



Clean Air Initiative for Asian Cities

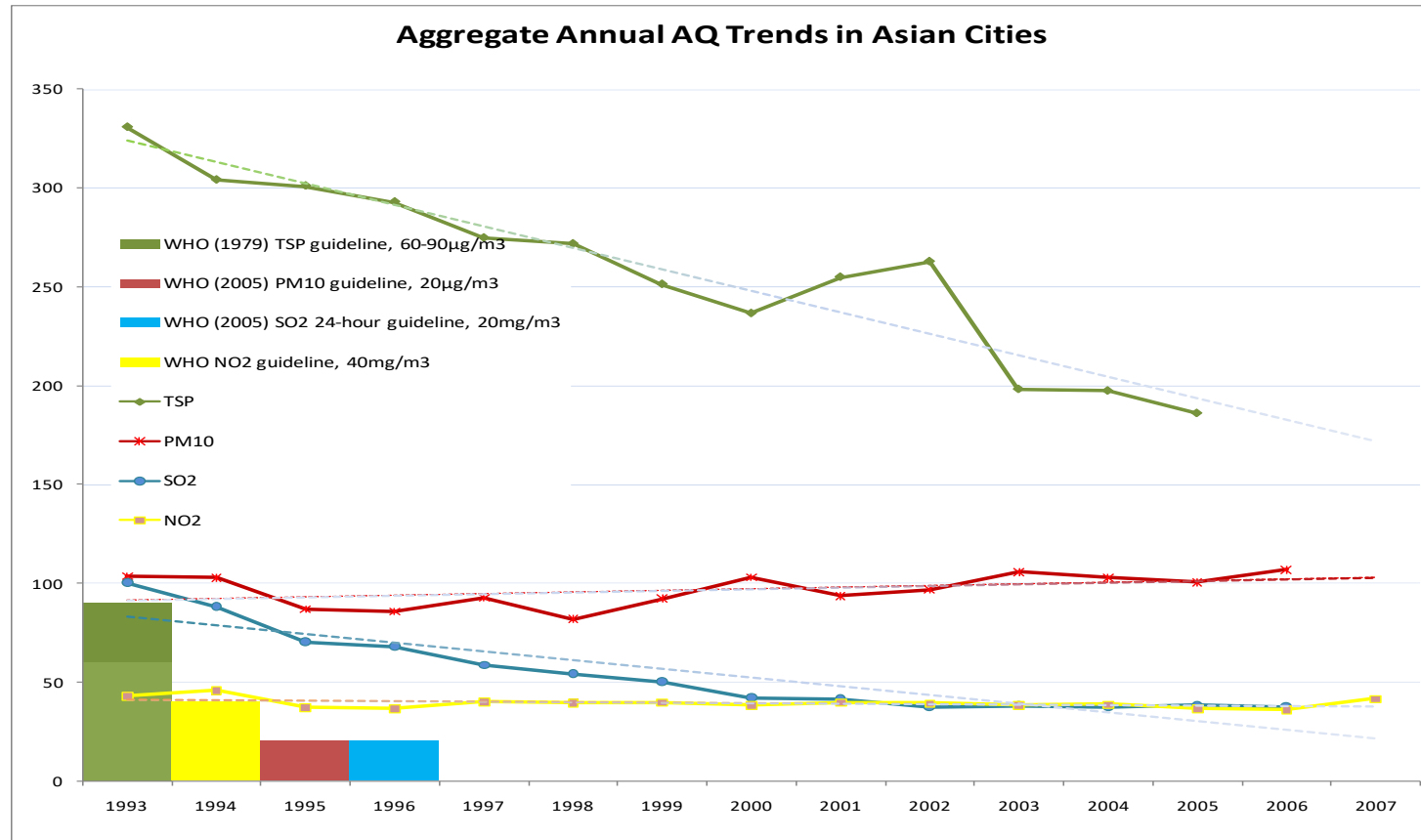
**Glynda Bathan – Policy and Partnerships Manager
CAI-Asia Center**

Male Declaration: Fifth Regional Stakeholders cum
Coordination Meeting
Colombo, 19-20 August 2008

“The Clean Air Initiative for Asian Cities promotes and demonstrates innovative ways to improve the air quality of Asian cities through sharing experiences and building partnerships”



Business Case for Addressing Air Pollution

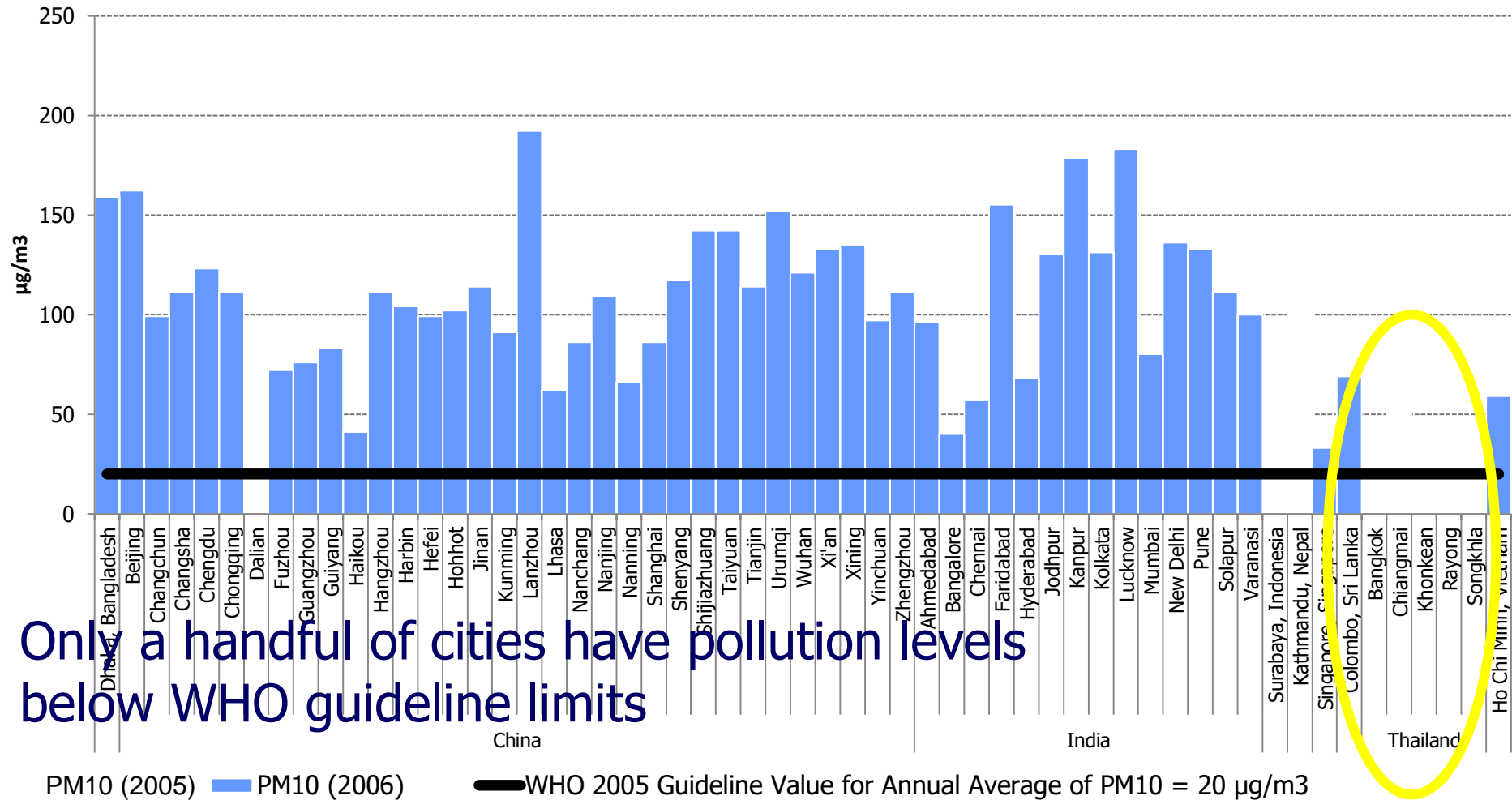


- Past efforts have contributed to a slow but steady reduction in urban levels of main air pollutants
- Air pollution might worsen due to exponential increases in energy use, vehicle ownership and industrial growth in Asia



PM levels in Asia – versus WHO guideline values

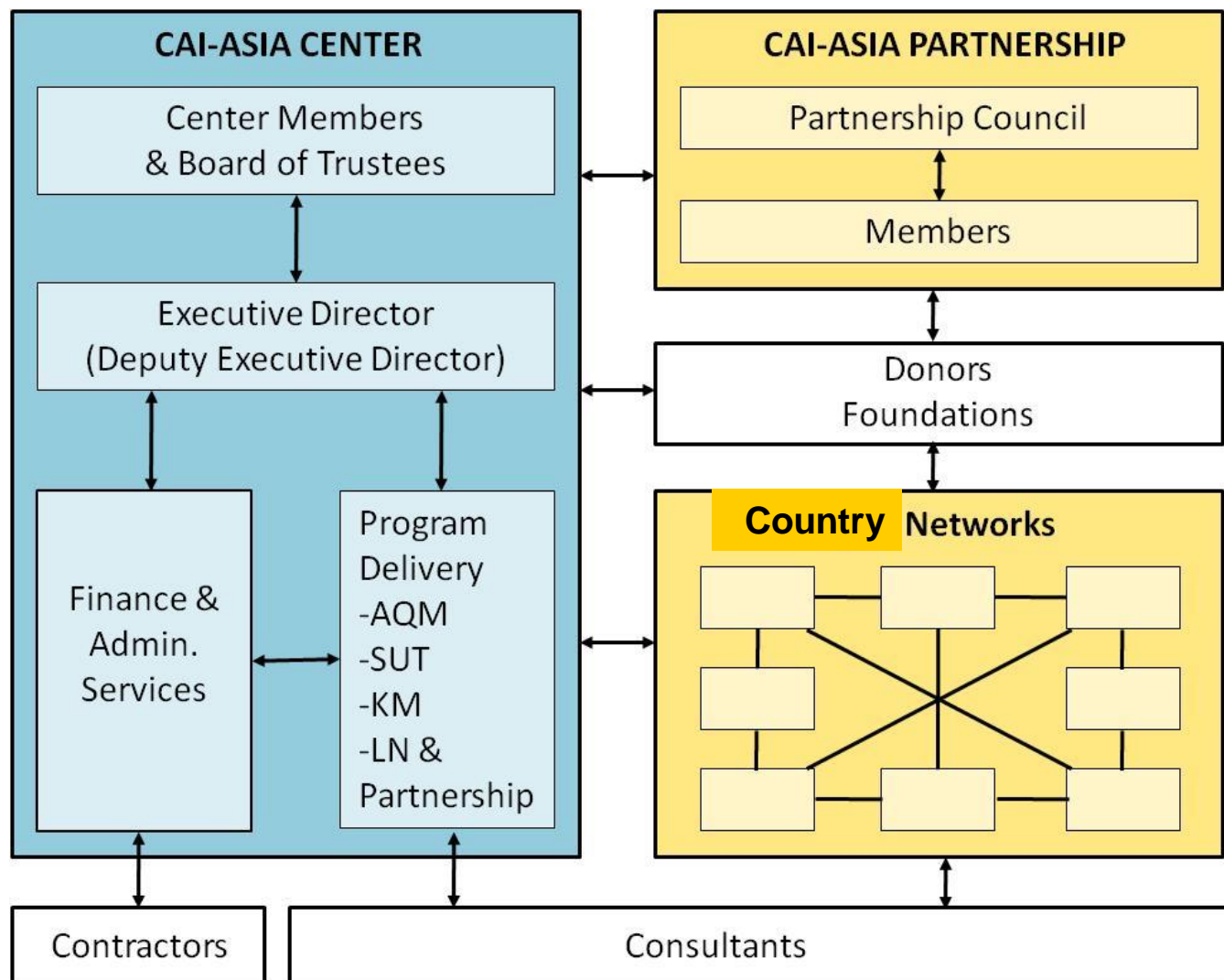
PM10 Annual Ambient Concentrations in Asian Cities vs WHO



Only a handful of cities have pollution levels below WHO guideline limits



CAI-Asia - Structure





Country networks

Pakistan

Pakistan Clean Air Network
Hosted by IUCN
Coordinator:
Mohammad Aqib
mohammad.aqib@iucn.org
Technical Advisor:
Ahmad Saeed
Head Ecosystems and
Livelihoods Group, IUCN
Pakistan
www.cleanairnet.org/pcan

Sri Lanka

Clean Air Sri Lanka
Hosted by Ministry of
Environment and Natural
Resources
Coordinator: Sugath Yalgama
sugath.yalgama@cai-asia.org
www.cleanairnet.org/cleanairsl

Nepal

Clean Air Network – Nepal
Coordinator: Gopal Raj Joshi
gopal.joshi@cai-asia.org
www.cleanairnet.org/cann

China

CAI-Asia China Office
Coordinator: Yan Peng
yan.peng@cai-asia.org
www.cleanairnet.org/chinanetwork

Philippines

Partnership for Clean Air
Hosted by Manila
Observatory
Coordinator: Gia Ibay
pca@observatory.ph
www.cleanairnet.org/pca

Viet Nam

Viet Nam Clean Air Partnership
Hosted by Swiss-Vietnamese
Clean Air Program
Coordinator: Nguyen Hoang Yen
yen.nguyen@cai-asia.org
www.cleanairnet.org/vcap

Indonesia

Mitra Emisi Bersih
Chairman: Fransiscus Soeseno
f_ones@yahoo.com
www.cleanairnet.org/meb

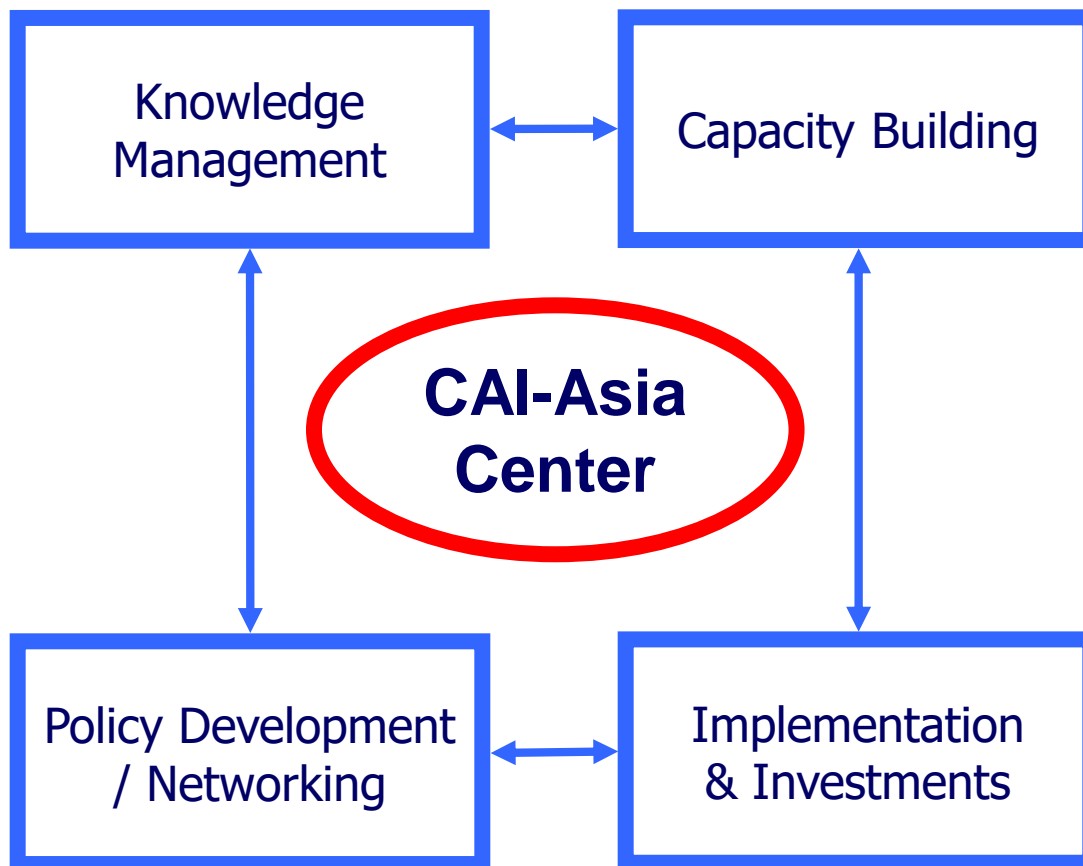




Main CAI-Asia Center activities

- Website
- Surveys
- Newsletter
- CitiesACT database & compendium
- Listserv (e-group)

- Policy dialogues
- BAQ conference
- Local policy development
- Long-Term Vision on Urban Air Quality
- Gov't Meeting on UAQM
- Regional networks



- Training
- Training systems
- City-to-city learning

- Sustainable Urban Mobility in Asia (SUMA) program

Enhancing Knowledge for AQM



Innovative solutions can only be acquired when knowledge is shared openly and applied by policy makers and AQM practitioners.

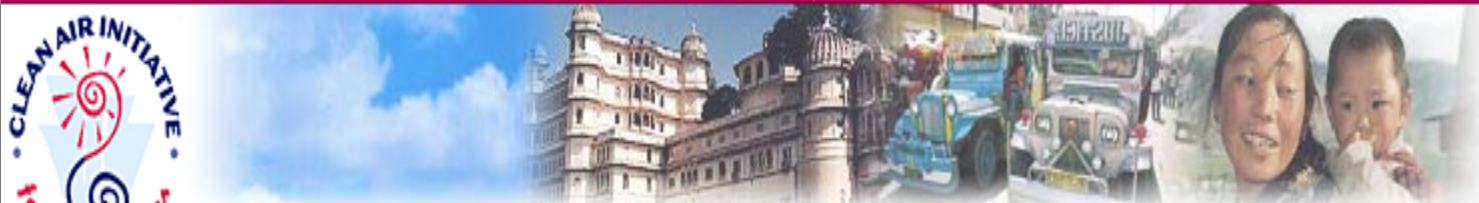


Website: Getting the message out

www.cleanairnet.org/caiasia

Wednesday, May 28, 2008

CLEAN AIR INITIATIVE for Asian Cities



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WELCOME TO THE CLEAN AIR INITIATIVE FOR ASIAN CITIES

Our mission: to promote and demonstrate innovative ways to improve the air quality in Asian cities through partnerships and sharing experiences.

Reminder: Call for Abstracts ongoing for Better Air Quality (BAQ) 2008, 12-14 Nov, Bangkok, Thailand (deadline extended to May 30)

How's the air today?
[Ambient Air Quality Data](#)
from websites around Asia

QUICK LINKS

Who we are:

- [CAI-Asia Partnership](#)
- [CAI-Asia Center](#)
- [Local Networks](#)

Key documents:



AQM Compendium: Who's doing what?

CAI-Asia's AQM Compendium - Mozilla Firefox

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[Submit your organization, project, or training details to the compendium.](#)

Legend:

- Organizations
- Projects
- Trainings

Air quality management (AQM) is still a major challenge in Asia. Continued urbanization in Asian cities, especially in China and India, have increased the demand for mobility and energy in the region, resulting in high levels of air pollution from mobile and stationary sources. The World Health Organization estimates that about 500,000 premature deaths per year are caused by air pollution, leaving the urban poor particularly vulnerable since they live in air pollution hotspots, have low respiratory resistance due to bad nutrition, and lack access to quality health care.

The AQM Compendium provides an overview of the organizations, projects and programs, and training courses currently active in air quality management, sustainable urban transport, cleaner energy, and climate change in Asia.

Organizations

Most of these profiles represent national and local government agencies, NGOs, academic institutions, international donors, and the private sector.

Total organization profiles:
99 as of 20 August 2008

- [ADEME, FFEM11](#)
- [Marxman Organization](#)
- [Test Org](#)

[View More](#)

Projects & Programs

Specific projects and general programs focuses on the following thematic areas: sources of air pollution, impacts of air pollution, fuels, and/or responses to air pollution.

Total project profiles:
453 as of 20 August 2008

[View More](#)

Training Courses

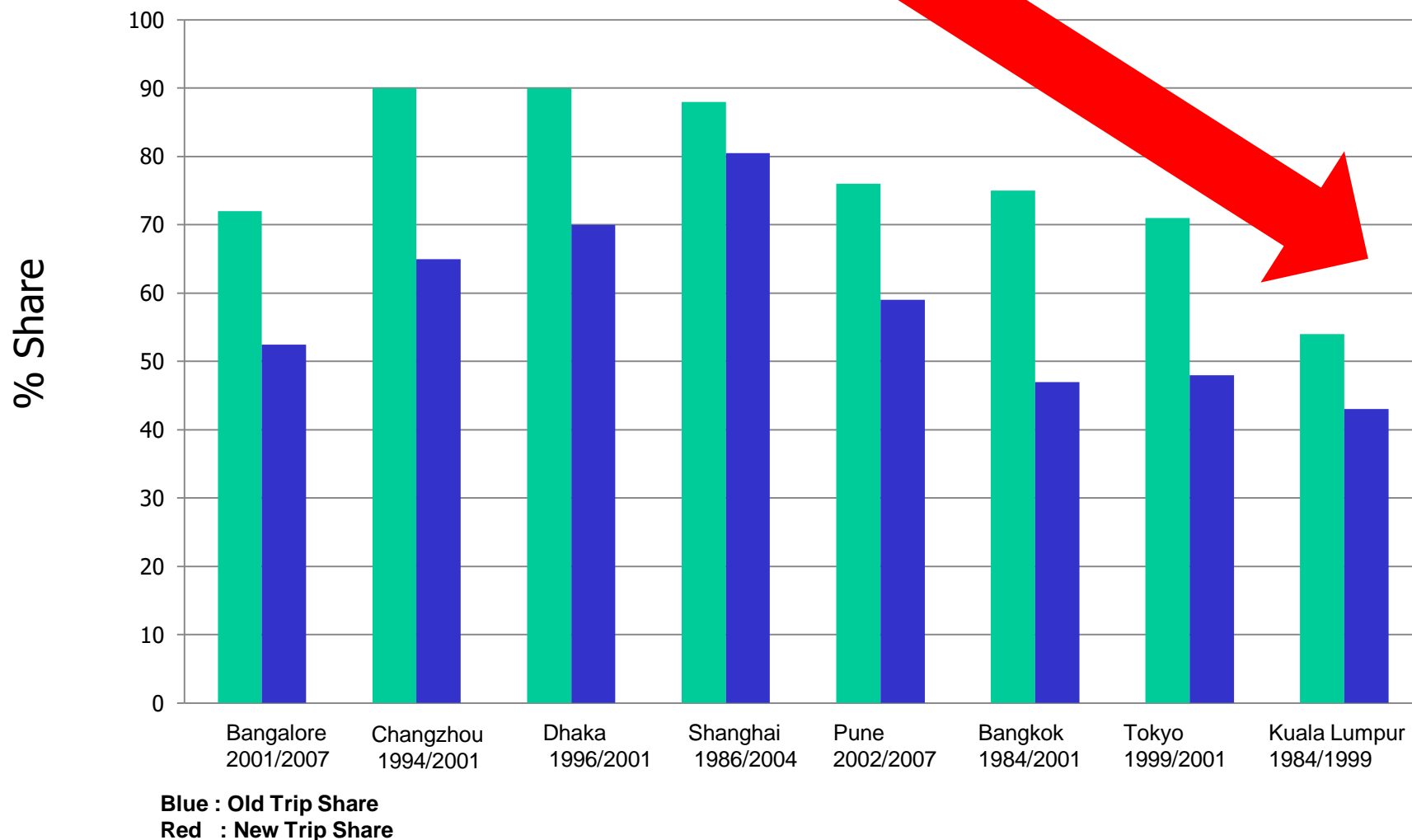
AQM training courses are delivered regularly and cover one or more modules, topics, or themes. These may include multi-year academic courses, short-term certificate courses, and distance learning. The Compendium, however, excludes any "ad hoc trainings" that are usually given during specific conferences or project-related workshops.

Total training course profiles:
28 as of 20 August 2008

[View More](#)



Keeping track of trends: Public transport & NMT share



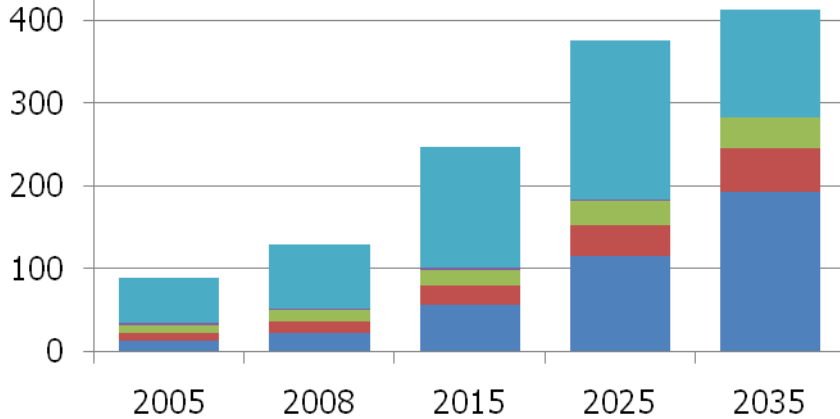


Trends: Vehicle growth forecast in Asia

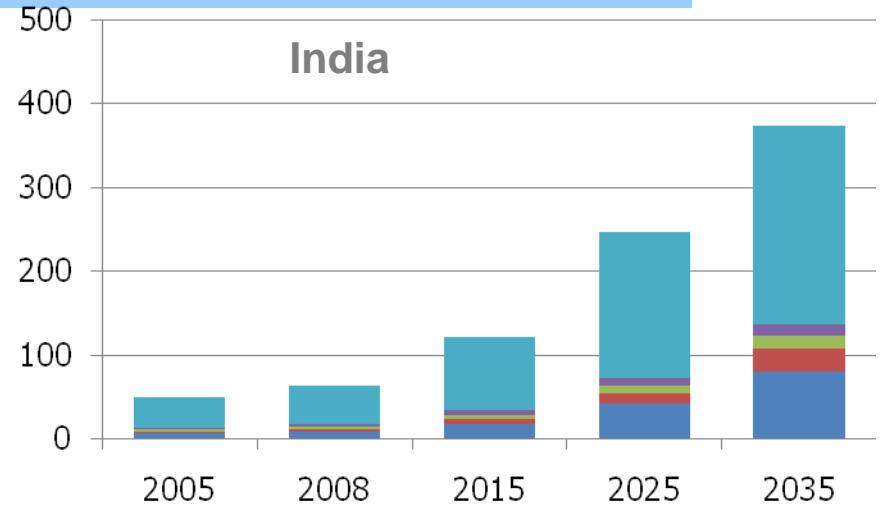
(in millions of vehicles)

500

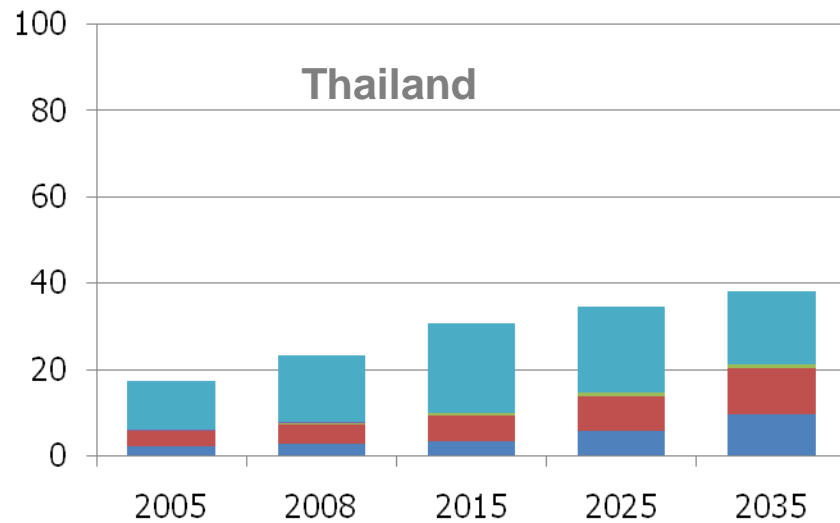
China, P.R.



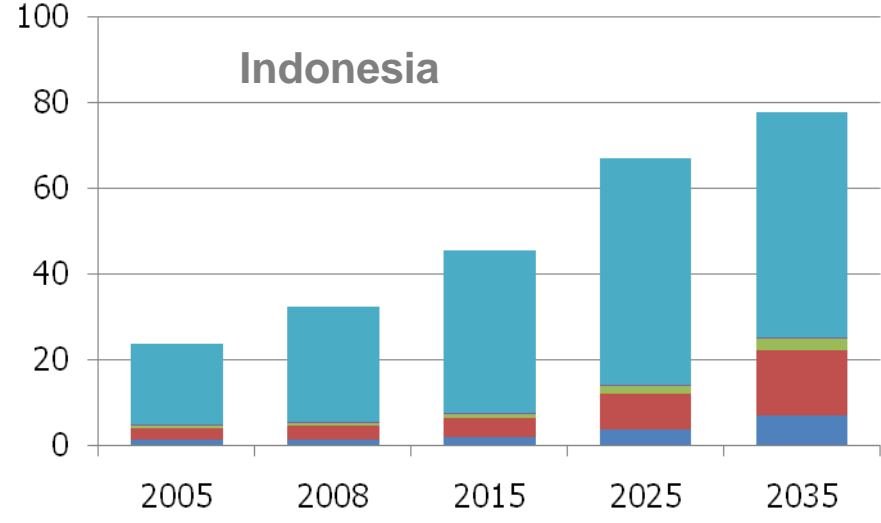
India



Thailand



Indonesia



■ PC ■ LCV ■ HCV ■ MC-three ■ MC-two



Trends: Growth of electric motorcycles

- China now produces 16 million E-bikes per year from 40,000 in 1998
- E-bikes are now in the majority in many of the Chinese cities
- E-bikes have an advantage in air pollutants over traditional motor cycles, and cars
- E- bikes can result in other environmental problems – lead acid batteries

Source: Preliminary results: Environmental Impacts of E-Bikes in Chinese Market, Christopher Cherry-University of Tennessee
Jonathan Weinert-Univ. of CA-Davis & Chevron, Yang Xinmiao-Tsinghua University



Bus Rapid Transit in Asia*

Systems in operation (17):

Akita, Japan	Jakarta, Indonesia	Nigata, Japan
Ankara, Turkey	Kanazuwa, Japan	Pune, India
Beijing, China	Kunming, China	Seoul, South Korea
Fukuoka, Japan	Miyazaki, Japan	Shijiazhuang, China
Gifu, Japan	Nagaoka, Japan	Taipei, China
Hangzhou, China	Nagoya, Japan	

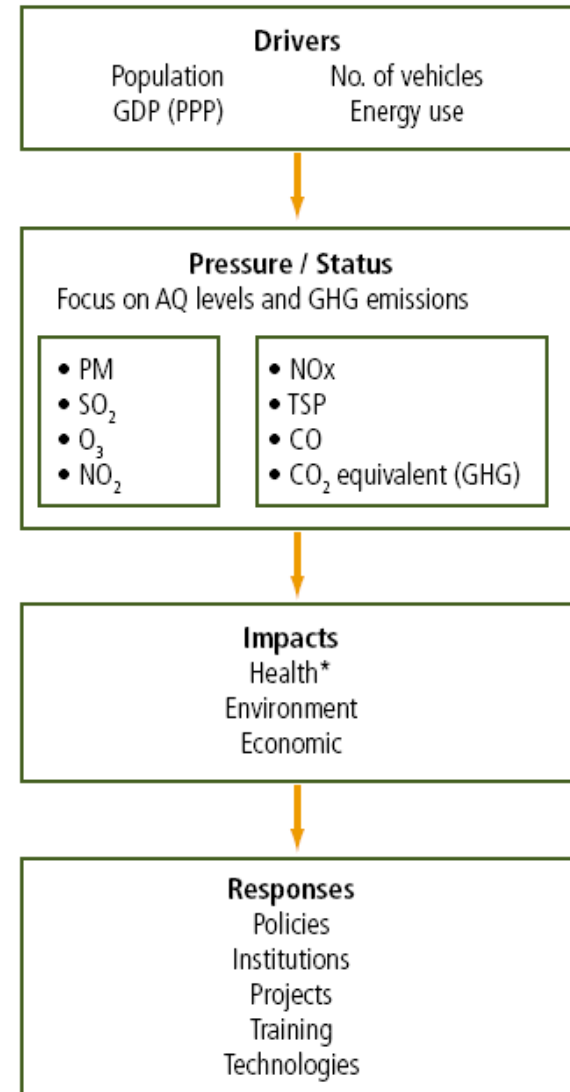
Systems in planning or under construction (37):

Ahmedabad, India	Incheon, South Korea	Shenzhen, China
Bangalore, India	Indore, India	Surabaya, Indonesia
Bangkok, Thailand	Jaipur, India	Surat, India
Bhopal, India	Jinan, China	T'aichung, China
Chiang Mai, Thailand	Karachi, Pakistan	T'ainan, China
Chengdu, China	Makati City, Philippines	Tienjing, China
Chongqing, China	Metro Manila, Philippines	Wuhan, China
Colombo, Sri-Lanka	Metro Cebu, Philippines	Wuxi, China
Delhi, India	Mysore, India	Vijaywada, India
Guangzhou, China	Pimpri-Chinchwad, India	Vishakhapatnam, India
Huai'an, China	Rajkot, India	Xi'an, China
Hyderabad, India	Shanghai, China	Xiamen, China
	Shenyang, China	



CitiesACT portal: Coming Online Soon!

- CitiesACT portal with
 - **A**ir quality,
 - **C**limate change, and
 - **T**ransport data and information
- To be launched at Better Air Quality 2008 workshop (12-14 November, Bangkok)



Building Capacity for Effective AQM



To advance AQM in Asia, there is a need to build the capacity of individuals as well as of organizations and institutions



Building Capacity for Effective AQM

Individual training

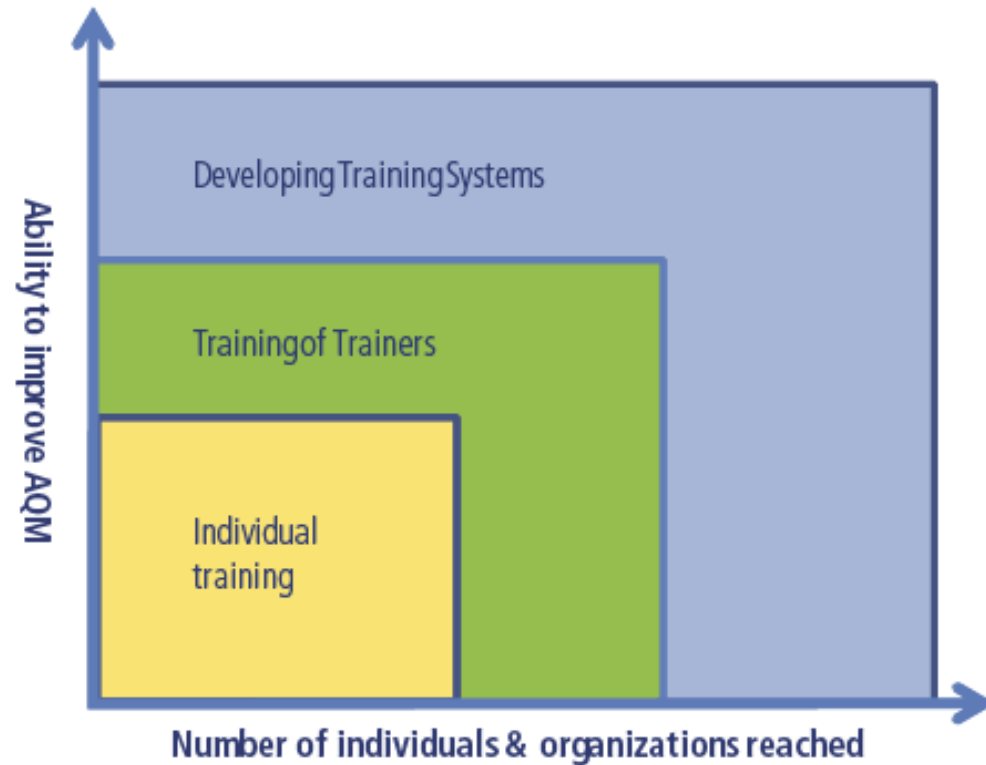
- Basic AQM training course
- Emissions inventory course
- City-to-city visits
- Exchange program

• Training of trainers

- Sustainable urban transport training under SUMA
 - Mass rapid transit
 - Transport demand management
 - Non-motorized transport

• Developing training systems

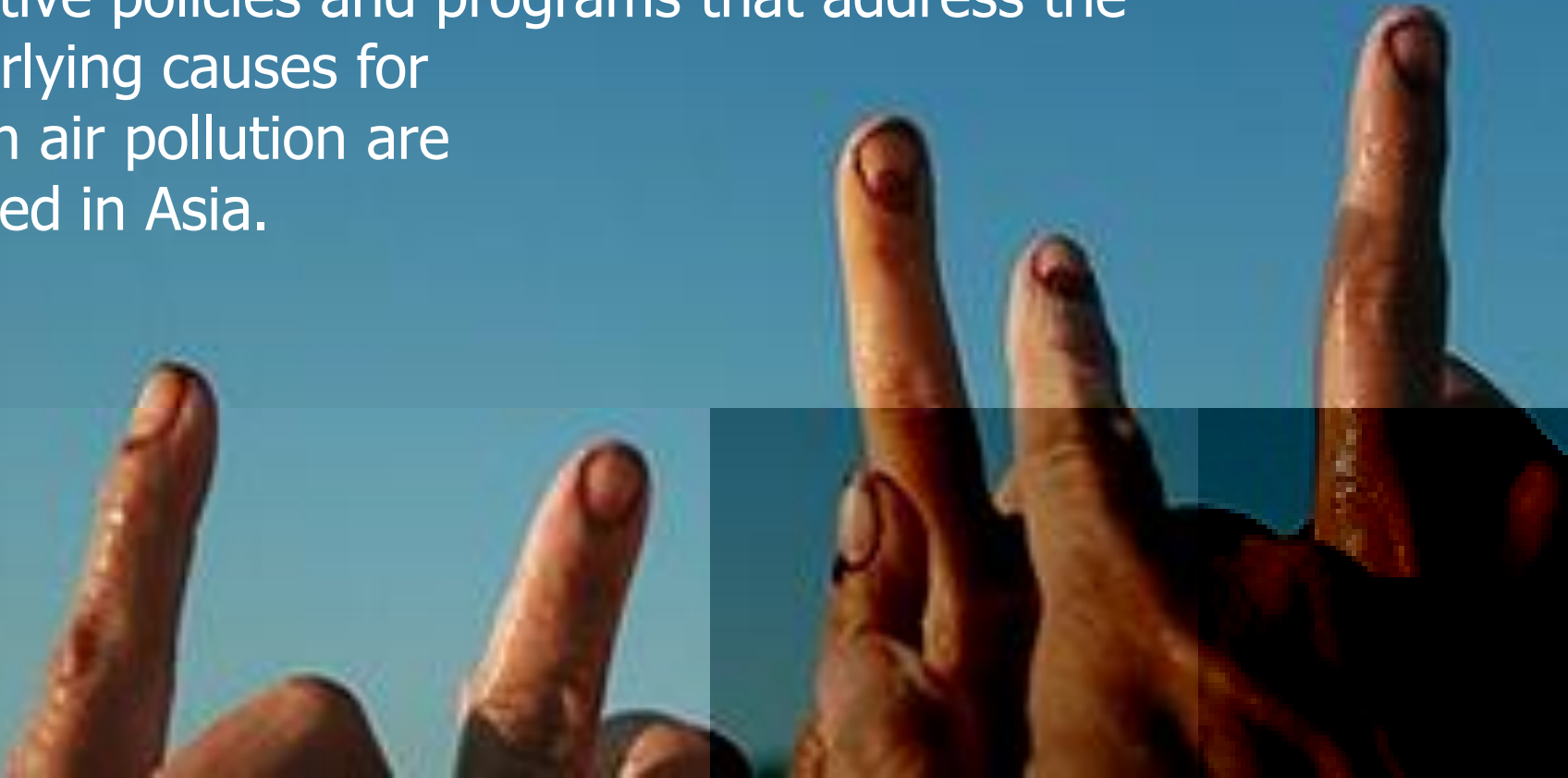
- Chinese Improved Training System for Air Quality Management (proposal submitted to Norway)
- Initial discussion with Ministry of Personnel and Training, India





Working Side by Side with Governments and Stakeholders

Effective policies and programs that address the underlying causes for urban air pollution are needed in Asia.





Working Side by Side

with Governments and Stakeholders

- Long Term Vision on Urban Air Quality
 - UNEP and CAI-Asia Center
 - Describes the desired state of AQM in Asian cities
 - Can help inspire Asian cities and countries in the development of their AQM policies and programmes
- Assisting policy development at the national and local level
 - CAI-Asia Center and Swiss-Vietnamese Clean Air Program (SVCAP), assisted the Viet Nam government with its 2007 State of the Environment (SoE) report
 - World Bank, the CAI-Asia Center and the Partnership for Clean Air, drafted administrative orders to implement the Citizen Suit provision of the Philippine Clean Air Act

Working Side by Side with Governments and Stakeholders

Better Air Quality (BAQ) Workshop

- Venue to discuss research, policies and concrete actions regarding air quality management
- Held every two years
- Attended by up to 1,000 policy makers and AQM stakeholders to discuss research, policies and concrete actions.





Investment and Implementation to Make a Real Difference

Actions are needed to make a real difference, and investments are needed to pay for actions





Investment and Implementation to Make a Real Difference

Sustainable Urban Mobility in Asia (SUMA) Program

Works with Asian cities and countries to strengthen the formulation and implementation of sustainable urban transportation and air quality management policies

Ahmedabad BRT



**Cycling inclusive planning for
Pune and Nanded**





Investment and Implementation to Make a Real Difference

SUMA in a Nutshell

The SUMA Program aims to "Accelerate the development of capacity for urban AQM and SUT in Asia through better integration of AQM and SUT in the strategies, policies, programs, and projects of developing countries in Asia and development agencies."

The CAI-Asia Center manages and implements the SUMA program in partnership with:

- German Technical Agency for International Cooperation-Sustainable Urban Transport Project (GTZ-SUTP)
- Interface for Cycling Expertise (I-CE)
- Institute for Transportation and Development Policy (ITDP)
- The United Nations Centre for Regional Development (UNCRD)
- The World Resources Institute Center for Sustainable Transport - EMBARQ (EMBARQ-WRI)
- Experts: Marie Thynell, a social specialist from Gothenburg University in Sweden, and Christopher Cherry and Jonathan Weinert, transport specialists, who did their dissertation on electric bikes in China at UC Berkeley and UC Davis

Activities under SUMA are implemented under the following categories:

Knowledge Management

- Indian City Survey on SUT
- Study 2-3 wheelers
- Social Impact Assessment Guidelines
- Environmental impacts of e-bikes
- Cycling inclusive planning guidelines
- Position paper on role of cycling in Asia

Capacity Building

- SUT training-of-trainers courses
- Pre-event courses at BAQ 2008, Bangkok
- Training at seminars, workshops

Networking & Policy Dialogue

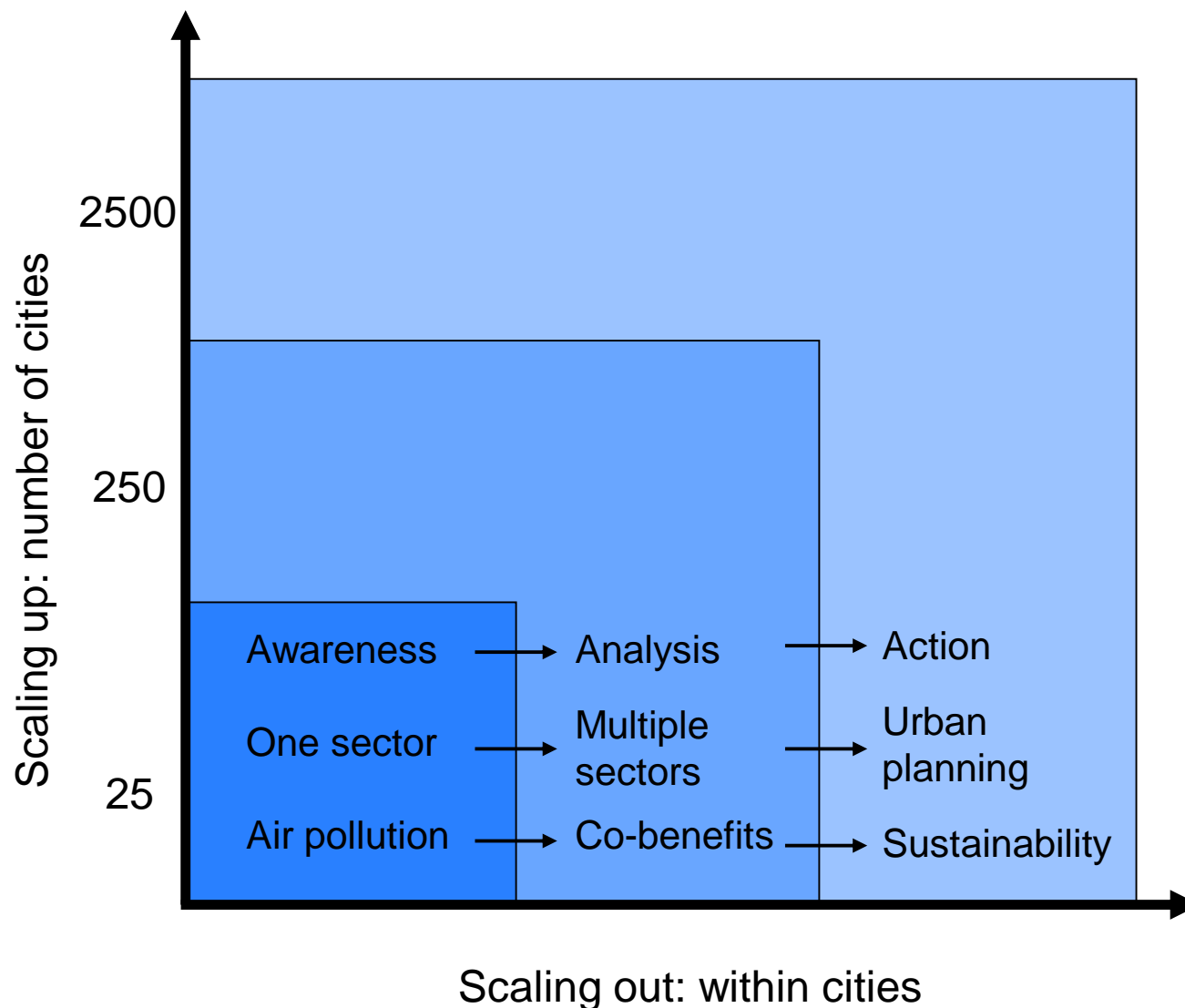
- SUT in regional policy discussions
- Policy in SUT/AQM initiatives
- National Policy and Action Plan for EST in Philippines
- BRT Network for Asia
- CAI-Asia Local Networks in 8+ countries
- SUT/AQM events

Pilot Projects

- Service plan for the Ahmedabad BRT system
- Bikeways pilot project in Pune and Nanded
- New pilot projects
- Specialist advice



Integration and scaling-up





Integration and scaling-up: how to go about it

- AP & CC link research
- Accessible knowledge
- Tools

Knowledge Management

Capacity Building

- Awareness raising
- Integration in education & training
- "City-to-city learning"

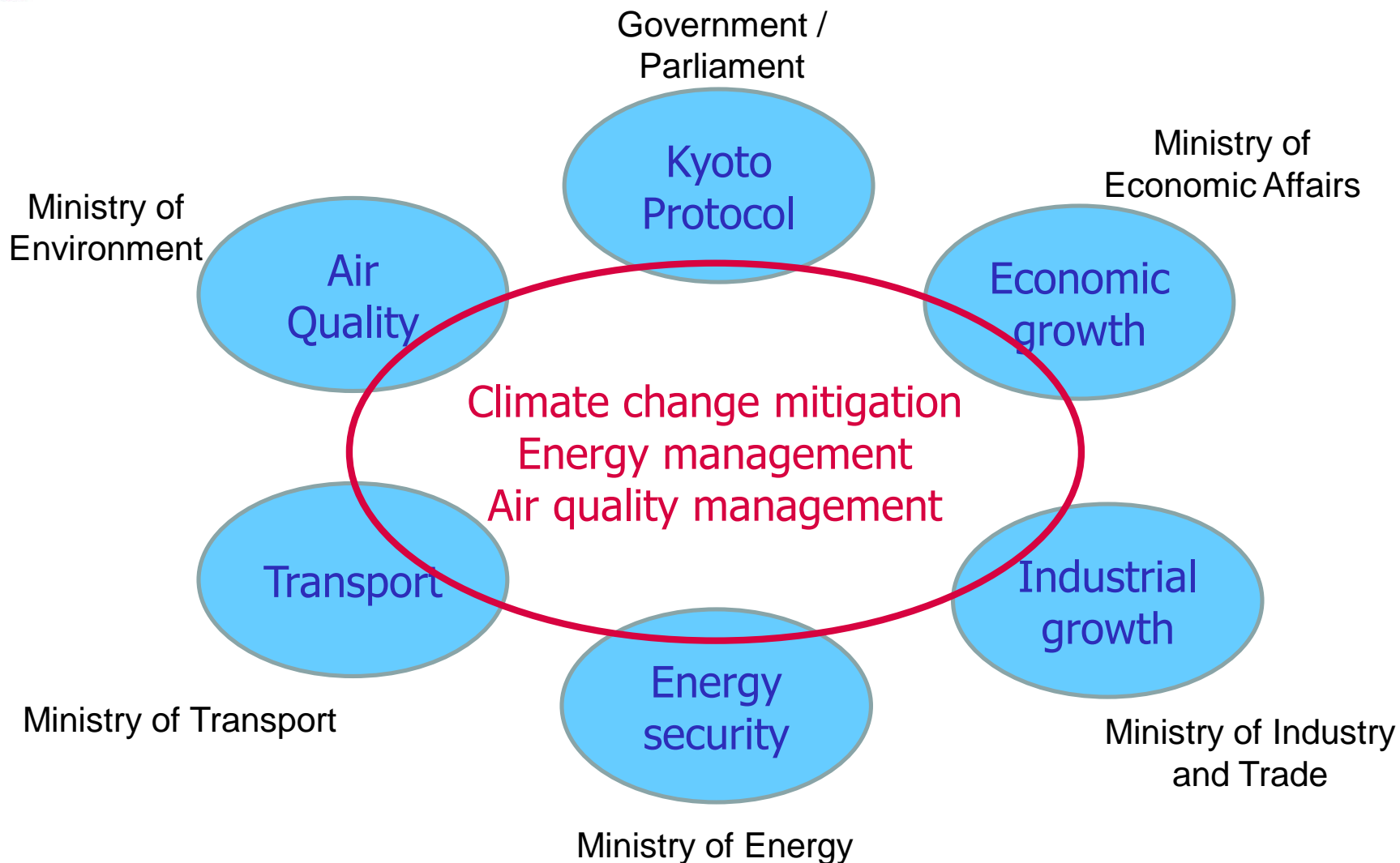
- Networks
- Integrated policies & treaties
- Integrated institutions
- Policy mix

Policy Development / Networking

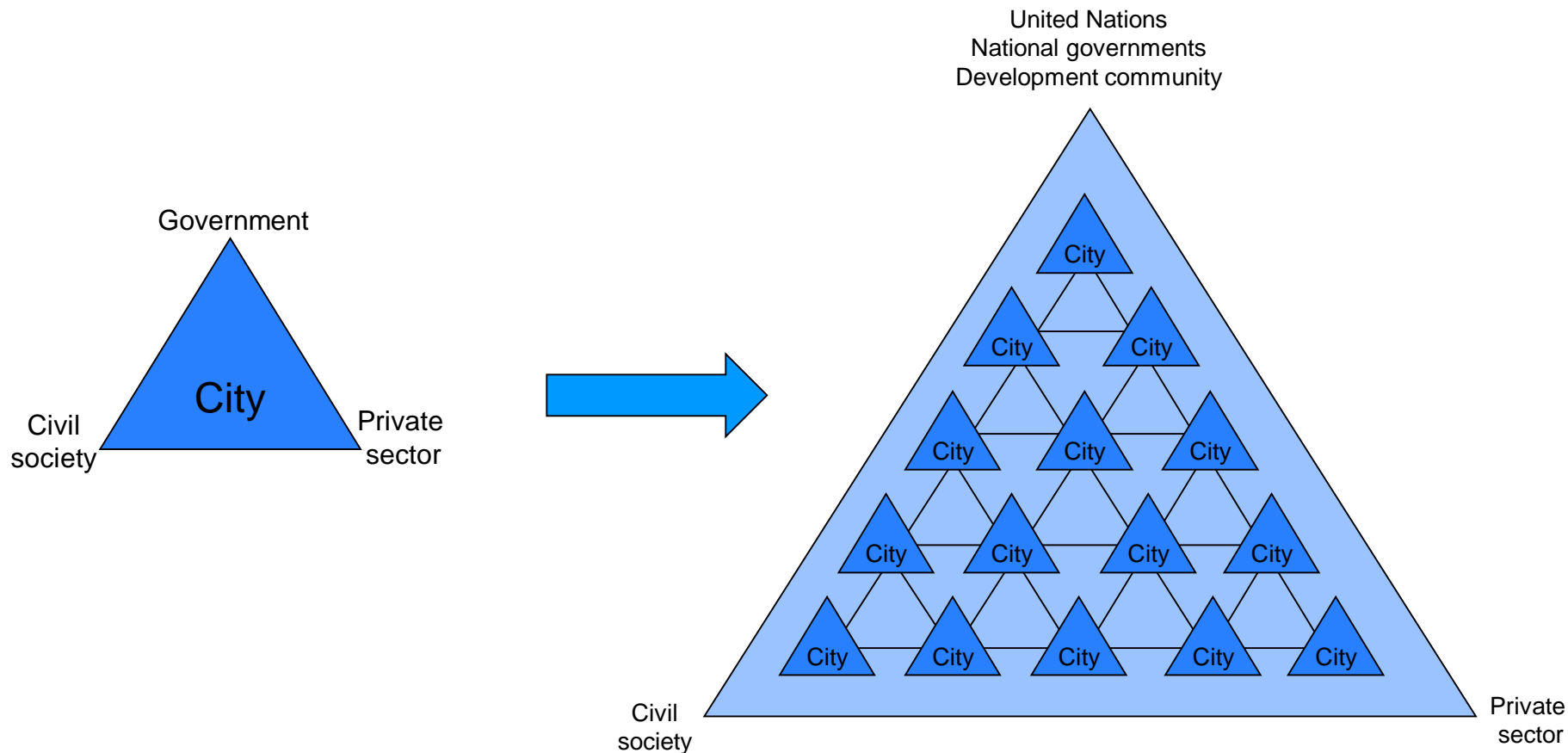
Implementation & Investments

- Technology transfer
- Local financing mechanisms
- CDM reform

Example of integration



Scaling up: city to city networks





Co-benefits:

Addressing Air Pollution and Climate Change

Addressing urban air pollution provides a unique opportunity to mitigate global climate change through local actions RIGHT NOW.

Air Pollution <ul style="list-style-type: none">• Low-sulfur coal• Smokestack controls• Catalytic converters• Evaporative controls <p>Adapted from Jason West et al (2002)</p>	Co-Benefits <ul style="list-style-type: none">• Clean fuels/renewables• Energy efficiency programs• Methane gas recovery• Diesel Particle Filters• Public transport and land use• Retirement of older vehicles• Efficiency standards for new vehicles/appliances• Inspection and maintenance programs	Climate Change <ul style="list-style-type: none">• Geological and terrestrial sequestration• Land use and land use change• Control of other GHGs (N₂O, HFCs, PFCs, SF₆)
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"Integrating air pollution abatement and climate change mitigation policies offers potentially large cost reductions compared to treating those policies in isolation." - IPCC



For more information



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www.baq2008.org

www.cleanairnet.org/caiasia