



OECD GREEN CITIES PROGRAMME:

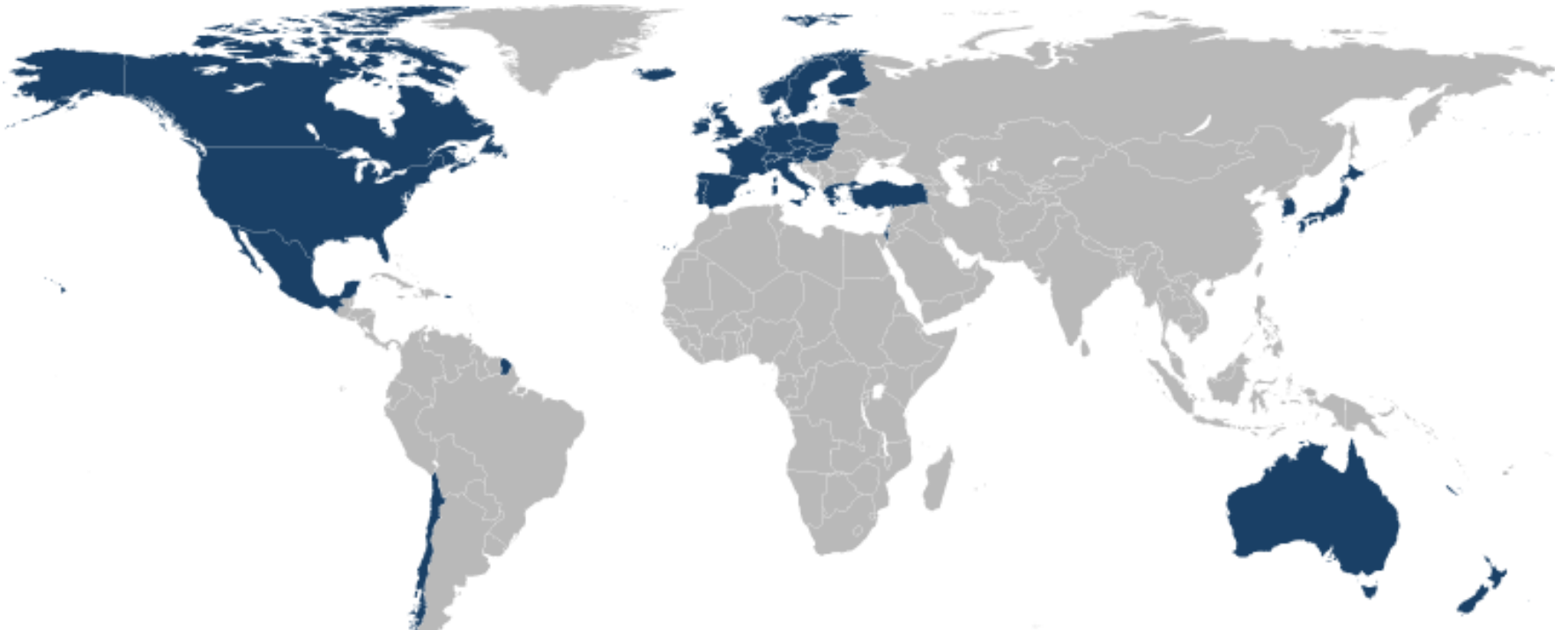
URBAN GREEN GROWTH IN DYNAMIC ASIA

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Presentation at the Post-2015 International Workshop,
12 March 2014, Jakarta



34 OECD Member Countries



“Enhanced engagement” with *Russia, Brazil, China, India, Indonesia and South Africa*

Regional initiatives covering *Europe, the Caucasus and Central Asia; Asia; Latin America; the Middle East and North Africa (MENA); and the Sahel and West Africa Club*



Thematic reports on urban policy and governance

- 2013 | Green Growth in Cities
- 2012 | Urban Trends and Policies in OECD Countries
- 2012 | Compact City Policies
- 2010 | Cities and Climate Change
- 2009 | Cities, Climate Change and Multi-level Governance
- 2006 | Competitive Cities in the Global Economy



OECD Green Cities Programme

- Launched in 2010
- Purpose:
 - To assess the impact of urban green growth policies on urban and national performance
 - To propose effective policy framework through case studies in OECD and non-OECD cities
- Four case studies – Paris, Chicago, Stockholm and Kitakyushu (2011-12)
- A synthesis “Green Growth in Cities” (2013)



Knowledge to be shared with fast-growing Asian cities



What is green growth in cities?

Fostering economic growth and development through urban activities that reduce negative environmental externalities and the impact on natural resources and environmental services

- “**Green**”: urban activities that reduce environmental impact
 - land-use planning, transport, buildings, energy, waste, and water.
- “**Growth**”: GDP growth primarily, but also urban quality of life



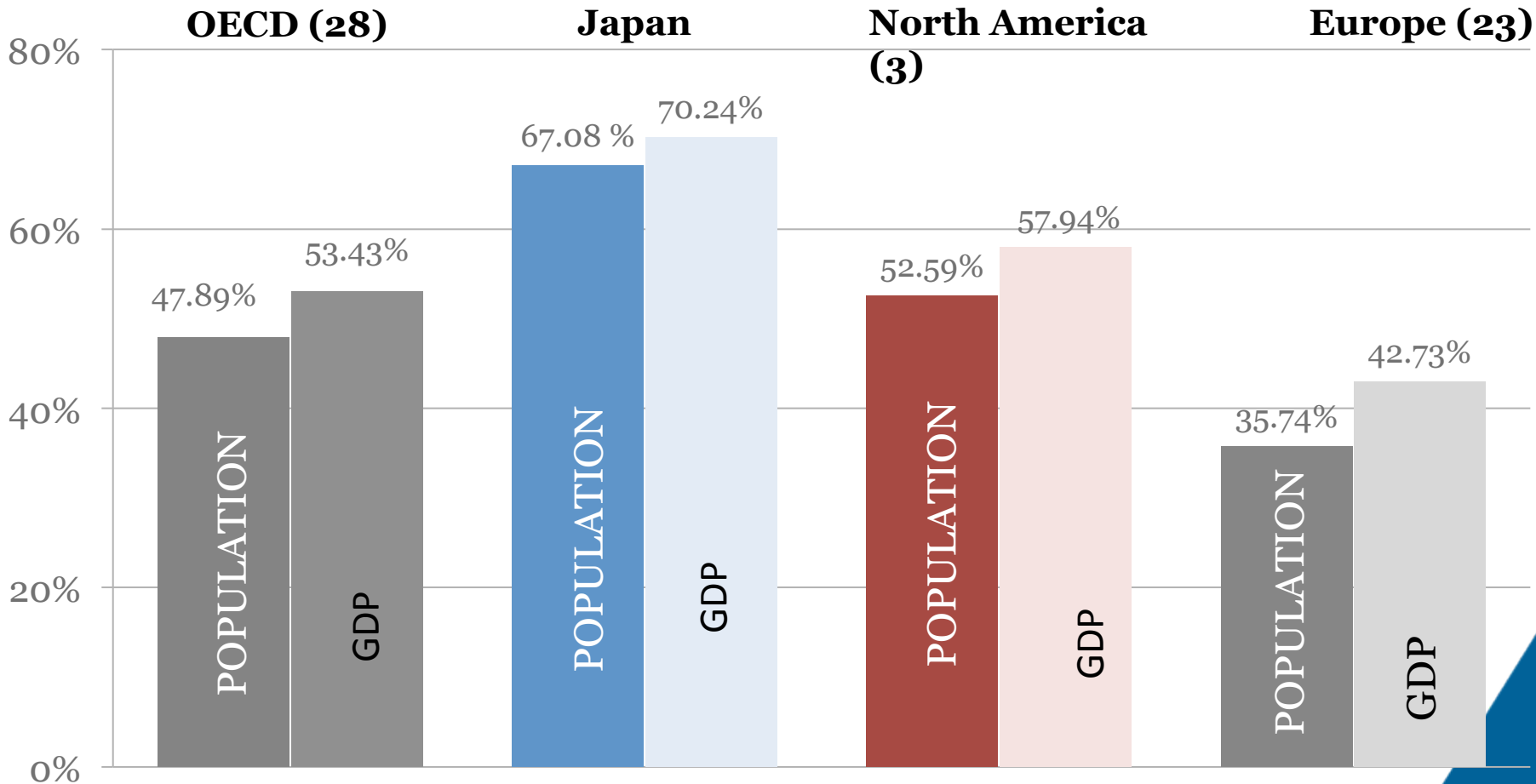
Why are cities important?

- Cities play an outsized role in national growth and key environmental impacts
- Urban policies can lower the abatement costs of national environmental policy targets
- Cities can be key spenders on infrastructure relevant to green growth



Metropolitan areas generate most economic growth.
---*Cities matter more in Japan than elsewhere.*

% of population and GDP in large metropolitan areas (2008)



of metro areas

264

36

105

113

7

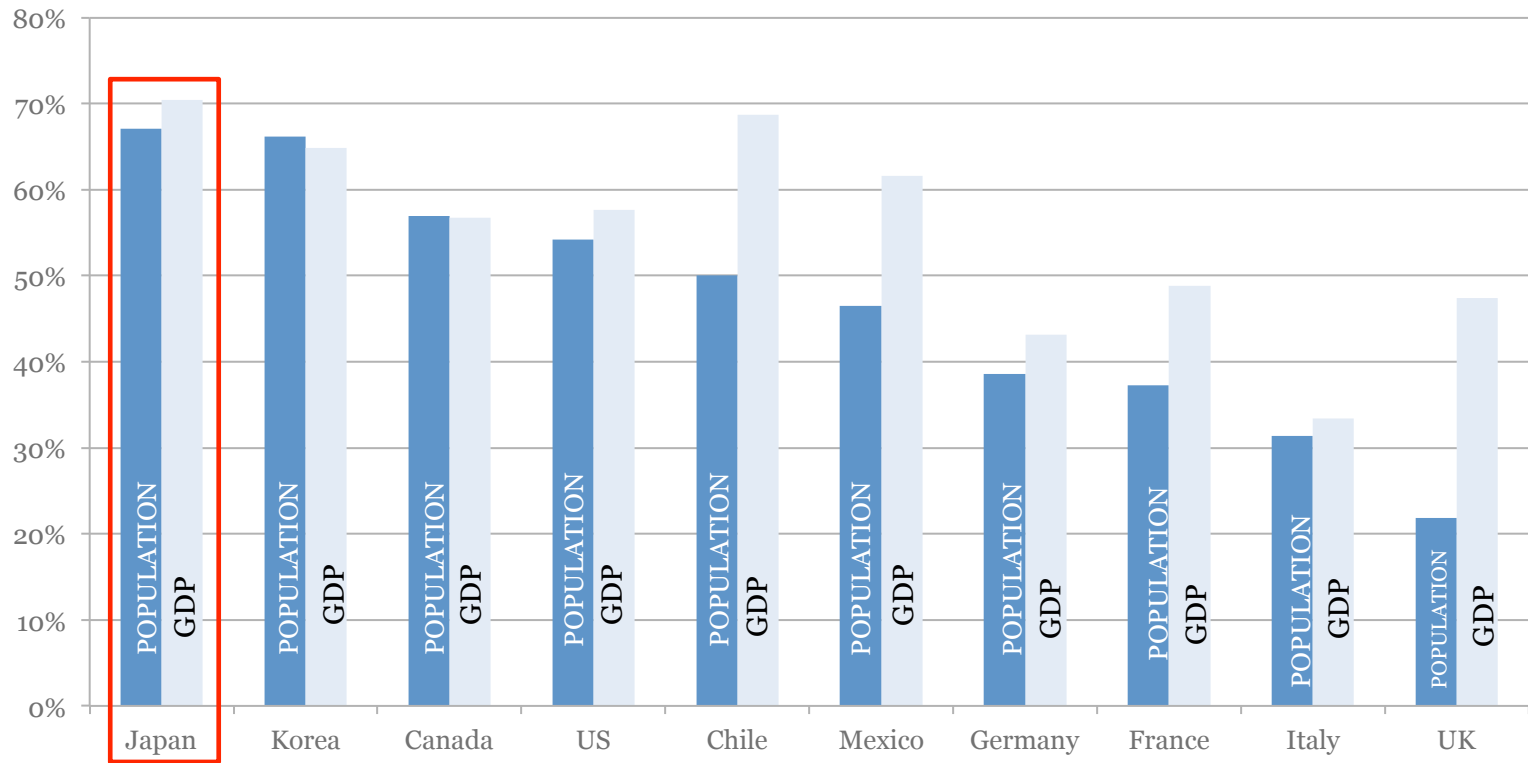
Source: OECD metropolitan database; the large metropolitan areas have at least 500,000 population



Metropolitan areas generate most economic growth.

---Japan, G7 and Emerging Countries compared.

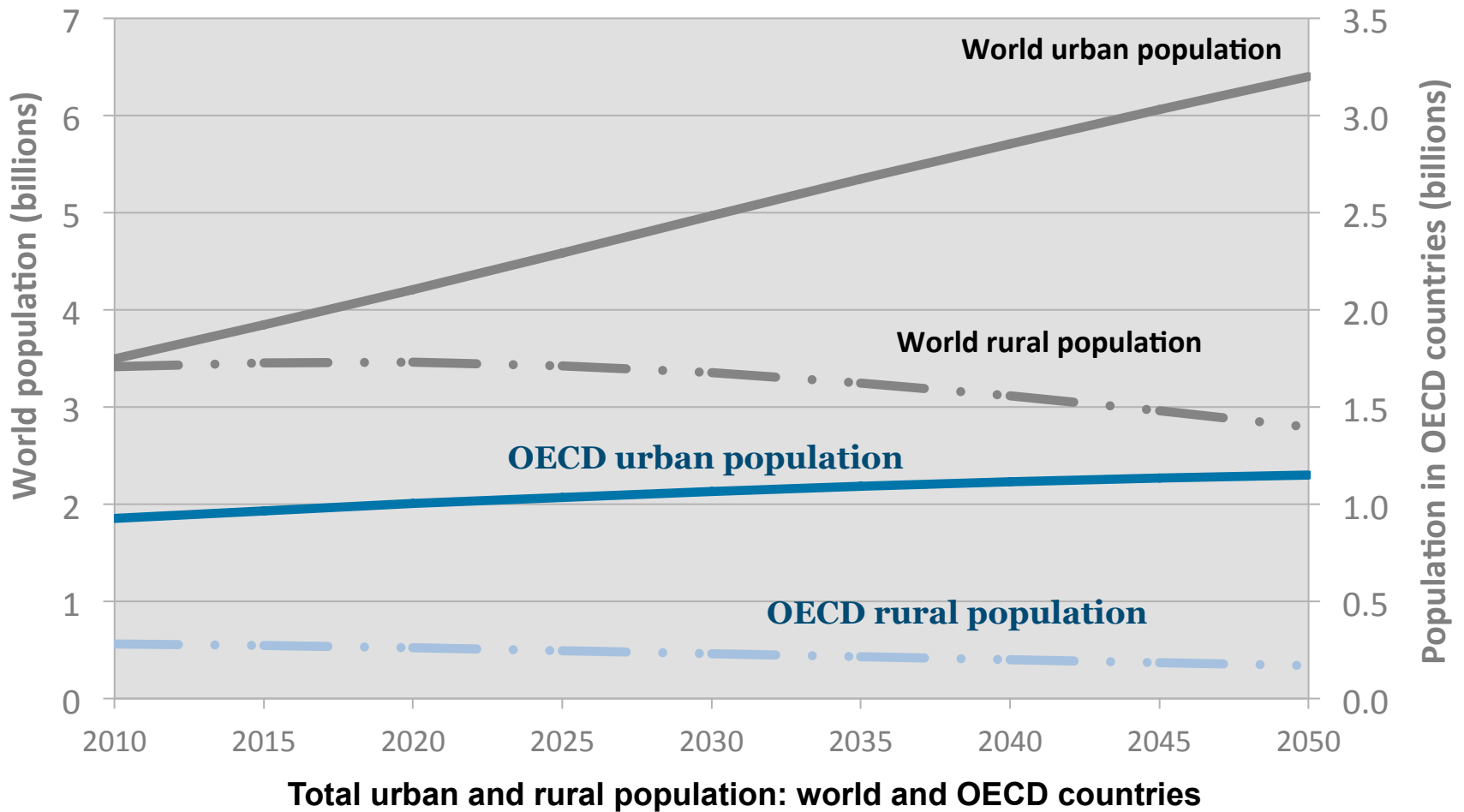
% of population and GDP in large metropolitan areas (2008)



Source: OECD metropolitan database; the large metropolitan areas have at least **500,000 population**

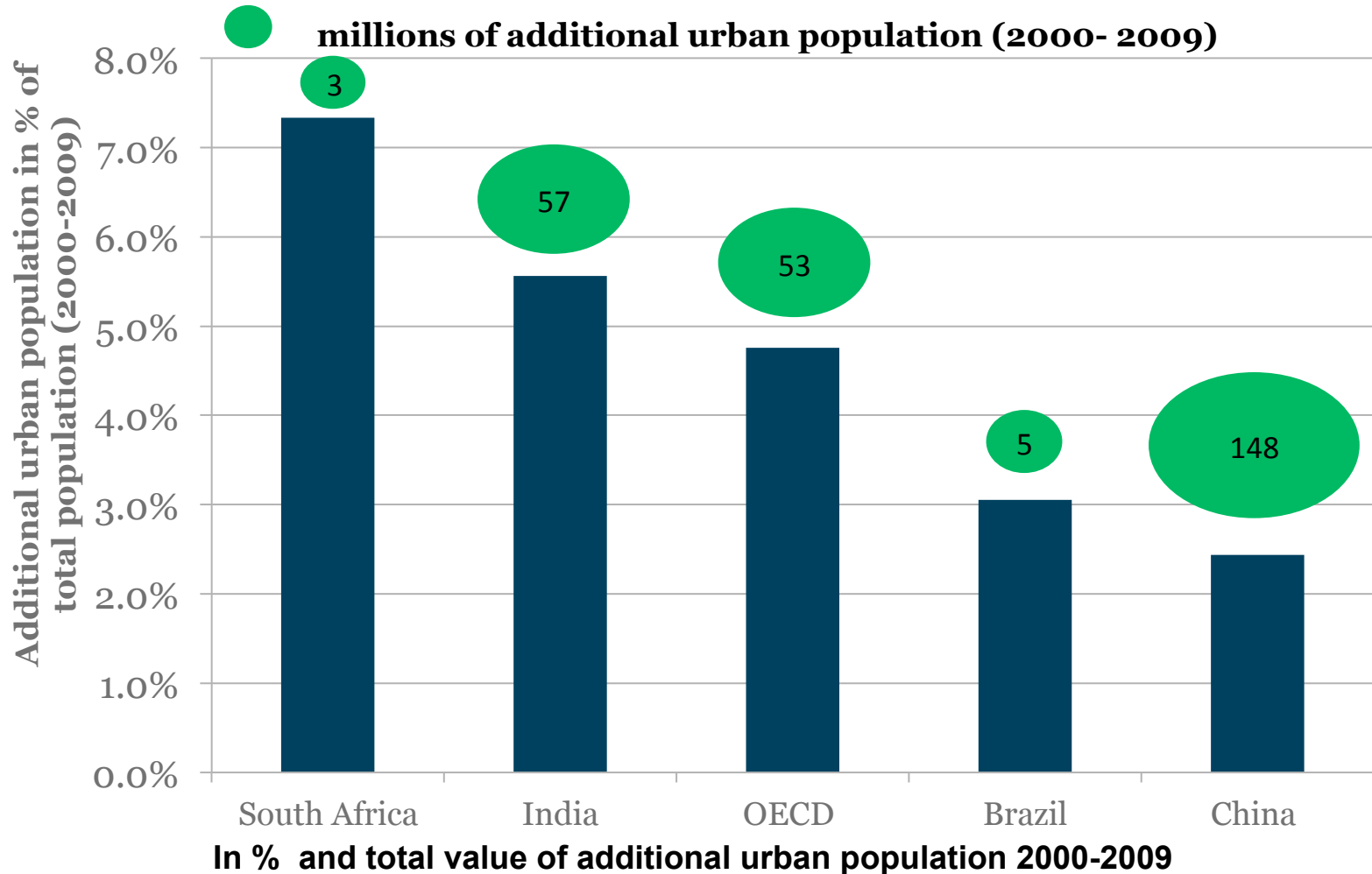


World urban population will keep growing, even in OECD countries





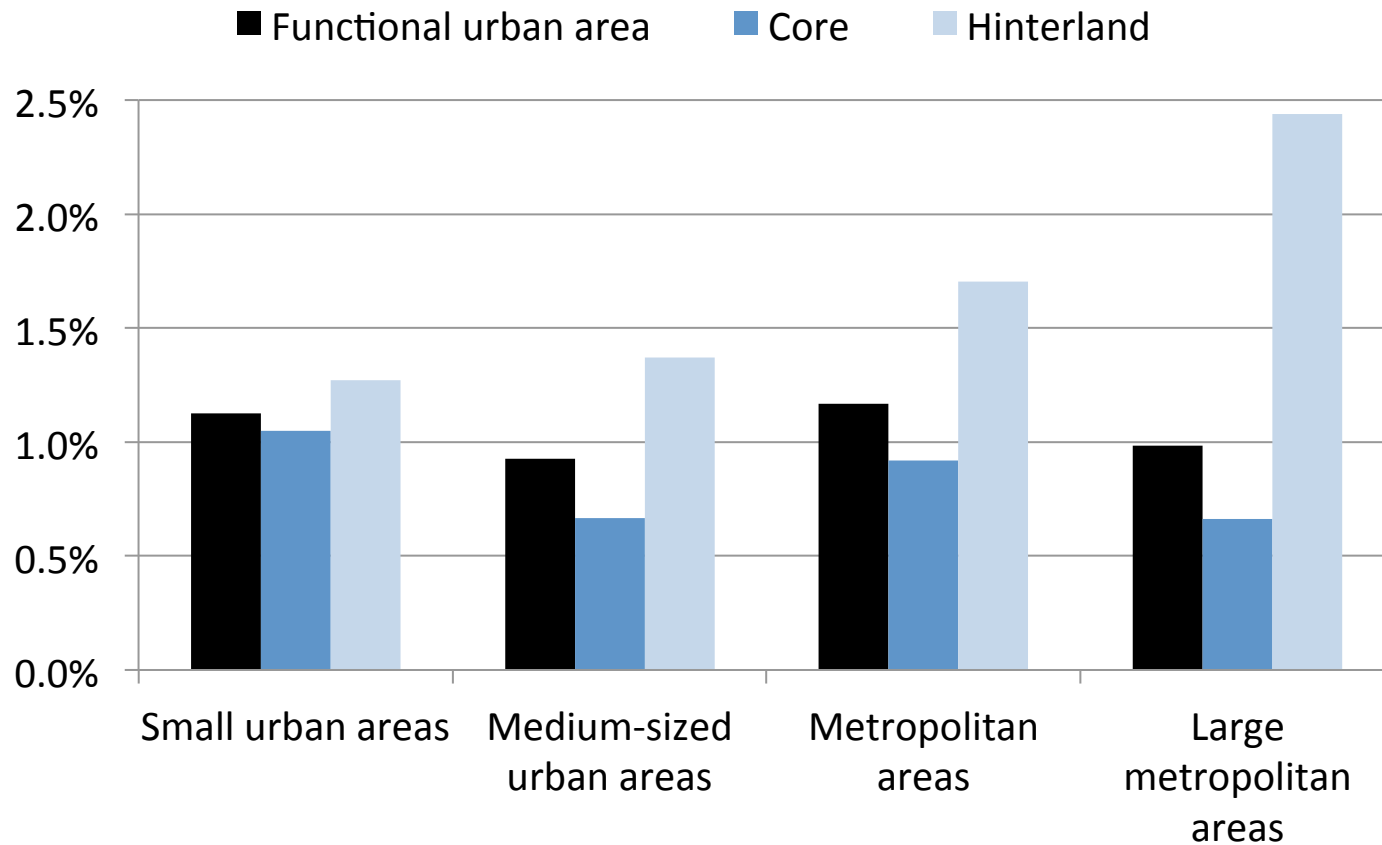
Recent increases in urban population in OECD and major emerging markets





Large cities influence neighbouring regions

Rate of urbanisation in OECD countries



Population growth 2000-2006 by city types and core/hinterlands (average yearly growth rates)



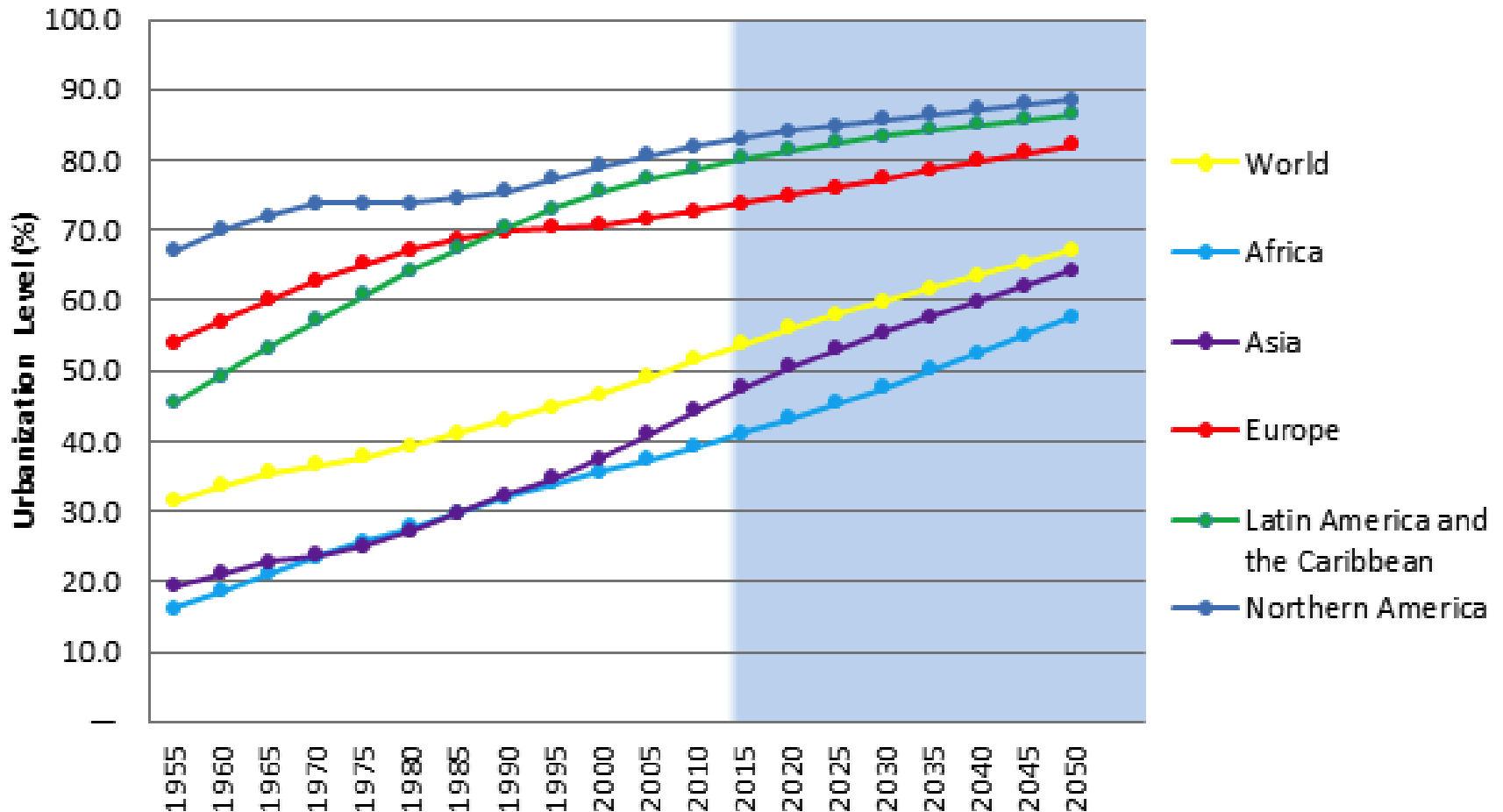
THE URBAN POLICY CONTEXT IN DYNAMIC ASIA



1. Policy Context and Key Strategies for Urban Green Growth in Asia

Urbanisation and Economic Growth Trends in Asian Cities

Level of urbanisation by region

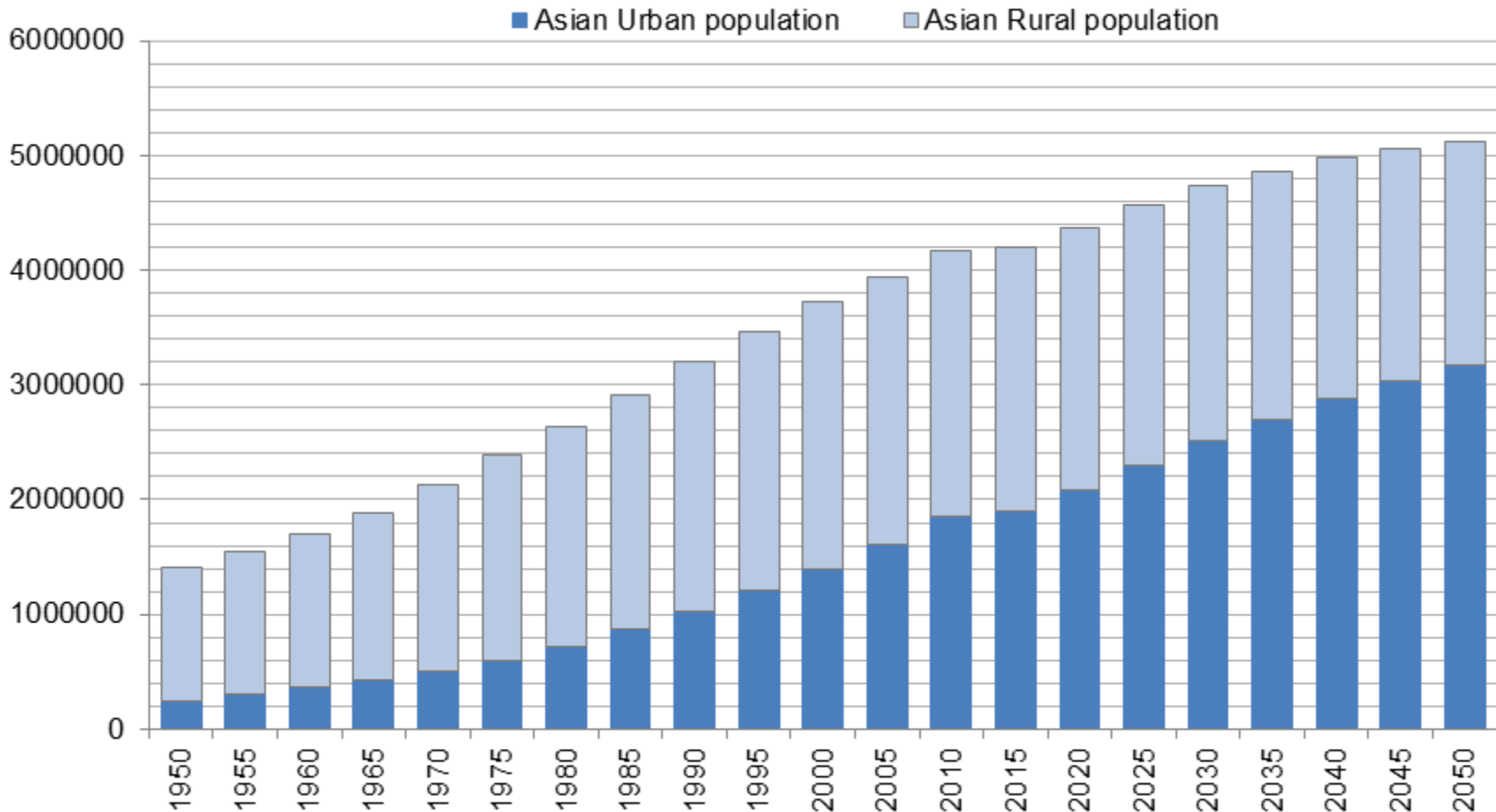




1. Policy Context and Key Strategies for Urban Green Growth in Asia

Urbanisation and Economic Growth Trends in Asian Cities (2)

Urban vs. rural population growth in Asia (thousands), 1950-2050





1. Policy Context and Key Strategies for Urban Green Growth in Asia

Urbanisation and Economic Growth Trends in Asian Cities (3)

GDP per capita in selected countries and regions of the world (1993-2012)

Country	GDP per capita in 2012 (current US\$)	Annual GDP per capita growth rate (%)				1993-2012
		1993-1997	1998-2002	2003-2007	2008-2012	
China	6,188	10.3	7.4	11	8.7	9.4
India	1,490	4.2	3.7	7.2	5.1	5.1
Nepal	707	2.5	1.5	2.3	3.6	2.5
Bangladesh	747	2.5	3.2	4.7	5.1	3.9
Thailand	5,480	5.3	0.1	4.9	2.7	3.2
Indonesia	3,557	5.4	-1.3	4	4.5	3.2
Philippines	2,588	2.1	0.5	3.7	2.9	2.3
Vietnam	1,596	7	4.8	6.8	4.8	5.9
Malaysia	10,381	6.5	0.4	4	2.4	3.3
Cambodia	946	3.4	5.8	8.9	3.8	5.6
Lao PDR	1,399	4.3	4	5.4	5.9	4.9
Japan	46,720	1.1	-0.1	1.8	-0.1	0.7
Singapore	51,709	5.6	1.3	5.7	1.5	3.5
OECD members	36,747	1.9	1.8	1.9	-0.2	1.4
Sub-Saharan Africa	1,433	0.2	0.4	3.2	1.4	1.3
Latin America and the Caribbean	9,569	1.8	0.3	3.2	1.6	1.7
World	10,207	1.4	1.5	2.4	0.5	1.4

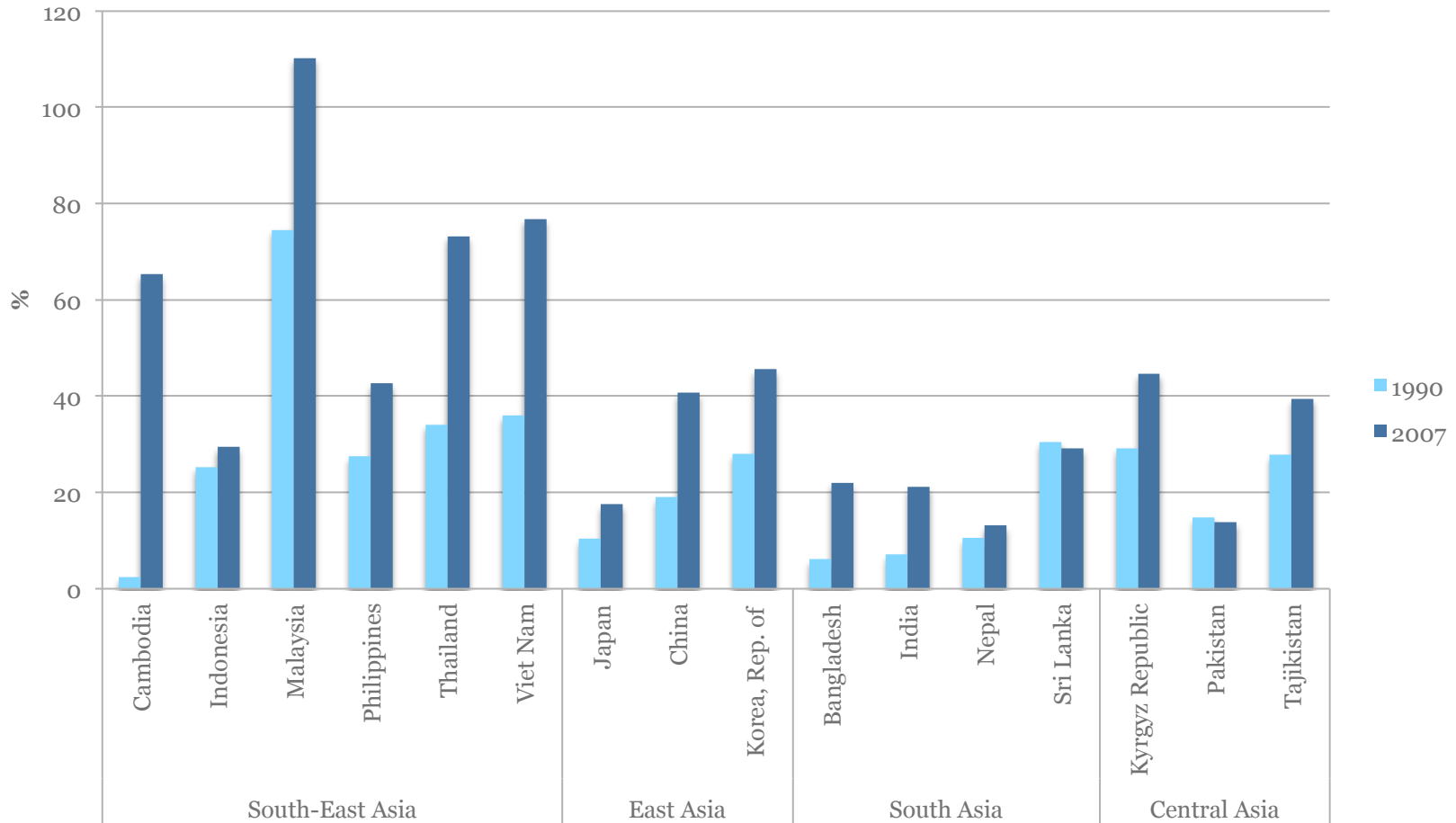
Source: World Bank, World Development Indicators Database, <http://data.worldbank.org/indicator/NY.GDP.MKTP.CD> (last accessed 5 December 2013).



1. Policy Context and Key Strategies for Urban Green Growth in Asia

Urbanisation and Economic Growth Trends in Asian Cities (4)

Contribution of exports to GDP of selected Asian countries 1990 and 2007



Source: ADB (2008), *Key Indicators for Asia and the Pacific*, Mandaluyong City, Philippines



1. Policy Context and Key Strategies for Urban Green Growth in Asia

Urbanisation and Economic Growth Trends: *Vulnerable*

Conditions for Long-Term Economic Growth

- **Rising disparities** in income
- High levels of **poverty**: 505.5 million **slum dwellers** in 2010 (30 per cent of Asia's urban population, over half of the world's slum population)
- Inadequate urban **infrastructure** – water, housing, transportation, solid waste, etc.
- Relatively immature and under-resourced **innovation systems**



1. Policy Context and Key Strategies for Urban Green Growth in Asia

Urbanisation and Economic Growth Trends: *Vulnerable Conditions for Long-Term Economic Growth (2)*

Urban slum population, 1990-2010

Urban Slum Population (Thousands)						
Major Region or Area	1990	1995	2000	2005	2007	2010
Developing Regions	656,739	718,114	766,762	795,739	806,910	827,690
North Africa	19,731	18,417	14,729	10,708	11,142	11,836
Sub-Saharan Africa	102,588	123,210	144,683	169,515	181,030	199,540
Latin America and the Caribbean	105,740	111,246	115,192	110,105	110,554	110,763
East Asia	159,754	177,063	192,265	195,463	194,020	189,621
South Asia	180,449	190,276	194,009	192,041	191,735	190,748
South-East Asia	69,029	76,079	81,942	84,013	83,726	88,912
West Asia	19,068	21,402	23,481	33,388	34,179	35,713
Oceania	379	421	462	505	524	556

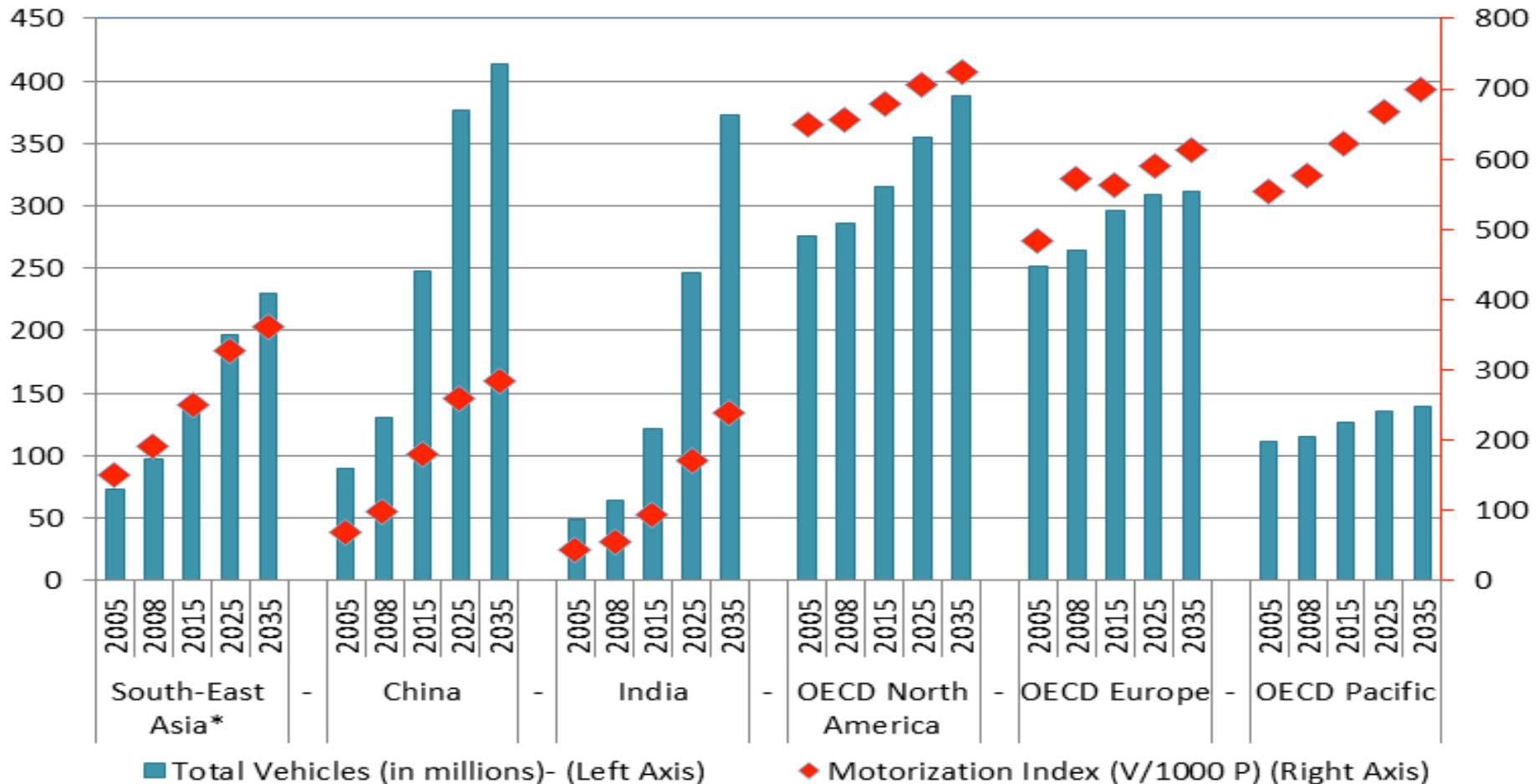
Source: UN HABITAT (2010), The State of Asian Cities 2010/11, Fukuoka, Japan.



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Urbanisation and Economic Growth Trends: *Vulnerable Conditions for Long-Term Economic Growth (3)*

Total vehicles and motorisation index in selected regions of the world (2005-2035)



Note: South-East Asia here refers to Indonesia, Viet Nam, Philippines and Thailand.

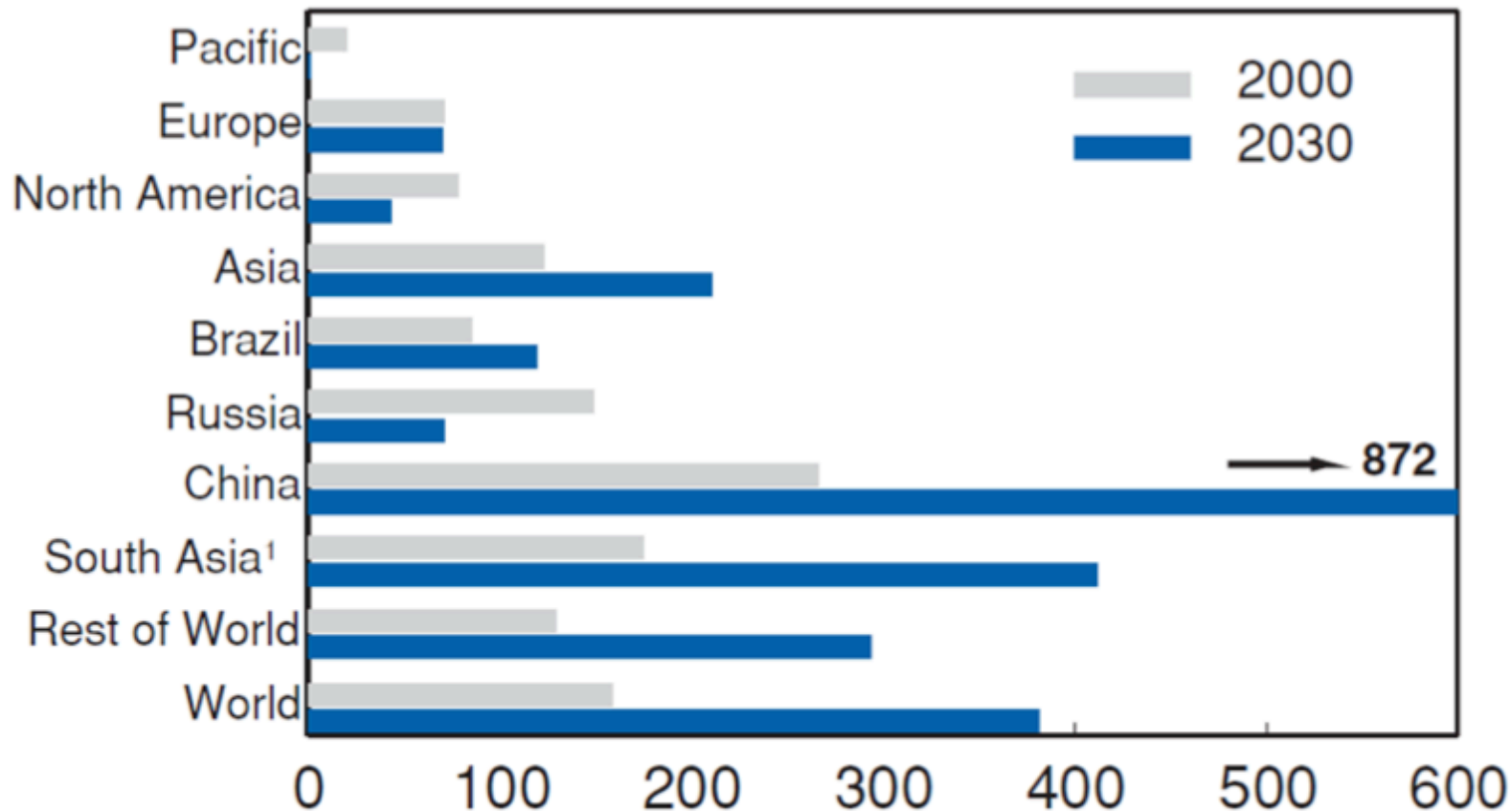
Source: Clean Air Asia Data (2009).



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Environmental Trends in Asian Cities: *Local Environmental Degradation (3)*

Estimated premature deaths from PM₁₀ air pollution per million inhabitants



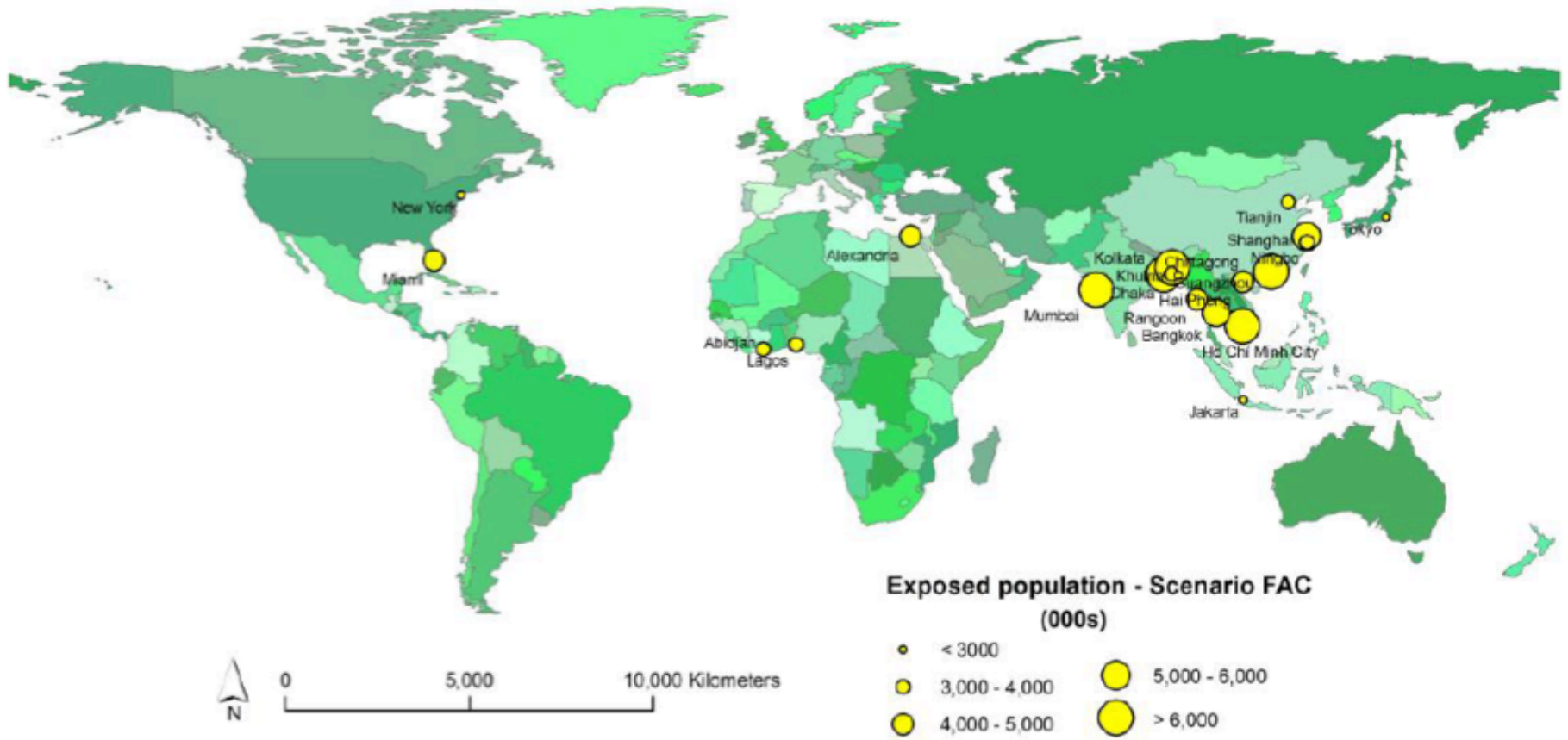
Source: OECD (2011d), *Towards Green Growth*, OECD Publishing, Paris.



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Environmental Trends: *Vulnerability to Climate Change and Natural Disasters*

Top 20 cities most exposed to floods in terms of population in the 2070s (FAC scenario)



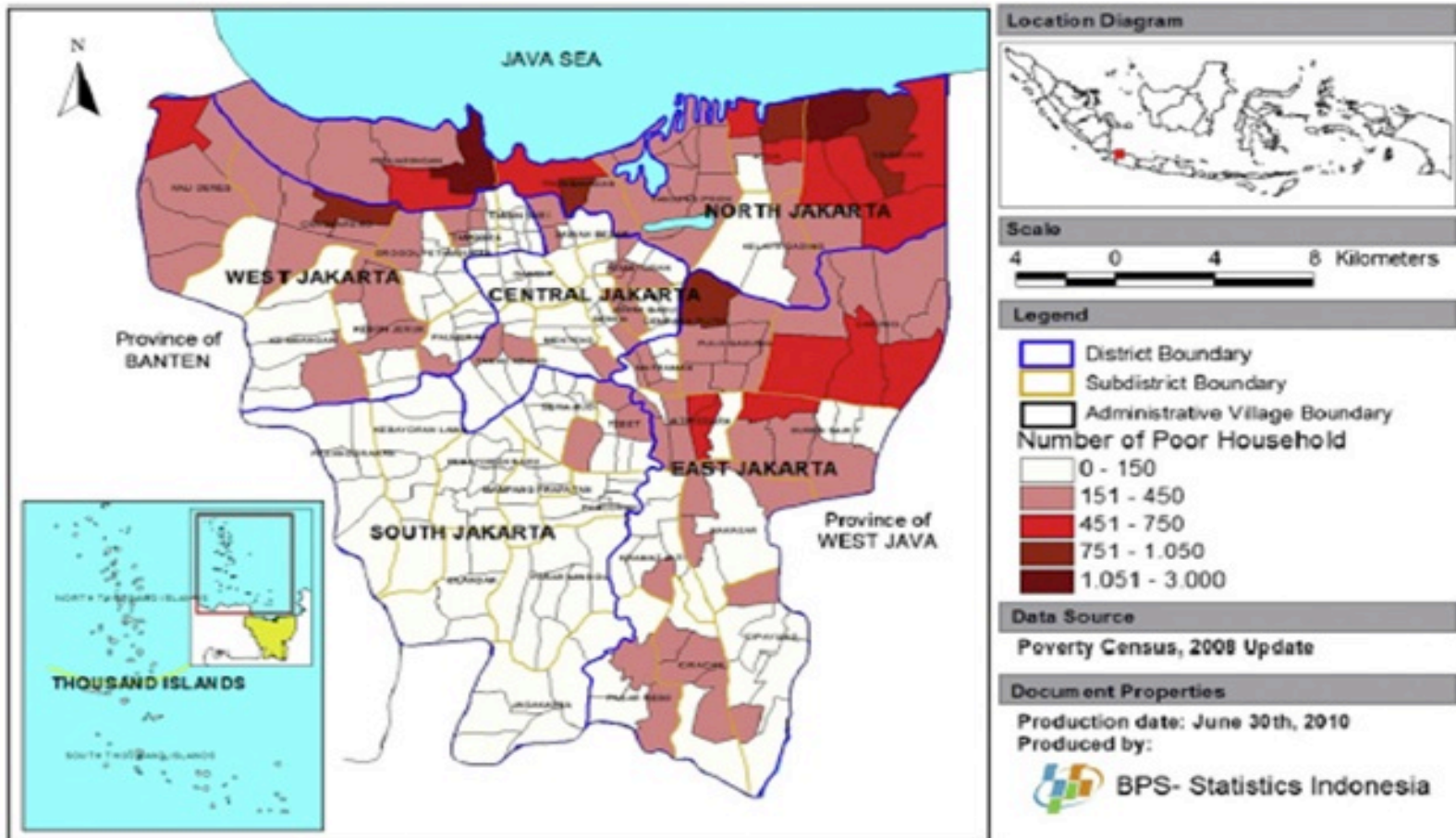
Source: Hanson, S. et al. (2011), "A Global Ranking of Port Cities with High Exposure to Climate Extremes", Climatic Change, Vol. 104, Issue 1, pp. 89-111.



1. Policy Context and Key Strategies for Urban Green Growth in Asia

Environmental Trends: *Vulnerability to Climate Change and Natural Disasters (2)*

Location of poor households in Jakarta by sub-district, 2008



Source: Firman, T., et al. (2011), "Potential climate-change related vulnerabilities in Jakarta: Challenges and current status", Habitat International, Vol.35, pp372-378.



1. Policy Context and Key Strategies for Urban Green Growth in Asia

Key Policy Strategies for Green Growth in Asian Cities

1. Urban Resilience

- Asian cities are particularly vulnerable to and unprepared to cope with risks related to natural disasters, in particular floods
- Resilience to natural disasters is highly cross-cutting and involves strategies such as smart cities and insurance policies
- Asian cities must also strengthen economic resilience

2. Poverty and Social Equity

- The urban divide observed in many Asian cities fuels structural poverty and is exacerbated by the pace of growth
- Inclusiveness is a core condition for green growth
- Policies must be targeted to avoid negative distributional outcomes

3. Long-term and Short-term Objectives

- Fast-growing Asian cities tend to prioritise short-term economic benefits (e.g., suburban housing development) over long-term considerations (e.g., human capital, investment in R&D for innovation)
- Reconciling both will require a balanced policy approach
- Green infrastructure investment, human capital, and short-term and long-term innovation should be paid more attention



1. Policy Context and Key Strategies for Urban Green Growth in Asia

Key Policy Strategies for Green Growth in Asian Cities (2)

4. Proactive Green Infrastructure Strategies

- An estimated two-thirds of infrastructure demand over the next 10 years will consist of new construction
- Proactive strategies are particularly important in the process of developing physical capital, due to the time scale of urban infrastructures
- Infrastructure must be built “right” to avoid lock-in
- Flexible infrastructures should be adopted when relevant

5. Environmental Actions

- A strong focus is needed on how the increase in real incomes can influence people’s behaviour and impact the local and global environments
- Some important features of behaviour related to income growth are: rising energy consumption, rising demand for personal living space and rising mobility
- Asian cities must identify and exploit potential synergies between adaptation and mitigation of climate change, and look at co-benefits



Urban green growth in dynamic Asia: Conceptual Framework

Urban Green Growth Policies

Urban Green Growth Strategies Deriving from Baseline Conditions

1. Promoting Urban Resilience
2. Addressing Poverty and Social Equity
3. Pursuing Long-Term Economic Development Goals while Achieving Short-Term Benefits
4. Adopting Proactive Green Infrastructure Strategies to Keep up with the Speed of Development
5. Accelerating Environmental Actions along with Economic Growth



Strategies can be best concretised in specific opportunity areas

Opportunity Areas for Urban Green Growth

1. Energy
2. Land Use and Transport
3. Buildings
4. Water Resource Management
5. Solid Waste Management
6. Green Goods and Services

National-Local
Integration

Finance

Policy
Instruments

Local
Governance

International
Cooperation

Enabling Strategies

Outcomes

Green Jobs
and Innovation

Inclusiveness

Climate
Change
Adaptation
and Mitigation

Healthier local
Environment
and Urban
Attractiveness

Results in



Ensures Policy Implementation





Urban green growth in dynamic Asia:

Three elements of the project

1. **Conceptual framework (2013-14)**
 - Second draft being reviewed (by 14 March)
 - Country consultation workshops (Bangkok/Jakarta)
2. **Case studies (2014-15)**
 - 4-6 cities (Bangkok, Surabaya, ...)
 - Individual report as the deliverable
3. **Knowledge sharing activities (2013-15)**
 - Workshops / forums
 - OECD-ADB Manila workshop (Feb 2013)
 - Stockholm workshop (May 2013)
 - Kitakyushu Mayors Forum (Oct 2013)
 - Surabaya workshop (Feb 2014)
 - Multi-city mutual learning: “Knowledge sharing platform”

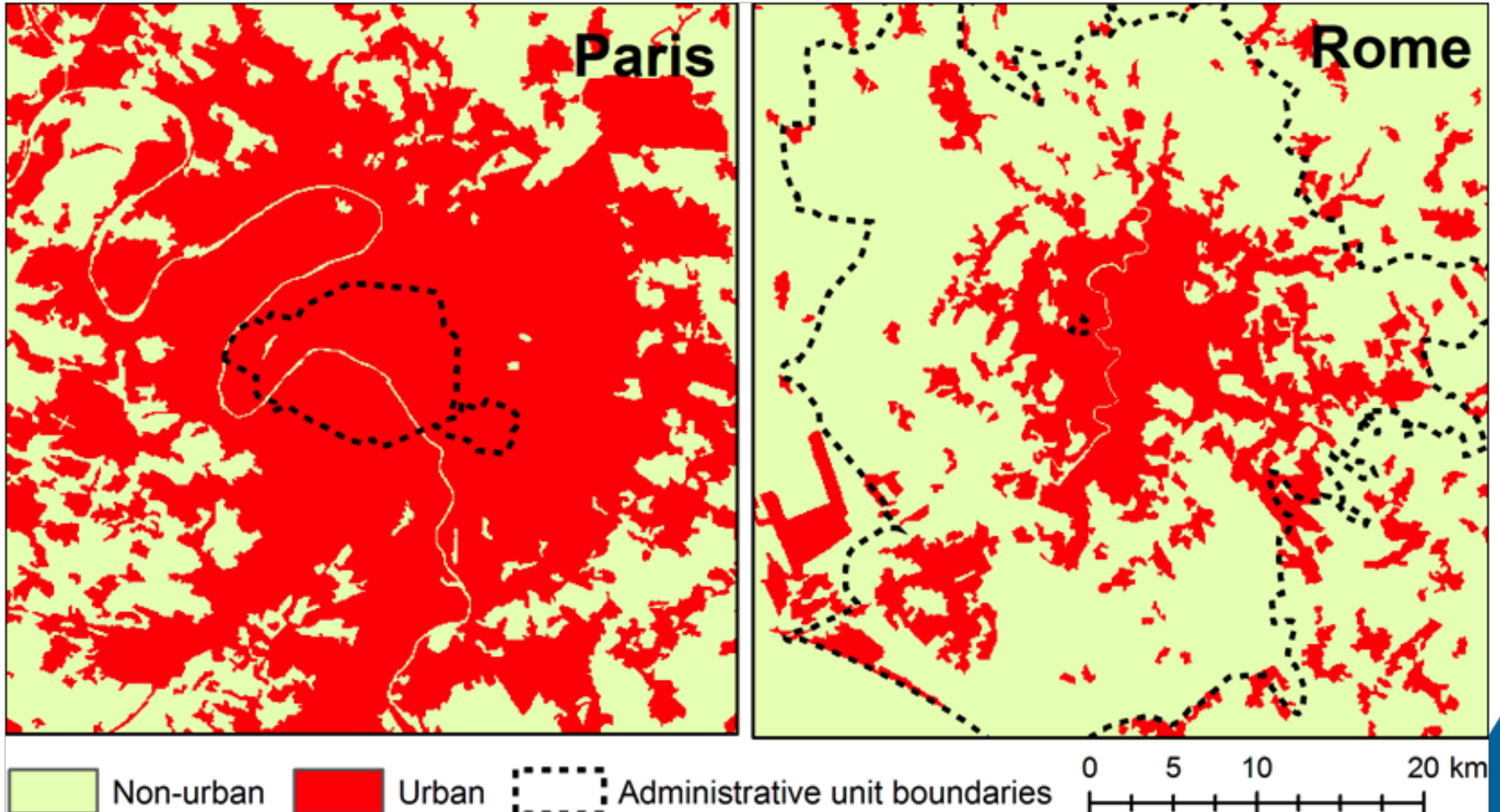


Knowledge Sharing – Urban Green Growth in Dynamic Asia **Country Consultation Workshops**

- Provide the conceptual framework with **valuable inputs** from national and local governments, and from international partners
- Two workshops are planned
 - Bangkok (21 February 2014)
 - Jakarta (14 March 2014)



Shifting towards Functional regions

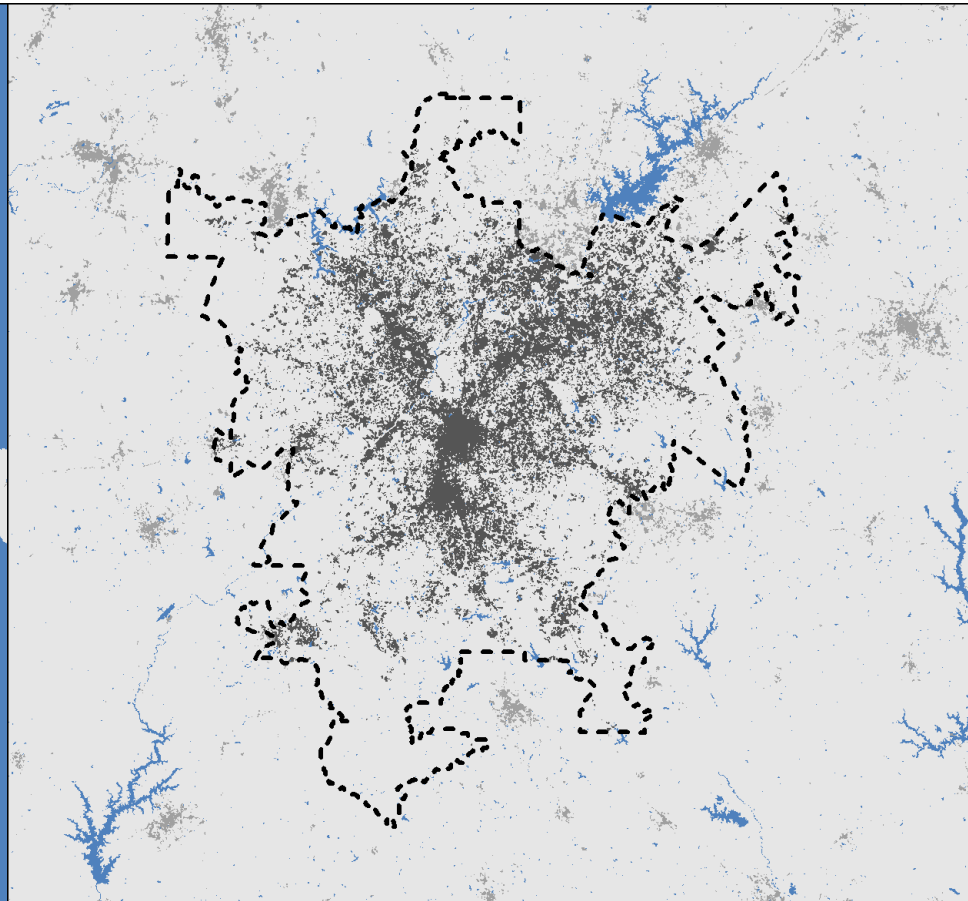




International comparison of urban land

Athens (3.4 million)

Atlanta (4.6 million)



--- Athens metropolitan area
■ Urban land cover in the metropolitan area
■ Other urban land cover

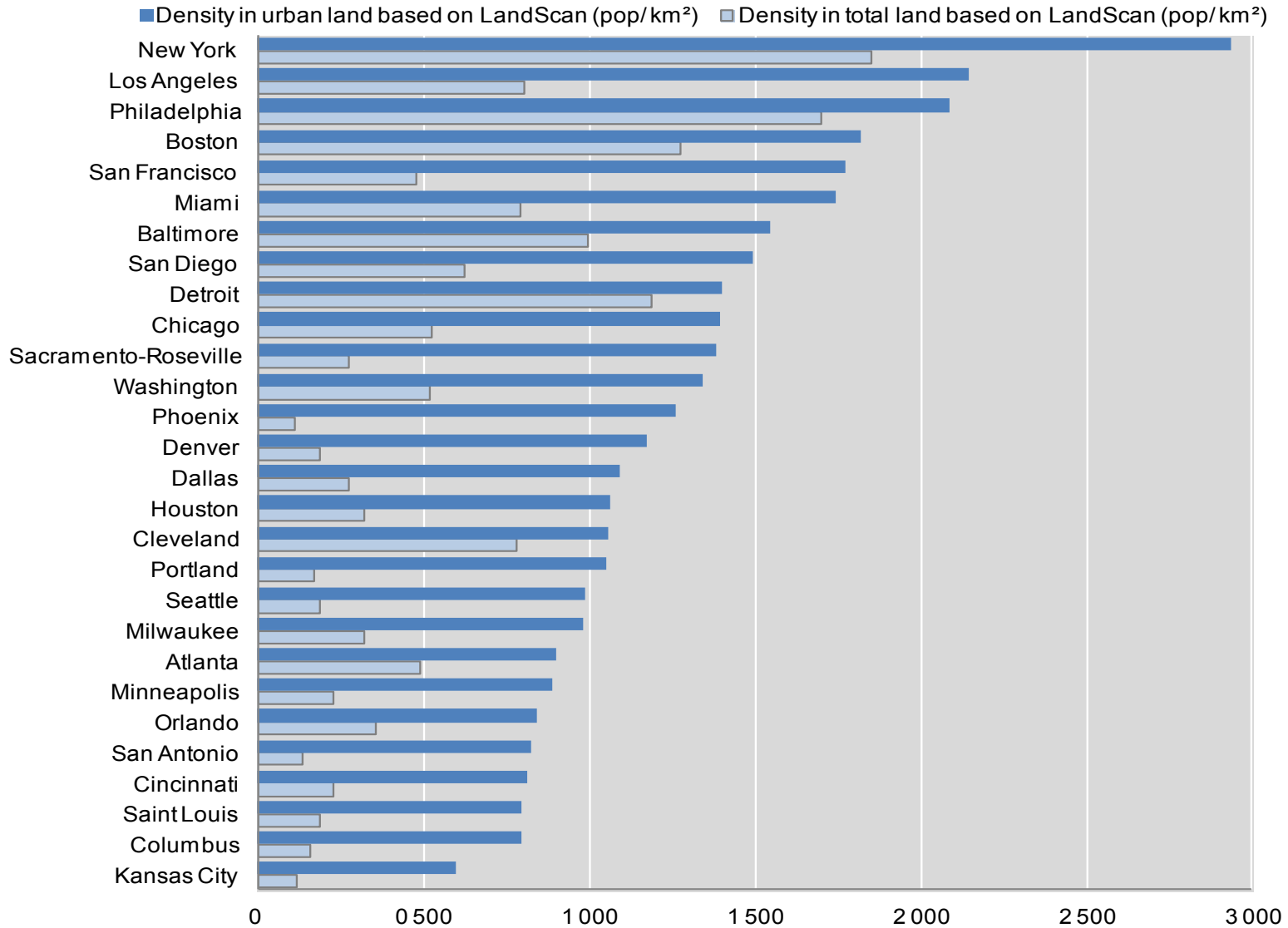
0 15 30 km

--- Atlanta metropolitan area
■ Urban land cover in the metropolitan area
■ Other urban land cover

0 15 30 km



Population density on urban land





THANK YOU

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