

ADB-ESCAP Workshop on Transport and Climate Change
Bangkok, 25 September 2009



Sustainable Transport for low-carbon, Green Growth in Asia-Pacific



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Asia-Pacific socio-economic challenges



1. Poverty

People under poverty line in Asia and the Pacific

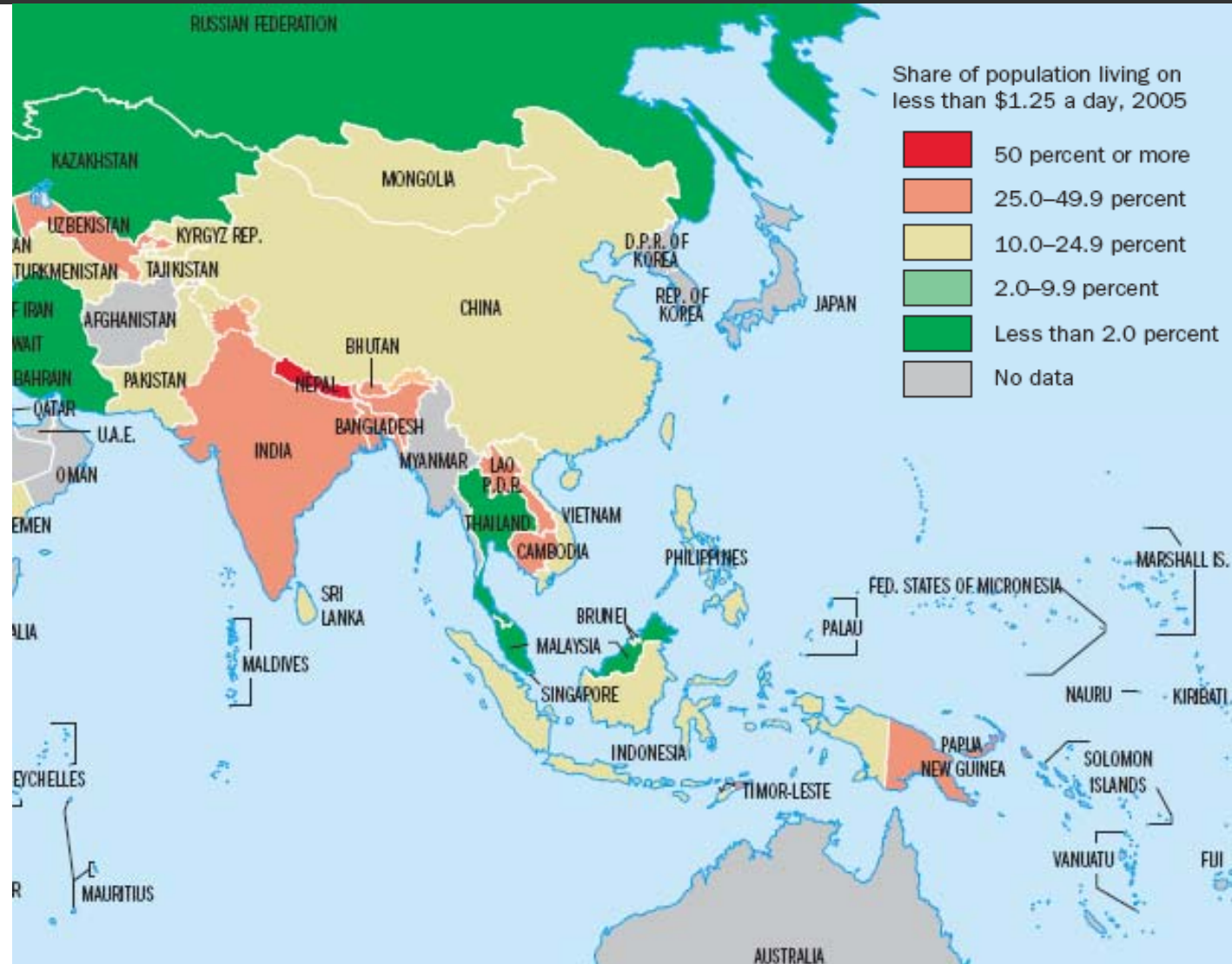
Under \$1(PPP) a day →
641 million

Under \$1.25 (PPP) a day

912 million, 66.4 % of the world poor (1,374 million)

Under \$2 (PPP) a day

1,821 million, 71% of the world poor (2,564 million)



Asia-Pacific socio-economic challenges



2. Health

- 4 million children die before age of 5
- Maternal mortality: 300 deaths per 100,000 live births

3. Access to services

- 400 million urban residents without access to sanitation
- 566 million rural residents without access to clean water
- 800 million without electricity
- 40% of urban residents in slums

Source: ESCAP, ADB, UNDP (2008) "A future within reach"

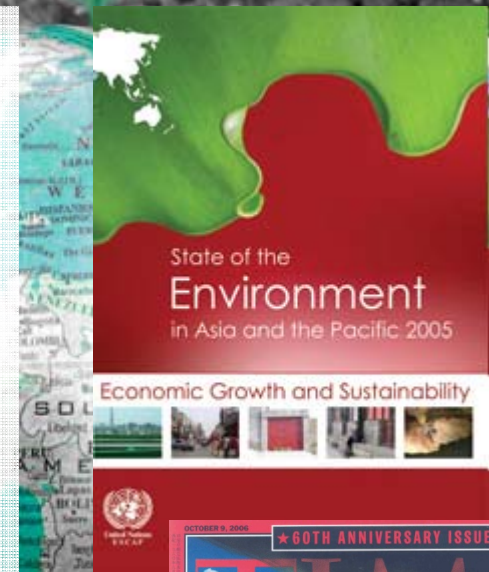
Asia-Pacific Development Challenge

Asia-Pacific is already living above its 'environmental means': Despite its relatively low-impact consumption patterns, its carrying capacity is already being exceeded

(ESCAP State of the Environment Report 2005)

LIMITED CARRYING CAPACITY

- Population density 1 ½ times the global average
- Freshwater available: 3,920m³/cap/yr vs. South America 38,300m³.cap/yr.
- Productive area available per capita: 60 % of the global average
- Arable land per capita: 80 % of the global average

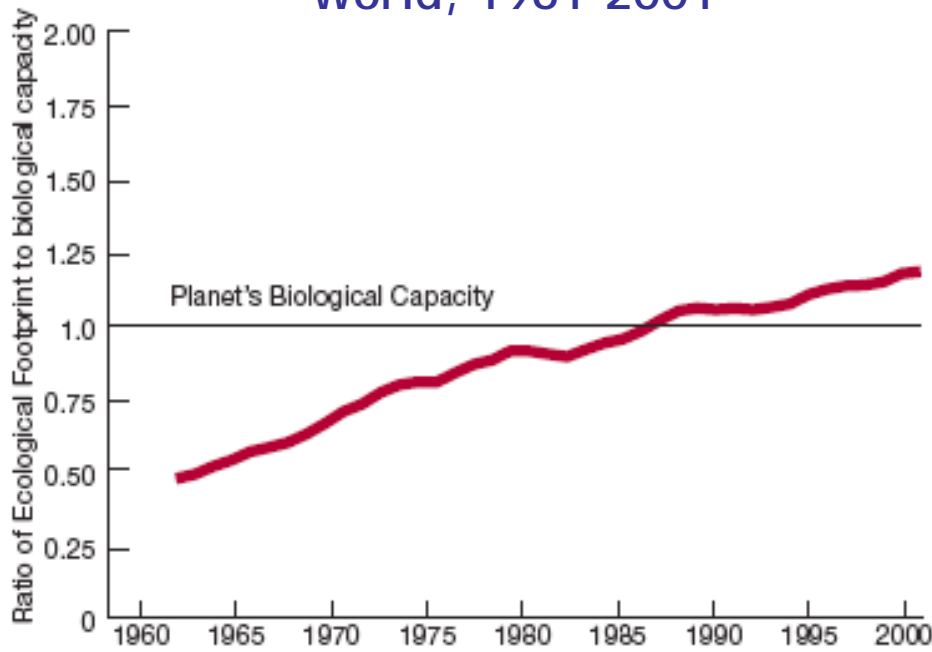


Asia-Pacific Ecological Footprint

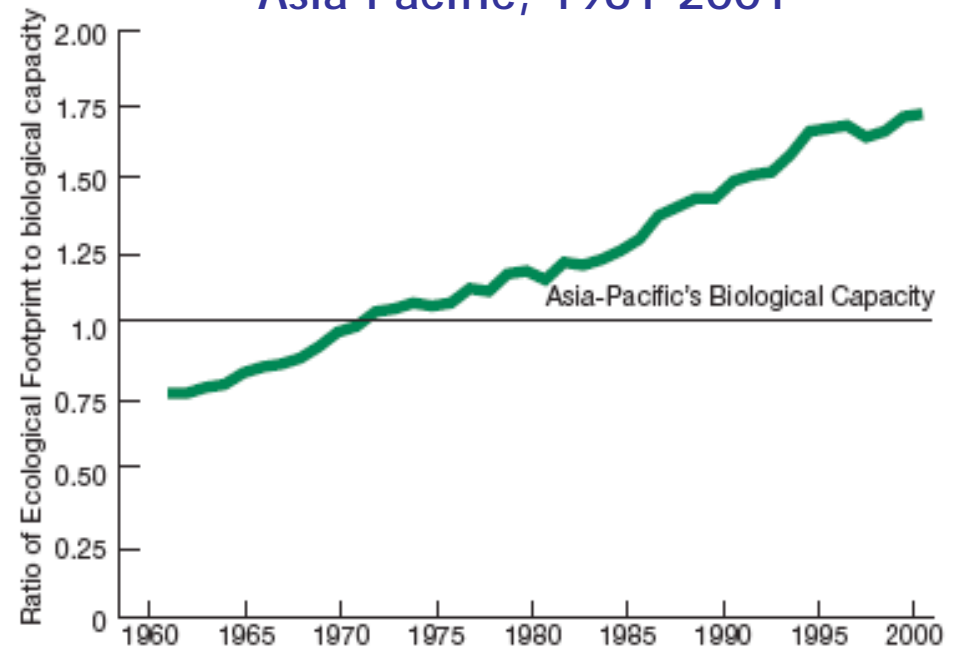


	GDP/capita (US\$)	Bio-capacity (GH/capita)	Eco-footprint (GH/capita)	Eco-deficit
Asia-Pacific	5,800	0.7	1.3	-0.6

World, 1961-2001

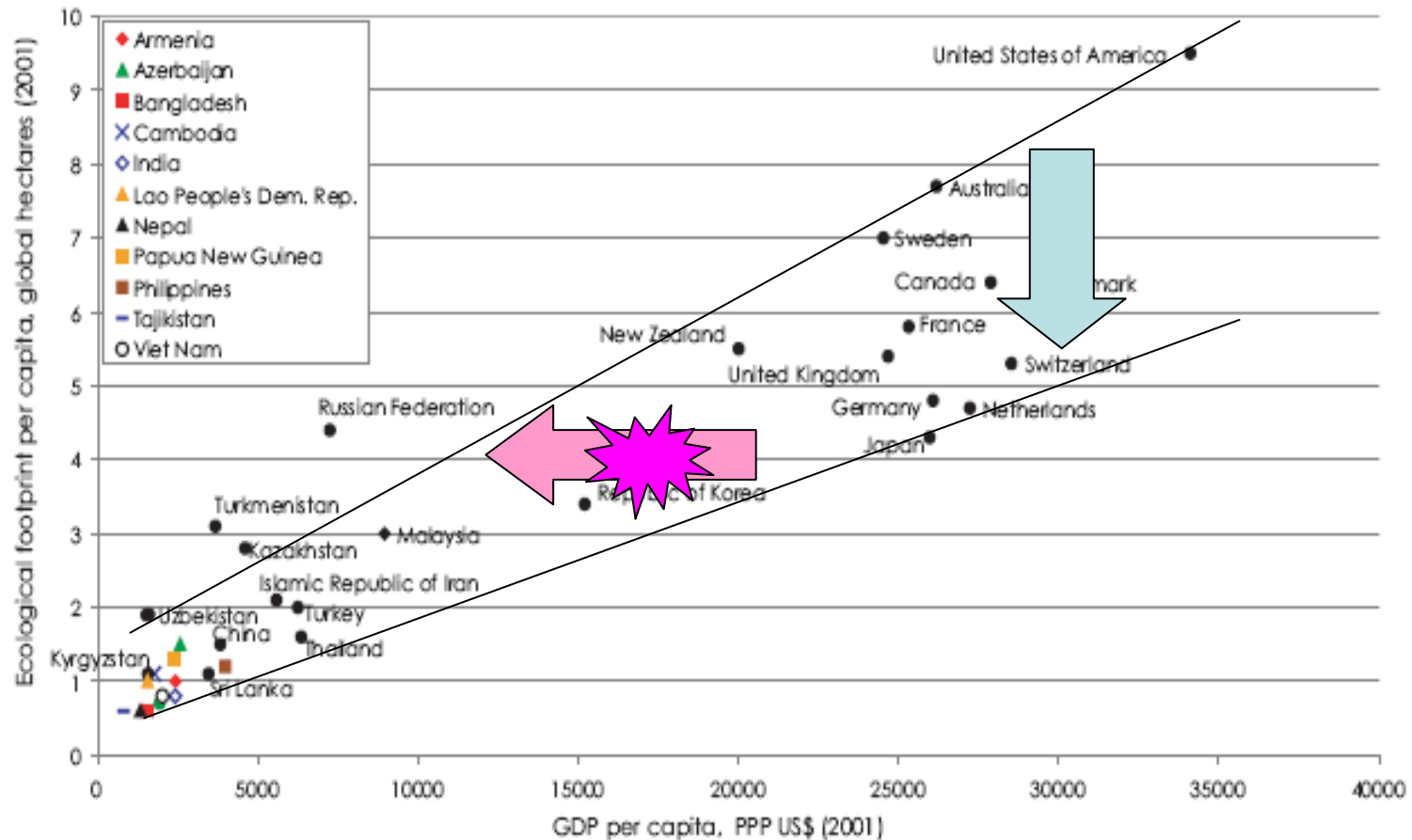


Asia-Pacific, 1961-2001



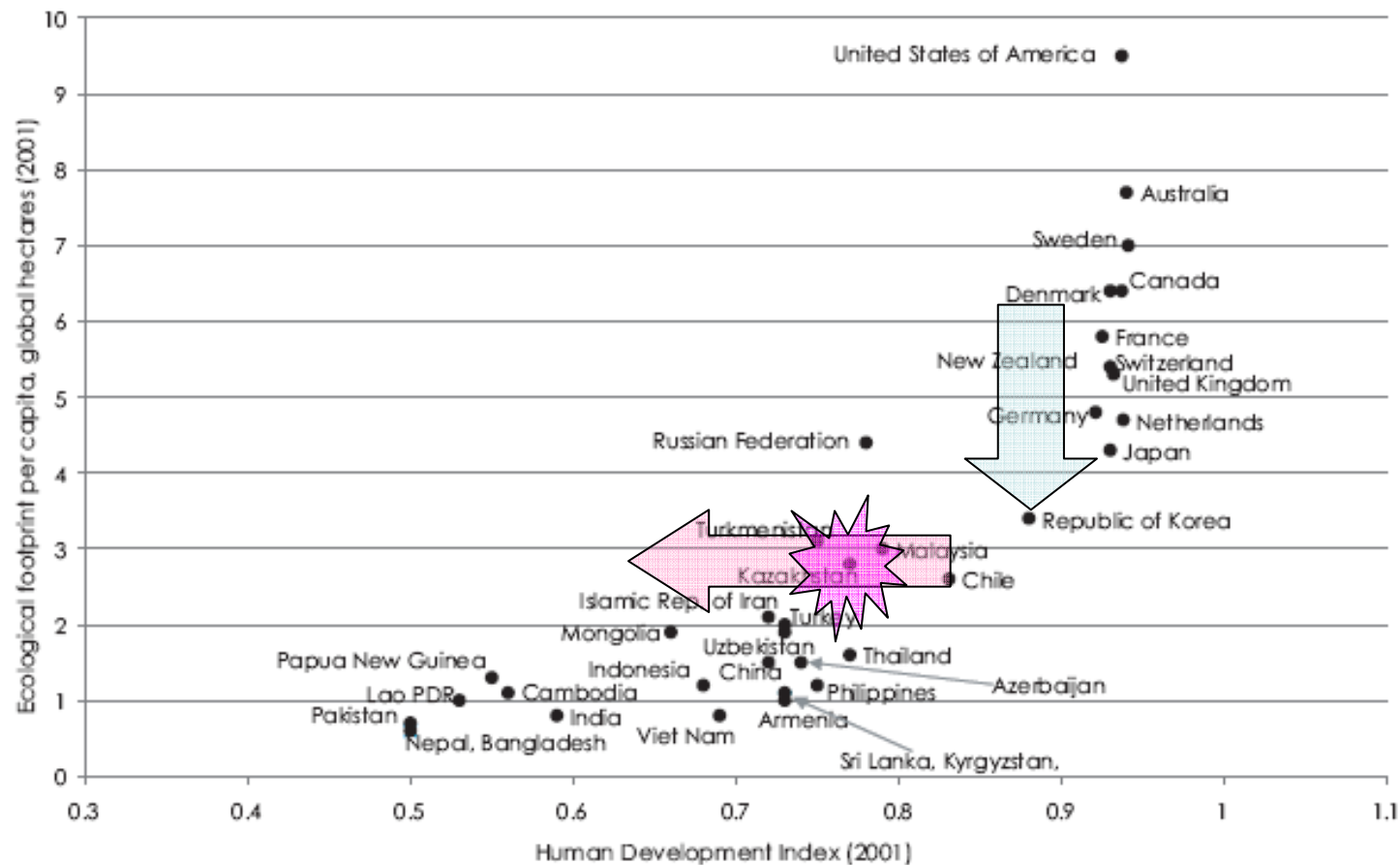
Source: WWF Living Planet Report Asia-Pacific 2005

Different Patterns of Growth



Source: Ecological footprint per capita: data provided by the Global Footprint network, July 2005;
 GDP per capita: World Bank, World Development Indicators database,
 downloaded on 5 July 2004 from <<http://devdata.worldbank.org/dataonline/>>.

Different Patterns of Growth



Source: Ecological footprint per capita: data provided by the Global footprint Network, July 2005; Human Development Index: UNDP, Human Development Report website, online database, accessed on 2 February 2006 from <<http://hdr.undp.org/statistics/>>.

Green Growth: Strategy for Asia-Pacific



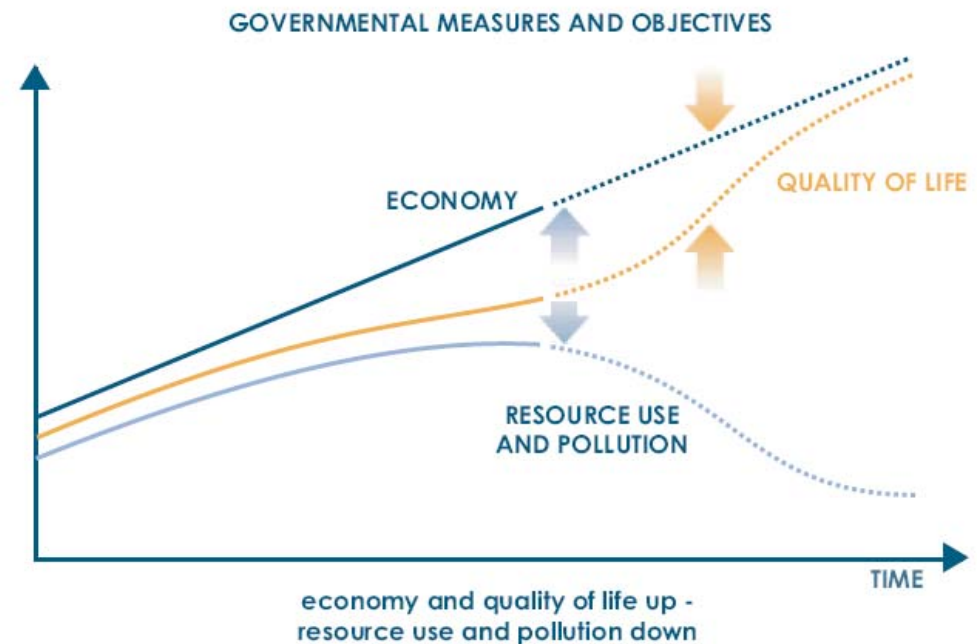
- Adopted as the strategy for Asia-Pacific at the 5th Ministerial Conference on Environment and Development (MCED 5, March 2005, Seoul)
- Achieving rapid growth without compromising environmental sustainability
- Attaining MDG 1 (poverty reduction) & MDG 7 (environmental sustainability) at the same time
- Achieving “low-carbon” development
- Focusing on Environmental Sustainability & Ecological Efficiency (Eco-efficiency)



Win-Win situations



- Green Growth is about pursuing economic growth and improving quality of life while at the same time preserving the ecological integrity
- Green Growth is about decoupling economic “goods” from environmental “bads”
- Green Growth is about regarding environmental protection as a growth engine



Source: WBCSD (2000: 23).

Threats to development



- Recent crises, such as the food, fuel and financial crises, have highlighted the ecological and social imbalances of current economic growth patterns and reiterated the case for shifting to environmentally sustainable economic growth
- Equating these imbalances will prove critical for Asia-Pacific if the region is to meet key persistent and emerging challenges, such as poverty reduction, water, energy and food security, and climate change
- These challenges are not isolated, but closely inter-linked

Energy Security



- Despite the recent relatively stable energy prices, the region will continue to be subjected to volatile prices of oil and other energy resources
- By 2030, the region's energy demand is expected to increase by 50 per cent, while the share of fossil fuel consumption is expected to remain as high as 82 per cent
- Economic vulnerability to volatile energy prices will compromise the efforts of countries to sustain their economic growth
- The least developed countries, landlocked developing countries, small island developing States and other fossil fuel-importing countries are most vulnerable



Climate Change



- Rising temperatures are causing sea levels to rise; increased frequency of extreme weather events such as storms and cyclones are resulting in frequent floods and land erosion
- Other visible effects include water shortages, reduced agricultural productivity, forest fires and increased prevalence of diseases
- All are likely to have devastating effects, particularly on the poor
- For many of our Pacific Island States, it is a question of their survival or extinction
- The proportion of Asia-Pacific's energy-related CO₂ emissions to the total world emissions is expected to increase to 55 per cent in 2030 from 45 per cent in 2005.
- The region is home to 7 out of the 15 major global greenhouse gas emitting countries
- This region also suffers from the largest number of human casualties from natural disasters in the world. In fact, it accounted for 80 per cent of disaster related global casualties in the last decade

Green Growth and Low-carbon development



Needs for Climate Action by all countries

- Challenge to Humanity in Increasingly Globalizing Society
- More Threats to Poor and Marginalised
- Immediate Action for Mitigating Impacts/ Adaptation Necessary
- Long-term GHG Emission Reduction to avoid Further Intensifying Impacts

Challenges

- Needs Sustaining Economic Growth
 - ➔ Making Climate Actions compatible with Sustained Economic Growth
- Competition with a number of other Socio-economic priorities
 - ➔ Needs a Holistic win-win Approach (“Co-Benefits”)
- Limited Financial /Human / Technological Resources
 - ➔ Needs a Resource Efficient Approach

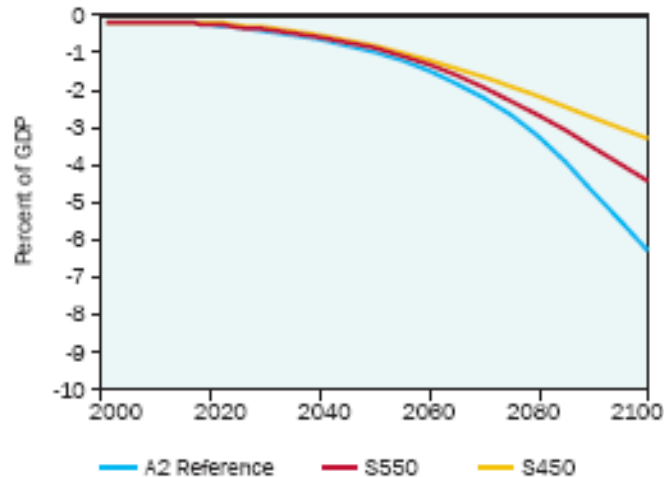
The Answer is Green Growth - Low Carbon Development

... or Low Carbon - Green Growth

Low Carbon Development to Prevent Economic Loss



Figure 5.5. Mean Total Loss under Different Scenarios in the Four Countries



Note: Total loss includes market impact, non-market impact and catastrophic risks
Source: ADB study team.

- By anticipated impacts of climate change in SE Asia, economic loss up to 6.7% of GDP each year by 2100
- Undermine the progress in achieving MDGs and beyond
- GDP loss will lessen to 3.4 % if action taken to follow 450ppm scenario (2 degree increase).
- Global study shows less than 1% of GDP Mitigation cost required to limit to 2 degree increase.
- Adaptation will bring benefit 1.9% of GDP by cost 0.2% of GDP

Importance of transport sector



ENERGY CONSUMPTION of
Transport Sector
(Tons of oil equivalent)



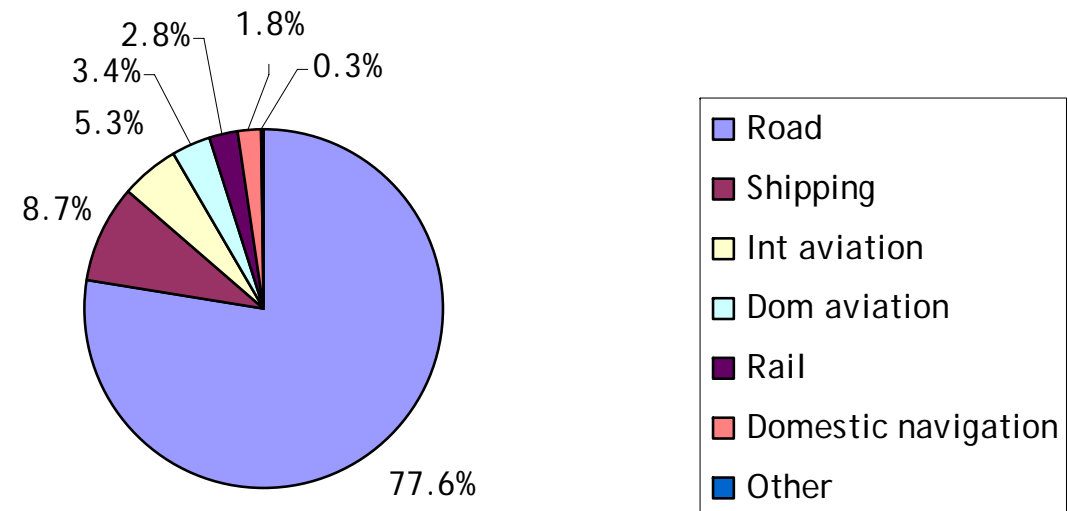
2,226 million



593 million

26.6%

CO ₂ EMISSIONS (million tons, 2005)	
Europe	1,038.4
North America	1,973.6
ESCAP	1,505.4
- Road	1223.9
- Rail	64.3



Source: ESCAP - Statistical Yearbooks 2008

ESCAP initiatives: Trans-Asian Railway Network



- 81,000 km, 28 countries
- Missing links
- Intergovernmental Agreement on the Trans-Asian Railway Network
 - Adopted by the 62nd UNESCAP Commission (April 2006, Jakarta)
 - Signing ceremony during the Ministerial Conference on Transport (6-11 November 2006, Busan)
 - Entered into force in June 2009

Track Gauges	
	1,676 mm
	1,520 mm
	1,435 mm
	1,067 mm
	1,000 mm
	1,000/1,435 mm
	TAR LINK - PLANNED UNDER CONSIDERATION
	POTENTIAL TAR LINK
	POTENTIAL TAR LINK TO BE CONSIDERED
	BREAK-OF-GAUGE
	FERRY CROSSING



The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not been agreed upon by the parties.

ESCAP Initiatives: Sustainable infrastructure



- Kitakyushu Initiative for a Clean Environment (ESCAP-IGES-Kitakyushu) (2000 - 2010)
- Eco-efficient and Sustainable Urban Infrastructure Development in Asia and Latin America (ESCAP-ECLAC-UNHABITAT) (2008 - 2010)
- Asia-Pacific Mayors; Forum on Environmentally Sustainable Urban Infrastructure (ESCAP-Ulsan City) (2008 -)
2nd Forum: 27-29 Oct 2009



ESCAP Intergovernmental forums



Regional Implementation Meeting for CSD 18-19 (transport included as focus theme)	Bangkok, Thailand 29 Nov - 1 Dec 2009
1 st Committee on Environment and Development	Bangkok, Thailand 2-4 Dec 2009
Forum of Asian Ministers of Transport	Bangkok, Thailand 14-18 Dec 2009
66 th Commission Session (Focus on Green Growth and MDGs)	Incheon, ROK May 2010
6 th Ministerial Conference on Environment and Development in Asia and the Pacific	Astana, Kazakhstan Sep 2010

Thank you for your attention



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WEBSITES

Environment and Development Division	http://www.unescap.org/esd/index.asp
Transport Division	http://www.unescap.org/ttdw/index.asp
SINGG	http://www.singg.org
Kitakyushu Initiative	http://kitakyushu.iges.or.jp/
Sustainable Infrastructure	Coming soon.... http://www.unescap.org/esd/environment/infra/index.asp