



United Nations
Centre for Regional Development

Environmentally
Sustainable
Transport

ASIAN EST INITIATIVE



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WHAT IS EST?

Although there is no single, commonly held definition of Environmentally Sustainable Transport (EST), the concept of EST is centred on the transportation systems and activities that meet social, economic, and environmental sustainability. EST offers an alternative to uncontrolled motorization and its related problems, comprising a complementary package of high quality public transport, non-motorized transport (walking and cycling), transport demand management measures, clean fuels, transit oriented development, intelligent transport systems, and road safety programmes that will create a new paradigm for urban mobility and accessibility.

While transportation is essential to meeting Asia's socioeconomic needs, balancing these needs with the need to protect the environment should be at the heart of the concept of EST. The **Asian Environmentally Sustainable Transport (EST) Initiative** was jointly launched by United Nations Centre for Regional Development (UNCRD) and the Ministry of the Environment, Japan (MOEJ) in 2004 in close collaboration with national governments, international organizations, and bilateral and multilateral donor agencies. It aims to build a common understanding across Asia on the essential elements of EST and the need to adopt an integrated approach at the local and national levels to deal with multi-sectoral environment and transport issues, including greenhouse gas (GHG) emissions reduction.

The twenty goals of the Bangkok 2020 Declaration (2010-2020), agreed at the fifth Regional EST Forum in 2010, provide the basis for identifying, developing and implementing necessary policies, programmes and measures in realizing EST in Asian countries (www.uncrd.or.jp/env/5th-regional-est-forum/doc/bangkok_declaration.pdf).

Currently, participating countries include **25 Asian countries**- Afghanistan, Bangladesh, Bhutan, Brunei Darussalam, Cambodia, People's Republic of China, Indonesia, India, Islamic Republic of Iran, Japan, Republic of Korea, Lao PDR, Malaysia, Maldives, Mongolia, Myanmar, Nepal, the Philippines, Pakistan, Russian Federation, Singapore, Sri Lanka, Thailand, Timor-Leste and Viet Nam. Asian EST Initiative promotes an integrated approach covering twelve thematic areas as described right. For further details, please refer to the *EST Sourcebook* (UNCRD, 2007) and the UNCRD homepage of the Asian EST Initiative

(www.uncrd.or.jp/env/est/).



Twelve Thematic Areas of the Integrated EST Strategy

WHY EST MATTERS?

While the transport sector has been an important factor contributing to Asia's remarkable economic growth, it is the **third largest energy consumer** in the region. Furthermore, its energy consumption is growing faster than that of any other sector or region, mainly driven by a rapid increase in motorization and the strong transport demand from economic development.



“ Asian cities today face a transport and environmental crisis ”



Parallel to the growing urbanization of Asia, the number of motor vehicles per 1,000 inhabitants showed a dramatic **increase by 321% between 1990 to 2005**, thus leading to a discussion as to whether the transportation system of the respective countries is sustainable. This has important repercussions not only in terms of energy security for the region, but also air pollution, GHG emissions, traffic congestion, road accidents, freight inefficiencies, greater rural-to-urban migration, and damage to economic productivity.

Additionally, polluting transport systems pose a major health threat to the growing populations as the World Health Organization (WHO) estimates that suspended particulate matter (SPM) leads to the **premature deaths of over 0.5 million people** per year worldwide. The SPM level in many Asian cities often exceeds WHO standards more than twofold.



Without major efforts to address air pollution and GHGs from the transport sector, growing vehicle ownership and usage, and increasing traffic accidents, it is expected that environmental quality, economic productivity, social equity, human health, and all other aspects of sustainability will be significantly undermined. Therefore, the Asian EST Initiative presents an opportunity to make the **new decade (2010-2020) for sustainable transport.**

“ The transport sector is emerging as the fastest growing source of global GHGs emissions and accounts for 23% of energy-related CO₂ emissions in the world ” 3

Components of the Initiative

Regional EST Forum in Asia

The Regional EST Forum in Asia is the key component of the Initiative. The annually held Forum comprises: (a) high-level government representatives (mainly from the Ministries of Environment, Transport, Urban Development, and Health); (b) a Subsidiary Expert Group of internationally renowned experts in various EST areas; and (c) international organizations, research institutions, NGOs and donor agencies. Starting with the ASEAN + 4 (China, Japan, the Republic of Korea, and Mongolia), the Regional EST Forum has been further expanded to cover eight South Asian countries and Russian Federation, thus bringing the total number of participating countries to **twenty three**.

The Regional EST Forum in Asia has the following objectives:

- a) Foster a **common understanding** across Asia on the essential elements of Environmentally Sustainable Transport (EST) as well as the need for an integrated approach to deal with a range of social, economic, and environmental issues in the transport sector;
- b) Provide a **strategic and knowledge platform** for sharing experiences and disseminating best practices, policy instruments, and technologies in the transport sector among Asian countries;
- c) Set in motion a **regional mechanism and consultative process** to address policy and institutional issues and gaps to deal with multi-sectoral environment, public health and transport issues;
- d) Facilitate intergovernmental discussion on how **sustainable transport policy options and measures** can be integrated into the overall policy, planning and development;
- e) Provide a **platform for interagency coordination** both at national and international levels towards facilitating partnerships and collaboration between governments and international organizations such as development banks, bi-lateral and multilateral donors, etc.; and
- f) Facilitate **improved regional input and information** on sustainable low-carbon transport to international discussions and negotiations on climate change.

HISTORY OF ASIAN EST INITIATIVE

Manila Policy Dialogue in 2004, Manila, the Philippines

The ***Manila Statement***, which was adopted by fourteen participating governments (ASEAN, China, Japan, Mongolia, and the Republic of Korea) in the Manila Policy Dialogue on Environment and Transport in the Asian Region held on 16-17 January 2004 in Manila, the Philippines, urged Asian countries to: (a) formulate National EST Strategies, and (b) establish a Regional EST Forum to share best practices and provide necessary advisory support and technical feedback towards national strategy formulation and other EST- related activities.

First Regional EST Forum in Asia 2005, Nagoya, Japan

As a follow-up to the outcome of the Manila Policy Dialogue, the launch meeting of the Regional EST Forum in Asia was organized in Nagoya, Japan on 1-2 August 2005 with the participation of government representatives (both from the Ministries of Environment and Transport) from fourteen countries and international experts. The participants adopted the ***Aichi Statement***, which sets a concrete future vision for the promoting EST in Asia in the future. Both the *Manila Statement* and *Aichi Statement* urged UNCRD to play a catalytic role in promoting EST in Asia by initiating a range of activities and pilot demonstration projects at the national and regional levels in collaboration with key regional institutions.

Second Regional EST Forum in Asia 2006, Yogyakarta, Indonesia

UNCRD, MOEJ and the Ministry of Environment of the Republic of Indonesia jointly organized the Second Regional EST Forum in Asia on 11-12 December 2006 in Yogyakarta, Indonesia during the Better Air Quality 2006 Week. The supporting organizations for this Forum were the Clean Air Initiative for Asian Cities (CAI-Asia), WHO, Swedish International Development Agency (Sida), Seoul Development Institute (SDI), and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). In particular, WHO sponsored for the first time the participation of Ministry of Health officials from selected countries flagging the importance of the public health sector.



HISTORY OF ASIAN EST INITIATIVE

Asian Mayors' Policy Dialogue 2007, Kyoto, Japan

In order to further promote EST at the local and city levels, UNCRD, the ASEAN Working Group on Environmentally Sustainable Cities (AWGESC), the MOEJ, and the Institute for Global Environmental Strategies (IGES) successfully organized the Asian Mayor's Policy Dialogue for the Promotion of EST in Cities, in April 2007, Kyoto, Japan. The Dialogue provided an excellent platform to discuss the progress made from city perspectives in relation to the overall recommendations made in the *Aichi Statement* as well as in the AWGESC Framework. As a key outcome of the Mayor's Dialogue, the ***Kyoto Declaration*** was adopted and signed by participating mayors and senior government representatives declaring that they would further promote EST through city-level actions and programmes.

Third Regional EST Forum in Asia 2008, Singapore

The Third Regional EST Forum was held in Singapore from 17 to 19 March 2008 in collaboration with the National Environment Agency (NEA) of the Ministry of the Environment and Water Resources of Singapore, Land Transport Authority (LTA) of the Ministry of Transport of Singapore, and MOEJ. The Forum was also attended by governmental representatives from South Asian countries for the first time. Country initiatives, policies, best practices, and issues concerning twelve thematic areas of EST as defined in the Aichi Statement were shared and discussed among twenty-two countries.

Fourth Regional EST Forum in Asia 2009, Seoul, Republic of Korea

The Fourth Regional EST Forum was jointly organized by the Ministry of Land, Transport, and Maritime Affairs (MLTM) of the Republic of Korea, MOEJ, and UNCRD from 24 to 26 February 2009 in Seoul, which resulted in the adoption of the ***Seoul Statement*** for the promotion of EST in order to achieve a low carbon society and green growth in Asia.

Special Event of Asian Mayors 2010, Seoul, Republic of Korea

The UN Forum on Climate Change Mitigation, Fuel Efficiency and Sustainable Urban Transport was held in Seoul, the Republic of Korea, on 16-17 March 2010. As an integral part of the UN Forum, the Special Event of Asian Mayors for the Signing of the Kyoto Declaration for the Promotion of EST in Cities was jointly organized by UNCRD and MOEJ. These ten new signatories have brought the total signatories to forty-four Asian cities.

HISTORY OF ASIAN EST INITIATIVE

Fifth Regional EST Forum in Asia 2010, Bangkok, Thailand

The Fifth Regional EST Forum in Asia was jointly organized by the Ministry of Natural Resources and Environment (MONRE) of the Kingdom of Thailand, UNCRD, MOEJ, and United Nations Economic and Social Commission for Asia and the Pacific (UN-ESCAP) from 23 to 25 August 2010 in Bangkok, Thailand. The Forum was attended by approximately 200 participants, comprising high-level government representatives from twenty-two Asian countries, international experts and resource persons, representatives from various UN and international organizations, and local observers from Thailand. The Fifth Forum participants agreed on ***Bangkok 2020 Declaration – Sustainable Transport Goals for 2010-2020***.

- Bangkok 2020 Declaration -

The Bangkok 2020 Declaration is an important milestone in the development of sustainable transport in Asia. It is the first declaration on strengthening of environmentally sustainable transport (EST) in developing Asia, which contains time-bound goals as well as indicators to assess the progress in achieving these goals. Reflecting a regional political consensus, the Declaration is expected to influence the decisions of governments and transport stakeholders in the region on overall transport policy, planning and development over the next decade.

Sixth Regional EST Forum 2011, New Delhi, India

The Sixth Regional EST Forum was co-organized by the Ministry of Urban Development (MOUD)-India, UNCRD, WHO/SEARO, and MOEJ, in conjunction with Urban Mobility India (UMI) 2011 as an integrated event titled “Conference cum Exhibition on Sustainable Mobility” from 3 to 6 December 2011 in New Delhi, India. The Conference was composed of forty-two sessions and attended by approximately 700 participants, including high-level government representatives from twenty-one Asian countries, Subsidiary Expert Group Members of the Regional EST Forum, international resource persons, representatives from various UN and international organizations, Indian officials from central and state governments, urban local bodies, and parastatals as well as academics, students, NGOs, and representatives from the private sector. The Sixth Forum discussed the progress made by the countries in addressing the goals of the Bangkok 2020 Declaration.

HISTORY OF ASIAN EST INITIATIVE

Seventh Regional EST Forum 2013, Bali, Indonesia

The Ministry of Transportation of the Government of Indonesia, the Ministry of Environment of the Government of Indonesia, the Ministry of the Environment of the Government of Japan, and the United Nations Centre for Regional Development, co-organized the Seventh Regional EST Forum in Asia, under the theme of ~ Next Generation Transport System We Want for 21st Century~ Looking Beyond Rio+20, from 23 to 25 April, 2013 at the Bali International Convention Centre, Nusa Dua, Bali, Indonesia. The Forum was attended by more than six hundred participants including Ministers, senior governmental officials from the transport, environment and health ministries of twenty-eight countries, representatives of the international organizations and partner agencies, NGOs, and international experts on sustainable transport. The Seventh Forum participants agreed on ***Bali Declaration on Vision Three Zeros – Zero Congestion, Zero Pollution, and Zero Accidents towards Next Generation Transport Systems in Asia.***

- Bali Declaration on Vision Three Zeros -

“Bali Declaration on Vision Three Zeros - Zero Congestion, Zero Pollution, and Zero Accidents towards Next Generation Transport Systems in Asia” is based on a vision of zero tolerance towards congestion, pollution, and road accidents. It is an expression of countries’ determination to devise and implement transport policies, programmes, and enforcement measures that put in place a continuing incremental approach towards the strengthening of the sustainability of transport in the region. Vision Three Zeros can help in bringing about a paradigm shift in thinking on the role of motorization and mobility in realizing sustainable development.



HISTORY OF ASIAN EST INITIATIVE

Eighth Regional EST Forum 2014, Colombo, Sri Lanka

With the overarching theme of “Next Generation Solutions for Clean Air and Sustainable Transport – Towards a Livable Society in Asia”, the Ministry of Environment and Renewable Energy (MERE) of the Government of Sri Lanka, the Ministry of Transport (MOT) of the Government of Sri Lanka, the Ministry of the Environment of the Government of Japan (MoE-J), the United Nations Centre for Regional Development (UNCRD), and the Clean Air Asia (CAA) co-organized the “Integrated Conference of Better Air Quality (BAQ) 2014 and the Intergovernmental Eighth Regional EST Forum in Asia” from 19 to 21 November 2014 in Colombo, Sri Lanka. The conference was hosted under the patronage of H.E. Mahinda Rajapaksa, President of the Democratic Socialist Republic of Sri Lanka.



Ninth Regional EST Forum 2015, Kathmandu, Nepal

With the theme of “EST for Resiliency – Building Safe, Smart, Low Carbon and Resilient Cities in Asia’, the Intergovernmental Ninth Regional EST Forum in Asia was hosted by the Ministry of Physical Infrastructure and Transport (MOPIT) of the Government of Nepal, and was co-organized by the Ministry of the Environment of the Government of Japan (MOE-Japan), the United Nations Economic and Social Commission for Asia and the Pacific (UN ESCAP), and the United Nations Centre for Regional Development (UNCRD), 17 to 20 November 2015. The Forum was attended by over three hundred fifty participants comprising government representatives from twenty-six countries, , subsidiary Expert Group members of the Regional EST Forum in Asia, international resource persons, representatives from various United Nations and international organizations, multilateral development banks, scientific and research organizations, nongovernmental organizations (NGOs), local observers and professionals from the transport sector in Nepal.

HISTORY OF ASIAN EST INITIATIVE

Tenth Regional EST Forum 2017, Vientiane, Lao PDR

The Intergovernmental Tenth Regional Environmentally Sustainable Transport (EST) Forum in Asia co-organized by the Ministry of Public Works and Transport (MPWT) of the Government of Lao PDR, the Ministry of the Environment of the Government of Japan (MOE-Japan), the Partnership on Sustainable, Low Carbon Transport (SLoCaT), the United Nations Economic and Social Commission for Asia and the Pacific (UN ESCAP), the United Nations Office for Sustainable Development (UNOSD) and the United Nations Centre for Regional Development (UNCRD), from 14 to 16 March 2017 in Vientiane, Lao PDR, with the theme of “*2030 Road Map for Sustainable Transport ~ Aligning with Sustainable Development Goals (SDGs)*”. The Forum was officially inaugurated by H.E Mr. Somdy Douangdy, Deputy Prime Minister of the Lao PDR, and chaired by H.E. Dr. Bounchanh Sinthavong, Minister of Public Works and Transport, Lao PDR. As an expression of interest and commitment to promote inclusive, affordable, accessible, safe, low-carbon, and sustainable rural transport infrastructure and services, the participating countries voluntarily adopted the *Vientiane Declaration on Sustainable Rural Transport towards achieving the 2030 Agenda for Sustainable Development*.

The *Vientiane Declaration on Sustainable Rural Transport towards Achieving the 2030 Agenda for Sustainable Development* is a commitment to the promotion of inclusive, affordable, accessible, safe, low-carbon, and sustainable rural transport infrastructure and services, as a means, among other things, to improve connectivity between rural populations and essential services (such as education and health care), to streamline supply chain logistics from producers to consumers, to reduce impacts on local air and water pollution, and to adapt to the challenge of climate change with prioritised resilience options. The Vientiane Declaration is thus a major step towards improving rural-urban connectivity and an important driver for meeting the SDGs.





Member countries of Asian EST Initiative

63 cities in 23 countries adopted and endorsed the *Kyoto Declaration on promotion of EST in cities*

- 1st signing in Kyoto, Japan (22 cities, 2007)
- 2nd signing in Bangkok, Thailand (12 cities, 2008)
- 3rd signing in Seoul, Republic of Korea (10 cities, 2010)
- 4th signing in Colombo, Sri Lanka (3 cities, 2014) Addendum
- 5th signing in Toyota, Japan (4 cities, 2015) Addendum
- 6th signing (29 cities, 2017) Addendum

Bangladesh (Dhaka North, Sylhet), **Cambodia** (Phnom Penh, Siem Reap), **PR China** (Shanghai, Suzhou, Tianjin, Yan'an, Yangzhou, Zhanjiang), **India** (Ahmedabad, Bangalore, Bhubaneswar, Guwahati, Navi Mumbai, Surat), **Indonesia** (Bandung, Banjarmasin, Batam, Makassar, Palembang, Semarang, Surabaya, Tangerang, Surakarta, Yogyakarta), **Japan** (Kyoto, Nagoya, Toyota, Sumita-cho), **Lao PDR** (Luang Prabang, Vientiane), **Malaysia** (Kuching South, Penang, Seberang Perai), **Malawi** (Lilongwe), **Maldives** (Male), **Mongolia** (Ulaanbaatar), **Myanmar** (Mandalay), **Nepal** (Kathmandu, Dhangadhi), **Pakistan** (Islamabad, Karachi), **Philippines** (Baguio, Cebu, Makati, Quezon), **Rep. of Korea** (Chuncheon, Donghae, Jeju, Seoul, Suwon), **Singapore**, **Sri Lanka** (Colombo, Kandy, Matale), **Seychelles** (Victoria), **Solomon Islands** (Honiara), **Thailand** (Bangkok, Chiang Mai, Korat(Nakhon Ratchasima), **Vanuatu** (Port Villa), **Zimbabwe** (Bulawayo)

“Acknowledging the important role that Mayors could play in implementing local-level actions to make cities healthy, green, and environment- and people-friendly...” - Kyoto Declaration, 2007





Regional EST Forum in Latin America

Recognizing the progress made under the Regional EST Forum in Asia, there has been an expressed interest in replicating the Asian EST Initiative in Latin American region. As a result, the first **Foro de Transporte Sostenible para América Latina** (FTS, Sustainable Transport Forum for Latin America) was co-organized by UNCRD, Inter-American Development Bank (IDB), and Ministry of Transport of Colombia, held in Bogotá, Colombia on 23-24 June 2011. As a key outcome of the important inaugural Forum, nine Latin American countries adopted the **Bogotá Declaration**, containing twenty-three goals for sustainable transport. This newly established regional policy Forum is planned to be held biannually and the next Forum is expected to be held in Mexico in 2012.

“ Sustainable transport can be understood as the provision of services and infrastructure for the mobility of people and goods needed for economic and social development and improved quality of life and competitiveness. These services and transport infrastructure provide secure, reliable, economical, efficient, equitable and affordable access to all, while mitigating the negative impacts on health and the environment locally and globally, in the short, medium and long term without compromising the development of future generations. ” **Bogotá Declaration**



For further details of the Regional EST Forum in Latin America including the full text of the Bogotá Declaration, please visit www.uncrdlac.org/fts/index.html



AICHI STATEMENT (2005)

--Towards establishment of the Regional Forum for the promotion of environmentally sustainable transport (EST) in Asia --

The participants, having met in Nagoya City, Aichi Prefecture, Japan from 1-2 August 2005, for the International Conference on Environment and Transport, to draw up and adopt a statement on the establishment of a Regional EST Forum for the promotion of environmentally sustainable transport in Asia,

Reaffirming and building upon the 'Manila Statement' agreed upon by the participants at the intergovernmental Manila Policy Dialogue on Environment and Transport in the Asian Region, held in Manila, the Philippines, from 16-17 January 2004,

Reaffirming and building upon the 'Framework for Environmentally Sustainable Cities in ASEAN', agreed upon by the ASEAN Working Group on Environmentally Sustainable Cities (AWGESC) and officially endorsed by the ASEAN Environment Ministers in December 2003,

Reaffirming and building upon the Johannesburg Plan of Implementation (JPOI) adopted in the 2002 World Summit on Sustainable Development (WSSD) which underlines the importance of environmentally sustainable transport and the required actions to be taken at national and international level,

Noting the important contribution sustainable transport systems can make towards realizing the Millennium Development Goals (MDG) set by the United Nations, through improving access to education, employment opportunities, and health care,

Noting the importance of achieving greater synergies among the various efforts to promote environmentally sustainable transport in Asia, at the regional, national and local level,

Acknowledging that continued economic growth in Asian countries will result in significant further growth in transport demand, which will require a wide range of effective measures at the national and local level to prevent or minimize negative environmental and social impacts associated with the rapid growth in motorization,

Considering that efforts to promote environmentally sustainable transport will result not only in the improvement of human health through the reduction of urban air pollution but will also have important complimentary benefits, including the reduction of greenhouse gas (GHG) emissions, the reduction of deaths and injuries from road accidents, the reduction of harmful noise levels, and the reduction of traffic congestion levels,

Recognizing the need for both national and local level governments to develop and adopt integrated policies, strategies, and programmes incorporating key elements of environmentally sustainable transport such as:

a. Public health

- Promoting integrated transport policies that mitigate the negative human health impacts of motorized transport
- Recognizing the high costs incurred to the national health system due to non-sustainable transport modes
- Strengthening the coordination and cooperation among health and transport agencies



b. Land-use planning

- *Accepting a vision of cities for people rather than for cars, with a focus on the movement of people and goods rather than vehicles*
- *Supporting urban planning with a particular emphasis on public transport, non-motorized transport, traffic safety and environmental control*
- *Encouraging the integration of both land-use and transport planning to reduce the unplanned, low-density expansion of urban areas*
- *Promoting urban revitalization through mixed-use development, favouring concentrated development around public transport nodes*

c. Environment and people friendly urban transport infrastructures

- *Providing affordable and socially acceptable transport infrastructure and facilities in urban areas*
- *Recognizing that overprovision of infrastructure can induce additional travel by private motorized vehicles and result in increased pollution and congestion, unless appropriate consideration is made*
- *Acknowledging the importance of mass transit systems in meeting the needs for increased mobility in an environment friendly manner*

d. Public transport planning and transport demand management (TDM)

- *Maintaining or increasing the share of public transport by improving the quality of such services*
- *Controlling the demand for private motorized travel through a combination of policies, such as regulatory measures (manage demand for road space), fiscal policies (such as parking fees, vehicle taxes, road or congestion charging, and fuel taxes, etc.), and infrastructure design measures*
- *Recognizing Bus Rapid Transit (BRT) as a low-cost mass transit option which can be implemented quickly to meet the growing demand for mobility*
- *Recognizing Mass Rapid Transit (MRT) as a mass transit option which can be implemented to meet the growing demand for mobility, where appropriate*

e. Non-motorized transport (NMT)

- *Acknowledging the dependence of all-income groups on non-motorized transport and its importance as an environmentally sustainable mode of transport*
- *Aiming to maintain or enhance the existing role of non-motorized transport, especially in dense urban areas, especially for short trips*
- *Encouraging the provision of higher-quality infrastructure and the development of city-level master plans for footpaths and cycle ways*
- *Increasing safety for non-motorized transport*

f. Social equity and gender perspectives

- *Acknowledging the need for, and contribution of, safe and affordable urban transport systems to the alleviation of poverty and the promotion of social development*
- *Recognizing that public transport has to address the conditions of women and the need to build the institutional capacity to better include gender aspects in urban transport planning*
- *Providing infrastructure that particularly caters to the needs of the most vulnerable users, including children, the elderly, and the physically disabled*

g. Road safety and maintenance

- *Creating appropriate inter-agency coordination and management mechanism to address the road safety in transport policies and programmes*
- *Acknowledging road safety as a primary guiding principle for transport planning*
- *Mobilizing resources for formulation and implementation of multi-stakeholder integrated road safety action plans*



h. Strengthening road side air quality monitoring and assessment

- *Improving road side air quality monitoring in urban city centres to better understand the impacts of road side pollution on people traveling on the roads and people working or living close to the roads*
- *Improving and harmonizing road side monitoring methodologies in line with the internationally standardized methodologies for ambient air quality monitoring*

i. Traffic noise management

- *Improving traffic noise monitoring in urban city centres to better understand the impacts of road side noise on people traveling on the roads and people working or living close to the roads*
- *Acknowledging the need for standards on noise levels and the enforcement of such standards by establishing management mechanisms*
- *Promoting the prevention of excessive noise through the promotion of non-motorized modes and high-quality public transport*

j. Cleaner fuel

- *Phasing out leaded gasoline as rapidly as possible, and phasing down sulphur levels in gasoline and diesel as required to achieve advanced vehicle emission standards*
- *Acknowledging the contribution of alternative fuels such as Compressed Natural Gas (CNG) and biomass-derived ethanol and biodiesel as a means to reduce vehicle emissions*
- *Planning for an eventual transition to renewable fuels*

k. Vehicle emission control, standards, and inspection and maintenance (I/M)

- *Rapidly phasing-in strict emission standards for new vehicles, with due regard to manufacturing lead times and to the provision of compatible fuels*
- *Adopting and enforcing vehicle inspection and maintenance programmes for vehicle emissions and safety, based on high-volume, test-only inspection centres with stringent quality control*
- *Reducing emissions from in-use vehicles by retro-fitting of emission control devices and/or the conversion to lower-emitting fuels*

l. Strengthening knowledge base, awareness, and public participation

- *Promoting coordination and cooperation among groups collecting or managing information on EST through a decentralized network of knowledge providers*
- *Developing and disseminating best practice on EST*
- *Increasing the understanding and awareness of the civil society and decision-makers on the beneficial aspects of EST with the aim to accomplish changes in policies, investment decisions, and personal behaviour*

Noting the best practice principles presented in this document, the participants are thus called upon to:

1. unanimously endorse the Regional EST Forum and welcome the contribution by its expert members to conduct periodic high-level policy dialogues and expert consultations to share opinions, ideas, and information on best practices and effective policy instruments among the participating countries on environment and transport related issues in the Asian Region;
2. welcome the initiatives of UNCRD in extending assistance to the countries of the region, especially the developing countries, in preparing national EST strategies, and request the expert members of the Forum to play a catalytic role by providing substantial input and strategic feedback towards the formulation of such strategies;



3. welcome the involvement of all groups including international organizations, bilateral organizations, nongovernmental organizations and civil society, academic institutions, foundations, private enterprises, and others, in developing and promoting a decentralized cooperation network to contribute to activities undertaken in support of the Forum such as knowledge management, capacity-building, and the formulation of integrated action plans;
4. request UNCRD to cooperate with other related organizations and initiatives both at the national and international levels in identifying and exploring sources of potential assistance and collaboration for capacity-building activities, including demonstration and pilot projects, as well as for the implementation of policies, strategies, and action plans developed by the participants of the Forum; such efforts may include providing assistance to the Forum participants in utilizing the Global Environment Facility (GEF), the Clean Development Mechanism (CDM), and financing from the bilateral and international organizations to implement EST measures.

1st EST Forum in Asia, Aichi, Japan, 2005



SEOUL STATEMENT (2009)

~ Towards the Promotion of Environmentally Sustainable Transport (EST) for a Low-Carbon Society and Green Growth in Asia ~

The participants, having met in Seoul, the Republic of Korea from 24 to 26 February 2009, for the Fourth Regional EST Forum, to draw up and adopt a statement for the promotion of environmentally sustainable transport in Asia,

Noting that Asia is experiencing the fastest economic growth and by mid of this century, and at the current growth rate there might be more motorized vehicles in Asia than there would be in Europe and North America combined, and that the profound impact of this trend on quality of human life and environment can not be underestimated,

Reaffirming and building upon the integrated EST measures defined under the Aichi Statement adopted at the First Regional EST Forum in Asia, held in Nagoya, Japan, on 1-2 August 2005, and considering that efforts to promote environmentally sustainable transport will not only result in the improvement of human health through the reduction of urban air pollution, but will also have important complementary (co-)benefits, including the reduction of greenhouse gas (GHG) emissions,

Recognizing the outcome of the Fifth Ministerial Conference on Environment and Development in Asia and the Pacific held in Seoul in 2005, which endorsed environmentally sustainable economic growth, Green Growth, as a policy focus and important strategy for achieving the Millennium Development Goals (MDGs) as well as decoupling environmental degradation from development,

Noting the commitment made by the Ministries of Health in Member States in the resolution of the WHO Regional Committee for the Western Pacific in September 2008 to assess the health implications of the decisions made on climate change by the transport sector and advocate for the decision that provide opportunities for improving health,

Realizing that transport services affect all aspects of sustainability - social, economic, and environmental - and that there is a need for safe, clean, and energy-efficient transport in order to achieve green growth through low-carbon transport in Asia, the participants are thus called upon to:

1. address transport issues with the broader environmental aims of green growth to encompass the transport-energy-carbon emission nexus, from energy consumption to the emissions and climate change perspectives;
2. develop strategies for low-carbon transport including the increasing shift to energy-efficient and low carbon modes to mitigate the effects of transport on climate, and the effects of climate change on transport services and other socioeconomic sectors;
3. focus on sustainable mobility and transport demand management (TDM) tools and measures [such as – parking controls (including parking charges and pricing), road pricing and congestion charging, fuel and vehicle taxation, low and zero emission zones, car-free day, city centre pedestrianization, public transport priority and improvement measures, transit oriented development, appropriate road- space allocation to high-occupancy vehicles, efficient and affordable mass transit systems (such as BRT), and measures to help and develop non-motorized transport (walking and cycling)], etc. with stakeholder consultation and participation rather than relying only on end-of-pipe solutions, so that local air pollutants and GHG emissions from transport sector can be addressed concurrently and effectively, thereby contributing to materializing a Low Carbon Asian Society;



4. as far possible exploit benefits of adopting intelligent transport system (ITS), and of utilizing market mechanisms such as tax credits for environmentally friendly technologies, to make the transport services environment and people friendly, cost effective as well as energy efficient;
5. develop city partnerships and collaboration across national boundaries within Asia and between Asian cities and cities from other regions for mutual technical assistance and cooperation on implementing environmentally sound practices in transport sector, including recognition of the special needs of the post conflict countries;
6. strengthen regional cooperation, in particular among the international organizations and donors active in the region and member countries, to further improve and deepen the transport agenda at energy efficiency and climate change-related fora, including the Conference of Parties (COP), for achieving low-carbon society and green growth bearing in mind the ultimate objective of reducing global emissions under the UN Framework Convention on Climate Change (UNFCCC); and
7. request international organizations and donor communities to mobilize necessary capacity building services and financial support to the developing member countries to enable them to overcome the complex technical barriers involved in developing transport projects for taking full benefit of the GHG market under the Clean Development Mechanism (CDM) stipulated by Kyoto Protocol.

4th EST Forum in Asia, Seoul, Republic of Korea, 2009



Cheonggyecheon in Seoul before the Restoration Project



Cheonggyecheon in Seoul after the Restoration Project



Bangkok Declaration for 2020

– Sustainable Transport Goals for 2010-2020



5th EST Regional Forum (2010)



We, the participants, who are representatives of Asian countries (Afghanistan, Bangladesh, Bhutan, Brunei Darussalam, Cambodia, People's Republic of China, Indonesia, India, Japan, Republic of Korea, Lao PDR, Malaysia, Maldives, Mongolia, Myanmar, Nepal, the Philippines, Pakistan, Singapore, Sri Lanka, Thailand, and Viet Nam), international organizations, bilateral and multilateral agencies, nongovernmental organizations (NGOs), research organizations, and expert sustainable transport professionals, having met at the Fifth Regional Environmentally Sustainable Transport (EST) Forum in Asia, held in Bangkok, Kingdom of Thailand, from 23 to 25 August 2010, to draft and adopt a declaration, the *Bangkok 2020 Declaration*, in order to demonstrate our renewed interest in, and commitment to, realizing a promising decade (2010–2020) of sustainable actions and measures for achieving safe, secure, quick, reliable, affordable, efficient and people-centred and environment friendly transport in rapidly urbanizing Asia,

Noting the identification of transport as a theme under Agenda 21 on sustainable development and the outcome of the high-level meeting of the 9th session of the Commission on Sustainable Development (CSD-9) in 2001 which reached important decisions on transport sector issues concluding that improving transport systems to promote sustainable development, including improving accessibility, can foster economic and social development, help integrate developing countries into the world economy, and contribute to the eradication of poverty,

Reaffirming and building upon the *Aichi Statement* agreed upon by the participants at the First Regional EST Forum, held in Nagoya, Aichi Prefecture, Japan, on 1–2 August 2005, and its integrated approach to promoting environmentally sustainable transport will result not only in the improvement of human health through the reduction of urban air pollution, but also the reduction of greenhouse gas (GHG) emissions, deaths and injuries from road accidents, harmful noise levels, and traffic congestion,

Reaffirming and building upon the *Seoul Statement*, agreed upon by the participants at the Fourth Regional EST Forum, held in Seoul, Republic of Korea, from 24 to 26 February 2009, that urged the need to address transport issues within the context of the broader environmental aims of Green Growth to encompass the transport-energy-carbon emission nexus, to develop strategies for low-carbon transport that include a shift to energy-efficient and low carbon modes to enhance energy security, and mitigate the effects of transport on climate as well as of climate change on transport services and other socioeconomic sectors,

Noting the findings of the 18th Session of the Commission on Sustainable Development (CSD-18) held in May 2010, that basic transport infrastructure and services are still lacking or inadequate in many developing countries (both in urban and rural areas), making it difficult for the poor, including women, youth, and children, to access basic services, including those related to health and education, and for workers to have access to jobs, and that in the case of rural areas lack of adequate rural transport infrastructure perpetuates poverty, poses constraints on the marketing of agricultural produce and other income-generating opportunities, and thus hampers efforts to achieve the internationally agreed Millennium Development Goals (MDGs),

Noting that transport-related carbon dioxide emissions are projected by international bodies to increase approximately 57 per cent worldwide in the period 2005–2030, whereby the largest part of this increase would come from the increase in private motorized vehicles in Asia,

Noting the UN General Assembly Resolution (64/255) of 2 March 2010 on improving global road safety, proclaimed 2011–2020 as a decade of action for road safety, and **deeply concerned** that about half of all road traffic fatalities and injuries occur in the Asian and Pacific region, most of which are related to vulnerable road users such as pedestrians, children, and cyclists, due to streets that lack the necessary safety infrastructure such as exclusive pedestrian and bicycle lanes, safe street crossings, kerb ramps for the disabled, and lack of post-accident care,

Recognizing the specific mobility needs of low-income groups, as well as women, children, the elderly, and persons with disabilities which must be addressed to achieve socially-equitable communities and a better quality of life for all,



Acknowledging the importance of an EST strategy based upon the concept of Avoiding unnecessary motorised transport – Shifting to more sustainable transport modes and – Improving transport practices and technologies,

We, the participants of the Fifth Regional Environmentally Sustainable Transport (EST) Forum in Asia express our intent to voluntarily develop and realize integrated and sustainable transport policy options, programmes, and projects that will help realize the following EST goals and objectives by the year 2020 in the Asian region (EST 20):

I. Strategies to Avoid unnecessary travel and reduce trip distances

Goal 1: Formally integrate **land-use and transport planning** processes and related institutional arrangements at the local, regional, and national levels

Goal 2: 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

Goal 3: Institute policies, programmes, and projects supporting **Information and Communications Technologies** (ICT), such as internet access, teleconferencing, and telecommuting, as a means to reduce unneeded travel

II. Strategies to Shift towards more sustainable modes

Goal 4: Require **Non-Motorized Transport** (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 of complete street design standards, wherever feasible

Goal 5: Improve **public transport** 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

Goal 6: Reduce the urban transport mode share of private motorized vehicles through **Transportation Demand Management** (TDM) measures, including pricing measures that integrate congestion, safety, and pollution costs, aimed at gradually reducing price distortions that directly or indirectly encourage driving, motorization, and sprawl

Goal 7: Achieve significant shifts to more sustainable modes of **inter-city passenger and goods transport**, 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

III. Strategies to Improve transport practices and technologies

Goal 8: Diversify towards more sustainable **transport fuels and technologies**, including greater market penetration of options such as vehicles operating on electricity generated from renewable sources, hybrid technology, and natural gas

Goal 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



Goal 10: Establish effective vehicle testing and compliance regimes, including formal vehicle registration systems and appropriate periodic vehicle **inspection and maintenance (I/M)** requirements, with particular emphasis on commercial vehicles, to enforce progressive emission and safety standards, resulting in older polluting commercial vehicles being gradually phased-out from the vehicle fleet, as well as testing and compliance regimes for vessels

Goal 11: Adopt **Intelligent Transportation Systems (ITS)**, such as electronic fare and road user charging systems, transport control centres, and real-time user information, when applicable

Goal 12: Achieve improved **freight transport** 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

IV. Cross-cutting strategies

Goal 13: Adopt a zero-fatality policy with respect to road, rail, and waterway **safety** and implement appropriate speed control, traffic calming strategies, strict driver licensing, motor vehicle registration, insurance requirements, and better post-accident care oriented to significant reductions in accidents and injuries

Goal 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 economic impacts of air pollution and noise, and devise mitigation strategies, especially aiding sensitive populations near high traffic concentrations

Goal 15: Establish country-specific, progressive, health-based, cost-effective, and enforceable **air quality and noise** standards, also taking into account the WHO guidelines, and mandate monitoring and reporting in order to reduce the occurrence of days in which pollutant levels of particulate matter, nitrogen oxides, sulphur oxides, carbon monoxide, and ground-level ozone exceed the national standards or zones where noise levels exceed the national standards, especially with regard to environments near high traffic concentrations

Goal 16: Implement sustainable low-carbon transport initiatives to mitigate the causes of **global climate change** and to fortify national **energy security**, and to report the inventory of all greenhouse gases emitted from the transport sector in the National Communication to the UNFCCC

Goal 17: Adopt **social equity** 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

Goal 18: Encourage innovative **financing** 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



Goal 19: Encourage widespread distribution of **information and awareness** on sustainable transport to all levels of government and to the public through outreach, promotional campaigns, timely reporting of monitored indicators, and participatory processes

Goal 20: Develop dedicated and funded **institutions** that address sustainable transport–land use policies and implementation, including research and development on environmentally–sustainable transport, and promote good **governance** through implementation of environmental impact assessments for major transport projects

Inviting countries to voluntarily report progress by utilizing the EST Forum –

5th EST Forum in Asia, Bangkok, Thailand, 2010



Each weekend, the world's most expensive two-kilometres of property becomes a “pedestrian paradise.”



Annex 1

Measuring Progress on the Bangkok Declaration for 2020

This annex outlines the type of performance indicators that countries may consider in achieving a successful EST strategy. The Bangkok Declaration for 2020 is a voluntary document, and thus countries may opt for developing a number of additional / alternative indicators and measures to monitor progress domestically.

The objective of such comprehensive list of indicators is to provide guidelines for objective measurement of the efficiency and effectiveness of the transport system to achieve the desired goals.

Strategy	Indicator
“Avoid” Strategies	Meta Indicator: Change in vehicle kilometres travel per person over time at the metropolitan and national levels
Integrated Land Use-Transport Planning	Number of cities in the country having formally developed integrated land use-transport plans
	Requirements for local compliance with regional integrated land use-transport plans
Mixed-Use Development	Reduction in average passenger trip length in the city
	Reduction in average freight trip distance regionally and nationally
	Number of units developed in purpose-built mixed-use projects
	Number of public transport projects achieving transit-oriented development (TOD) around stations
	Population and employment per square kilometre along major public transport corridors
	Number of public transport corridors achieving an increase in development and population density
	Amount of increase in property value along corridors of quality public transport projects
Information and Communications Technologies (ICT)	Number of policies developed encouraging ICT as a substitute for travel
	Average broadband speed of internet services
	Penetration of broadband among different income groups
	Penetration rate of mobile telephones in the country
	Increase in the amount of teleconferencing over business travel
	Number of policies and/or programs that promote telecommuting
	Estimated number of trips avoided through telecommuting



<p>“Shift” Strategies</p>	<p>Meta Measure: Mode share of all major transport modes at the metropolitan and national levels, including passenger transport (walking, bicycles, car driver, car passenger, motorcycle driver, motorcycle passenger, motorized three-wheelers, non-motorized three-wheelers, buses, minibuses, and urban rail), inter-city transport (private motorized vehicles, bus, rail, and boat), and freight transport (truck, rail, barge, minivan, and non-motorized)</p>
<p>Non-Motorized Transport</p>	<p>Number of cities with NMT specifically highlighted in the city’s integrated transport master plans</p> <hr/> <p>Note the existence of national and local policies requiring drop curbs at interface between footpaths and intersections</p> <hr/> <p>Note the existence of national and local policies mandating minimum footpath widths, and note the minimum width</p> <hr/> <p>Note the existence of national and local policies mandating dedicated pedestrian signals at major intersections</p> <hr/> <p>Promote the monitoring and measurement of the quality of pedestrian facilities and the number of cities surveyed or audited for a “walkability” score</p> <hr/> <p>Number of cities with dedicated cycleways</p> <hr/> <p>Number of kilometres of cycleways</p> <hr/> <p>Number of secure bicycle parking spaces</p> <hr/> <p>Number of cities with shared bicycle programmes and number of shared bikes per programme</p> <hr/> <p>Number of cities with pedicabs (cycle rickshaw) improvement programmes</p> <hr/> <p>Number of public transport systems with formal integration of pedicabs (cycle rickshaws)</p> <hr/> <p>Number of cities participating in a Car-Free Day programme</p>
<p>Public Transport</p>	<p>Number of cities with trunk bus corridors operating on dedicated busway lanes in the median of the roadway (Bus Rapid Transit)</p> <hr/> <p>Number of kilometres of dedicated, median busways (Bus Rapid Transit)</p> <hr/> <p>Number of cities with bus systems using pre-board fare verification and stations designed for at-level fast boarding</p> <hr/> <p>Number of cities utilizing electronic fare cards on their public transport system</p> <hr/> <p>Number of cities with a fully integrated fare structure across public transport modes</p> <hr/> <p>Number of cities with elevated or underground metro systems (MRT)</p> <hr/> <p>Number of kilometres of MRT</p>



Transportation Demand Management	Number of cities or areas utilising congestion charging
	Number of cities or areas utilizing road tolls
	Number of cities employing a formal parking levy system, in which a parking levy is defined as a set land tax charged to each non-residential parking space, and is assessed regardless of whether or not the parking space is utilized
	Number of cities with active parking management programmes
	Amount of any increase in fuel levies
	Number of cities or regions which have adopted measures to discourage ownership and/or operations of private vehicles
	Amount of vehicle duties or taxes
Inter-City Passenger and Goods Transport	Increase of mode share of high-quality inter-city bus services
	Increase of mode share of inter-city conventional rail services
	Increase of mode share of high-speed inter-city rail services
	Number of kilometres of high-speed inter-city rail
	Number of kilometres of freight rail lines
	Number of inland dry ports
“Improve” Strategies	Meta Measure: Fuel efficiency levels of passenger and freight fleets
Cleaner Fuels and Technologies	Market share of alternative fuels for road transport, including renewably-generated electricity, natural gas, and sustainably managed and cultivated biofuels that do not compete with food crops
	Market share of electric vehicles, hybrid vehicles, and fuel cell vehicles
Standards	Note current fuel quality standards and the time line for attainment of EURO IV (or equivalent) fuel quality standard
	Note current vehicle emission standards for each vehicle class
	Note current fuel economy standards for each vehicle class
Inspection and Maintenance	Note the nature of commercial vehicle testing requirements, including frequency of tests, emission levels required, safety features examined, and number of vehicles retired
	Number of cities that conduct roadway spot checks on vehicle emissions
	Note the type of vehicle insurance mandated by national and local laws
	Number of persons taking driver licensing testing and provision of the pass/fail rate



Intelligent Transportation Systems	Number of public transport vehicles per city with Automatic Vehicle Location tracking technology
	Number of public transport stations and vehicles using real-time information displays
	Number of cities with a control centre to manage traffic incidents and manage public transport fleets
Freight Transport	Quantify improvements in freight vehicle fuel efficiency
	Quantify changes in freight vehicle types
	Quantify network efficiency gains
“Cross-Cutting” Strategies	
Safety	Reductions in number of traffic accidents
	Reductions in number of transport-related injuries and deaths
	Adoption of a zero-accident policy framework
Health	Incidence levels of disease and illnesses related to transport emissions including asthma, other pulmonary diseases, heart disease, stroke, and flu
	Reduction in number of days with restricted outdoor activity due to health concerns of air quality
	Number of cities with policies in place to prohibit smoking in public places, including public transport systems
Air Pollution and Noise	Number of cities with ambient air quality monitoring, including monitors for particulate matter (PM10 and PM2.5, nitrogen oxides (NOx), sulphur oxides (SOx), carbon monoxide (CO), and ground-level ozone, especially with monitors in high traffic areas and ports
	Air quality levels for particulate matter (PM10 and PM2.5), nitrogen oxides (NOx), sulphur oxides (SOx), carbon monoxide (CO), and ground-level ozone for each major city
	Number of days air quality is within local standards and WHO guidelines for all major pollutants in each major city
	Number of cities with formal noise monitoring programme
	Number of cities that spot check noise levels on vehicles
	Number of cities with time-of-day noise restrictions and noise reduction programmes
Climate Change and Energy Security	Note whether the transport sector is included as part of the Nationally Appropriate Mitigation Actions (NAMA), and note the specific transport sub-sectors in the NAMA
	Note the number of transport GEF projects approved for the country
	Amount of oil imported by the country



Social Equity	Amount and type of security measures provided on public transport systems
	Off-peak frequency of public transport systems
	Number of public transport vehicles and stations permitting full universal access for users in wheelchairs and parents with prams
	Number of public transport stations and kilometres of footpaths with tactile paving tiles for the sight impaired
	Number of kilometres of footpaths that have been upgraded to be fully accessible to persons in wheelchairs
	Relative affordability levels of public transport services for low-income groups
	Employment generated from EST projects and availability of related job training opportunities
Finance and Economics	Number of applications for greenhouse gas emission reduction credits
	Total amount of revenues generated from greenhouse gas emission reduction credits
	Total amount of revenues generated from congestion charging schemes
	Total amount of revenues generated from roadway tolls
	Total amount of revenues generated from parking levies
	Number of Public-Private Partnerships (PPPs) implemented
	Total amount of revenues generated from land value capture initiatives
	Number of Benefit-Cost analyses conducted on transport projects, considering, direct, indirect, and cumulative impacts
	Note the results of Benefit-Cost analyses conducted on transport projects
Information and Awareness	Number of EST-related publications
	Number of outreach and promotional efforts on EST
Institutions and Governance	Number of staff at Transport, Environment, and Health Ministries dedicated to EST
	Amount of financial resources of the national government dedicated to EST
	Human and financial resources devoted to EST at the regional and local levels
	Existence of unit at National Government level dedicated to non-motorized transport and number of cities with local government units dedicated to non-motorized transport to promote walking
	Structure and relationship of national, regional, and local actors involved in EST, including engagement with civic and business sectors
	Note environmental impact assessments (EIAs) for evaluating the impact of transport infrastructure initiatives prior to environmental clearance



Bali Declaration (2013)

Vision Three Zeros - Zero Congestion, Zero Pollution, and Zero Accidents towards Next Generation Transport Systems in Asia

We, the participants, who are representatives of member countries of the Seventh Regional Environmentally Sustainable Transport (EST) Forum in Asia (Afghanistan, Bangladesh, Bhutan, Brunei Darussalam, Cambodia, People's Republic of China, Indonesia, India, Japan, Republic of Korea, Lao PDR, Maldives, Mongolia, Myanmar, Nepal, the Philippines, Pakistan, Russian Federation, Sri Lanka, Thailand, Timor-Leste, and Viet Nam), international organizations, bilateral and multilateral agencies, nongovernmental organizations, research organizations, and expert sustainable transport professionals, having met at the Seventh Regional EST Forum in Asia and Global Consultation on Sustainable Transport in the Post-2015 Development Agenda, held in Bali, Indonesia, from 23 to 25 April 2013, adopt the “Bali Declaration on Vision Three Zeros - Zero Congestion, Zero Pollution, and Zero Accidents towards Next Generation Transport Systems in Asia”, to give further inspiration and encouragement to all who are working on promoting environmentally sustainable transport in Asia. Realizing this will be helped by zero tolerance to fatalities, congestion, and pollution.

Recalling the commitments to achieve the sustainable transport goals under the Bangkok 2020 Declaration (2010-2020) agreed upon by the participants at the Fifth Regional EST Forum, held in Bangkok, Thailand, on 23-25 August 2010,

Noting the Outcome of the 2012 United Nations Conference on Sustainable Development (Rio+20) – The Future We Want, which provides the international community with a meaningful framework to develop and implement environmentally-protective, safe, economically-efficient, and socially-inclusive transport policies, programmes, and measures, leading to more sustainable passenger and freight transport systems and services,

Acknowledging that the frequency and magnitude of natural disasters (floods, earthquakes, tsunamis, cyclones, landslides, volcanic eruptions, storm surges, and extreme weather events) are on the rise globally, including across Asia, and that transport infrastructure and services are vulnerable to climate change impact,

Raising concern that a majority of developing countries and cities of the region are yet to make climate resilience, mitigation, and adaptation an integral part of their transport (infrastructure and services) policy, planning and development, and recognizing the need for the developed countries to fulfill existing commitments for financial support, technology transfer, capacity-building, and institutional-strengthening for developing countries so as to facilitate introduction of next generation sustainable transport systems in Asia for zero congestion, zero pollution, and zero accidents;

1. Express our intent to voluntarily develop and introduce more sustainable transport policies programmes, and projects, appropriate to the context of our countries and cities, that will contribute to our common vision of realizing 21st century cities characterized by zero congestion, pollution, and transport accidents, and at the same time, be resilient to climate change;

2. Call for a Post-2015 Development Agenda that acknowledges the critical contribution of sustainable transport in realizing sustainable development and addressing the climate change challenges;



3. Recommend complementing the Bangkok 2020 Declaration with the voluntary and legally non-binding Bali Declaration;
4. Call for close cooperation among countries to jointly foster the vision of Three Zeros;
5. Call for the developed countries and multinational institutions to fulfil their existing commitments for financial assistance, technological transfer, and sharing the expertise and experiences in advancing environmentally sustainable transport;
6. Call for multilateral financial institutions to adopt more inclusive policies for environmentally sustainable transport; and
7. Call for relevant international fora to deal with sustainable development to give more serious attention to environmentally sustainable transport aspects.

7th EST Forum in Asia, Bali, Indonesia, 2013



“BRT provides a sophisticated metro-quality transit service at a cost that most cities, even developing cities, can afford.”



Colombo Declaration (2014)

For the Promotion of Next Generation Low-Carbon Transport Solutions in Asia

We, the participants, who are representatives of member countries of Regional Environmentally Sustainable Transport (EST) Forum in Asia (Afghanistan, Bangladesh, Bhutan, Cambodia, India, Indonesia, Japan, Lao PDR, Malaysia, Maldives, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Russian Federation, Republic of Korea, Singapore, Sri Lanka, Thailand, and Viet Nam), international organizations, bilateral and multilateral agencies, nongovernmental organizations, research organizations, and sustainable transport experts, having met at the Eighth Regional EST Forum in Asia, held in Colombo, Sri Lanka, from 19 to 21 November 2014, unanimously adopt the Colombo Declaration, in order to demonstrate our continued intention in, and reinforce our resolve and commitment to the promotion of low carbon transport in Asia,

Reaffirming and building upon the Seoul Statement ~ Towards the Promotion of Environmentally Sustainable Transport (EST) for a Low-Carbon Society and Green Growth in Asia, agreed upon at the Fourth Regional EST Forum in Asia (2009),

Reaffirming and building upon the voluntary actions of participating member countries of the Regional EST Forum in Asia to achieve the twenty sustainable transport goals under the integrated Avoid-Shift-Improve strategy of the Bangkok 2020 Declaration (2010-2020) agreed upon at the Fifth Regional EST Forum in Asia (2010),

Recalling the Rio+20 Outcome Document - The Future We Want, which recognized that transport and mobility are centre to sustainable development, and which called for the efficient movement of people and goods, and access to environmentally sound, safe and affordable transportation as a means to improve social equity, health, resilience of cities, urban-rural connectivity and productivity of rural areas,

Reinforcing the objectives of the Bali Declaration on Vision Three Zeros-Zero Congestion, Zero Pollution, and Zero Accidents towards Next Generation Transport Systems in Asia adopted at the Seventh Regional EST Forum in Asia and Global Consultation on Sustainable Transport in the Post-2015 Development Agenda (2013),

Recognizing the mandate of the United Nations Framework Convention on Climate Change as the lead process for developing intergovernmental agreements on climate change,

Noting the outcomes of the UN Climate Summit 2014 organized by the United Nations Secretary-General Ban Ki-moon with special emphasis on the Voluntary Commitments made on Transport: (a) The International Association of Public Transport (UITP): Declaration on Climate Leadership; (b) The International Union of Railways (UIC): Low-Carbon Sustainable Rail Transport Challenge; (c) The Urban Electric Mobility Vehicles Initiative (UEMI); (d) Global Fuel Economy Initiative - Public-Private Partnership to double vehicle efficiency, and (e) Reducing Short-Lived Climate Pollutants – A Global Green Freight Action Plan,

Noting the substantial potential for mitigation of emissions from all sorts of transport modes documented in the Fifth Assessment Report of the Intergovernmental Panel on Climate Change as well as the substantive economic savings of adopting and implementing low-carbon transport policies by the International Energy Agency,



Noting the role of sustainable transport in realizing the Sustainable Development Goals (SDGs) and in particular the transport related SDGs and associated targets, recommended by the Open Working Group (OWG) for adoption to the United Nations General Assembly,

Noting the priority given by UN Secretary-General to sustainable transport including the establishment of a Secretary-General High-level Advisory Group on Sustainable Transport,

Acknowledging the rapid growth of greenhouse gas emissions from transport sector in urbanizing Asia, and the importance of promoting sustainable development for movement of people and goods, safe, low carbon transport through policies, programmes and actions that will result in the availability of appropriate transport infrastructure and services for shifting to most efficient, multimodal, integrated modes of passenger and freight transport along with improvement in the environmental performance of fuel and engine technologies,

Underscoring the enabling role of environmentally sustainable transport for Asian countries to reduce poverty, improve regional and rural-urban connectivity, and achieve sustainable development,

(1) Applaud the efforts of UN Secretary-General Ban Ki-moon to promote action on Climate Change in the context of Sustainable Development and to make transport one of the specific areas of action in the UN Climate Summit 2014;

(2) Express our support for the transport-related commitments on mobility; transit-oriented development; non-motorized transport (NMT); maritime transport; public transport; fuel economy; and green freight presented at the UN Secretary-General's Climate Summit 2014, and confirm our intention to voluntarily develop, introduce and implement policies, programmes and projects in support of these transport commitments;

(3) Call upon our development partners in the international development community (both multilateral and bilateral development partners); foundations and NGOs; and the business sector to align their transport-related assistance with these commitments presented at the UN Secretary-General's Climate Summit 2014 and national plans and programmes. This includes the provision of support for capacity building and setting countries EST Strategy, as well as financial support for implementing such commitments;

(4) Express our intention to make use of mechanisms under the United Nations Framework Convention on Climate Change, including the Clean Development Mechanism, Clean Technology Center and Network, the Global Environment Facility, the Green Climate Fund and Nationally Appropriate Mitigation Actions (NAMAs), to support the promotion of low carbon transport in Asia. Likewise, this also applies to climate change related mechanisms that are not part of the United Nations Framework Convention on Climate Change, such as the Climate Investment Fund; and

(5) Agree to share best practices of Asian countries and promote learning, cooperation and technology transfer on low carbon transport and solutions, transport safety, and acknowledge the positive role of the Regional EST Forum in Asia and its partners in facilitating and supporting the dialogue among Asian countries.

8th EST Forum in Asia, Colombo, Sri Lanka, 2014



KYOTO DECLARATION

for the Promotion of Environmentally Sustainable Transport in Cities

Adopted by Cities,
in Kyoto, Japan (2007), Bangkok, Thailand (2008), Seoul, Republic of Korea (2010),
Colombo, Sri Lanka (2014), Toyota, Japan (2015), Vientiane, Lao PDR (2017)

Addendum to Kyoto Declaration

*For the Promotion of Environmentally Sustainable Transport ~
Towards Realizing Resilient, Smart and Liveable Cities in Asia*

(Extended - 15 March 2017)

Subsequently, we, the city Mayors and local government representatives (Vientiane City, Lao People's Democratic Republic; Luang Prabang City, Lao People's Democratic Republic; Quezon City, the Philippines; Bangkok Metropolitan Administration, Thailand; Bulawayo City, Zimbabwe; Cebu City, the Philippines; Colombo City, Sri Lanka; Dhangadhi Sub-Metropolitan City, Nepal; Guwahati Municipal Corporation, India; Honiara City Council, Solomon Islands; Karachi Metropolitan Corporation, Pakistan; Kathmandu Valley Development Authority, Nepal; Suwon City, Republic of Korea; Kuching South City, Malaysia; Lilongwe City Council, Malawi; Male City Council, Maldives; Mandalay City Development Committee, Myanmar; Matale Municipal Council, Sri Lanka; Nakhon Ratchasima City, Thailand; Port Villa City, Vanuatu; Seberang Perai Municipal Council, Malaysia; Surabaya City, Indonesia; Surakarta City, Indonesia; Tangerang City, Indonesia; Ulaanbaatar City, Mongolia; Victoria City, Seychelles; Yan'an Municipal People's Government, People's Republic of China; Yogyakarta City, Indonesia; Zhanjiang Municipal Government, People's Republic of China), having met at the special ceremony for signing of Kyoto Declaration for the Promotion of Environmentally Sustainable Transport ~ Towards Realizing Resilient, Smart and Liveable Cities in Asia at the Tenth Regional Environmentally Sustainable Transport (EST) Forum in Asia, 14-16 March 2017, Vientiane, Lao PDR, unanimously endorse and sign the Kyoto Declaration and its Addendum.

Reaffirming and building upon the voluntary actions of participating member countries of the Regional EST Forum in Asia to achieve the twenty sustainable transport goals under the integrated Avoid-Shift-Improve strategy of the Bangkok 2020 Declaration (2010-2020) agreed upon at the Fifth Regional EST Forum in Asia (2010),

Recalling that the Rio+20 Outcome Document - The Future We Want, which recognized that transport and mobility are centre to sustainable development, and which called for the efficient movement of people and goods, and access to environmentally sound, safe and affordable transportation as a means to improve social equity, health, resilience of cities, urban-rural connectivity and productivity of rural areas,

Noting the Bali Declaration on Vision Three Zeros-Zero Congestion, Zero Pollution, and Zero Accidents towards Next Generation Transport Systems in Asia adopted at the Seventh Regional EST Forum in Asia and Global Consultation on Sustainable Transport in the Post-2015 Development Agenda (2013),

Noting the priority given by UN Secretary-General to sustainable transport including the establishment of a Secretary-General High Level Advisory Group on Sustainable Transport as well as including 'transportation' as a separate action area in his September 2014 Climate Summit,



Noting the role of sustainable transport in the Sustainable Development Goals (SDGs), including dedicated urban transport related targets under SDG 11 – Make Cities and Human Settlements Inclusive, Safe, Resilient and Sustainable, adopted by the United Nations General Assembly at the UN Sustainable Development Summit held in New York from 25 to 27 September 2015,

Acknowledging the important role of Asian cities and local governments will play, given the unprecedented level of urbanization likely to happen worldwide, largely driven by Asia, over the next decades, in setting up and implementing a vision for sustainable cities, from the initiation of city planning and design through to revitalization of older cities and neighbourhoods, including developing most efficient modes of mass rapid transit (MRT) systems while maintaining and expanding the role of walking and cycling with prime importance to human safety and mobility,

Underscoring that inclusive, resilient and sustainable cities and human settlements as well as provision of access to safe, affordable, accessible and sustainable transport systems for all along with improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons, will be critically important areas for the international community to achieve under the post-2015 development agenda,

1. Express our good-will intention to voluntarily develop, introduce, implement, and integrate more sustainable transport and urban planning policies, programmes and projects, including PPP (public-private-partnerships) funding next generation public transport, walking, cycling, and clean freight infrastructure developments, towards realizing resilient, smart and liveable cities,
2. Adopt effective policies, regulations, and enforcement mechanisms to minimize fatalities and serious injuries due to road crashes and to curb health-impairing air pollution, with specific attention to health impacts of small suspended particulate matters (PM10/PM2.5) and smoke and to mitigation of other global warming pollutants,
3. Progressively introduce and implement transport policies and programmes, which will emphasize more climate and disaster resilient transport infrastructures and services to have long term benefits for the society, and
4. Make efforts to support and take part in regional or global initiatives to promote sustainable transport, technical cooperation, technology transfer at affordable cost, and acknowledge the important role of the Regional EST Forum in Asia to facilitate their engagement with such regional or global initiatives.
5. We request international organizations and donors to realign their programmes in the spirit of EST.

**- Addendum to Kyoto Declaration –
~ For the Promotion of Environmentally Sustainable Transport ~
Towards Realizing Resilient, Smart and Liveable Cities in Asia
(Extended – 16 January 2015)**

Subsequently six Asian cities (Bandung, Kuching South, Nagoya, Sumita-cho, Toyota, and Yangzhou) having met in the Special Ceremony for signing of Kyoto Declaration on the Promotion of Environmentally Sustainable Transport in Cities during the High-level Symposium on Sustainable Cities: Connecting People, Environment and Technology, Co-convened by the United Nations and Toyota City, in Toyota, Japan on 16 January 2015, unanimously endorsed and signed the Kyoto Declaration and its Addendum.



**- Addendum to Kyoto Declaration –
~ For the Promotion of Environmentally Sustainable Transport ~
Towards Realizing Resilient, Smart and Liveable Cities in Asia
(Extended – 20 November 2014)**

•We, the city Mayors and local government representatives (Dhaka North, Shanghai, Navi Mumbai, Tangerang, Yogyakarta, Vientiane, Ulaanbaatar, Kathmandu, Karachi, Baguio, Cebu, Singapore, Colombo, Matale, Bangkok, Chiang Mai, Kyoto), having met at the Special Event of Asian Mayors of the Eighth Regional Environmentally Sustainable Transport (EST) Forum in Asia, held in Colombo, Sri Lanka, from 19 to 21 November 2014, unanimously endorse and sign the addendum to the existing Kyoto Declaration (2007), in order to demonstrate our continued interest in, and reinforce our resolve and commitment to the promotion and implementation of Environmentally Sustainable Transport (EST) in Asia,

Reaffirming and building upon the voluntary actions of participating member countries of the Regional EST Forum in Asia to achieve the twenty sustainable transport goals under the integrated Avoid-Shift-Improve strategy of the *Bangkok 2020 Declaration* (2010-2020) agreed upon at the Fifth Regional EST Forum in Asia (2010),

Recalling that the Rio+20 Outcome Document - *The Future We Want*, which recognized that transport and mobility are centre to sustainable development, and which called for the efficient movement of people and goods, and access to environmentally sound, safe and affordable transportation as a means to improve social equity, health, resilience of cities, urban-rural connectivity and productivity of rural areas,

Noting the role of sustainable transport in the Sustainable Development Goals, including a dedicated urban transport target under the proposed Sustainable Urban Development Goal, recommended by the Open Working Group (OWG) for adoption to the United Nations General Assembly,

Noting the priority given by UN Secretary-General to sustainable transport including the establishment of a Secretary-General High Level Advisory Group on Sustainable Transport as well as including 'transportation' as a separate action area in his September 2014 Climate Summit,

Noting the *Bali Declaration on Vision Three Zeros-Zero Congestion, Zero Pollution, and Zero Accidents towards Next Generation Transport Systems in Asia* adopted at the Seventh Regional EST Forum in Asia and Global Consultation on Sustainable Transport in the Post-2015 Development Agenda (2013),

Acknowledging the important role of Asian cities and local governments will play, given the unprecedented level of urbanization likely to happen worldwide, largely driven by Asia, over the next decades, in setting up and implementing a vision for sustainable cities, from the initiation of city planning and design through to revitalization of older cities and neighbourhoods, including developing most efficient modes of mass rapid transit (MRT) systems while maintaining and expanding the role of walking and cycling with prime importance to human safety and mobility,

Underscoring that inclusive, resilient and sustainable cities and human settlements as well as provision of access to safe, affordable, accessible and sustainable transport systems for all along with improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons, will be critically important areas for the international community to achieve under the post-2015 development agenda,



- (1) Express our good-will intention to voluntarily develop, introduce, implement, and integrate more sustainable transport and urban planning policies, programmes and projects, including PPP (public-private-partnerships) funding next generation public transport, walking, cycling, and clean freight infrastructure developments, towards realizing resilient, smart and liveable cities,
- (2) Adopt effective policies, regulations, and enforcement mechanisms to minimize fatalities and serious injuries due to road crashes and to curb health-impairing air pollution, with specific attention to health impacts of small suspended particulate matters (PM₁₀/PM_{2.5}) and smoke and to mitigation of other global warming pollutants,
- (3) ProProgressively introduce and implement transport policies and programmes, which will emphasize more climate and disaster resilient transport infrastructures and services to have long term benefits for the society, and
- (4) Make efforts to support and take part in regional or global initiatives to promote sustainable transport, technical cooperation, technology transfer at affordable cost, and acknowledge the important role of the Regional EST Forum in Asia to facilitate their engagement with such regional or global initiatives.
- (5) We request international organizations and donors to realign their programmes in the spirit of EST.

**- Addendum to Kyoto Declaration –
~ For the Promotion of Environmentally Sustainable Transport ~
Towards Realizing Resilient, Smart and Liveable Cities in Asia
(Extended – 16 March 2010)**

Subsequently ten Asian cities (Ahmedabad, Banjarmasin, Chiang Mai, Chuncheon, Donghae, Islamabad, Kandy, Penang, Surakarta, and Tangerang) having met in the Special Event of Asian Mayors on the signing of the Kyoto Declaration for the Promotion of Environmentally Sustainable Transport in Cities during the United Nations Forum on Climate Change Mitigation, Fuel Efficiency and Sustainable Development of Urban Transport in Seoul, Republic of Korea on 16 March, 2010, unanimously endorsed and signed the Kyoto Declaration for the promotion of environmentally sustainable transport (EST) in Asia.

**Addendum to Kyoto Declaration –
~ For the Promotion of Environmentally Sustainable Transport ~
Towards Realizing Resilient, Smart and Liveable Cities in Asia
(Extended – 12 November 2008)**

Subsequently ten Asian cities (Baguio, Bangkok, Batam, Cebu, Colombo, Guwahati, Karachi, Kathmandu, Makassar, Makati, Palembang, and Surat) having met in the Special Event of Asian Mayors on Environmentally Sustainable Transport during Better Air Quality (BAQ) 2008 Workshop in Bangkok, Thailand on 12 November 2008, unanimously endorsed and signed the Kyoto Declaration for the promotion of environmentally sustainable transport (EST) in Asia.



Kyoto Declaration

**~For the Promotion of Environmentally Sustainable Transport ~
Towards Realizing Resilient, Smart and Liveable Cities in Asia
(24 April 2007)**

We, the Mayors and governmental representatives of Asian cities, having met in Kyoto, Japan on 23-24 April 2007 at the Asian Mayors' Policy Dialogue for Promotion of Environmentally Sustainable Transport (EST) in Cities, to discuss and address key policy issues on environment and transport from city perspectives under the overall framework of the Regional EST Forum,

Recognizing that cities in the region are faced with a number of critical environment and transport related issues, their implications for human health, economic well-being, and social equity, and the emerging need to define and implement clear goals at the city level in line with the Millennium Development Goals (MDGs) and the Johannesburg Plan of Implementation (JPOI) adopted at the 2002 World Summit on Sustainable Development (WSSD),

Reaffirming and building upon the Aichi Statement agreed upon at the First Meeting of the Regional Environmentally Sustainable Transport Forum in Asia, held in Nagoya, Japan, from 1-2 August 2005,

Noting the objectives of the Regional EST Forum, an initiative of the United Nations Centre for Regional Development (UNCRD) in cooperation with Asian countries, which is comprised of high-level government representatives and experts in various thematic areas related to EST, and which provides a strategic and knowledge platform for sharing experiences and disseminating best practices, policy instruments, tools, and technologies,

Emphasizing that the Regional EST Forum has identified in the Aichi Statement the need for both national and local governments to develop and adopt integrated policies, strategies, and programmes incorporating key elements of environmentally sustainable transport,

Realizing the importance of strengthening regional cooperation for sustainable cities through the framework of the ASEAN Working Group on Environmentally Sustainable Cities (AWGESC) and other initiatives, such as the International Council for Local Environment Initiatives (ICLEI) and the Kitakyushu Initiative for a Clean Environment,

Acknowledging the important role that Mayors could play in implementing local-level actions to make cities healthy, green, and environment- and people-friendly in cooperation with key stakeholders, and also addressing local issues which have regional and global implications, such as climate change,

Recognizing the importance of achieving greater synergy between local actions and national strategies and programmes to realize EST,



We, the Mayors, thus hereby declare our intention to:

- 1.resolve to demonstrate leadership and ownership in promoting EST and setting the vision in Asian cities in motion in close collaboration with the national government, the private sector, civil society, and regional and international communities,
- 2.commit to implementing integrated policies, strategies, and programmes addressing key elements of EST such as public health; land-use planning; environment- and people-friendly urban transport infrastructure; public transport planning and transport demand management (TDM); non-motorized transport (NMT); social equity and gender perspectives; road safety and maintenance; strengthening road side air quality monitoring and assessment; traffic noise management; reduction of pollutants and greenhouse gas emission; and strengthening the knowledge base, awareness, and public participation,
- 3.dedicate ourselves to specifically addressing priorities that are often under-emphasized but are nevertheless vital and central to EST, such as the provision of exclusive pedestrian and bicycle lanes, and ensuring safe and comfortable movement of women, children, the elderly, and the physically impaired,
- 4.dedicate ourselves to specifically address the adverse impact of the growing number of motorcycles in most Asian cities,
5. ensure sustainable financing and equitable pricing structures for implementing EST,
- 6.resolve to actively collaborate and cooperate through the Regional EST Forum in order to share information and promote the incorporation of EST elements in city master plans and programmes,
- 7.urge the international and donor community to acknowledge the importance of city-based actions and programmes concerning EST, and strongly appeal to them to actively support the implementation of these actions and programmes by providing financial assistance, and facilitating technology transfer and capacity-building through pilot and demonstration projects,
8. call for city-to-city cooperation to address issues of common concern and to bridge knowledge, policy, and technology gaps in the environment and transport sector, and
- 9.explore possible opportunities for organizing similar policy dialogues on a regular basis in collaboration with the international and donor community.

We are thus convinced that the concerted efforts of national governments, city authorities, the private sector, civil society, and the donor and international community will contribute to a more profound vision of EST for Asian cities in the 21st century.

We express our sincere appreciation to the organizers, experts, and participants for contributing their ideas, opinions, and experiences which will greatly help us in achieving this milestone.





Vientiane Declaration (2017)

On Sustainable Rural Transport towards Achieving the 2030 Agenda for Sustainable Development

Preamble

Rural transport is a key driver for improving rural wellbeing, economic development, community empowerment as well as livelihood - and food security. Due to inadequate basic rural transport infrastructure and services, many developing countries of Asia confront a number of socio-economic and development challenges. Poverty, under nutrition, lack of access to agricultural markets, basic utilities and services (e.g. drinking water, energy, education and employment opportunities, health care facilities, and recreation sites) remain formidable challenges in the development of most of the rural areas in Asia. Additionally, environmental problems arising from vehicular emissions, lack of proper vehicle inspection and maintenance, fuel adulteration significantly affect rural inhabitants and ecosystems.

Improved rural transport infrastructure and services are a key enabler to increased rural resiliency, rural empowerment and rural socio-economic transformation through poverty eradication, hunger elimination, social integration, increased food security and improved supply chain logistics. Thus, it is of paramount importance for developing countries to improve and maintain their rural transport infrastructure and services, to ensure better accessibility for low-income communities, farmers, women, youth and other vulnerable groups, and to ensure that “no one is left behind,” as urged by the recently-adopted 2030 Agenda for Sustainable Development. As most agricultural production takes place in rural areas, improved access to both local markets and urban areas can make a significant contribution towards improving economy and livelihood security of farming communities.

Due to increasing frequency and magnitude of natural and climate-driven disasters (e.g. windstorms, floods, cyclones, earthquakes, landslides, avalanches and droughts), rural transport systems require strategic investment and design to help increase resilience of rural communities. Climate adaptive and disaster resilient transport investments in rural areas can help secure all-season access to markets and essential services and prevent isolation of fragile or remote communities, thus contributing to economic development and well-being.

The 2030 Agenda for Sustainable Development, with 17 Sustainable Development Goals (SDGs) and 169 related targets at its core, represents a plan of action for people, planet and prosperity, and reflects national commitments to put the world on a more sustainable and resilient path. Through the adoption of this Agenda, member states have acknowledged the vital role of sustainable transport in achieving the SDGs. Essential steps realizing the SDGs for the rural sector include developing and maintaining resilient rural transport infrastructure (e.g. footpaths, tracks, trails, farm and feeder roads, railroads, waterways, bridges and drainage systems), expanding rural transport service networks to promote education and health in isolated areas, and improving rural transport access to provide enabling environments for trade and commerce.

Declaration

We, the participants, who are representatives of member countries of the Regional Environmentally Sustainable Transport (EST) Forum in Asia (i.e. Afghanistan, Bangladesh, Bhutan, Cambodia, India, Indonesia, Islamic Republic of Iran, Japan, Lao PDR, Malaysia, Maldives, Mongolia, Myanmar, Nepal, Pakistan, the Philippines, Russian Federation, Republic of Korea, Singapore, Sri Lanka, Thailand, Timor-Leste, and Viet Nam), observer countries (Azerbaijan, Ecuador, Kiribati, Kyrgyzstan, Malawi, Peru, Seychelles, Solomon Islands, Tajikistan, Turkmenistan, Uganda, Uzbekistan, Vanuatu, Zimbabwe), international organizations, bilateral and multilateral agencies, civil society organizations, the scientific and academic community, the private sector, sustainable transport professionals, and other stakeholders having met at the Tenth Regional EST Forum in Asia, held in Vientiane, Lao PDR, from 14 to 16 March 2017, unanimously adopt the “Vientiane Declaration on Sustainable Rural Transport towards Achieving the 2030 Agenda for Sustainable Development”,



Reaffirming the voluntary actions of participating member countries of the Regional EST Forum in Asia to achieve the twenty sustainable transport goals under the Bangkok 2020 Declaration (2010-2020) agreed upon at the Fifth Regional EST Forum in Asia (2010),

Acknowledging the Bali Declaration on Vision Three Zeros-Zero Congestion, Zero Pollution, and Zero Accidents towards Next Generation Transport Systems in Asia adopted at the Seventh Regional EST Forum in Asia and Global Consultation on Sustainable Transport in the Post-2015 Development Agenda (2013),

Noting the Sendai Framework for Disaster Risk Reduction 2015-2030, the Addis Ababa Action Agenda of the Third International Conference on Financing for Development in Ethiopia in 2015 and the Istanbul Declaration and Programme of Action for the Least Developed Countries for the Decade 2011-2020, which highlight the need to build safe, resilient and sustainable infrastructure and services in developing and least developed countries as a priority area of action,

Reaffirming the significance of sustainable rural transport and multiple benefits of rural access in the effective implementation of the Sustainable Development Goals (SDGs) and related targets set by the United Nations and international community,

Noting the outcome of the Global Sustainable Transport Conference held on 26-27 November 2016 in Ashgabat, Turkmenistan,

Noting also the outcome of the UNESCAP Ministerial Conference on Transport held on 5-9 December 2016 in Moscow, Russian Federation, that adopted the Regional Action Programme on Sustainable Transport Connectivity, Phase I (2017-2021) including achieving greater rural connectivity as one of the core themes,

Taking into account that currently about 47% of the population in Asia lives in rural areas and that rural poverty is a major barrier to achieving the Sustainable Development Goals (SDGs) in developing countries,

Considering that rural areas are the growth engine of agricultural products and that inadequate basic rural transport infrastructure and services increases the cost of transport, limits access to local markets for agricultural products, and reduces productivity, employment and business opportunities,

Recognizing the efforts of many of the countries in the region that have resulted in substantive improvements in rural transport infrastructure and services, but **acknowledging** that much more needs to be done including greater use of the various options for financing rural connectivity,

Noting that food waste because of inadequate rural transport infrastructure and services continues to threaten food security in the region,

Noting that it would be important to take into due consideration of the environment, such as implementation of environmental impact assessment while building transport infrastructure, in order to conserve natural environment, ecosystem and prevent all forms of pollution in rural areas,



Underscoring the fact that Asia is one of the world's most vulnerable regions to the impacts of climate change and natural disasters, improved rural transport and accessibility will have significant positive impacts prior to, during, and after extreme weather events and other disasters, including more efficient evacuation, relief mobilization and relocation and rehabilitation,

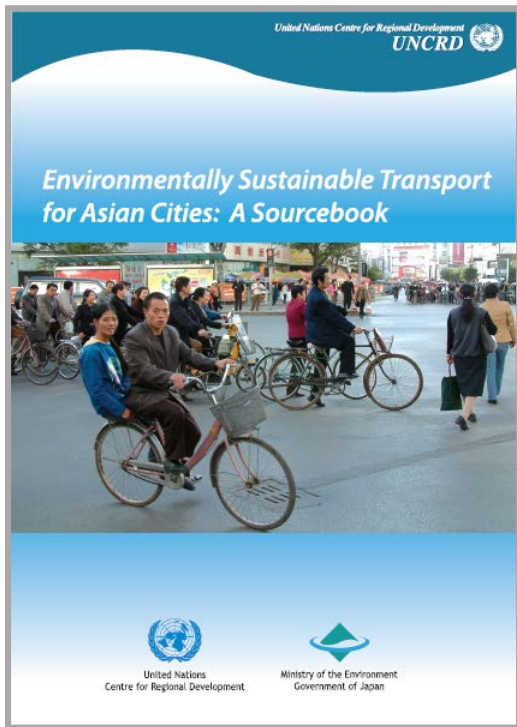
Recognizing that rural transport is a key enabler for social equity, human resource development, local economic growth and employment generation, efficiency and productivity in rural areas, and improvement of the quality of life of the rural poor, farmers, girls and women, youth, the elderly and other vulnerable populations, and

Underscoring that efficient rural-urban connectivity plays a crucial role in the generation of income, employment and wealth and urban food security, yet is often not adequately addressed in national economic and trade policies,

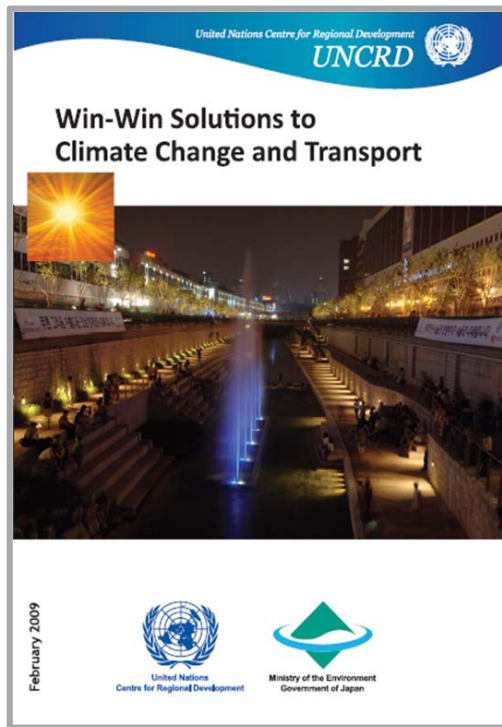
1. *Express* our commitment to promote inclusive, affordable, accessible and sustainable rural transport infrastructure and services, thus facilitating improved access to basic utilities and services including health and education by the rural poor, farmers, agricultural workers, girls and women, youth, and differently abled and vulnerable groups;
2. *Recognize* that rural access does not only comprise investments in new roads, but as well adequate maintenance of existing infrastructure, including the provision of sufficient funding through government and donors for necessary road works;
3. *Recognize* that sustainable rural transport should be integrated within the rural landscape planning, and healthy ecosystems around transport system contribute significantly to sustainability and resilience of transport system;
4. *Express* our commitment to explore climate adaptive road and infrastructure investments in rural areas to enhance resilience of local communities as well as to secure all-season access to essential utilities and services;
5. *Express* our commitment to promote environmentally sustainable transport in rural areas by introducing low-carbon transport system and avoiding road development without environmental consideration;
6. *Express* our commitment towards transport-linked development, which is local resource based, environment friendly and participatory, as the way of integrated rural transport development;
7. *Express* our commitment to promote efficient rural access, rural-urban connectivity and sustainable freight movement with an objective to achieve rural livelihood security, rural resilience, rural empowerment and productivity, and sustainable rural and regional development in support of successful implementation of the SDGs;



8. *Express* our commitment to assign due priority to rural transport projects and initiate the development of national strategies and policy frameworks to improve rural transport connectivity to wider local, national and regional transport networks;
9. *Express* our commitment to improve transport safety, sustainability and efficiency in rural areas through better coordination of relevant stakeholders, legal frameworks, and enforcement of safety and environmental regulations, including mandatory vehicle inspection and maintenance (I/M), driver and mechanic training, monitoring of fuel quality against adulteration, and inclusive planning and management techniques;
10. *Express* our commitment to undertake Environmental and Social Impact Assessment in all rural transport infrastructures, including road networks, and consider the environmental and social impact of the technologies used;
11. *Utilize* the outputs of research for innovative methodologies to provide more sustainable and appropriately-engineered rural connectivity that provides value-for-money and incorporates local resources and materials; and
12. *Call* for the widest possible national, regional and international cooperation and support for reviewing progress, institutional capacity-building, knowledge sharing, technology transfer, and research and development for innovative solutions to improve rural-urban connectivity; to improve and green supply chain logistics (from producers to consumers); and to minimize local and transboundary pollution, address illegal, transboundary movement of hazardous waste, as well as mitigate, and adapt to climate change.



UNCRD EST SOURCEBOOK (April 2007)
 Available at
http://www.uncrd.or.jp/env/publication/est_sourcebook.pdf



WIN-WIN SOLUTIONS TO CLIMATE CHANGE AND TRANSPORT (February 2009)
 Available at
http://www.uncrd.or.jp/env/publication/win_win_solutions.pdf



Formulation of a National Environmentally Sustainable Transport Strategy for the Philippines (April 2007)
 Available at
http://www.uncrd.or.jp/env/est/docs/P_NESTS.pdf

Recent EST Capacity-Building and Training Activities



Training Course on Non-Motorised Transport in Urban Areas (pre-event of 4th Regional Forum)
Seoul, Republic of Korea (February 2009)

Co-organized by: UNCRD, MOEJ, MLTM-K
Supported by: KOTI, GIZ, I-CE



National Environmentally Sustainable Transport Training Workshop-cum-Policy Dialogue
Jakarta, Indonesia (April 2009)

Co-organized by: UNCRD, MOE-Indonesia, MOT-Indonesia
Supported by: Sida, GIZ, ITDP, MOEJ, US-EPA



National Training Workshop-cum-Policy Dialogue on Environmentally Sustainable Transport
Dhaka, Bangladesh (April 2009)

Co-organized by: UNCRD, DoE/MoEF-Bangladesh
Supported by: UNDP-Bangladesh, Sida, GIZ, MOEJ



Sub-Regional EST Training Workshop-cum-Policy Dialogue in South Asia
Ahmedabad, India (August 2011)

Organized by: UNCRD, SACEP, MOEJ, AMC, CEPT
Supported by: WHO/SEARO, CAI-Asia, The WRI Center for Sustainable Transport, EMBARO, GIZ



United Nations Centre for Regional Development Nagoya, Japan

ABOUT UNCRD

The United Nations Centre for Regional Development (UNCRD) was founded in 1971 as part of the United Nations (UN) system of organizations promoting regional development in developing countries and countries with economies in transition in the Asian-Pacific, African, and Latin America and the Caribbean regions. It was set up in pursuance of the terms of the UN Economic and Social Council (UN/ECOSOC) resolutions 1086 C (XXXIX) and 1141 (XLI) which called for global action to promote regional development, and resolution 1582 (L) which provided guidelines for its operations.

UNCRD was created by an agreement between the UN and the Government of Japan. Under Article III of the agreement, UNCRD has four distinct but interrelated responsibilities.

(1) To serve as a training and research centre in regional development and planning and related fields for developing countries which may wish to avail themselves of its services;

(2) To provide advisory services in regional development and planning and related fields at the request of developing countries;

(3) To assist developing countries in promoting the exchange of data on research, practical experience, teaching, and other relevant subjects in regional development and planning and related fields; and

(4) To assist and cooperate with other organizations, national or international, concerned with regional development and planning and related fields.

To meet these goals, the Centre targets its programmes towards socially and environmentally sustainable development. The three multidisciplinary themes of human security, environment, and disaster management serve as a guide for the Centre's training and research activities.

The Centre's operations have benefited greatly from its cooperative relationship with UN/DESA, which provides valuable and consistent support.

For more information see www.uncrd.or.jp.



Three Generations, Photo by Mikael Colville-Andersen, www.copenhagencyclechic.com/



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