
"Cross-Cutting"		implementation, including research	☐ Largely in Place	
Ç		and development on	■ Fully Completed	
3		environmentally-sustainable	(Please Check the box)	

transport, and promote good **governance** through implementation of environmental impact assessments for major transport projects

Please add few specific examples of initiatives, pilot projects, major policies or programmes developed or under development (or) any major investment decisions. Please attach reports or include websites where relevant.

EST related research institute: http://www.estfukyu.jp

The following research is conducted at National Institute for Land and Infrastructure Management, MLIT:

Study on the Reduction of CO2 Emissions in Road Transportation:

Study on reduction of CO2 emission in driving and on CO2 emission process models of the transport sector.

http://www.nilim.go.jp/lab/dcg/kadai/kadai2.htm

http://www.nilim.go.jp/lab/dcg/seika/ronbun/h29/2h29.htm

Research on Implementation and Promotion of Life-Cycle Assessment on 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).

http://www.nilim.go.jp/lab/dcg/lca/top.htm

Examples of important actions that you plan to carry out in next year (2019~2020)

	What importance does this particular EST Goal attach in your country's on-going efforts in
	achieving the Sustainable Development Goals (SDGs) under the 2030 Agenda for Sustainable
	Development?
	Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster
	innovation
	Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable.