



# Financing Mechanisms for Sustainable Transport

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ADB

# Structure of the presentation

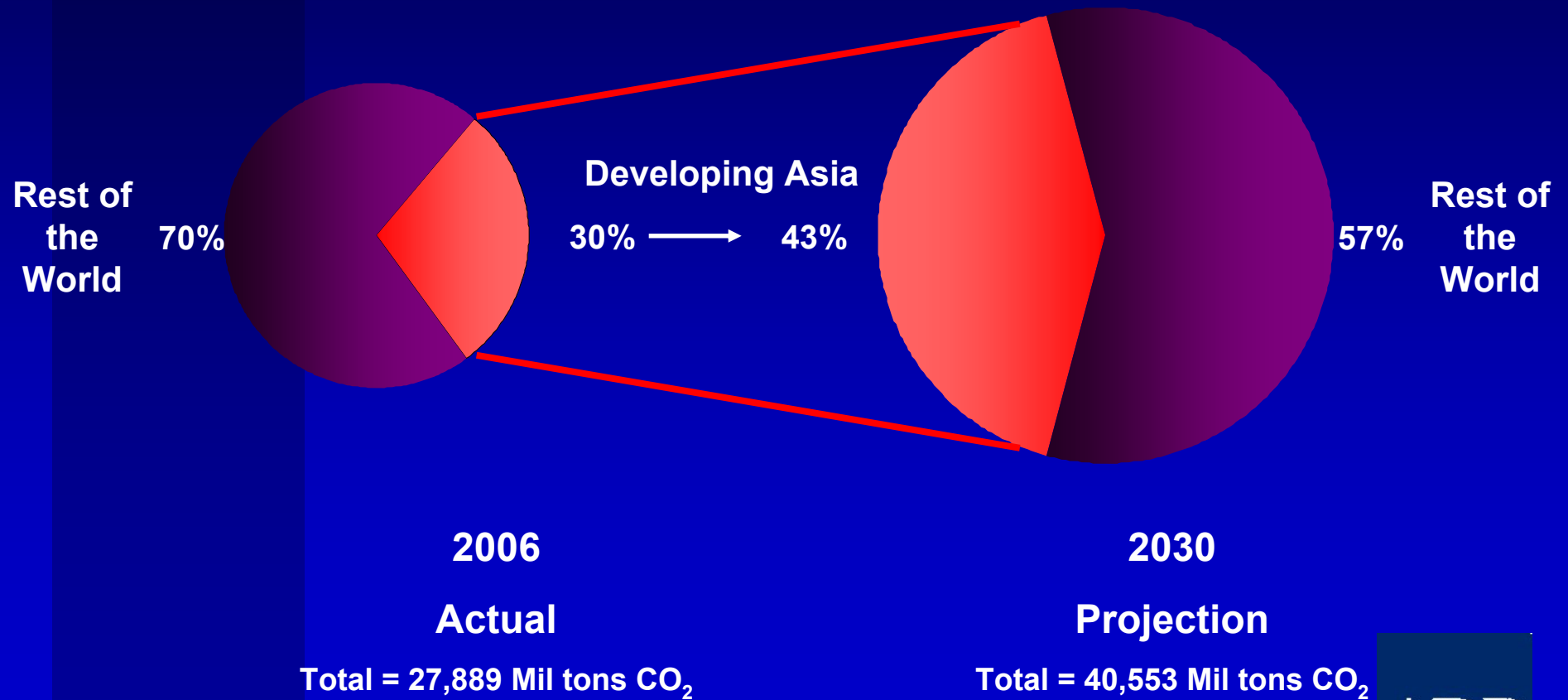
1. The Problem - Solution
2. Financing solutions- Best practices
3. Existing global financing options
4. Future financing options
5. ADB's Sustainable Transport Initiative
6. Recommendations

# The Problem

- Motorization synonymous with growth and progress
- Transport responsible for rising share of:
  - Carbon emissions , air pollution, congestion, accidents....
- Externalities not integrated in transport policy making
- Transport not part of climate change discussions

# The Problem

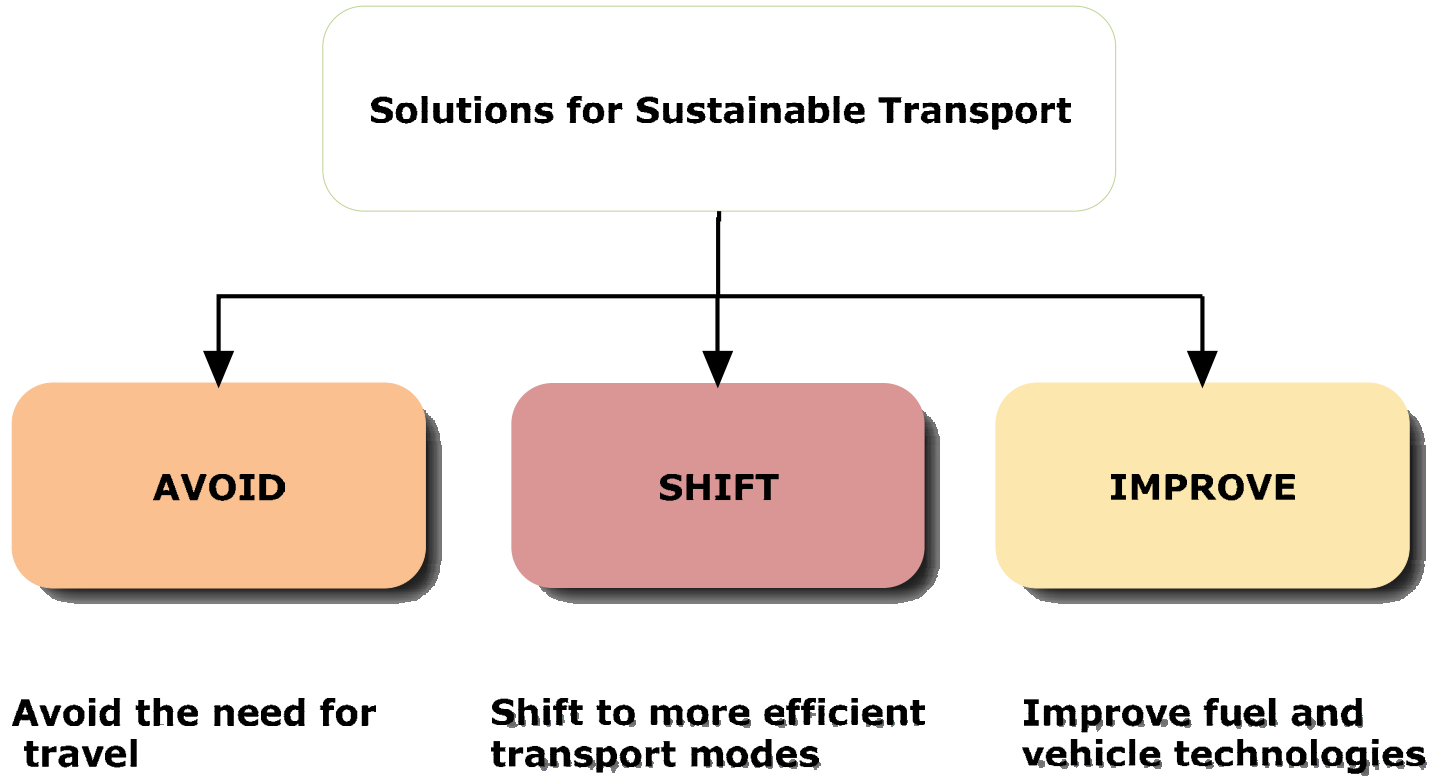
## Developing Asia's Share in Global CO<sub>2</sub> Emissions from Energy Consumption



Source: ADB, data from IEA World Energy Outlook 2008

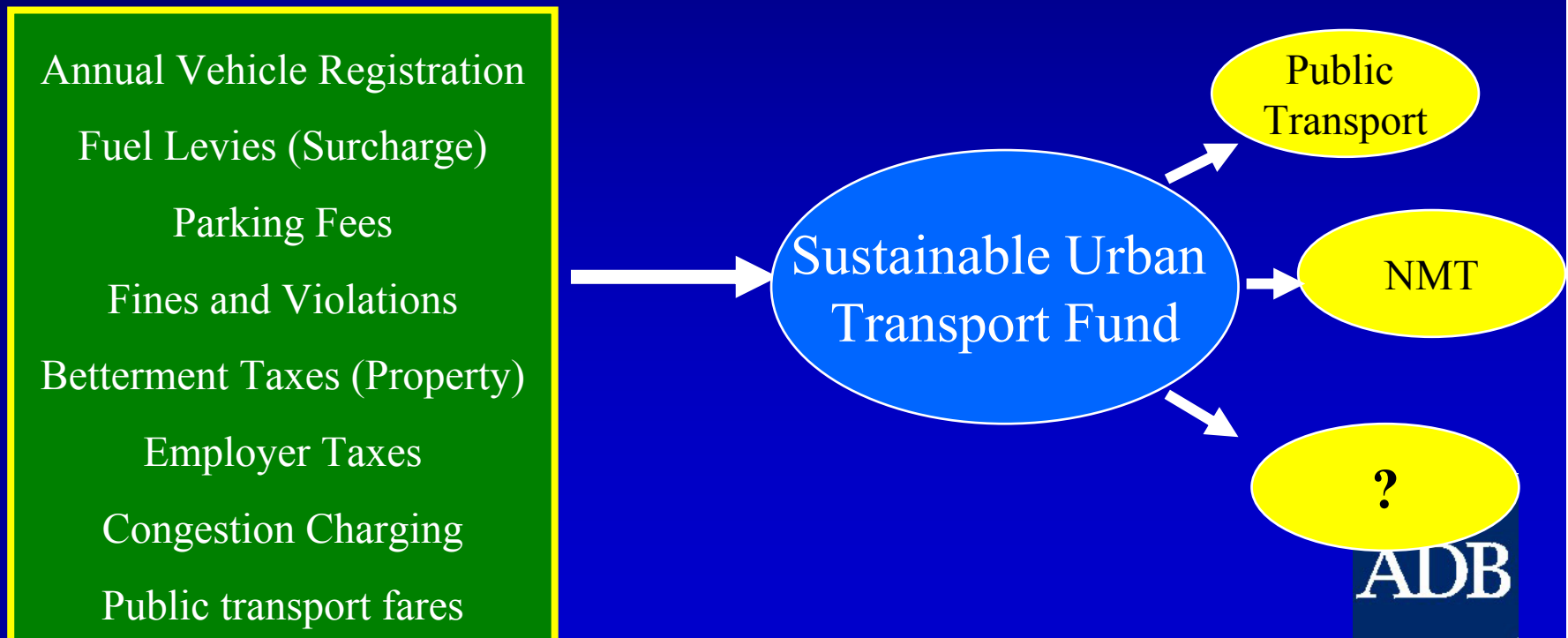
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# The Solution



# Financing Solutions

- Finding solutions at the city level is vital
- 2500+ cities in Asia are planning infrastructure investments
- Cities must be accountable and empowered
- Fiscal sustainability of city transport systems is the key



# Financing Solutions



- London Congestion Charging financing public transport
  - Revenues from congestion charging
    - £ 250 million
  - Legal requirement to reinvest profits in Public Transport
  - Transformed traffic flows
    - Buses increased by 25%
    - Bicycles increased by 49%

# Financing Solutions

- Velib, Paris
- 16000 bikes, 1200 stations
- Trips 75,000 to 120,000 (sunny days)
- Revenue \$30 million from subscriptions and rental fees
- Operator pays fixed yearly fee (\$ 5 million) for advertising rights + penalty for performance lapses





# Financing Solutions

- Example: Surat city, India
- Background
  - City had no public transport system
  - Private vehicles increased from 400 thousand (1994) to 1.3 million in 2007
- Features
  - Govt. created an urban mobility plan
  - Created a dedicated urban transport fund through budgetary allocation
  - Additional revenue components include vehicle taxes, parking charges and advertising revenue
  - Used for creating public transport system and developing CNG infrastructure
- **ADB exploring the concept in several cities**

# Existing Global Finance

- Clean Development Mechanism
- CDM difficult to apply for transport
  - 2 transport projects out of 1662 registered
  - 8 out of 4000+ projects in the pipeline
  - 6 approved methodologies
  - 0.04% of the CERs issued
  - **Contrast 23% of fossil fuel CO2 emissions with 0.04% share of CDM funds**

# Existing Global Finance

## Relevance of carbon finance

- A Bus Rapid Transit (BRT) project
  - 100 kms @ \$ 5million = \$ 500 million
  - Savings in CO2 (32,000 tons per year)
  - NPV (10%, 21 years) = \$2.5 million
- % capital cost offset by future carbon streams = **0.5%**



Transjakarta

**Will carbon finance affect decisions?**

# Existing Global Finance

## Climate Investment Funds

Interim solution until a post 2012 financial architecture is in place

### Clean Technology Fund (CTF)

#### Trust Fund Committee

with equal representation of donors  
and recipients

**Observers**  
from relevant  
organizations (GEF, UN)

→US\$5.2bn/4years

### Strategic Climate Fund (SCF)

#### Trust Fund Committee

#### Observers

Pilot  
Program for  
Climate  
Change  
Resilience

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Sub-  
Committee

Forest  
Investment  
Fund

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Sub-  
Committee

Small Scale  
Renewable  
Energy Projects  
for Low Income  
Countries  
(SREP)

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Sub-Committee

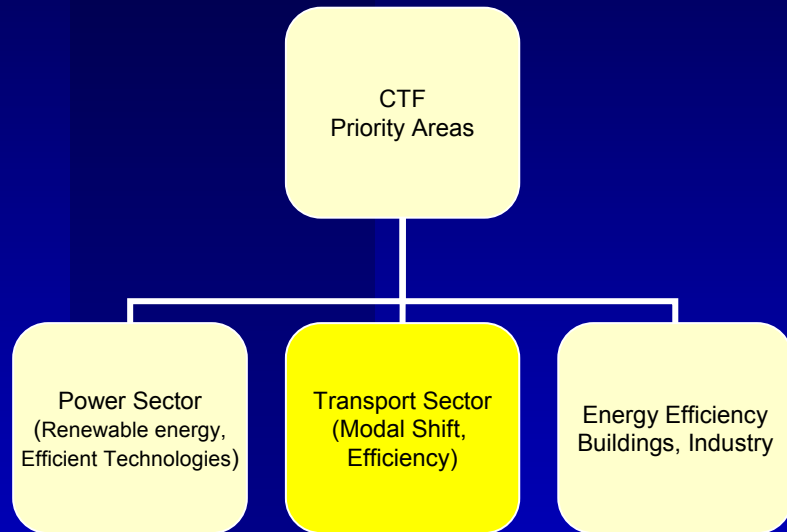
→US\$0.9bn+/4years

Donors: Japan, US, UK, Germany, France, Canada.....

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# Existing Global Finance

## CLEAN TECHNOLOGY FUND



	Energy \$ million	Transport \$ million
Turkey	400	0
Mexico	300	200
Egypt	200	100

Under consideration (ADB/IFC/IBRD):  
Requested for CTF: Philippines,, Thailand  
Initial discussions: Indonesia, Vietnam

## Comment on existing financing

- Climate change and other negative externalities are not on the radar of Decision makers
- Local sustainable funds need to be created
- Need for pricing externalities
- Inadequate global financing support

# ADB Financing Tools: Mitigation and Adaptation

Help make climate change mitigation and adaptation actions affordable and more competitive to DMCs through:

- Mobilizing concessional resources (Grant Funds)
- Catalyzing private capital
- Maximizing the use of market-based mechanisms
  - Carbon Market Funds

# Future Options

- Expanded and Improved CDM
- Simplified methodology for transport
- New approach to determine additionality
- CERs from projects with certified co-benefits accorded a higher value
  - E.g. Gold Standard
  
- Sectoral No-lose targets
- Credits awarded if emissions kept below a pre-agreed level
- No penalties if target is exceeded
- No-lose target set below BAU

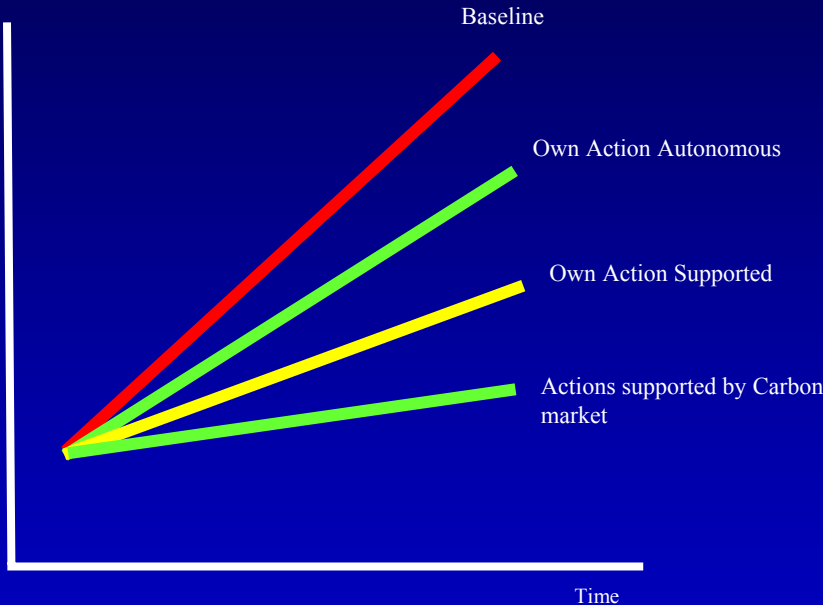


# Future Options

## Nationally Appropriate Mitigation Actions (NAMAs)

Types of NAMAs	MRVs	Examples from Transport sector
Voluntary and Unilateral Action without support	Not required	Fuel economy stds
Actions that require support (technology, finance, capacity building)	Mutually agreed MRV procedures	Vehicle Technology e.g. Electric vehicles
Actions motivated by carbon market	Similar to CDM	Congestion charges, Public transport

GHG Emission Level



Source: EC 2009

# Future Options

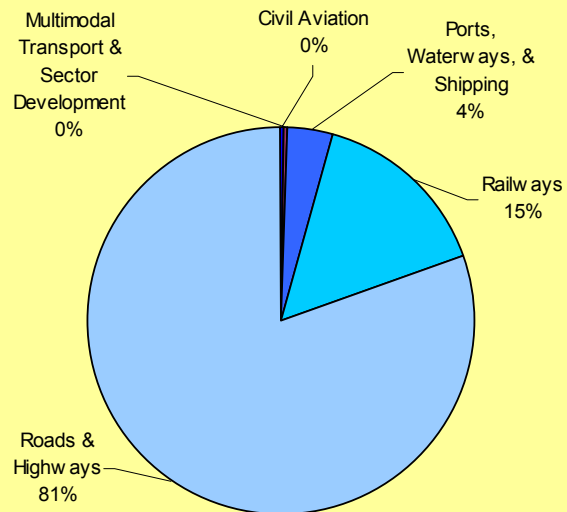
## Mitigation Fund for Transport

- Build on the CIF (CTF) concept
- Dedicated for low carbon transport projects
- Not linked to the carbon market
- Provide enabling finance for acknowledged low carbon transport projects
  - BRT, cycle networks, land use planning
- Management by multi lateral banks to co-finance projects

# ADB's Sustainable Transport Initiative

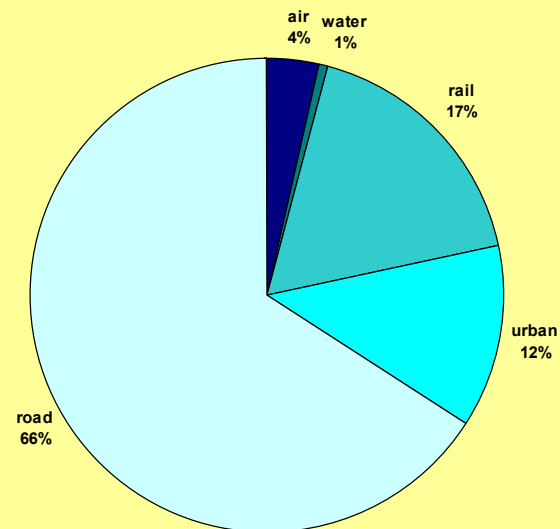
Transport is a priority sector for ADB lending

ADB Transport Lending - Public Sector  
(2004-2008)



**\$2.19 billion per annum**

ADB's Transport Lending Pipeline - Transport Sector  
(2009-2011)



**\$5.89 billion per annum**

# Sustainable Transport Projects

NMT

Kathmandu

Mass Transit

Hanoi, HCMC, Lahore,  
Lanzhou  
Ulaanbaatar

Heavy Rail

China, Bangladesh, Vietnam,  
Cambodia, India, Azerbaijan

Multi modal

Tbilisi,  
Yerevan,  
Bangkok

# Recommendations

- Need to push the global community to support low carbon transport
- MDB's can support by:
  - Diversifying their investment pipeline
  - Providing more policy and advisory support
- Developing countries need to proactively plan and seek support

## **For More Information**

Web site: [www.adb.org](http://www.adb.org)

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