

City Baseline Survey of Climate Change Plans and Urban Infrastructure Priorities in Asia



May Ajero/Sophie Punte
Air Quality Program Manager/Executive Director

6-8 March 2012
3rd High Level Seminar on Environmentally Sustainable Cities



Objectives



- The status of climate change and other relevant plans for Asian cities and their focus on climate change adaptation versus mitigation
- Where demand for climate change related infrastructure projects exists based on these plans

Steps



- Select 139 Asian cities: 250,000 – 5 million plus capital cities for comparison
- Survey of climate change and other relevant plans for selected cities and countries
- Review of selected other websites and publications to put this the baseline survey in a broader perspective
- Comparison with priorities of IFIs and relevant development partners
- Report

REPORT CONTENTS

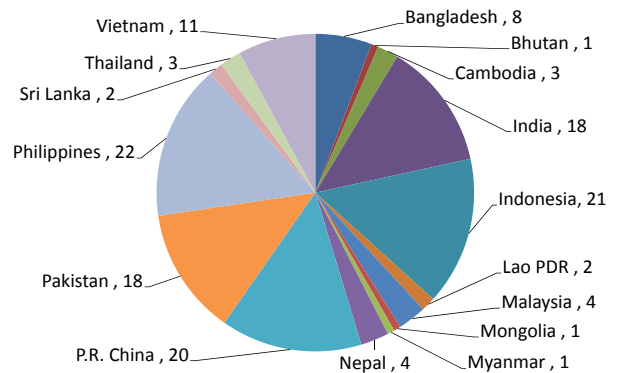
- Executive summary
- 1. Introduction
- 2. City Plans relevant to climate change
- 3. National Plans relevant to climate change
- 4. Comparison with IFI and development partner priorities
- 5. Conclusions
- 6. Recommendations
- 7. Annexes
 - List Asian cities surveyed
 - Baseline survey questionnaire
 - Climate change plans for C40 cities and infrastructure categories
 - IFIs and development partners
 - Country summaries
 - References

(UNPUBLISHED results – not to be cited)

1. Select Cities: 139 Cities from 16 Asian Countries



Cities 250,000 – 5 million + Capital cities



1. Selection of Cities: membership of city networks and initiatives



• 114 of 139 surveyed cities are member of existing city networks and initiatives

• 52 cities are member of multiple initiatives

2. Survey of Climate Change and other Plans



- Country, population size, and location in a coastal area
- Membership or association with city networks or initiatives

Existing Climate Change Plans

- Mitigation, adaptation or both
- Title, time period, issuing/implementing authority and source

Sectors covered by Climate Change Plans

- (Based on C40 Baseline of Climate Action for Mega Cities)
- Transport
 - Energy (Energy supply and distribution, Buildings, Outdoor lighting)
 - Municipal services (Waste management, Water)
 - Planning and Urban Land Use
 - Flood protection

- Too little information on infrastructure investments
- Other Plans and reference to climate change: Socio Economic, Disaster Risk Management, Urban Development, Transport, Environment/ Health/ Clean Air, and Energy

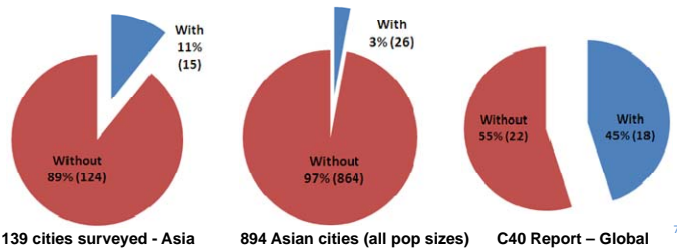
Other key studies/websites consulted

- C40 baseline study on climate actions
- Global Carbon Project and the Urban and Regional Carbon Management Initiative
- World Bank Urban Development Series on Climate Change and Cities
- ADB's brochures on Green, Competitive, and Inclusive Cities

2. Survey of Climate Change Plans: Existing plans

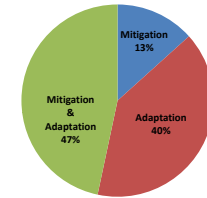
India: Ahmedabad, Chennai Delhi, Gorakhpur, Indore, Surat
Indonesia: Bandar Lampung, Semarang
China: Guiyang, Nanchang
Thailand: Bangkok
Vietnam: Can Tho, Danang, HCMC, Qui Nhon

- The development of city climate change plans is at an early stage in Asia. Climate change plans were only found for
 - 15 (11%) of the 139 surveyed cities
 - 26 (3%) of the 894 cities with all population sizes
 - 4 Asian capital cities (Bangkok, Delhi, Singapore, Tokyo)
- 45% of C40 cities have plans thus an increase is to be expected
- 77 climate change plans were found worldwide (26 in Asia)
- 14 of 16 surveyed countries have climate change plans (in development for Myanmar and Pakistan)

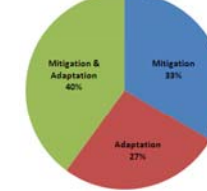


2. Survey of Climate Change Plans: Mitigation vs. Adaptation

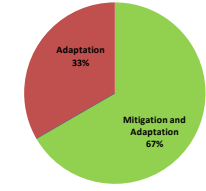
139 cities surveyed - Asia



C40 Report - Global



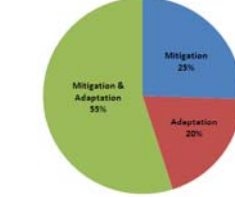
16 National CC Plans - Asia



External assistance is a key factor of influence on the existence of plans and their scope

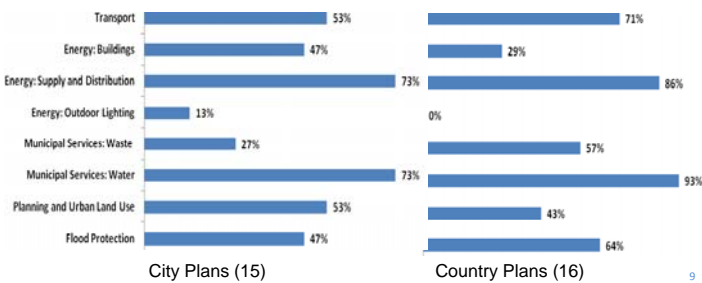
- Asian Cities Climate Change Resilience Network (ACCCRN): 7 surveyed cities, adaptation focus
- Low Carbon Pilot of China's NDRC: both Chinese cities with plans, mitigation focus

57 cities Global Carbon Project



2. Survey of Climate Change Plans: Sectors Covered

- Water services and Energy supply and distribution most frequently covered
- National plans better sector coverage than city plans
- All sectors apply to mitigation and adaptation, except flood protection, favoring combined plans
- None of the city plans included data on financial investments needed to implement the plan or for infrastructure investments
- National plans include total infrastructure investment estimates only



2. Survey of other Plans relevant to Climate Change

- Climate change has not yet been mainstreamed in selected city plans analyzed. Climate change is explicitly mentioned in:
 - 10 of 13 transport plans
 - 2 of 23 urban development plans
 - None of socio economic plans (4), disaster risk management plans (6), environment, health and clean air plans (19), and energy plans (1)
- At the national level the situation is more hopeful
 - 15 countries have socio-economic plans, most refer to climate change
 - 9 countries have disaster risk management plans and 8 countries include climate change except for P.R. China that focuses on earthquakes only
 - Few have urban development(4), transport (6), environment, health and clean air (4) and energy plans, (2) and climate change is covered by some
- National bodies are thus ahead of cities in mainstreaming climate change in sector plans and policies

4. IFI and development partner priorities

- Country coverage**
 - IFIs and other development partners broadly cover the 16 Asian countries
 - Bhutan and Myanmar are covered by fewer agencies
- Sector coverage**
 - Transport and energy sectors are investment priorities of all IFIs
 - Insufficient detail to understand CC related infrastructure investments
 - KfW provided urban investments: >50% towards municipal services and explicit inclusion of planning and urban land use
 - Only JICA lists flood protection separately as an investment area
- Other development partners work around development themes (health, environment, education)

IFIs:

- ADB
- AFD
- JICA
- KfW
- World Bank

Development Partners:

- GIZ
- Sida
- Austria
- KOICA
- UN Habitat
- Rockefeller Foundation

	ADB	%	World Bank	%	JICA	%	KfW - Urban Investments 2006-2010	%	KfW - Investments in 2010	%	AFD	%
Total investment	11,462		58,747		10,461		2,332		4,612		5,268	
Transport	3,831	33%	9,002	15%	4,756	45%	546	23%	2,487	54%	1,844	35%
Energy	2,454	21%	9,925	17%	2,463	24%	171	7%	785	17%		
Municipal Services	607	5%	4,103	7%			1,231	53%			474	9%
Planning/Urban land use							102	4%				11
Flood protection					39	0.4%						

For more information

CAI-Asia China Office

cpo@cai-asia.org
 901A Reignwood Building,
 No. 8 YongAnDongLi
 Jianguomenwai Avenue Beijing
 China

www.cleanairinitiative.org

CAI-Asia Center

center@cai-asia.org
 Unit 3505 Robinsons-Equitable Tower
 ADB Avenue, Pasig City
 Metro Manila 1605
 Philippines

CAI-Asia India Office

india@cai-asia.org
 Regus Elegance
 Elegance Tower, Mathura Road,
 Jasola Vihar, New Delhi
 India

CAI-Asia Country Networks

China • India • Indonesia • Nepal • Pakistan • Philippines • Sri Lanka • Vietnam

CAI-Asia Center Members



231 CAI-Asia Partnership Members

- 45 Cities
- 19 Environment ministries
- 13 Other Government agencies
- 17 Development agencies & foundations
- 67 NGOs
- 37 Academic and research institutes
- 33 Private sector companies

Donors in 2011

- Asian Development Bank
- Cities Development Initiative for Asia
- ClimateWorks Foundation
- Energy Foundation
- Fredskorpset Norway
- Fu Tak lam Foundation
- German International Cooperation (GIZ)
- Guangdong Government
- Institute for Global Environmental Strategies (IGES)
- Institute for Transport Policy Studies
- Institute for Transportation and Development Policy
- International Union for Conservation of Nature
- Korea Transport Institute
- MAHA
- Philippine Business for the Environment
- United Nations Centre for Regional Development (UNCRD)
- United Nations Environment Program Partnership for Clean Fuels and Vehicles (UNEP PCFV)
- Veolia
- World Bank