United Nations Centre for Regional Development
UNCRD

Asian EST Initiative: Promoting National EST Strategies

MEET Follow Up Meeting, 17-18 June 2009, Hakodate

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Director

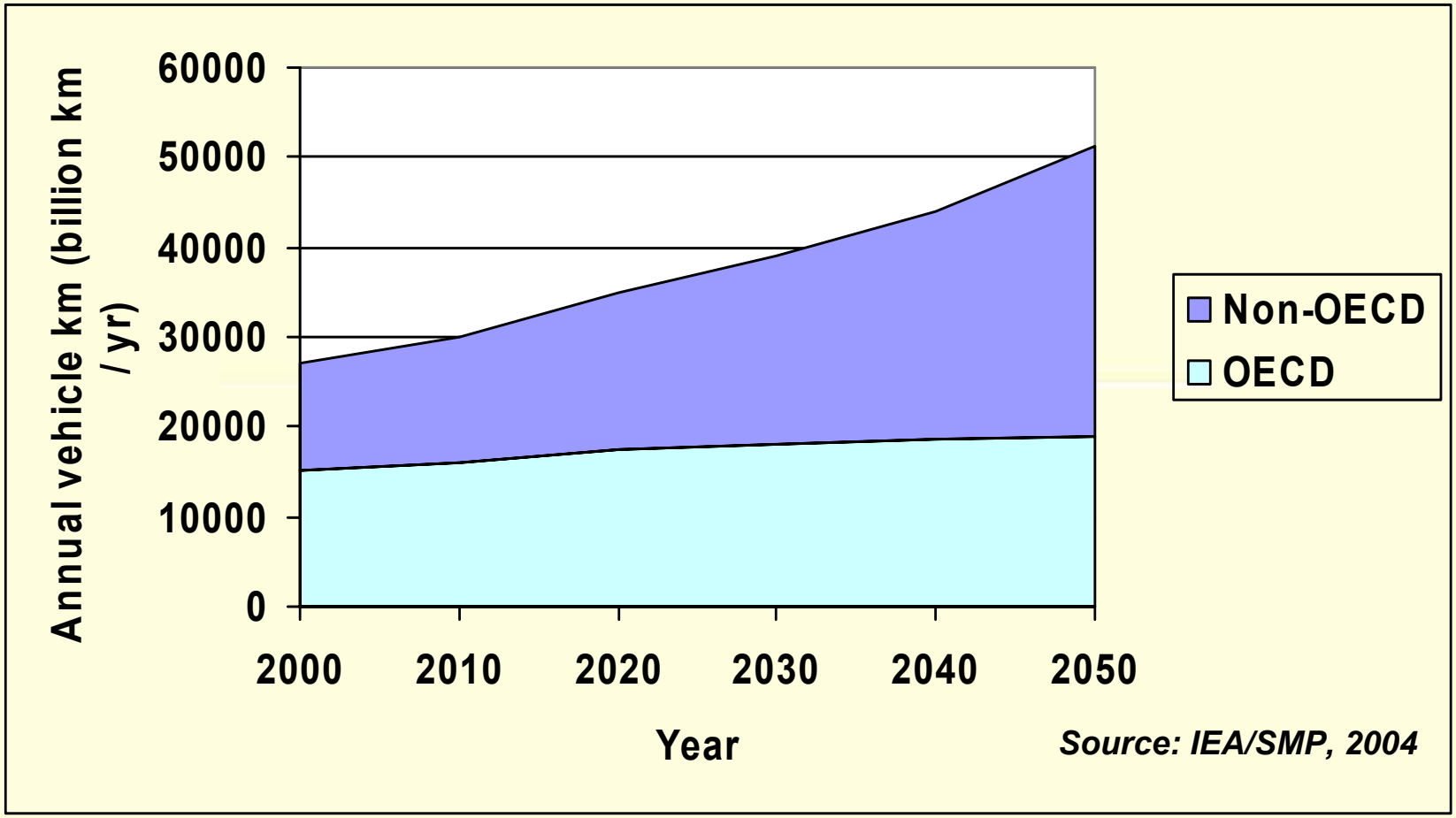
UNCRD

United Nations Centre for Regional Development


Mexico City
CUATRO CAMINOS
24-171
Onogawa


London, Oxford St.
Oxford Street
Selfridges
Marble Arch
Ryder
Onogawa

Vehicle usage



There will be not only more cars, but moe driving as well.

1. Public health

2. Road safety and maintenance

3. Traffic noise management

4. Social equity and gender perspectives

12. Strengthening knowledge base, awareness and public participation

Integrated EST Strategy

5. Public transport planning & TDM

6. Non-mototrised transport

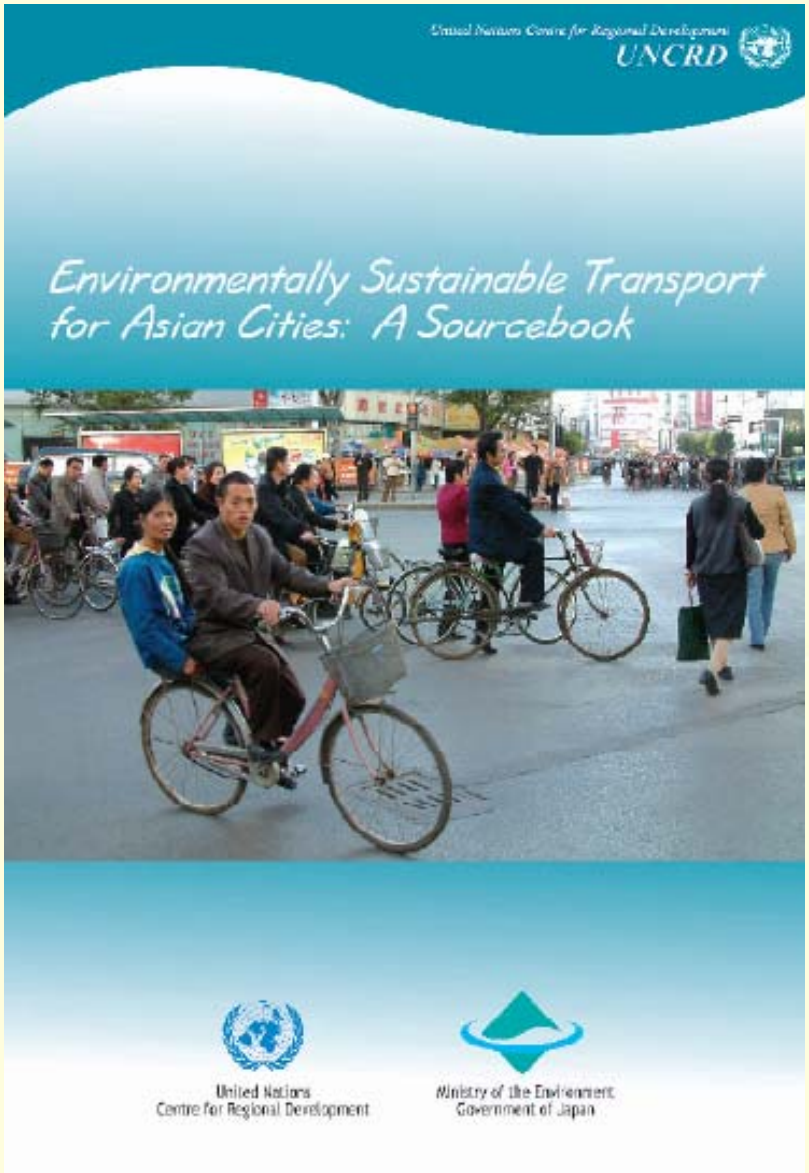
11. Land use planning

10. Vehicle emissions control & standards & I/M

9. Strengthening road side air quality monitoring and assessment

8. Cleaner fuels

7. Environment and people friendly infrastructures



Key considerations under EST:

- **Quality of urban environment & life**
- **Economic productivity**
- **Social sustainability**
- **Social equity**
- **International obligation (global climate change)**

Benefits of EST

EST offers an environmentally friendly alternative to uncontrolled motorization and its related problems.

EST offers a complementary and integrated package of efficient public transport, quality foot-paths, and cycle-ways, vehicle restriction measures, clean fuels, road safety programmes, and the required facilities for transport-sensitive groups (the poor, children, women, the elderly, and the physically challenged).

EST offers a unique opportunity to create a new paradigm for urban mobility and the creation of a more human urban environment.

Development of EST activities in Asia

Date	Meetings	Outputs	Organizers
Jan. 2004	Policy Dialogue on Transport and Environment (Manila, Philippines)	Manila Statement (Necessity of strategic approach for EST, Foundation of Asian EST Regional Forum)	UNCRD, GOJ, Philippine Gov.
Aug. 2005	1st EST Regional Forum (Nagoya)	Aichi Statement (12 components of EST, 13 countries from Asia)	UNCRD, GOJ
Dec. 2006	2nd EST Regional Forum (Yogyakarta, Indonesia)	Approval of EST Guideline (14 countries)	UNCRD, GOJ, Indonesia Gov.
April. 2007	Asian Mayors' Policy Dialogue for the Promotion of EST in Cities	Adoption of Kyoto Declaration (22 cities from 14 countries)	UNCRD, ASEAN, GOJ, IGES
March 2008	3rd EST Regional Forum (Singapore)	Report of development of national strategies, Co-benefit and climate change (22 countries)	UNCRD, GOJ, Singapore
Nov. 2008	2nd Signing on Kyoto Declaration	Additional 14 cities signed on Kyoto Declaration	UNCRD, CAI-Asia, GOJ
Feb. 2009	4th EST Regional Forum (Seoul, Korea)	Green Growth, Climate change & Funding mechanisms (Seoul Statement)	UNCRD, Korea, GOJ

1st Regional EST Forum,

Aug 2005, Nagoya Japan

Participating countries: Brunei Darussalam, Cambodia, Canada, China, Indonesia, Japan, Lao PDR, Malaysia, Mongolia, Myanmar, Philippines, Singapore, Thailand, and Viet Nam

Supporting Organizations: ADB, Sida, and WHO

- **Regional EST Forum launched**
- **Subsidiary Expert Group established**
- **"Aichi Statement" adopted**

Activities of EST

- **Regional (Asia) Level: provide strategic and knowledge platform for policy dialogue through Regional EST Forum,**
  - common understandings are formulated as Aichi and Seoul Statements
- **National Level: Technical assistance for National EST Strategy development, need based training programmes, and policy consultations,**
  - national strategies are developed with the participation of all ministries concerned
- **Local/City Level: Kyoto Declaration provides basis for promotion of EST at city level.**
  - Many Asian cities are joining in this Kyoto Declaration

Development of national strategies in Asia

- Vietnam, Laos, Cambodia and Indonesia (First targeted countries, 2006-)
- Philippines and Bangladesh (Second Group, 2008-)
- and further (South and N-E Asia)

National EST Strategy Formulation in Viet Nam

Institutional Co-operation/Mechanism vis-à-vis National EST-Working Group for Formulation of EST Strategy-cum-Action Plan

National EST Working Group

Generic guidelines

Periodic follow-up

UNCRD

Regular follow-up

National Focal Point/Steering Committee
- DoE/MONRE
- DoST/MOT

Input/feedback

Progress

National Formulation Team (CC)

Substantive input/data/information/comments/ suggestions

National Sectoral Agencies/Departments

Traffic Noise Management

Cleaner Fuels

Vehicle Emissions Control & Standards

Knowledge Base & Research/ Public Health & Awareness

Integrated EST Strategy

Roadside Air Quality Monitoring & Assessment

Land Use Planning

Road Maintenance & Safety

Urban Infrastructures

Transport Planning & Demand Management

(9 thematic areas)

International Organizations/ Resource Institutions/Other Partners

Regional EST Forum*

First Draft

National stakeholders consultation

Second Draft

National expert level meeting

Third Draft

Limited internal review by national focal points & UNCRD

Peer Review

Peer review by limited international experts/organizations/ selected members from Regional EST Forum

Final Draft for Printing/ Dissemination/Endorsement/ Donors Consultation

*= (The Regional EST Forum will be comprised of senior policy makers/government representatives from Transport & Environment agencies, individual experts, UNCRD, MoE-Japan, IGES, automobile companies, oil & fuel companies, and other international organizations, as appropriate. The 1st Regional EST Forum is expected to meet during 1-2 Aug 2005, in conjunction with EXPO 2005, to be held at Nagoya, Japan.)

Linkage between national governments and municipalities

- Kyoto Declaration signed by 22 City Mayors (14 countries)
  - political commitment by leaders of municipalities *Kyoto, April 2007*
- Additional signatories to the Kyoto Declaration (14 cities including Bangkok)
  Bangkok, November 2008

Asian Mayors' Policy Dialogue

Adoption of Kyoto Declaration

Asian Mayor's Policy Dialogue,
23-24 Apr 2007, Kyoto, Japan

Participating cities: 22 Asian Cities signed Kyoto Declaration on EST on 24 April 2007 at Kyoto, Japan
Bangalore,Bhubaneswar,Jeju, Korat,Kuala Lumpur, Kuching, Kyoto,Luang Prabang,Matale, Nagoya,Phnom Penh,Quezon, Ulaanbaatar,Semarang,Seoul, Siem Reap,Singapore,Surabaya, Suzhou,Sylhet,Tianjin,Vientiane, and Yogyakarta
Organizers: UNCRD, MoE-Japan, AWGESC, IGES
Co-Organizations: ADB, MLIT-Japan,ICLEI
Supporting Organization:
Kyoto Committee for 40th Annual Meeting of the ADB

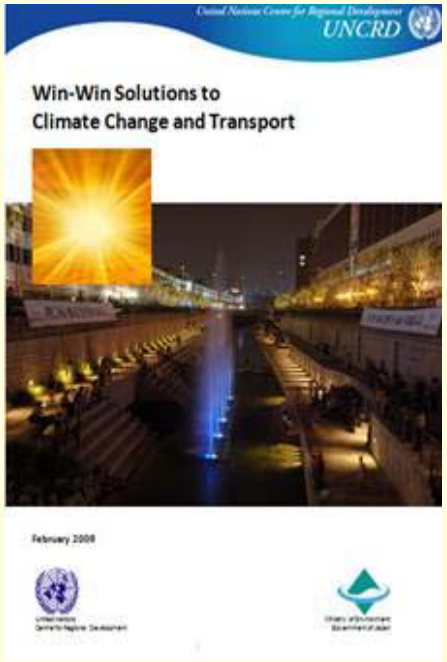
12 More Asian Cities signed the Kyoto Declaration on 12 Nov 2008 at BAQ-2008, Bangko, Thailand:

Bangkok (Thailand), Baguio (Philippines), Cebu (Philippines), Colombo (Sri Lanka), Batam (Indonesia), Guwahati (India), Karachi (Pakistan), Kathmandu (Nepal), Makassar (Indonesia), Makati (Philippines), Palembang (Indonesia), and Surat (India),

Organizers: BMA (Thailand), UNCRD, MoE-Japan, and CAi-Asia

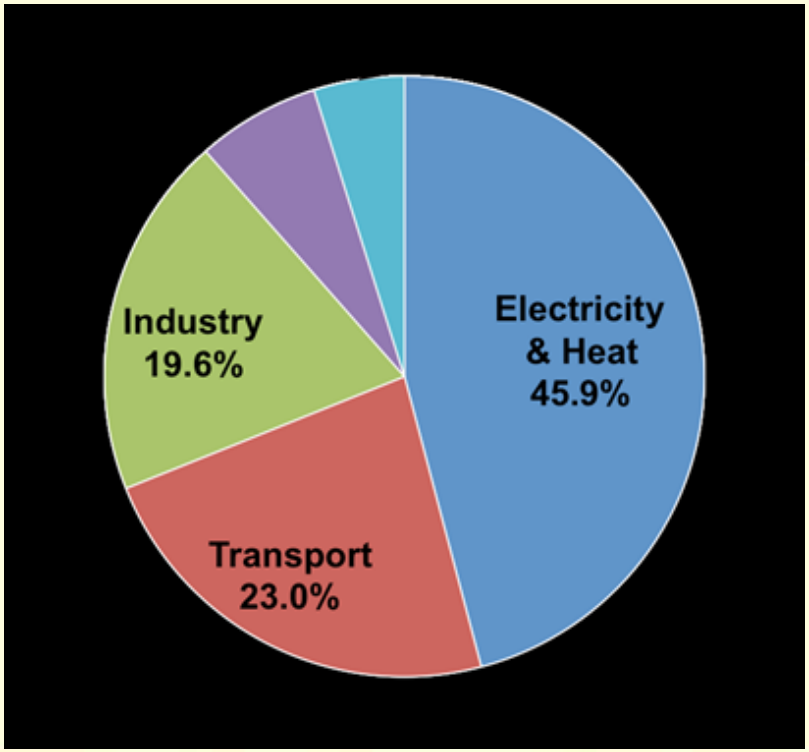
Total Signatories 34 Asian Cities

Win-Win Solutions to Climate Change & Transport



Global CO2 Emission

In 1750, at the start of the industrial revolution, there was approximately 280 ppm of CO2 in the atmosphere. Today, the concentration exceeds 390 ppm and is growing at a rate of 1.5-2 ppm each year (UNEP, 2008).



The world's CO2 emissions in 2006 were 28 billion tons, among which the transport sector was responsible for 23%, or 6.45 billion tons (UNEP, 2008).

The worldwide transport CO2 emissions will increase by 1.4 times to 8.9 billion tons by 2030 (IEA, 2008).

4th Regional EST Forum, Feb 2009, Seoul, R. O. Korea

Seoul Statement:

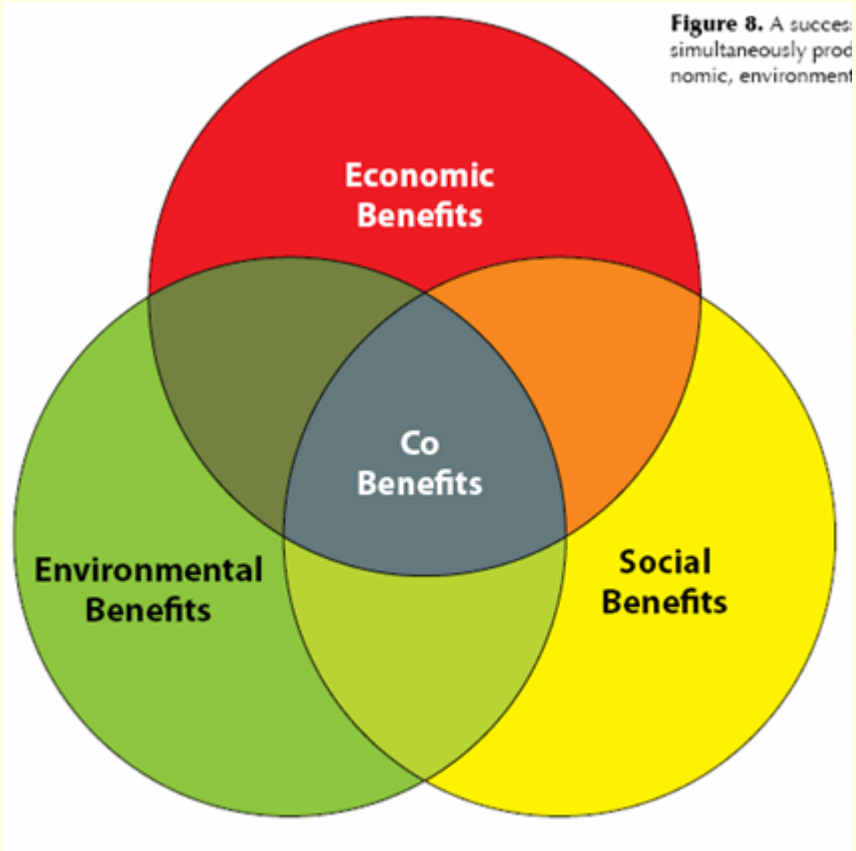
Towards Green Growth and Low Carbon Society in Asia

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 (**Seoul Statement, 2009**)*

(4th Regional EST Forum, 24-26 Feb 2009, Seoul, Republic of Korea)

Supporting Organizations: WHO, Sida, GTZ, AWGESC, SACEP, JICA, ADB, WB, UNEP, ESCAP, gTKP, CAI-Asia

Co-benefits/ancillary benefits/complementary benefits/win-win solutions



Co-benefit refers to the realization of multiple objectives or benefits within a single strategy.

A successful co-benefits approach simultaneously produces benefits across economic, environmental, and social aspects.

Source: Win-Win Solutions to Climate Change and Transport, UNCRD, 2009.

Co-benefit Impact from Transport Demand Management (TDM)

Economic benefits	Vehicle use restrictions	Fuel taxes	Parking levies
Congestion reduction	√	√	√
Consumer spending savings	√		
Employment creation			
Small-enterprise development	√	√	√
Traffic accident reduction			
Technology transfer	√	√	√
Energy security	√	√	√
Economic productivity			
Environmental benefits			
Greenhouse gas reductions	√	√	√
Particulate matter reduction	√	√	√
Sulphur oxides reduction	√	√	√
Nitrogen oxides reduction	√	√	√
Carbon monoxide reduction	√	√	√
VOC reduction	√	√	√
Noise reduction	√	√	√
Solid waste reduction	√	√	√
Water contaminant reduction	√	√	√
Social benefits			
Health (e.g. obesity reduction)	√	√	
Crime reduction	√	√	√
Gender equity promotion		√	√
Universal access for disabled	√	√	√
Scholar access improvement			
Convenience and comfort	√	√	√
Community sociability	√		√
Reduction in severance			

Source: Win-Win Solutions to Climate Change and Transport, UNCRD, 2009.

Lloyd Wright)

(City of Seoul)

Co-benefit Impact from Non-motorized Transport (NMT)

Economic benefits	Pedestrian upgrades	Pedicabs	Bicycle rentals	Car-free day
Congestion reduction	√	√	√	√
Consumer spending savings	√	√	√	√
Employment creation	√	√	√	√
Small-enterprise development	√	√	√	√
Traffic accident reduction	√	√	√	√
Technology transfer		√		
Energy security	√	√	√	√
Economic productivity	√	√	√	√
Environmental benefits				
Greenhouse gas reductions	√	√	√	√
Particulate matter reduction	√	√	√	√
Sulphur oxides reduction	√	√	√	√
Nitrogen oxides reduction	√	√	√	√
Carbon monoxide reduction	√	√	√	√
VOC reduction	√	√	√	√
Noise reduction	√	√	√	√
Solid waste reduction	√	√	√	
Water contaminant reduction	√	√	√	
Social benefits				
Health (e.g. obesity reduction)	√		√	√
Crime reduction	√	√	√	√
Gender equity promotion	√	√	√	√
Universal access for disabled	√			√
Scholar access improvement	√	√	√	√
Convenience and comfort	√	√	√	√
Community sociability	√		√	√
Reduction in severance	√			

Source: Win-Win Solutions to Climate Change and Transport, UNCRD, 2009.

. Each Sunday, Bogotá gives 120 kilometres of road space over to cyclists, skaters, joggers, and families. Photo by Lloyd Wright.

Bicycle rental facility in Seoul, Photo: Lloyd Wright

Delivery service by Pedicab/bicycle taxi in London, Photo: ITDP

Co-benefit Impact from Land Use Planning Measures

Economic benefits	Smart growth polices	Transit-oriented development
Congestion reduction	√	√
Consumer spending savings	√	√
Employment creation	√	√
Small-enterprise development	√	√
Traffic accident reduction		
Technology transfer	√	√
Energy security	√	√
Economic productivity		
Environmental benefits		
Greenhouse gas reductions	√	√
Particulate matter reduction	√	√
Sulphur oxides reduction	√	√
Nitrogen oxides reduction	√	√
Carbon monoxide reduction	√	√
VOC reduction	√	√
Noise reduction	√	√
Solid waste reduction	√	√
Water contaminant reduction	√	√
Social benefits		
Health (e.g. obesity reduction)	√	√
Crime reduction	√	√
Gender equity promotion	√	√
Universal access for disabled	√	√
Scholar access improvement	√	√
Convenience and comfort	√	√
Community sociability	√	√
Reduction in severance	√	√

Source: Win-Win Solutions to Climate Change and Transport, UNCRD, 2009.

Oyumino (Chiba, Japan) is a smart growth community that inter-connects residential and commercial areas with a large network of NMT routes. Photo: Lloyd Wright

Singapore's LRT System developed around purpose-built-communities in which residential, shopping, education, public services and workplaces are all co-located. Photo: Lloyd Wright

Smart growth refers to a set of policies that promote more accessible land –use policies. Smart Growth policies include the mixed-use development patterns that allow the close proximity of residential areas to shopping, work and services. ***TOD*** refers to integrating development and public transport along high density corridors and at key nodal points brings benefits to all. Such planning focuses largest number of destinations (work, residential, public services, schools near public transport stations, and thus encouraging both NMT as well as public transport usage.

Co-benefit Impact from Public Transport

Economic benefits	Bus Rapid Transit	System Integration	Fare - free service
Congestion reduction	√	√	√
Consumer spending savings	√	√	√
Employment creation	√		
Small-enterprise development			
Traffic accident reduction	√	√	√
Technology transfer	√		
Energy security	√	√	√
Economic productivity	√	√	√
Environmental benefits			
Greenhouse gas reductions	√	√	√
Particulate matter reduction	√	√	√
Sulphur oxides reduction	√	√	√
Nitrogen oxides reduction	√	√	√
Carbon monoxide reduction	√	√	√
VOC reduction	√	√	√
Noise reduction	√	√	√
Solid waste reduction	√		
Water contaminant reduction	√		
Social benefits			
Health (e.g. obesity reduction)		√	
Crime reduction	√	√	√
Gender equity promotion	√	√	√
Universal access for disabled	√	√	√
Scholar access improvement	√	√	√
Convenience and comfort	√	√	√
Community sociability			√
Reduction in severance			

Source: Win-Win Solutions to Climate Change and Transport, UNCRD, 2009.

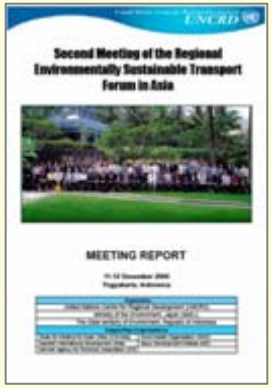
The TransMilenio BRT in Bogotá. Photo courtesy of Volvo Bus Corporation.

System integration (NMT + Public Transport) /Park-and-ride facilities, Lloyd Wright

UNCRD Publications on EST

http://www.uncrd.or.jp

EST Regional Forum Reports

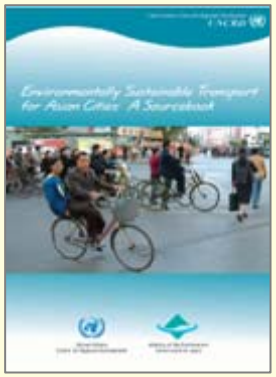


Asian Mayors' Dialogue Meeting

Meeting Report (April 2007)

Kyoto Declaration Poster (April 2007)

EST Sourcebook

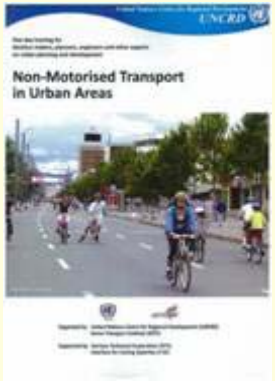


Other Publications

EST Workshop in Cambodia, Laos, and Viet Nam (June 2006)

Aichi Statement (April 2007)

Win-Win Solutions to Climate Change and Transport (February 2009)



NMT in Urban Areas (April 2009)

Asian EST Initiative (since 2004~)

- **Promotion of sustainable transport in a integrated manner of all components,**
- **Broad participation of Environment, Transport, and Health Ministries and their relevant national/local authorities,**
- **Wide network of local, national, and international stakeholders including UN organizations and donors,**
- **Involvement of City Mayors (Kyoto Declaration),**
- **Good recognition among the governments,**
  - Prime ministers' level declaration (EAS 2008)
  - Transport ministers declaration (G8+EAS 2009)
- **possible expansion to LAC (OECD Global Forum 2008)**

ıgoya Castle