

2019 World Conference on Transport and Research (WCTR)

UNCRD Special Session - Role of the Private Sector in Sustainable and Resilient Transport Development in Cities of Asia ~ Implication towards SDG 11



**9:30-11:00, 28 May 2019 at Room: LC 001
Indian Institute of Technology Bombay (IIT Bombay), Mumbai, India**



Connection Between Transport and the SDGs

Sustainable transport and mobility are fundamental to progress in realizing the promise of the 2030 agenda for sustainable development and in achieving the 17 SDGs (Global Mobility Report, 2017). Sustainable transport has direct relevance to 7 SDGs (1, 3, 8, 9, 10, 11, 13)



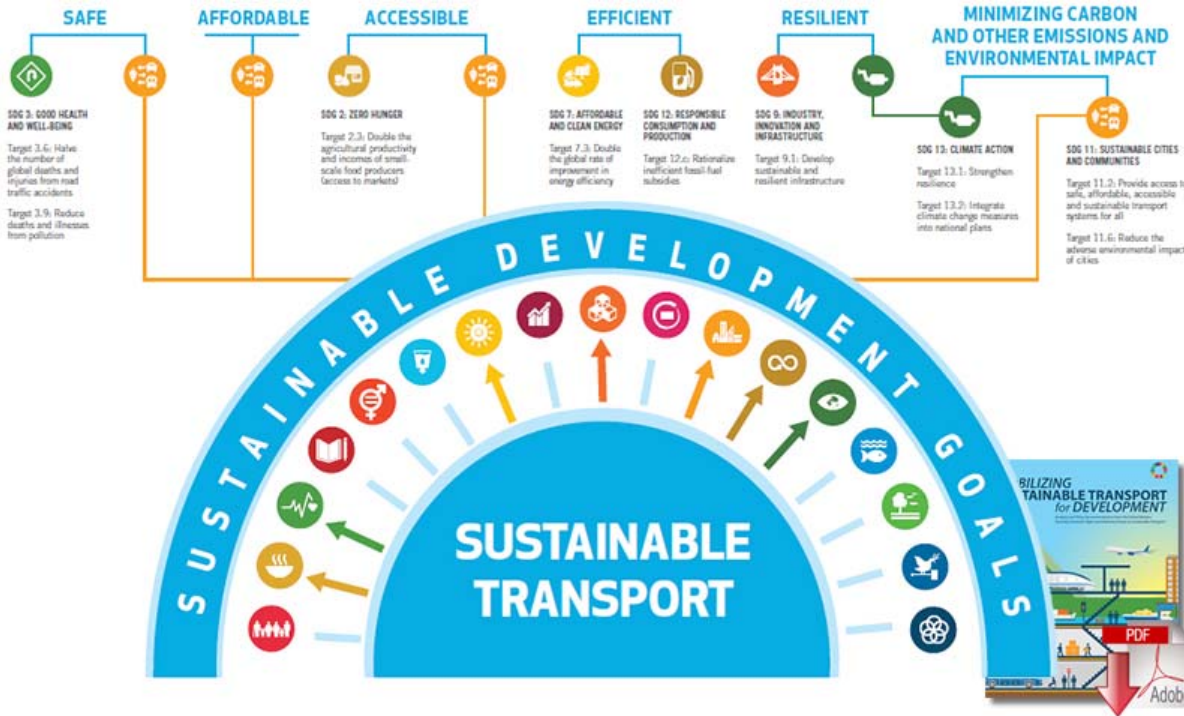
SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable

SDG: 11.2. *By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, 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. (Indicator: proportion of population that has convenient access to public transport, by sex, age and persons with disabilities)*

SDG: 11.6. *By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.*

SDG: 11.7. *By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities.*

11.a. *Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning.*



Mobilizing sustainable transport for development –analysis and policy recommendations from the United Nations Secretary-General’s high level advisory group on sustainable transport, Oct 2016

Sustainable Urban Transport Infrastructure:

- **Economically sustainable – decent employment, increased household income, firm profits without generating debt crisis;**
- **Socially inclusive – needs of low income and other marginalized groups (women, children, elderly, physically challenged, migrants, indigenous communities)**
- **Environmentally sustainable – minimum impact on local, regional, global environments, GHG emissions, improved natural resources efficiency, safe guarding critical ecosystems and biodiversity**

Major Issues and Challenges in Developing Countries:



Traffic jam in Manila, Philippines

Buses share roads with cars which reduce the efficiency of bus travel



Traffic congestion in Dhaka, Bangladesh

Crippling traffic congestion leads to frequent stopping, long journey times and delays in passenger pick-up and drop-off. World Bank data shows that congestion in Dhaka eats up 3.2 million working hours per day (The Daily Star, 19 July 2017)



Crowded bus plunges into gorge in India

Overcrowded buses raise safety concerns. 22,941 people die each year in traffic-related incidents in Thailand, making its roads the deadliest in Southeast Asia (WHO, 2018)



Crowded bus in Kathmandu, Nepal



Traffic congestion in Lahore, Pakistan



Road accidents in India



Air pollution in PR China



Crowded bus in Lahore, Pakistan

Traffic congestion and air pollution



Mumbai, India



Kabul, Afghanistan



Dhaka, Bangladesh



Jakarta, Indonesia

As many cities are struggling with chronic congestion and toxic air pollution, yet private car ownership is projected to increase by up to 500% outside the OECD by 2050 (New Climate Economy Report, 2018).



Seoul, South Korea

Source:hant.com



Beijing, China

Source:thebeginner.com



Bangkok, Thailand

Source:abcnews.go.com



Ulaanbaatar, Mongolia

Source:peterswanderings.com

Asia has the highest rate of all day traffic congestion, traffic accidents and fatalities and carbon emission (WHO, 2015). Air Pollution cost India a staggering 8.5% of its GDP in 2013 (World Bank, 2016)

Climate adaptation and disaster resilience of cities through sustainable transport policies and solutions (-----> SDG 11.b)

- **rise in frequency and magnitude of natural disasters (flood, earthquake, cyclones, landslides, etc.) across the world;**
- **Climate & disaster resilience is not a major part of the current transport policy, planning and urban/transport infrastructure and services development resulting in unprecedented potential damages to both human life and economy during such extreme events;**
- **urban/transport infrastructures in Asia and Africa are vulnerable to effects of climate change and these vulnerabilities should be addressed in the design, construction, and geometry of roads, railway tracks, and other transport infrastructure, including the drainage system of cities.**



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Global infrastructure investment deficit stands at about ~ 1 trillion US\$/year, much of it in urban areas. India has a huge infrastructure deficit at current urbanization level and needs 4.5 trillion US\$ by 2040 to develop infrastructure to improve economic growth & community well-being as per Economic Survey 2017-18. . Who will finance ? Where will the resource come from?

At city level, options for scaling up investments in sustainable transport infrastructure could be through a mixture of fiscal reform and financial mechanisms such as –

- piggy-backed arrangements on income or carbon taxes
- user fees & charges
- simple property tax systems
- stamp duties on property sales
- debt financing including green bonds
- land sales
- betterment levies
- **PPPs for infrastructure development**

Benefits of Public-Private-Partnership (PPP):

- Public-private-partnerships can offer alternatives in which governments and private companies assume **co-responsibility and co-ownership** for the delivery of urban services, including infrastructure development.
- Partnerships can combine the advantages of the private sector (**dynamism, access to financial resources and latest technologies, managerial efficiency, and entrepreneurial spirit, etc.**) with social concerns and responsibility of the public sector (**public health and better life, environmental awareness, local knowledge and job creation, etc.**).
- Partnerships are indispensable for creating and financing adaptation measures towards **resilient cities** which in turn are more attractive for private investments.
- Partnerships can further provide **win-win solutions** both for the public utilities and private sector—if **duly supported by appropriate policy frameworks**. Such partnerships could lead to savings in government budgets, and the private sector, on the other hand, may use the opportunity to create business opportunities that could also serve as income generating opportunities for the local communities.

Questions for Panel Discussion:

- 1. What are the biggest financing barriers developing countries and cities are facing with regard to investing in building sustainable and resilient urban transport infrastructures (e.g., mass transit system)? In what aspects particularly can private sector offer support to city and national governments?**
- 2. The frequency and magnitude of natural disasters (flood, earthquake, cyclones, landslides, etc.) are on rise across Asia, yet the majority of developing countries and cities, have not made “resilience” a major part of their transport policy, planning, and financing for infrastructure and services development. The urban transport infrastructures are also vulnerable to effects of climate change. What measures or options the local and national government authorities should consider in leveraging their financing needs through private sector investment?**
- 3. What are the critical enabling conditions (in terms of policy, legislative, institutional arrangements, socio-cultural elements, etc.) for the successful private sector investment in urban transport sector?**
- 4. It is very important to design and build cities that enhance trade, connectivity and investment in such a way that the opportunities of low-carbon transport development, transit oriented development (TOD), smart growth and green employment are mainstreamed into the city development initiatives. At the same time cities and businesses are tied to each other in a symbiotic relationship (cities supports business and business supports cities in return). In this regard, what can partnerships (e.g., public-private-partnerships) offer for cities?**



Environmentally
Sustainable
Transport

ASIAN EST INITIATIVE



Ministry of the Environment
Japan

Moving Towards
2030: Successor
of Bangkok
2020
Declaration

Kyoto Declaration
(endorsed first by 22,
now 63 Asian
Cities/Mayors with
addendum 2017)

Seoul Statement
(climate change)

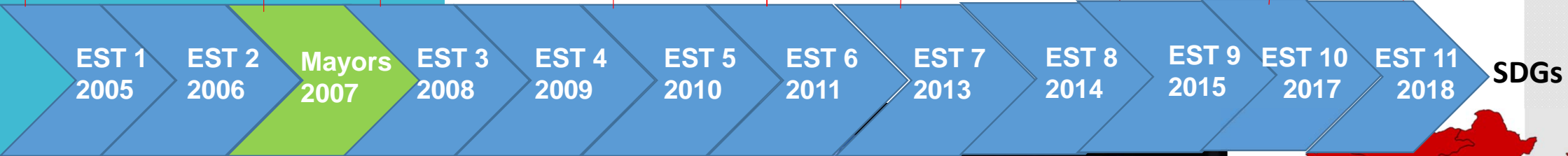
**Bangkok 2020
Declaration**
(20 goals)

Colombo Declaration
for Next Generation
Low-carbon Transport
Solutions in Asia

**Bali Declaration on
Vision Three Zeros**
(Zero Congestion,
Zero Pollution, Zero
Accidents)

**Vientiane
Declaration on
Sustainable
Rural Transport**
(2017)

**Aichi
Statement**
(defining core EST
areas)



Awareness Raising on Sustainability Transport in Asia

Formulation of National EST Strategies (Philippines, Viet Nam, Cambodia, Lao PDR, Indonesia, Nepal)

Development Banks start shifting funding to Sustainable Transport

Promotion of Green Freight in Asia/Green Freight Agreement in Asia

Avoid trips

Shift to most efficient mode

Improve efficiency

Greater focus on sustainable transport, low carbon solutions for livable society in Asia in line with Rio+20 outcome – *The Future We Want*, SG's Climate Summit (2014), Post-2015 Development Goals/SDGs.