



Background

Sustainability
Initiatives

Financial
Sustainability

SUSTAINABLE CITIES FOR ASIA

Adolfo Guerrero
CDIA's PPP Specialist
Asian Development Bank



Asia's Urban Challenge

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Cities on average provide 80% of the economic base
— but as much of the noise and environmental impact including
contamination of air and water.

Large disparities have emerged as poverty has urbanized – over 200 million
people live in poverty in Asia's cities

and many more are vulnerable to economic and environmental shocks.

Managing cities in this context requires a new approach:

- > New forms of engagement
- > New forms of finance and
- > The flexibility to adapt to the circumstances of each city

Informal Economic Giants

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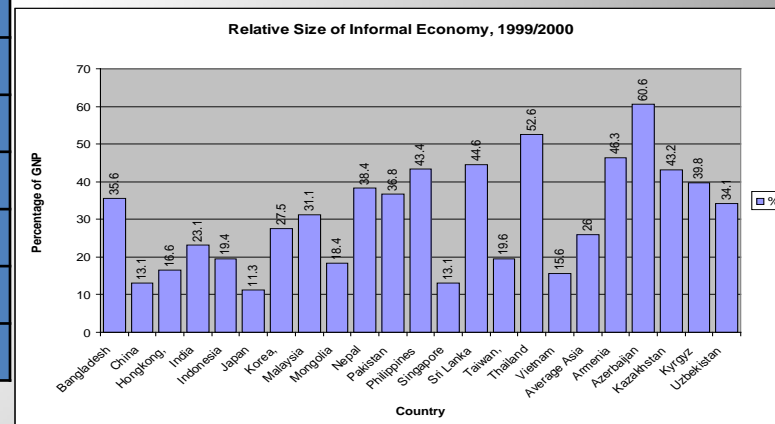
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| City | Country | Population '000s 2005 | Economic Product \$m 2004 |
|----------|-------------|-----------------------|---------------------------|
| Shanghai | China | 12,665 | 89,980 |
| Mumbai | India | 18,336 | 83,528 |
| Jakarta | Indonesia | 13,194 | 24,592 |
| Manila | Philippines | 10,677 | 32,277 |
| Bangkok | Thailand | 6,604 | 63,088 |
| Tokyo | Japan | 35,327 | 740,000 |
| | Sweden | 8,855 | 255,400 |
| | Denmark | 5,300 | 174,400 |
| | Cambodia | 13,107 | 26,990 |
| | Bangladesh | 136,600 | 56,600 |

Megacities are nation-sized in population and economic product

But they contain a large informal economy



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CITIES MUST REMAIN COMPETITIVE

- Economically
 - Cities provide 80% of the GDP of Asian economies.
 - Focal point for most of investment , production and consumption.
- Socially
 - Show an enormous population growth (average 3 %/a) compounding their global impact compounding 250 million in Asian cities.
 - Accounting for more than half of the World's urban poor.
- Environmentally
 - Cities are specially vulnerable to climate change
 - Cities use about 85% of energy and generate about 75% of GHGs
 - CO₂-emissions are per capita in many third world cities as high as in cities of the developed world

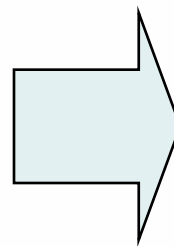
Climate Change Background and Challenges

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Rise in pollution and sea levels puts trillions in economic output and hundreds of millions of people at risk



Urgent need for efficiency gains, reduction in pollution and GHGs and integrated planning for adaptation

What to Do?

Sustainable initiatives from Planning to Implementation aiming at:

- Climate Change Mitigation
- Resources Utilization
- Economic Outreach

What to Do?

- **Local land use and transportation patterns.** Plan land use and transportation to be people friendly, to foster mobility that is not car dependent and saves energy and money.
- **Building construction and energy efficiency.** Use zoning codes, building codes and the permitting process to encourage building designs that save energy and resources.
- **Local economic activity.** Encourage development in resource efficient, low-energy, zero-carbon directions.



Planning to Implementation Process

Example: Tianjin Eco-city integrated transport and land use

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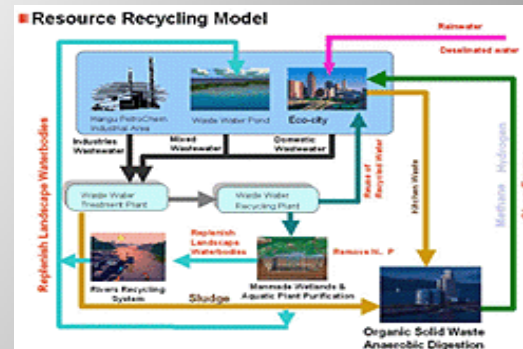
Green Transportation

An efficient and easily accessible public transport system focusing on 'Green trips', which include public transportation, cycling and walking. The target is for at least 90 per cent of the trips within the Eco-city to be via walking, cycling or use of public transport.



Use of Clean, Renewable Energy and Ecologically Friendly Waste Management

Particular emphasis on the "3Rs" of waste management - Reduce, Reuse and Recycle.



Balance of Economic and Social needs

– Preservation of Heritage

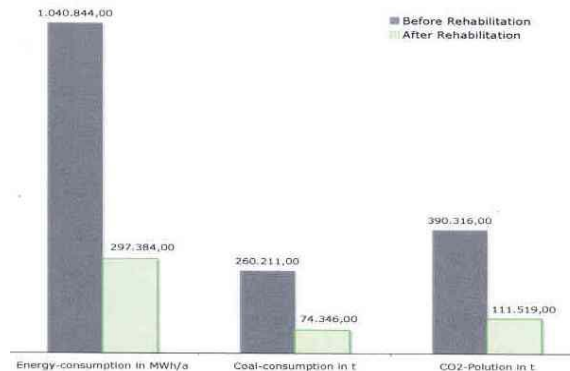
Conservation through adaptive reuse or partial rebuilding.



Bad Planning has Solutions

Example: energy savings for Mongolian housing > Retrofitting the City

The Building – before and after



The Savings

- energy, coal and CO2
- ability to close one out of three power plants

The Financing

- ADB/CDM, KfW and local banks

Good Background for a Good Planning

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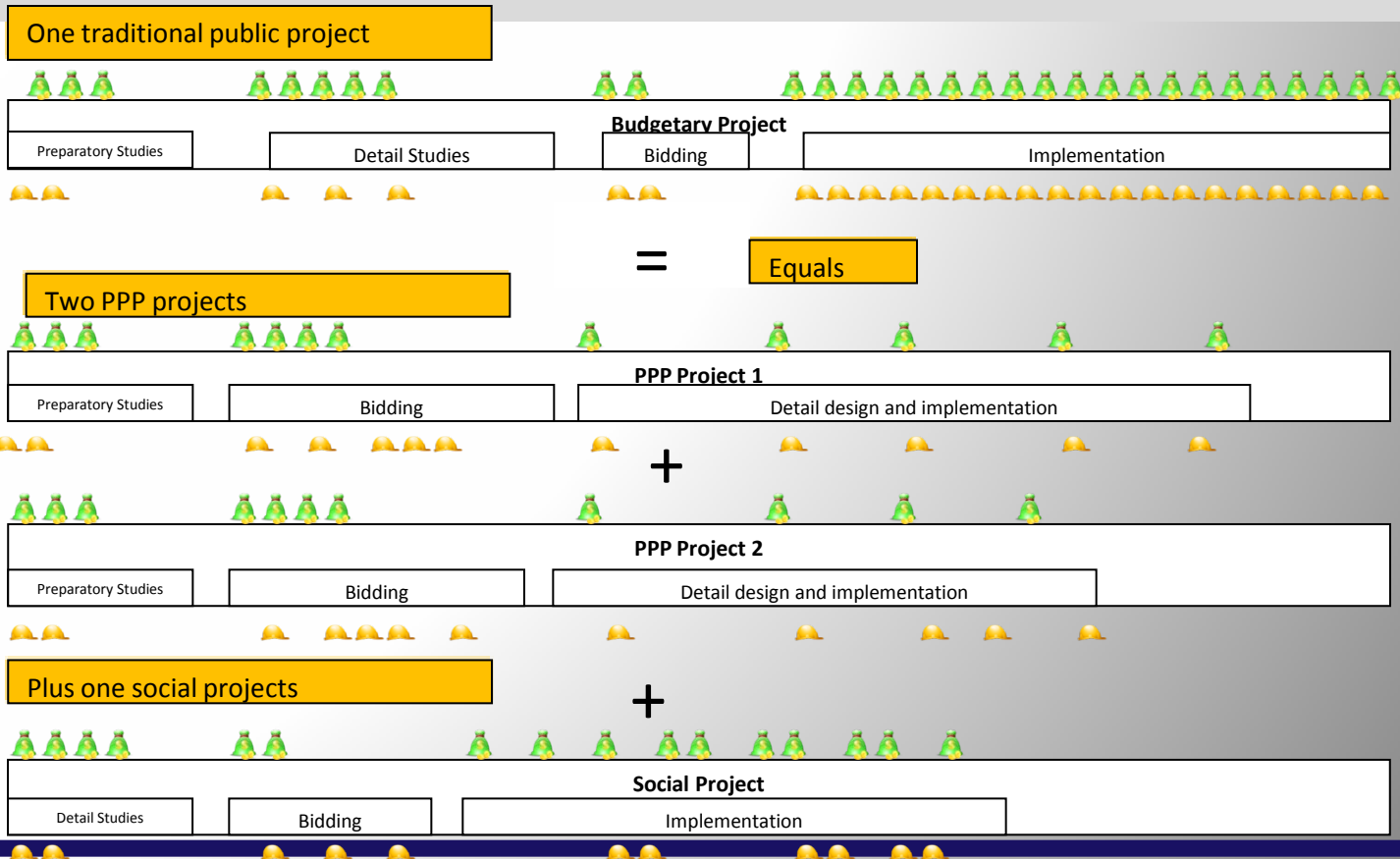
- Institutional Capacity
- Financial Sustainability

PPP Leveraging City Budgets

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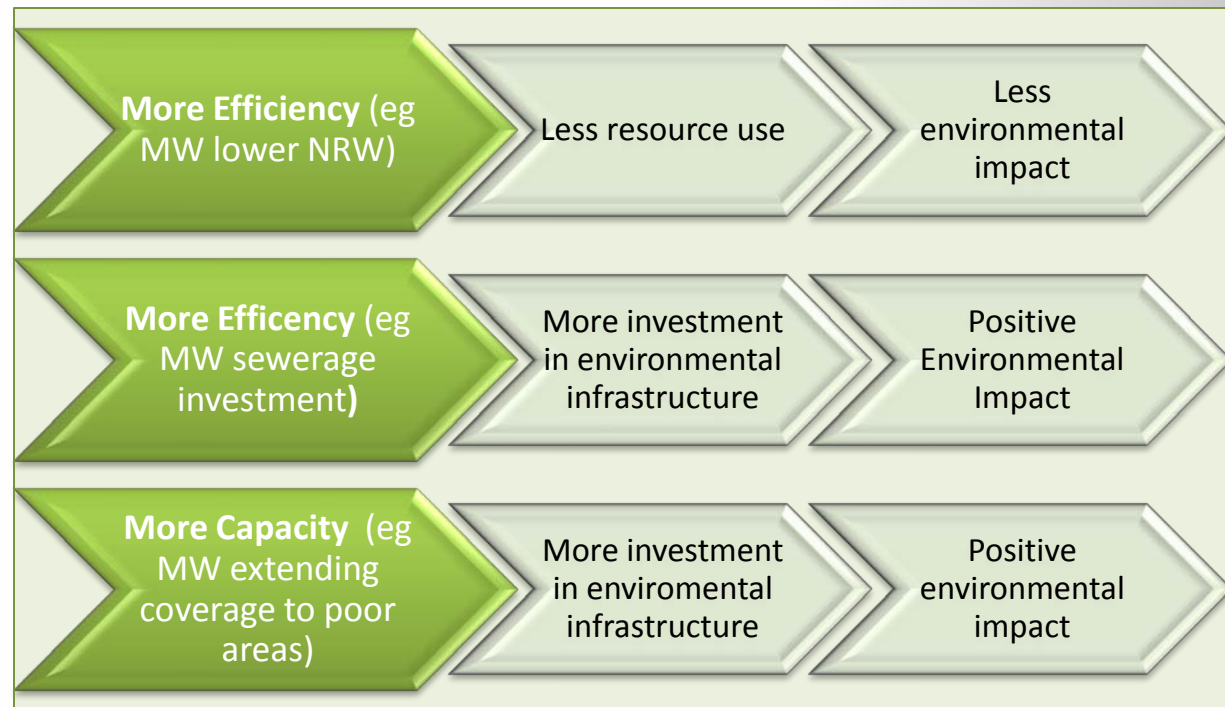
Figure

PPP Accomplishing Sustainability Principles

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Capital Markets and Environmental Infrastructure

Asia's capital markets are highly liquid, but short term:

- Asia has high levels of savings, banks and other financial institutions have money, BUT investments tend to be short term
- With no clear regulatory structure – high transaction costs
- Limited mechanisms to encourage institutions holding long term funds, such as pension funds and life insurance companies, to invest in infrastructure
- Lack of mechanisms for public sector debt finance and for public/ private Special Purpose Vehicles
- Issues of inter-jurisdictional coordination make project formulation and structuring difficult

Developed country pension funds and life insurance companies are highly liquid and seek long term investments, BUT they are highly risk averse and have unrealistic expectations of returns

Public funds can leverage private funds by financing parts or aspects of projects which embody risks the private sector cannot accept.

감사합니다
Kahn Sah Ham Nida
Thank You