

Strategies for Environmentally Sustainable Transport in Asia

Dollaris Riauaty Suhadi

Country Coordinator (Indonesia) - CAI-Asia Center
Executive Director - Swisscontact Indonesia Foundation

Access to Clean Urban Transport Energy Solutions for the Urban Poor
Yogyakarta, Indonesia
27-29 May, 2009





Transport and Poor people- EST strategy

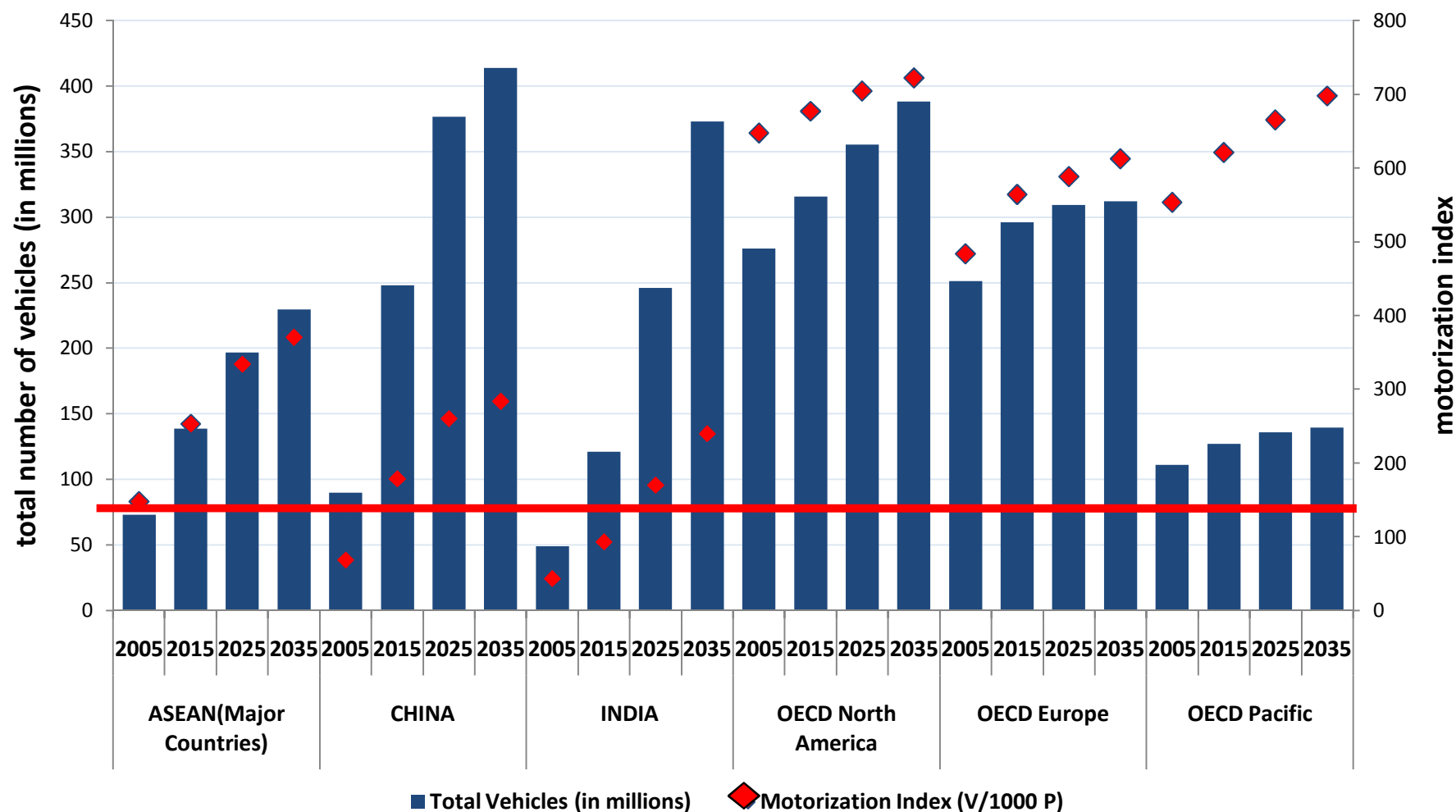


Source: CAI-Asia & ADB

www.cleanairnet.org/caiasia



1. Asia – Motorization and Vehicle growth

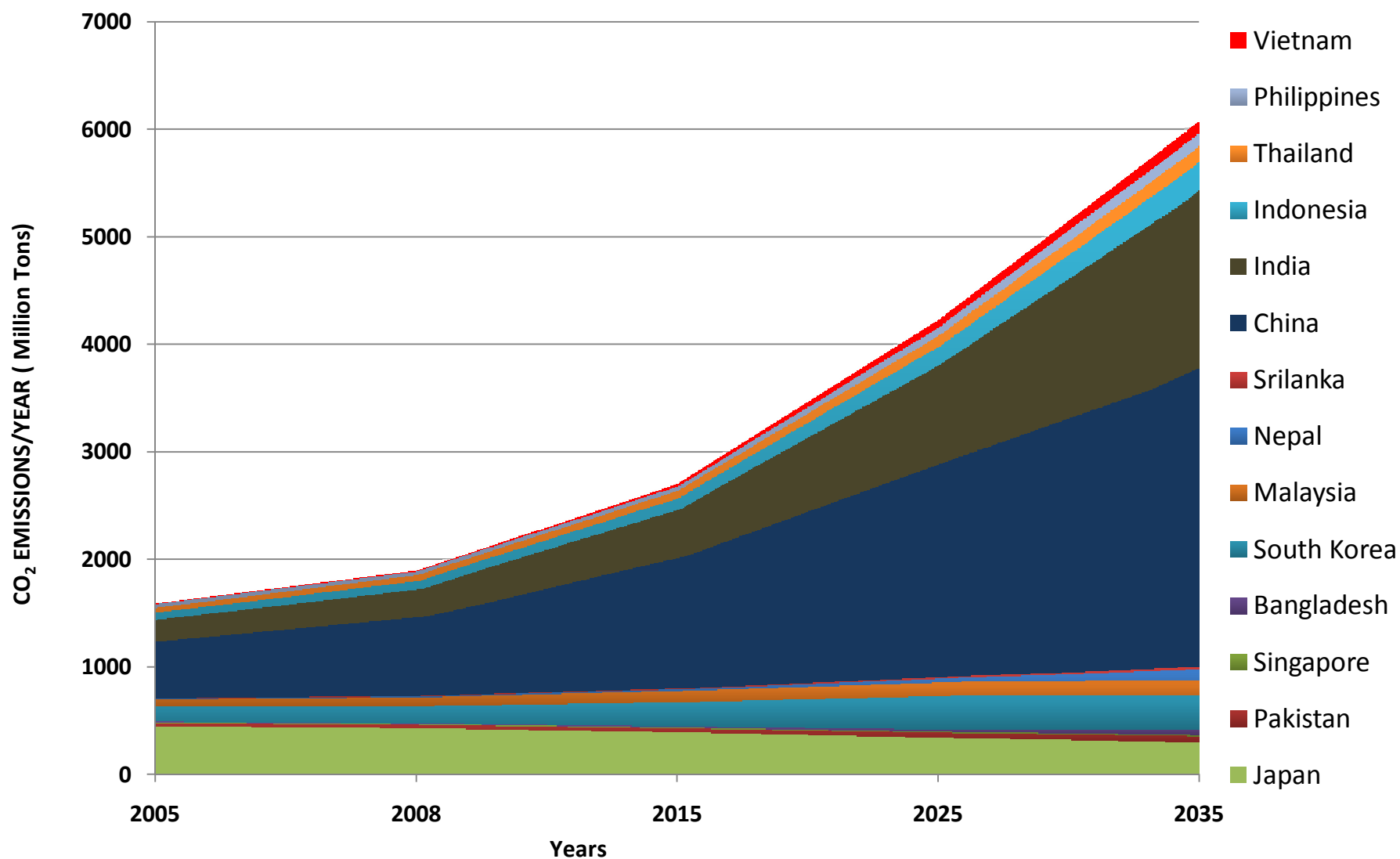


Source: 2008. ADB, CAI-Asia, Segment Y Ltd., and IEA

**MI - Indonesia in 2008 (138)
and in 2025 (247)**



2. Asia – CO₂ Emissions from Transport (BAU)



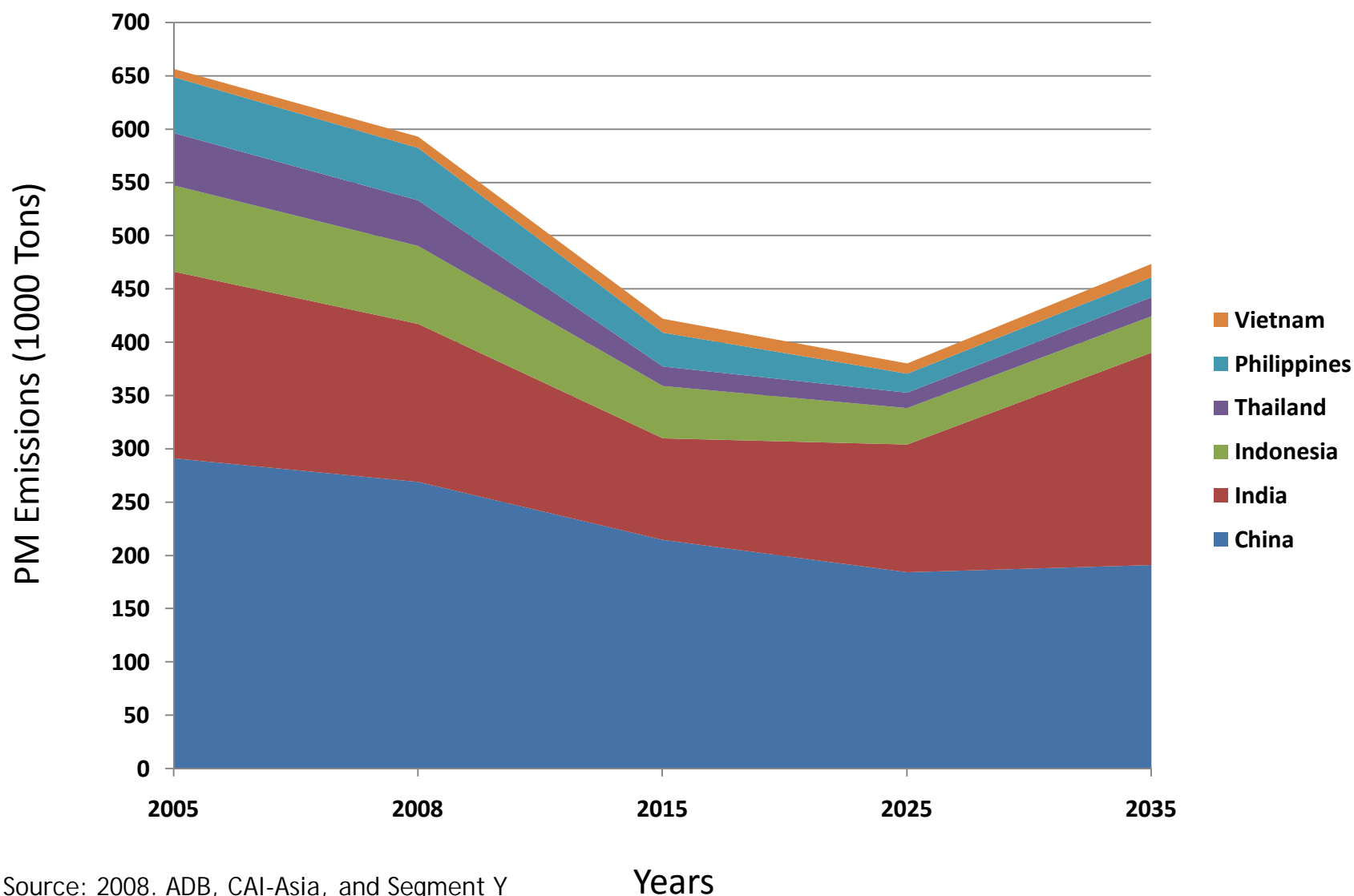
Source: 2008. ADB, CAI-Asia, and Segment Y Ltd

www.cleanairnet.org/caiasia

CAI-Asia Center



3. Asia – PM Emissions from Transport (BAU)



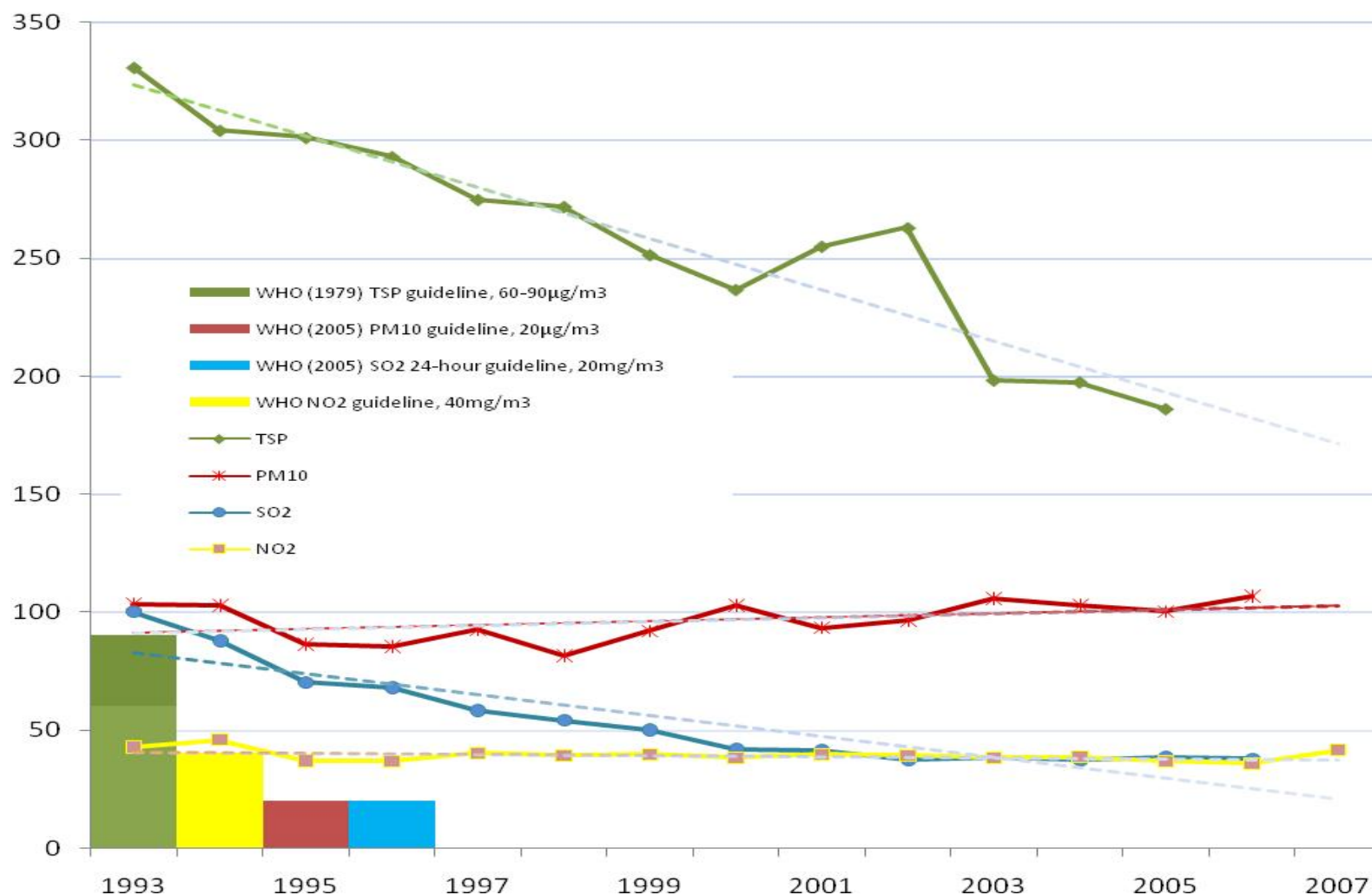
Source: 2008. ADB, CAI-Asia, and Segment Y
(based on adoption up to Euro 3 standards)

www.cleanairnet.org/caiasia

CAI-Asia Center



4. Urban Air Pollution Trends in Asia 1993-2007



Source: CAI-Asia, 2008

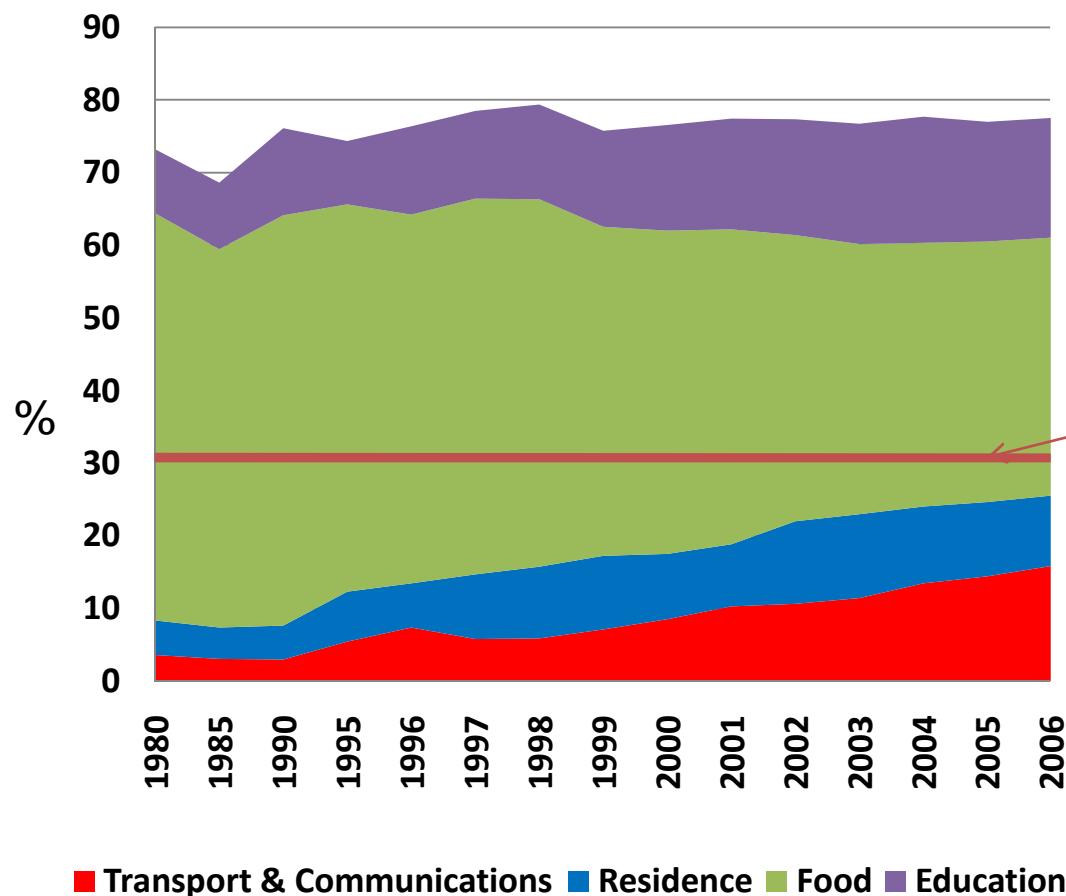
Aggregated Annual Ambient AQ Trends, $\mu\text{g}/\text{m}^3$ (1993 to 2007)

www.cleanairnet.org/caiasia



5. Asia – High cost of Transport

Shanghai – Per-Capita Consumer Expenditures of Urban Household



- In Shanghai -Low income section pays as much on transport as on healthcare (5%), Cloths (5%) and rent (0.8%) combined !!

- In Hong Kong – Its nearly 40% of Income on Transport and Housing

- Top 20 Cities in India – 30.6% on Transport and Housing (in fact in the booming cities, people spend more on Transport (21.3%) than on Health (7.6%), Education (5.2%) and Housing (8%) combined !!)

Source :- Shanghai Statistical Bureau and others

www.cleanairnet.org/caiasia

6. Asia - Fuel subsidies – Who pays? Who benefits ?



Who consumes more gasoline and diesel??
Where can be the money best used??

Government Subsidy (in BILLION USD)

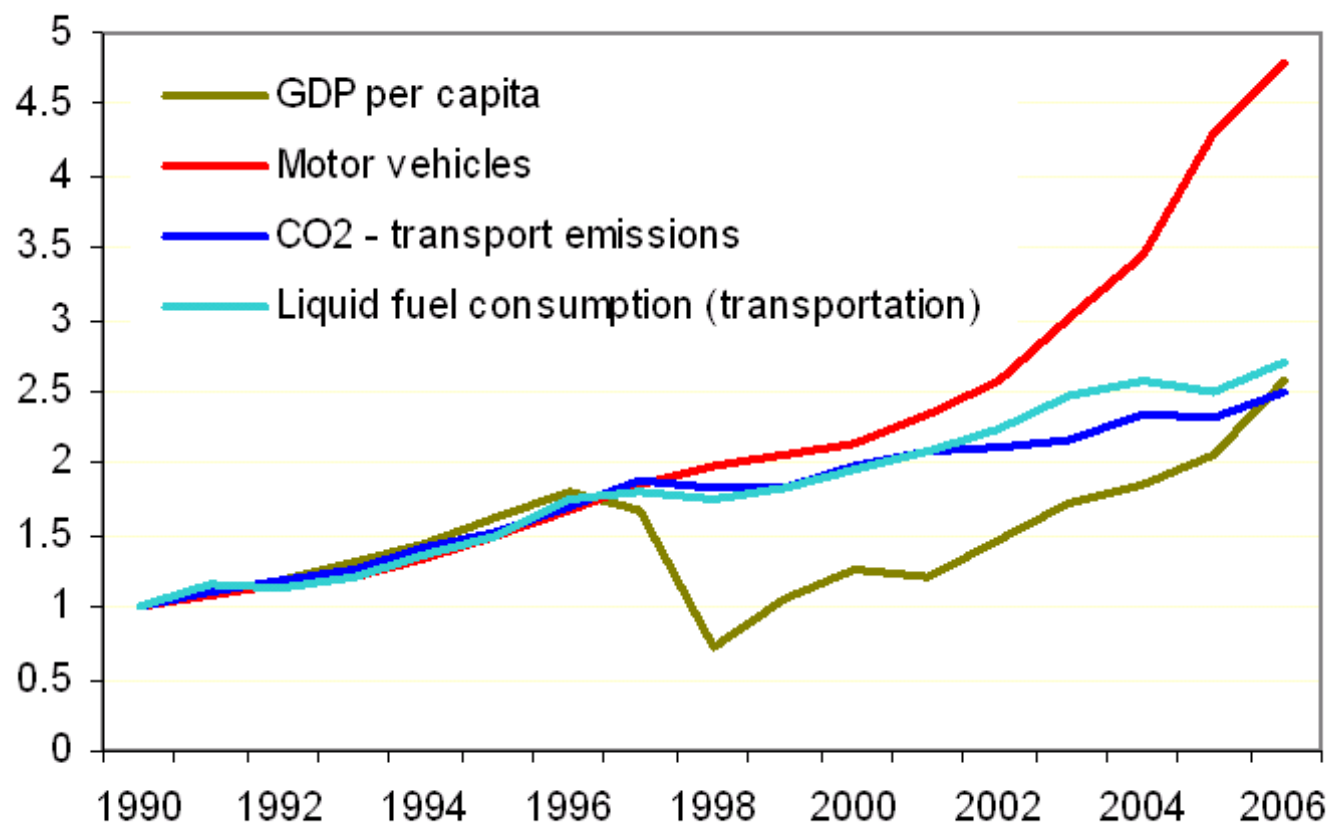
Country	2006	2007	2008 (P)
Bangladesh	0.81	0.73	1.50
China	0.68	NA	1.79
India	0.64	0.74	17.50
Indonesia	5.90	9.31	19.60
Malaysia	4.00	4.70	10.83
Nepal	NA	NA	0.30
Pakistan	NA	2.70	6.90
Philippines	NA	NA	NA
Singapore	NA	NA	NA
Sri Lanka	0.09	0.15	0.28
Thailand	NA	NA	NA
Vietnam	0.61	0.73	3.20

Source :- Compiled from different sources by CAI-Asia

www.cleanairnet.org/caiasia



7. Emissions grow faster than GDP



Annual growth rates of GDP per capita, motor vehicles, CO₂-transport emissions, and liquid fuel consumption in the transportation sector in Indonesia

BPS, 2007; WRI, 2008; Pertamina, 2008.



8. Issues: Safety, Social Equity, Noise, Congestion



Source: CAI-Asia

www.cleanairnet.org/caiasia



9. Environmentally Sustainable Transport (EST)

Includes all the key facets of transport

- Vehicle emission control, standards and I/M
- Cleaner fuels
- Strengthening road side monitoring and assessment
- Land-use planning
- Public transport planning and travel demand management
- Environment and People Friendly Infrastructure Development
- Road safety and maintenance
- Traffic noise management
- Public health
- Social equity and gender perspectives
- Strengthening roadside air quality monitoring and assessment
- Strengthening knowledge base, awareness, and public participation

Concept of EST is centered on the transportation system and activity that meets social, economic and environmental objectives
– People and not vehicles are the objective

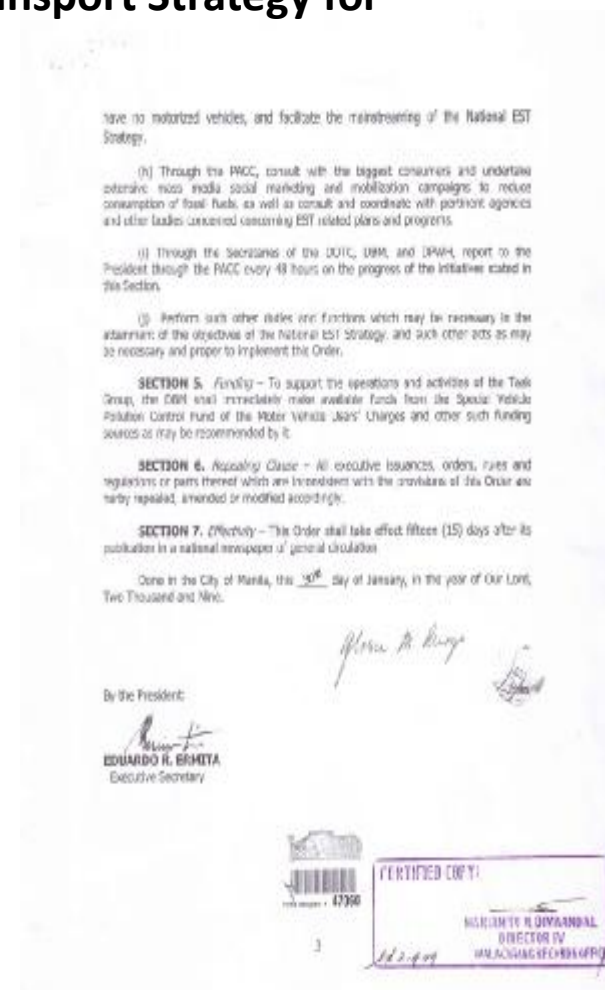
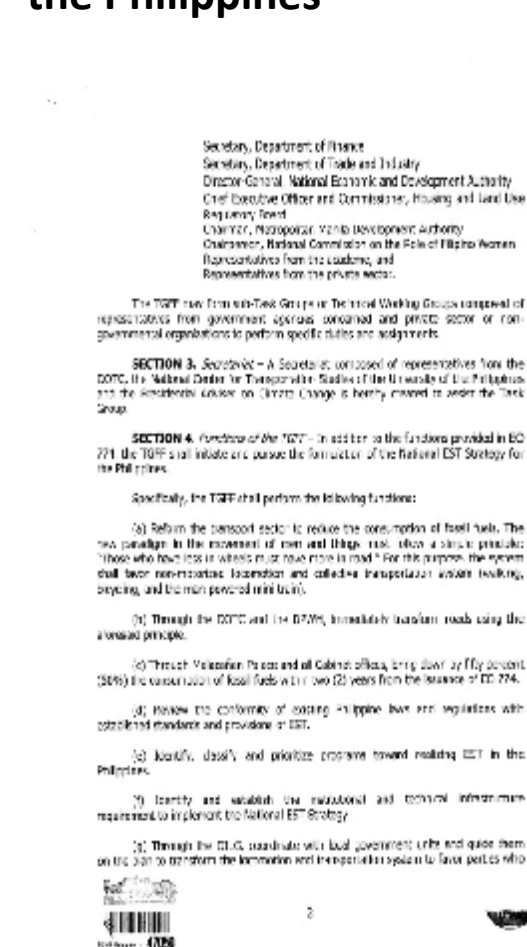
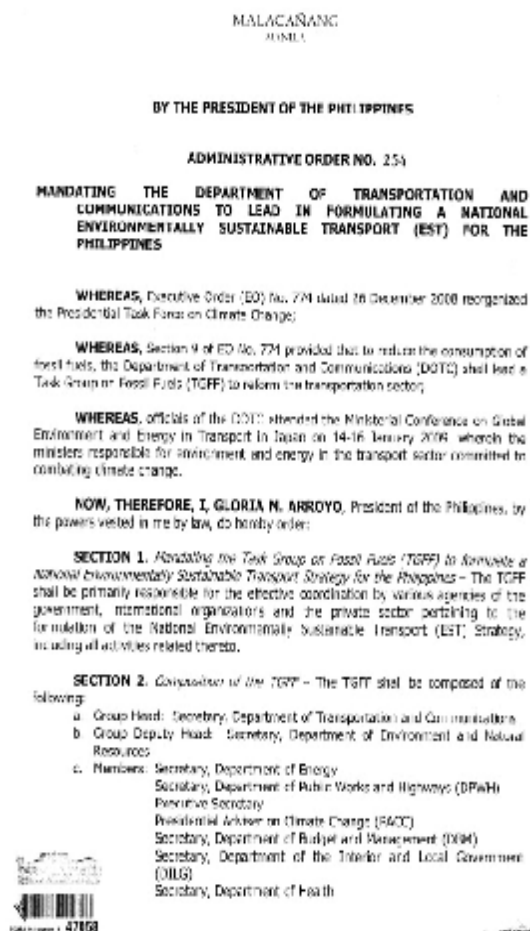
Source: UNCRD

www.cleanairnet.org/caiasia



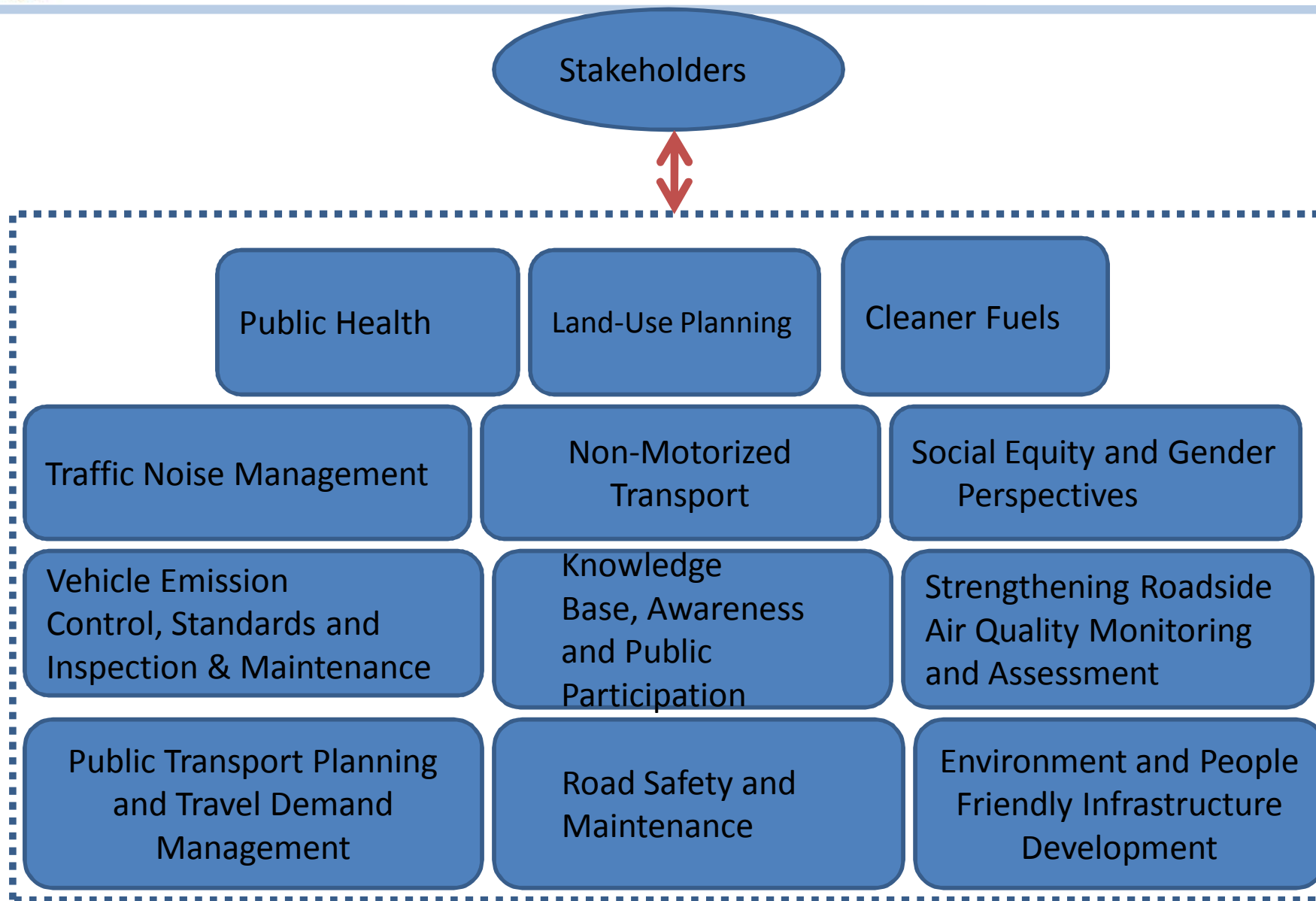
10. EST in Philippines

Presidential Administrative Order No. 254 - Formulation of a National Environmentally Sustainable Transport Strategy for the Philippines -





11. EST in Philippines





12. EST in Indonesia

- Support from UNCRD to promote EST strategy, mainstream
- New transport legislation addresses “limited” EST (TDM, public transport, NMT) --- needs to be further defined
- Recently GOI is considering efficiency and sustainability of its energy policies --- fuel quality improvement & introduction of fuel economy (policy measures)
- EST measures
 - BRT and improved public transport system in cities
 - Blue Sky Cities Evaluation Program (MoE) – to promote clean air & support cities in implementing EST
 - Wahana Tata Nugraha Evaluation program (MoT) – evaluation of city’s transport management performance
 - Use of CNG for high usage public vehicles where CNG is available
 - Cities’ initiatives to promote NMT (e.g. Yogya, Palembang)



CAI-Asia Center

www.cleanairnet.org/caiasia



Unit 3510, 35th Floor, Robinsons-Equitable Tower, ADB Avenue, Pasig City, Metro Manila, 1605 Philippines

www.cleanairnet.org/caiasia