

Global Policy for Sustainable Low Carbon Transport in Developing Countries



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Asian Development Bank/ CAI-Asia Center

TRANSPORTATION AND CLIMATE POLICY

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Asilomar Conference Grounds

Pacific Grove, California

ADB

Dhaka, Bangladesh



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Business as Usual?

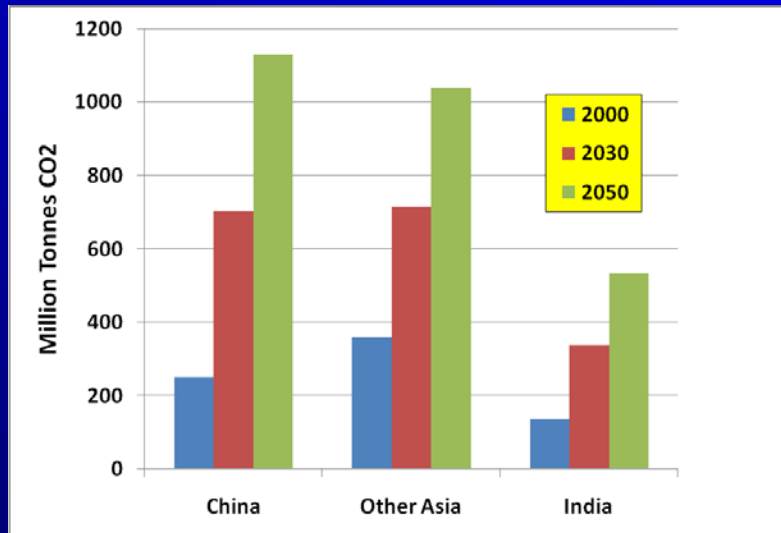
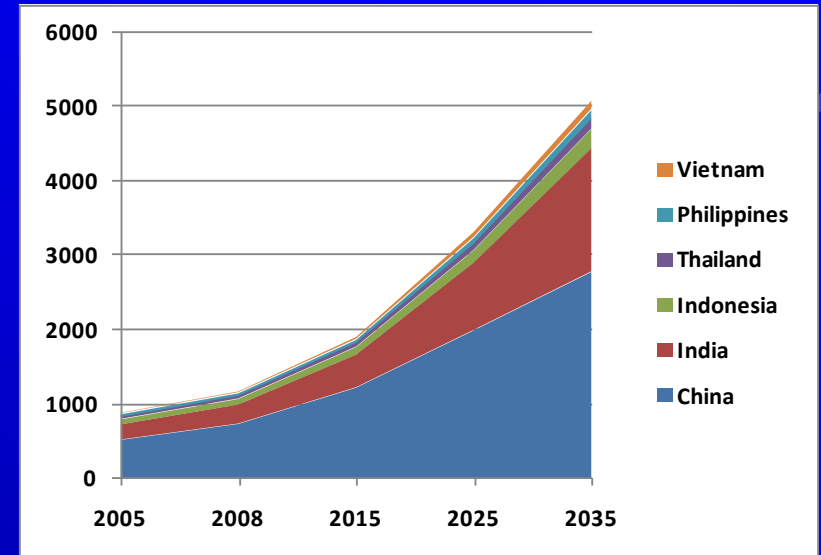


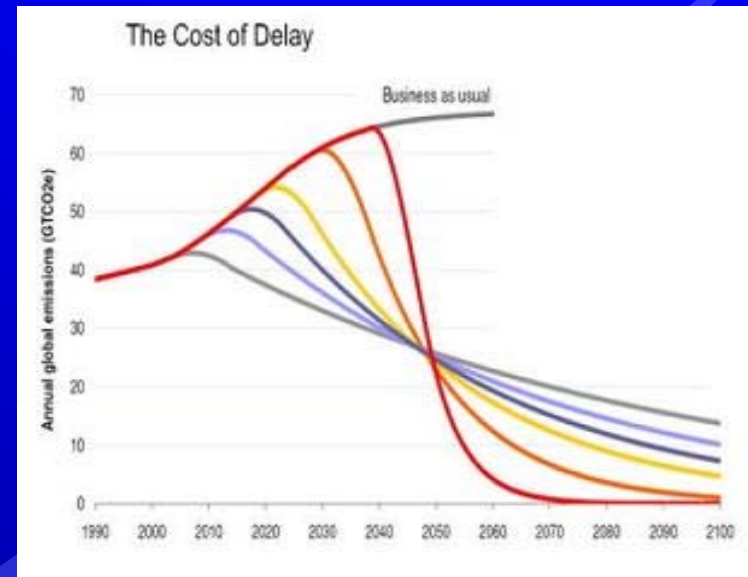
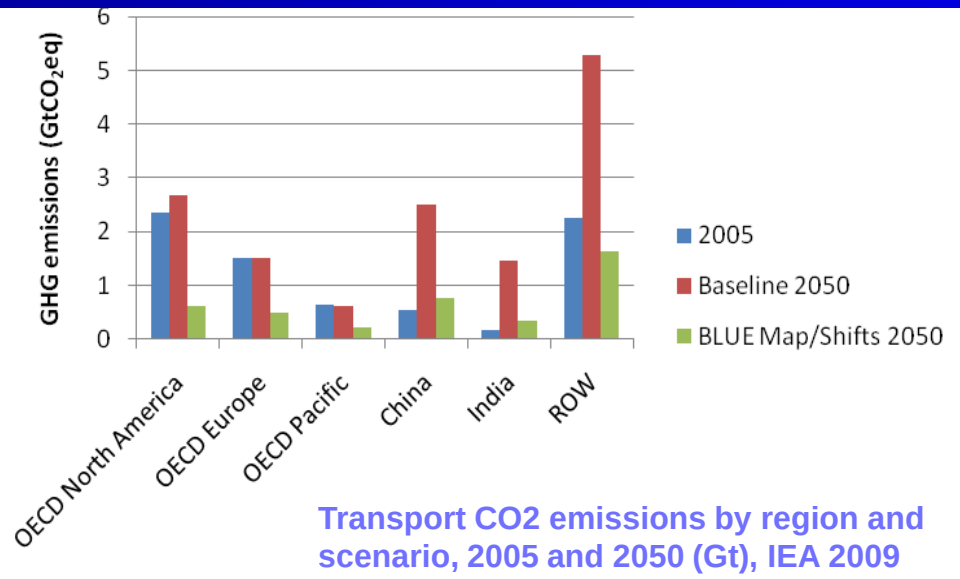
Figure 2. SMP Projections of CO₂ Emissions from Transport in Asian Regions 2000- 2030, Source: IEA



Road Transport CO₂ emissions (Million Tons) using Segment Y Ltd Data, Source: ADB, Segment Y, CAI-Asia 2009

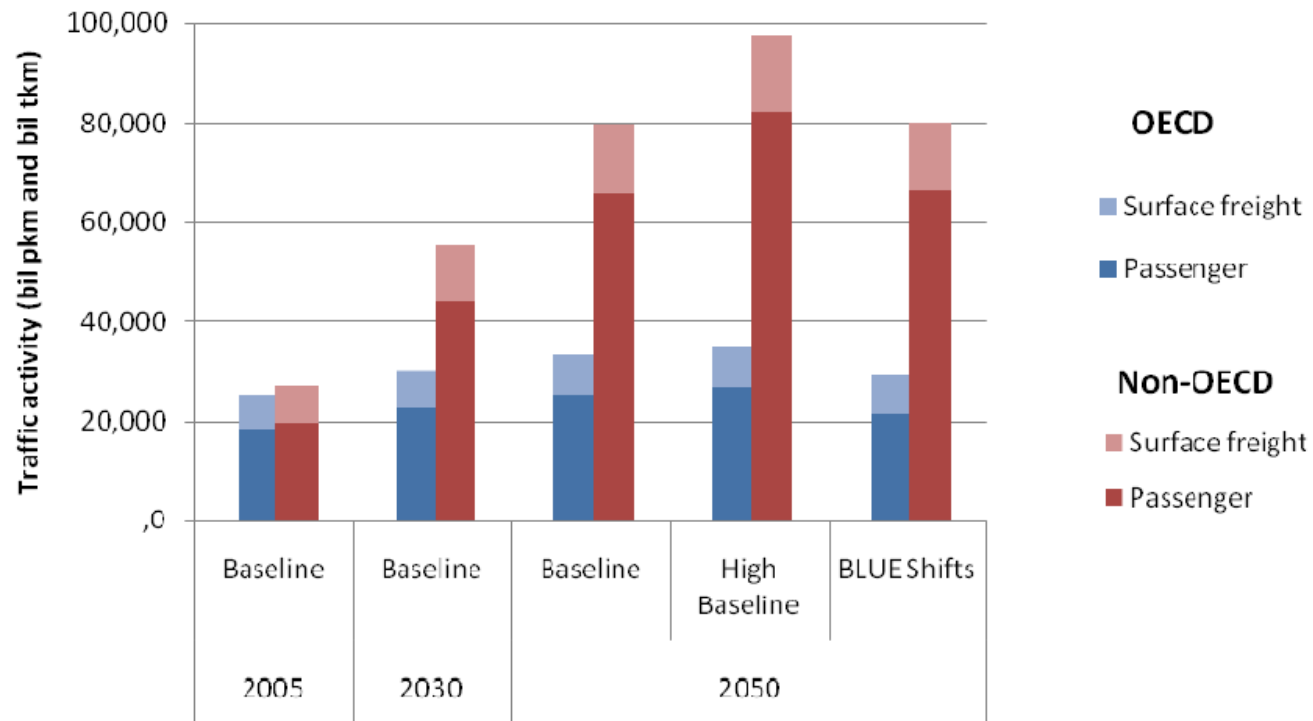
- Transport related CO₂ emissions are expected to increase 57% worldwide in the period 2005 – 2030, and transport in developing countries is expected to contribute about 80 % of this increase
- 70% from increase in use of fuel oil will be in developing Asia.
- 75% of increased global fuel consumption will be in transport.
- Most of the increases will come from private vehicles.

The Price of Delay



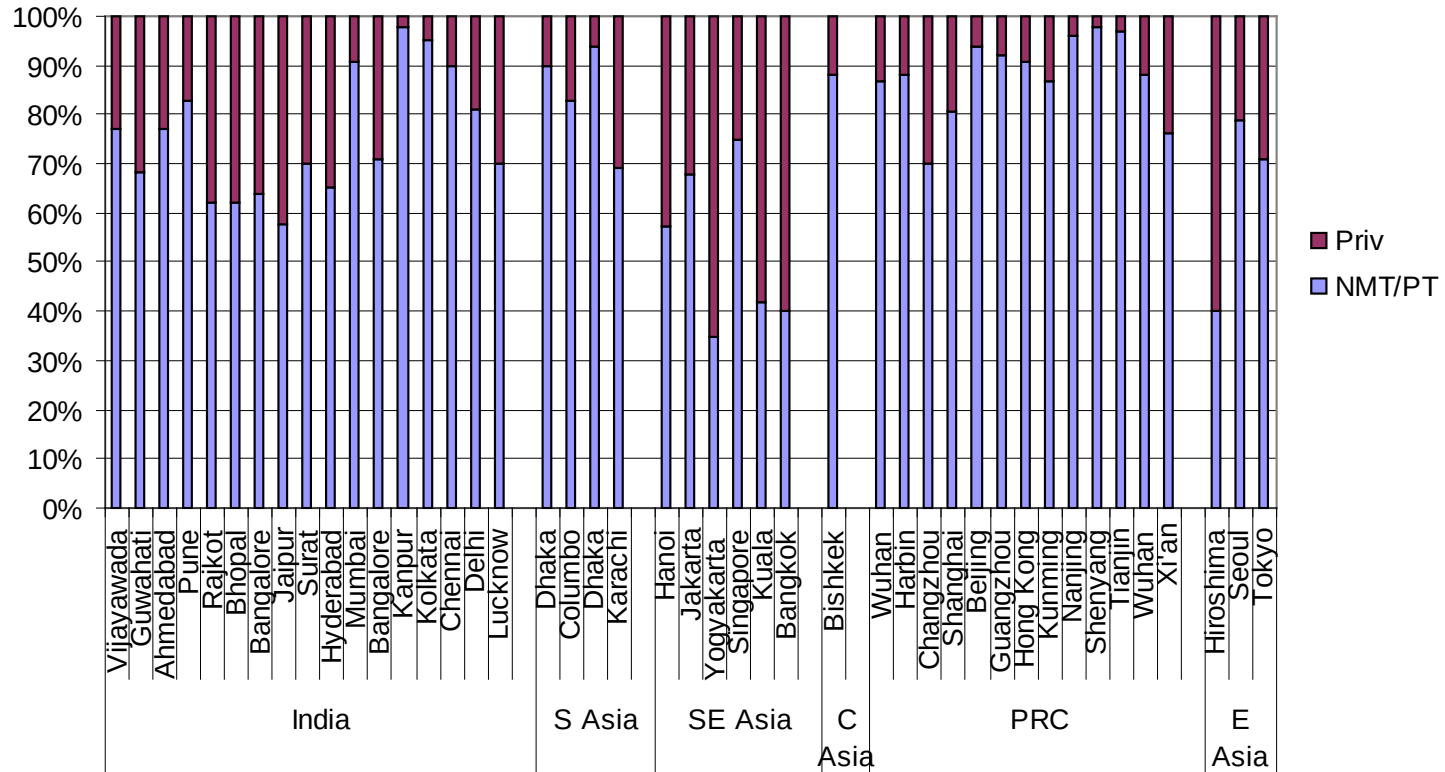
- IPCC calls for 15% to 30% reduction in CO₂ emissions below BAU by 2020 as developing country contribution to 2° Celsius scenario
- CO₂ emissions from fossil fuel consumption will have to be reduced globally by 70-90% compared to 1990 by 2050
- Is a 15-30% reduction below BAU by 2020, helpful in reaching the targets called for IPCC, or scenarios as modeled by IEA?

Mobility Split by Type of Transport, OECD and Non-OECD



Source: IEA, draft 2009

Asia has favorable modal split

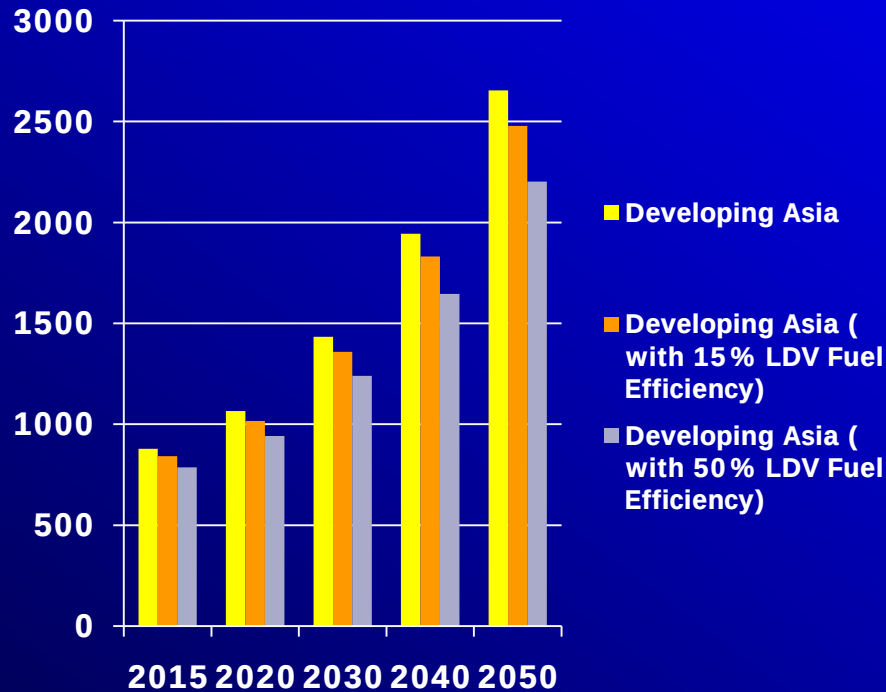


Source: ADB, 2009

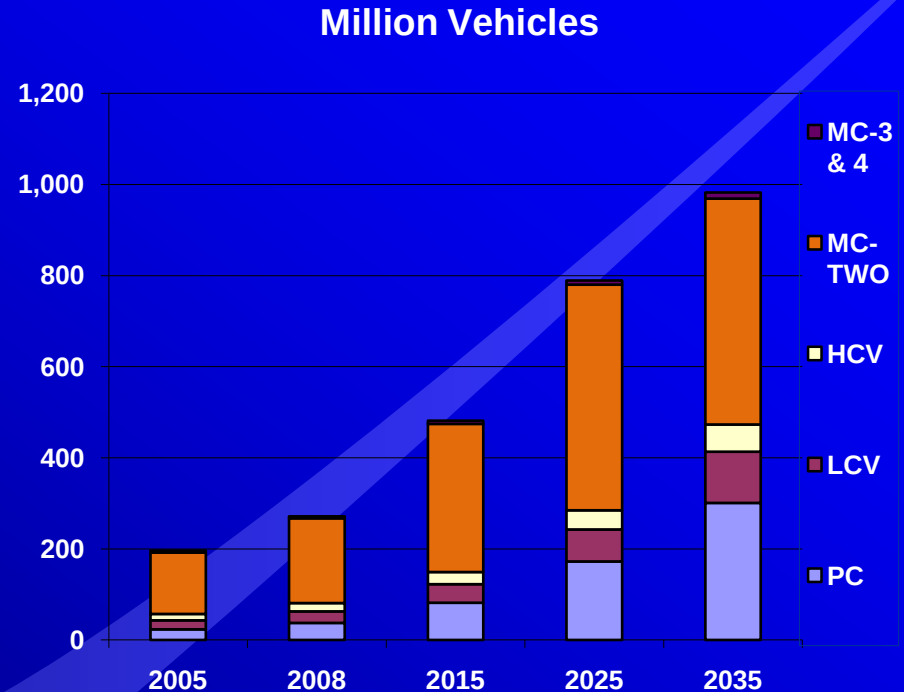
Many Asian cities have 70% mode share for public transport + non motorized transport



LDV Fuel economy in Asia



Source: SMP 2004, authors



Source: ADB, Segment Y, 2006

- LDV's fuel Efficiency is not magic bullet as it presently contributes only a small % of share in total passenger VKT (2005 – 12%)
- Only after 2025 the trend will change and LDV VKT will overtake 2W VKT.

Electric 2-wheelers in China

- Production from 48,000 in 1998 to 16 million in 2006 (now about 20 million)
- Current estimated fleet: 100 million
- Range: 40-50 km
- Actual max speed: 20-30 km/hr
- Cost: US \$200-500



Scooter style electric bike (SSEB)

CO2 (g / pax-km)	
Car	102-306
Bus	24.2-96.8
Motorcycle	64-128
Bicycle	4.70
BSEB	15.6-31.2
SSEB	20.2 -40.5

Sources: Cherry and Weinert, 2009



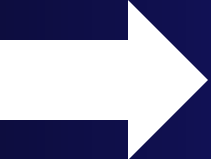
Bicycle style electric bike (BSEB)

Developed countries

- High baseline
- Low growth
- Dominance 4 wheelers + private transport
- Good data availability (ASIF)
- Strong institutional capacity
- Market failure

Developing countries

- Low Base line
- High growth
- Dominance 2 wheelers (Asia), large PT share and NMT
- Limited data availability (ASIF)
- Weak institutional capacity
- Market failure + market absence

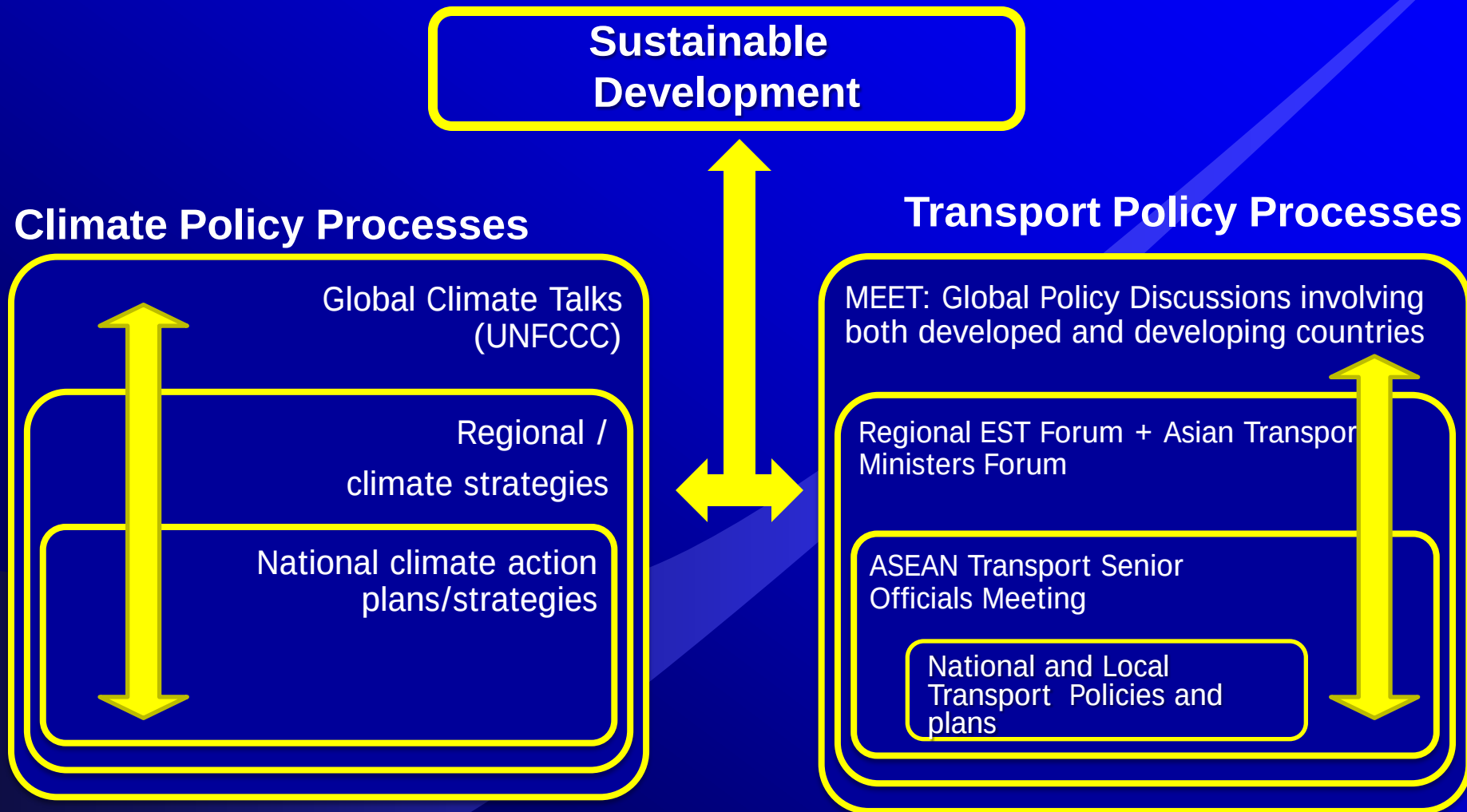


Policies for developed and developing countries are not necessarily identical

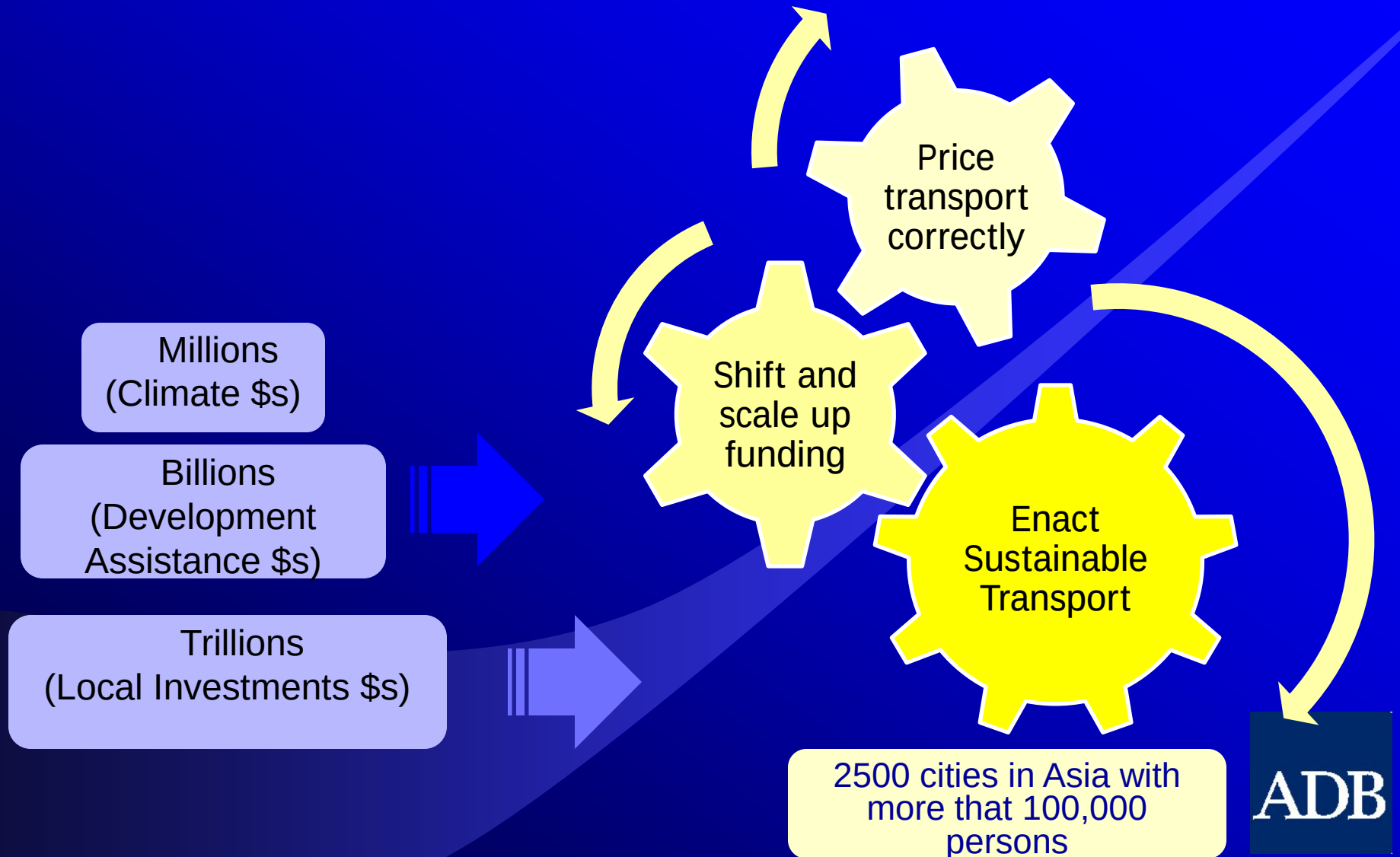
Same Principles but different interpretation

Principles	Developed Countries	Developing Countries
Avoid	• Emphasis on reduction of VKT through TDM	• Emphasis on avoiding unnecessary generation of VKT through land use planning, TOD and TDM
Shift	• Shift from private vehicles to NMT and PT	• Prevent shift from NMT and PT to private vehicles
Improve	• Clean up existing vehicles, encourage down scaling vehicle/engine size	• Ensure that future vehicles are as clean as possible, prevent up scaling vehicle/engine size

The Challenge: Integrate emerging processes at all Levels

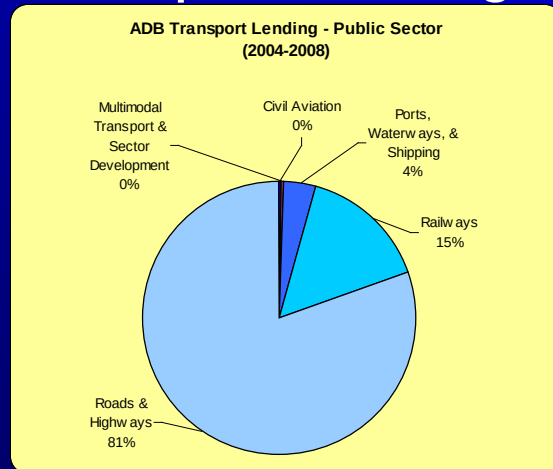


Funding Sustainable Low Carbon Transport in developing countries: Linkages and Synchronization

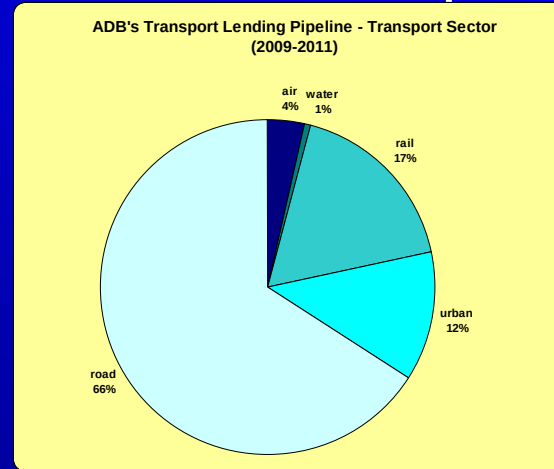


Regional Development Banks as agent of change

- ADB – Sustainable Transport Initiative: aim 50% of transport lending for sustainable transport by 2015



\$2.19 billion per annum



\$5.89 billion per annum

- Gleneagles G8 Summit 2005: ADB nominated as focal point on transport, energy and climate change

Bellagio Declaration Principles

1. Effective climate action is incomplete without addressing the overall system performance of the transport sector
2. Climate action in the transport sector should recognize co-benefits
3. More effective carbon finance should catalyze sustainable transport policies, programs and projects

May 2009
18
Organi-
zations

ADB	Clean Air Institute	IEA	ITDP	EMBARQ/ WRI	Paulista Forum
UN-DESA	CAI-Asia Center	TRL	Rockefeller Foundation	GTZ	UITP
IGES	UC Berkeley	VREF	TERI	IADB	Environ-mental Defense Fund

ADB

Bellagio

Common Policy Framework

Outlines the vision for sustainable, low carbon transport in developing countries:

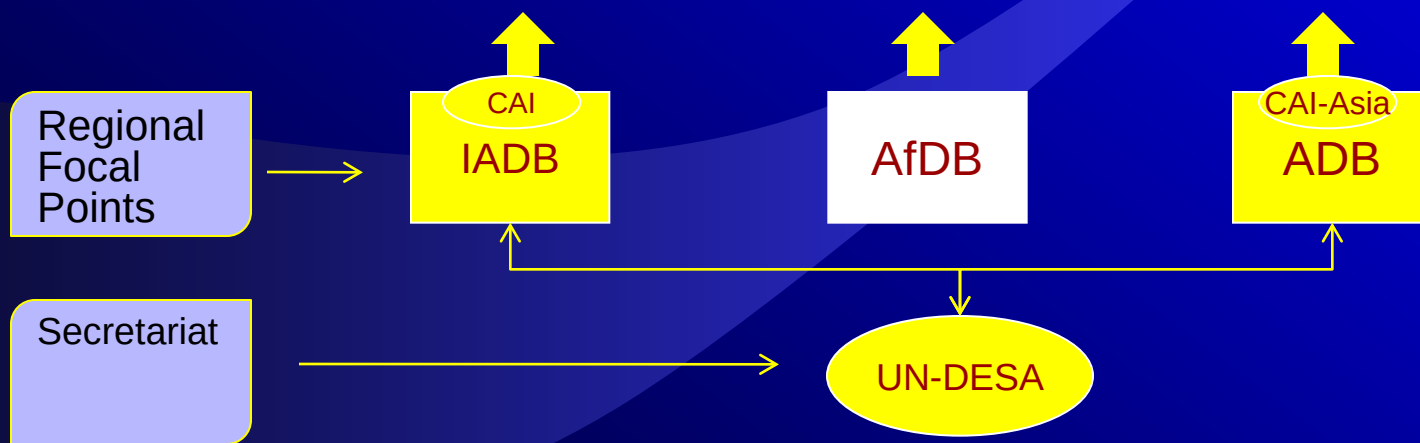
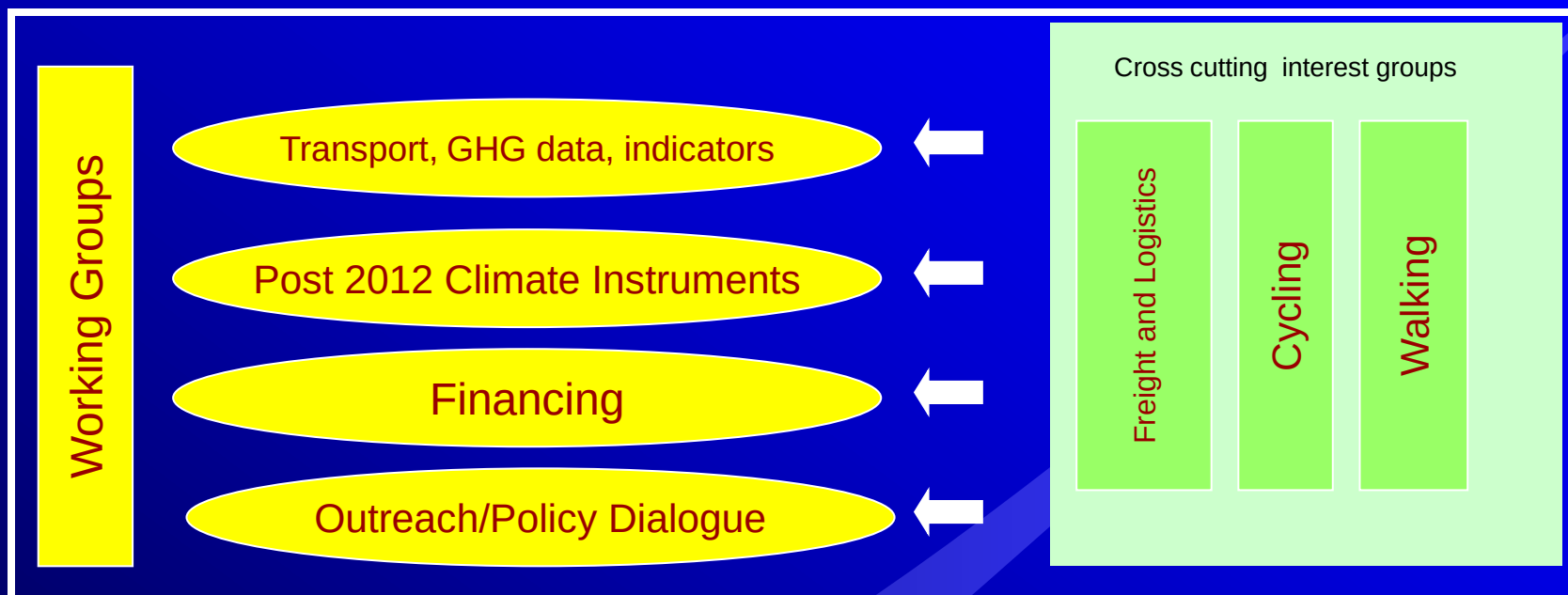
- Developing countries need to take the lead (institutions, policy instruments, pricing, and financing)
- Post 2012 Climate instruments (off-setting: CDM and sectoral crediting; and mitigation: NAMAs), combined with technology transfer, financing and capacity building can catalyze local action but not replace it.
- Development organizations can help and kick-start sustainable, low carbon transport till new more effective Climate Agreement comes into force after 2012 (knowledge management, capacity building, policy dialogue and investment support)

Partnership on Sustainable, Low Carbon Transport 2009 - 2012

- Strengthen policy processes and their implementation:
 - inputs in COP 15 and formulation of detailed guidelines in 2010-2012
 - support to Ministerial Meeting on Environment, Energy in the Transport Sector 2010-2012
 - support to CSD 2010-2011 and its follow- up
 - Mainstream SUT in development organizations
- Scope land transport in Asia, Africa and Latin America
- Non-legal, non binding character
- Secretariat in UN-DESA



Organization Partnership



Key Messages

1. No plausible policy scenarios in place which can reduce transport emissions in developing countries to levels called for by IPCC by 2050 or modeled by IEA
2. There are large differences in transport structures of developing and developed countries
3. Policy principles are the same but interpretation and implementation will differ between developed and developing countries
4. Integrate climate and transport policy making: requires both the Climate and the transport community
5. Need for scaling up (financing) mechanisms which are locally driven and which are able to make effective use of the millions – billions and trillions of dollars
6. We are only at the beginning in developing the institutional structures on transport and climate change in developing countries

What If?

The Washington Post

EDITORIAL

Get on the Bus

A promising way to speed commutes

Sunday, July 19, 2009

Lured by the incentive of new federal stimulus dollars earmarked for transportation, a regional group, the Metropolitan Washington Council of Governments, is seeking \$276 million to build an extensive system of priority and dedicated bus corridors in the city and surrounding areas.

Washington DC really would show the way

ADB

Thank you

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ADB