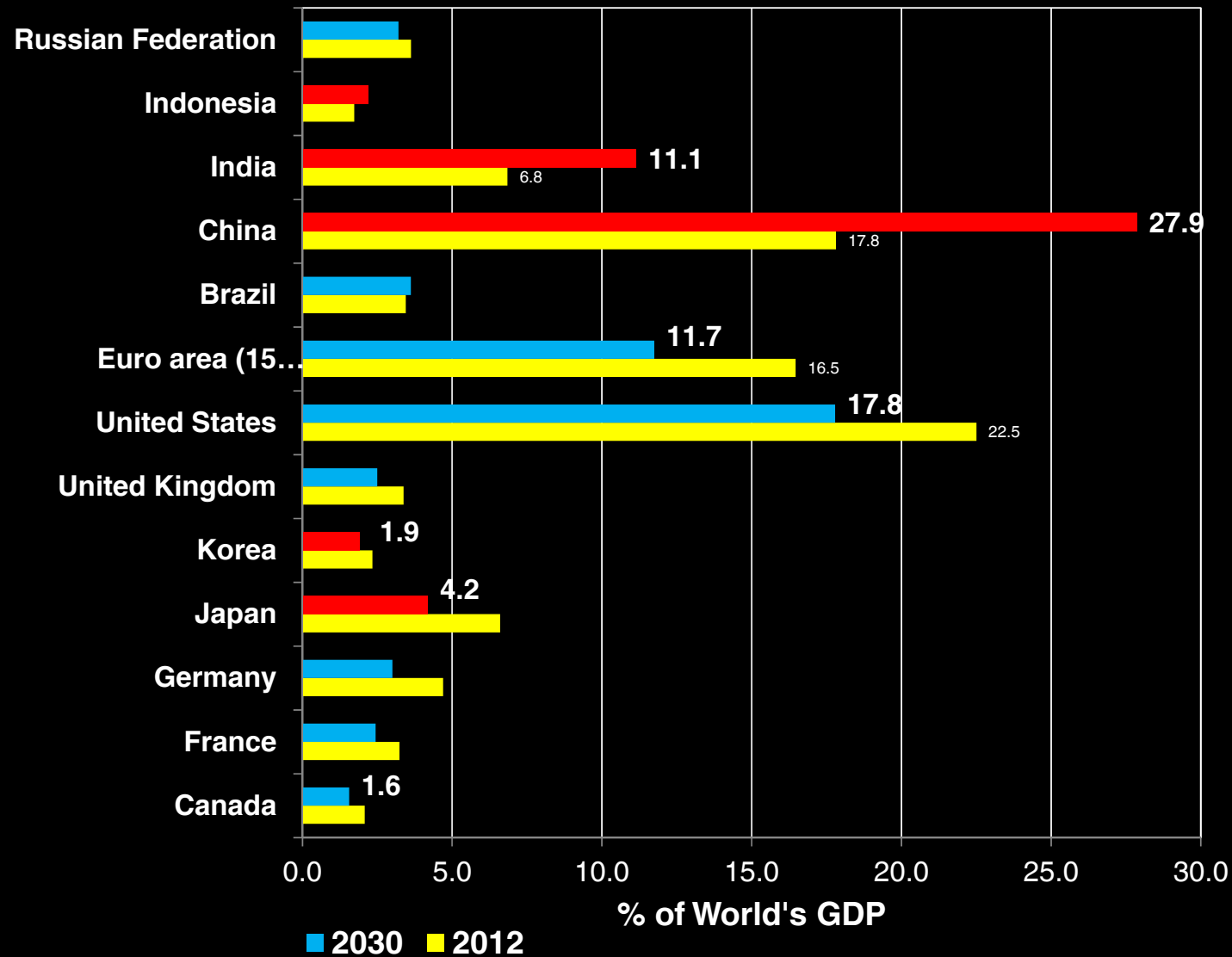




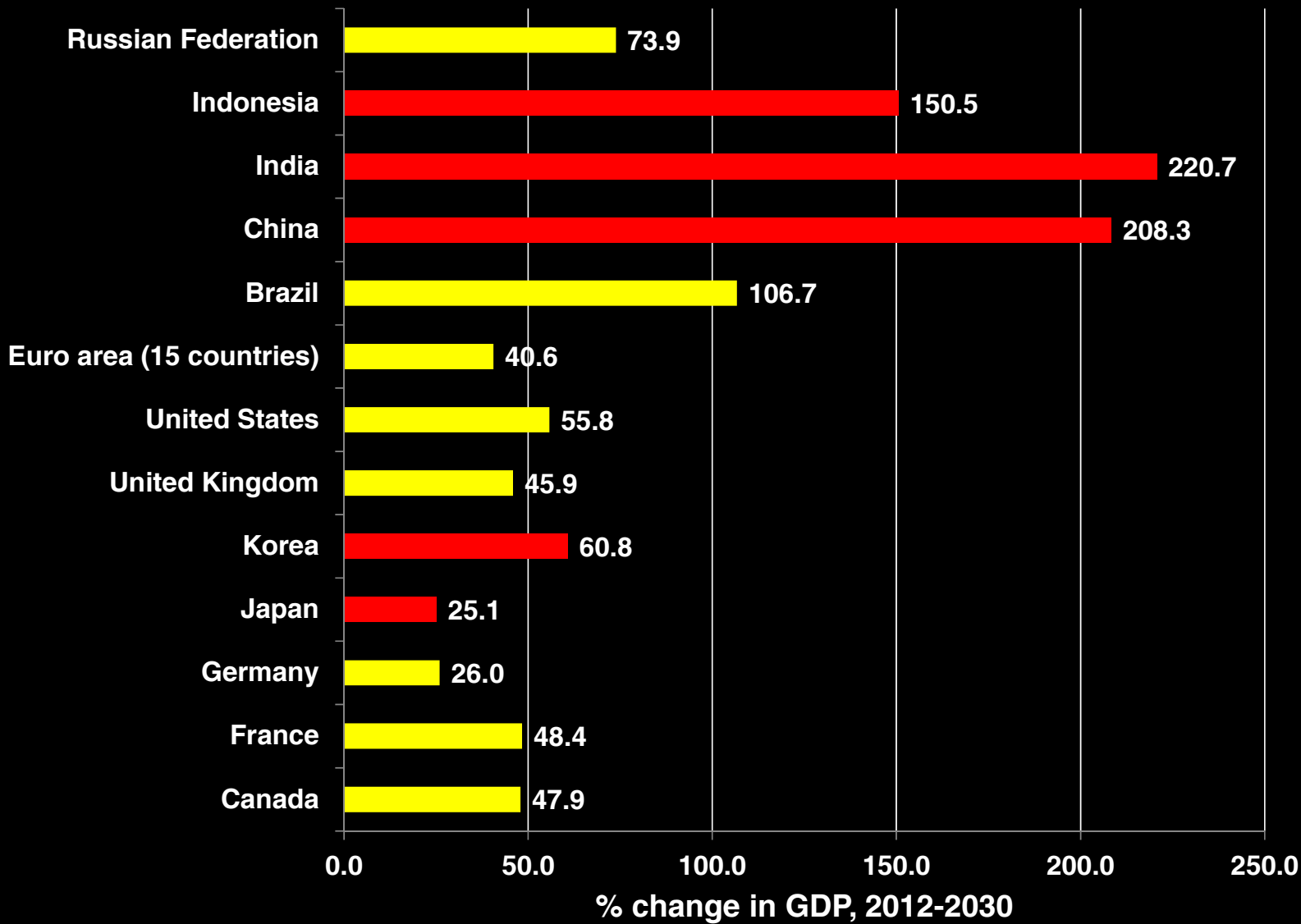
Capturing Opportunities for Innovation in Asia's Metropolitan Regions

Edward Lemman
President, Chreed Ltd.
27 March 2013



Source: OECD (2013)

Share of World's Gross Domestic Product (2012, 2030)



Source: OECD (2013)

India's and China's GDP will more than quadruple by 2030





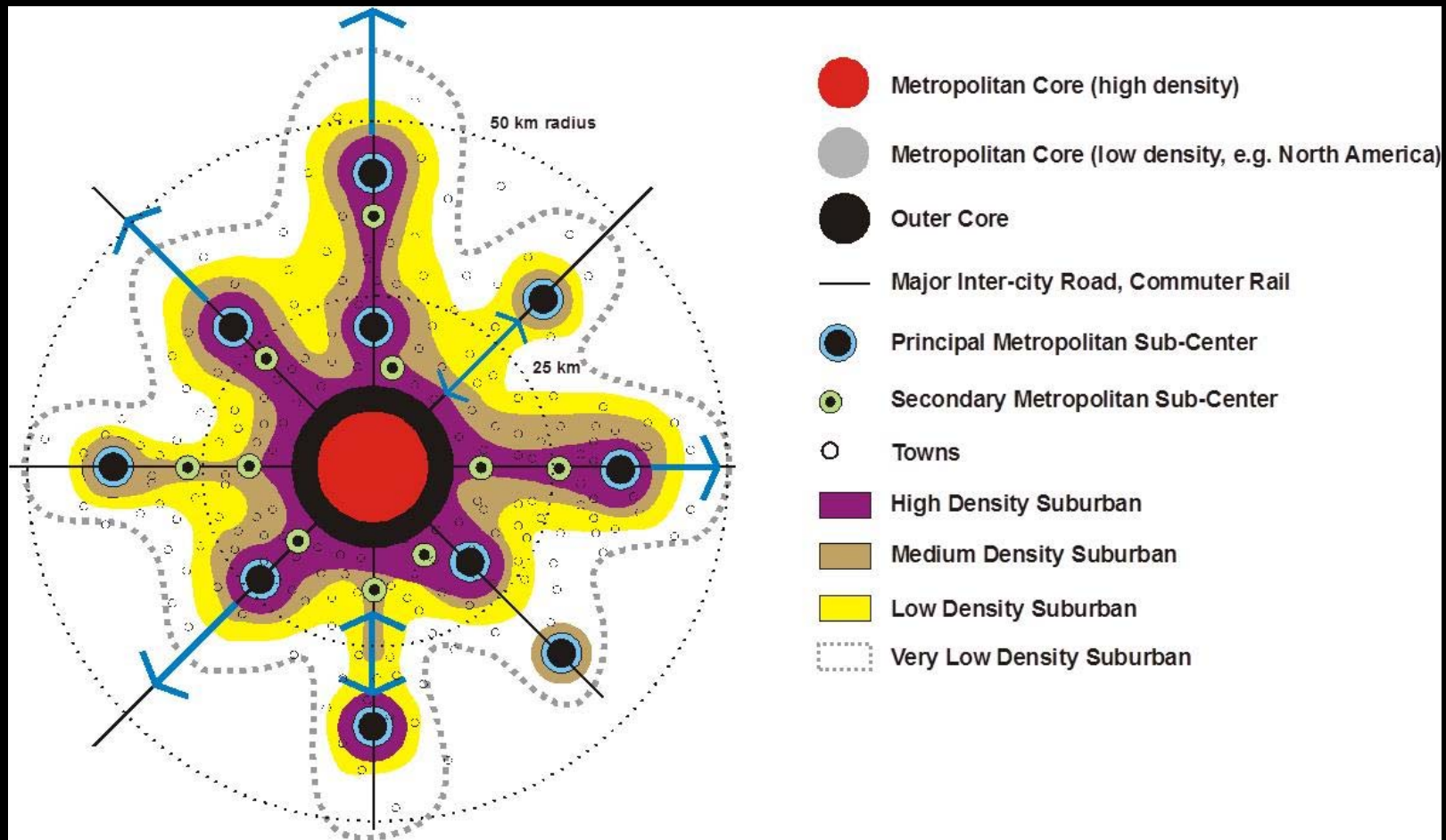
Asia's economic growth will not happen in the countryside...



Cities will be where Asian economies grow...



Urbanizing Asia, 2012



Metropolitan Regions are key drivers of Asia's economic growth.

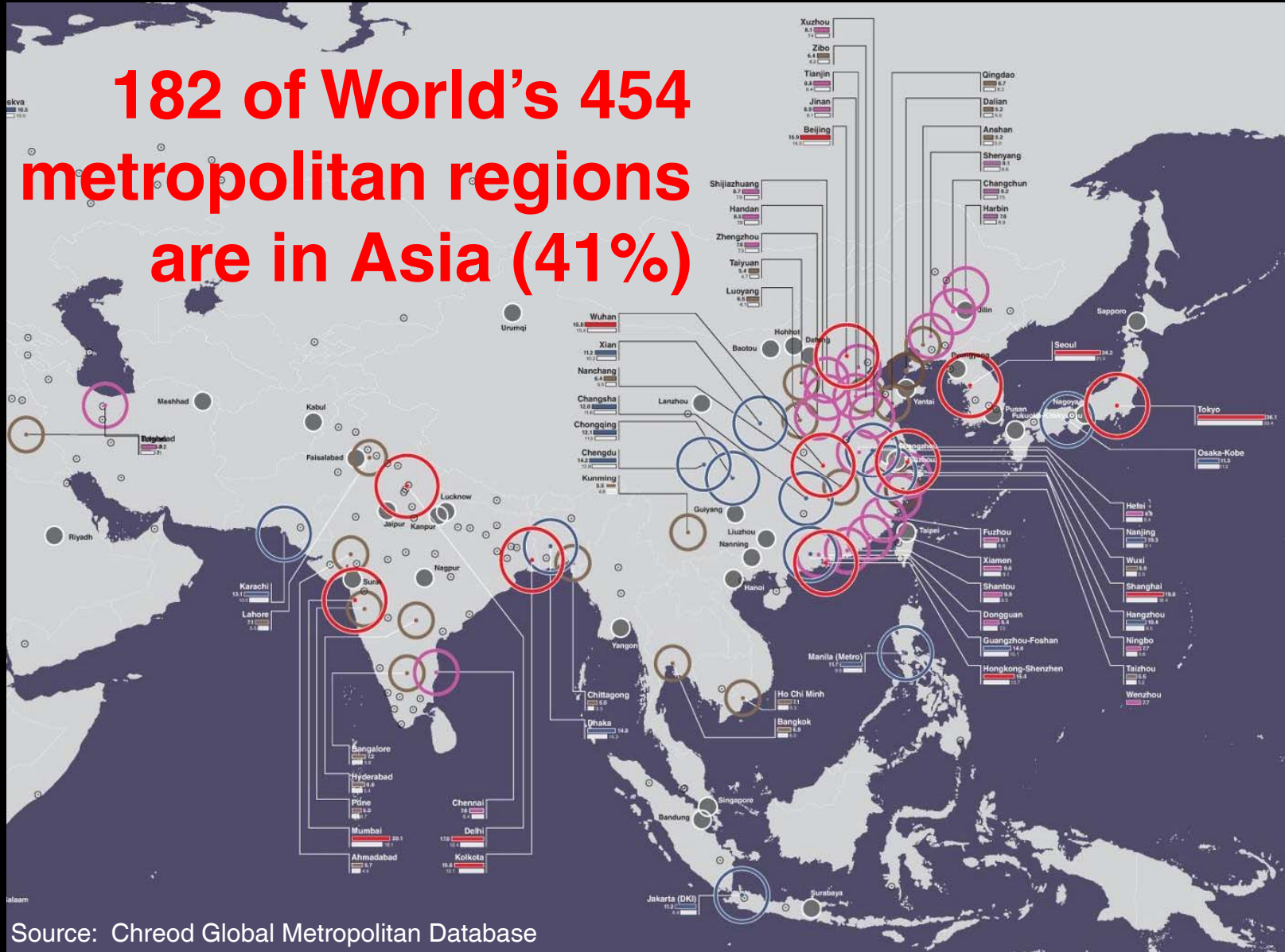
Source: Chreed Ltd.

Generalized Structure of Metropolitan Regions

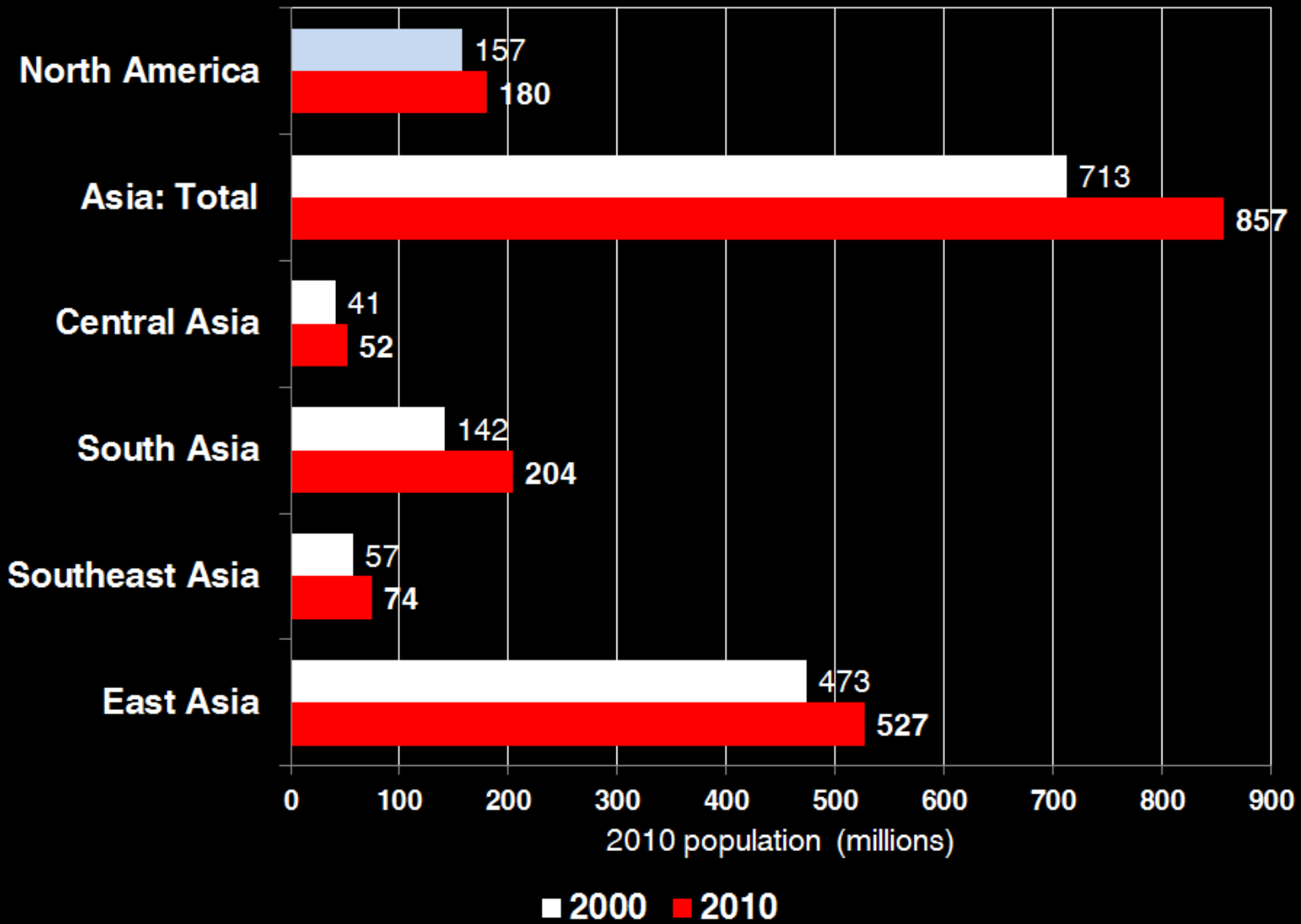


Pearl River Delta: urban builtup area

182 of World's 454 metropolitan regions are in Asia (41%)

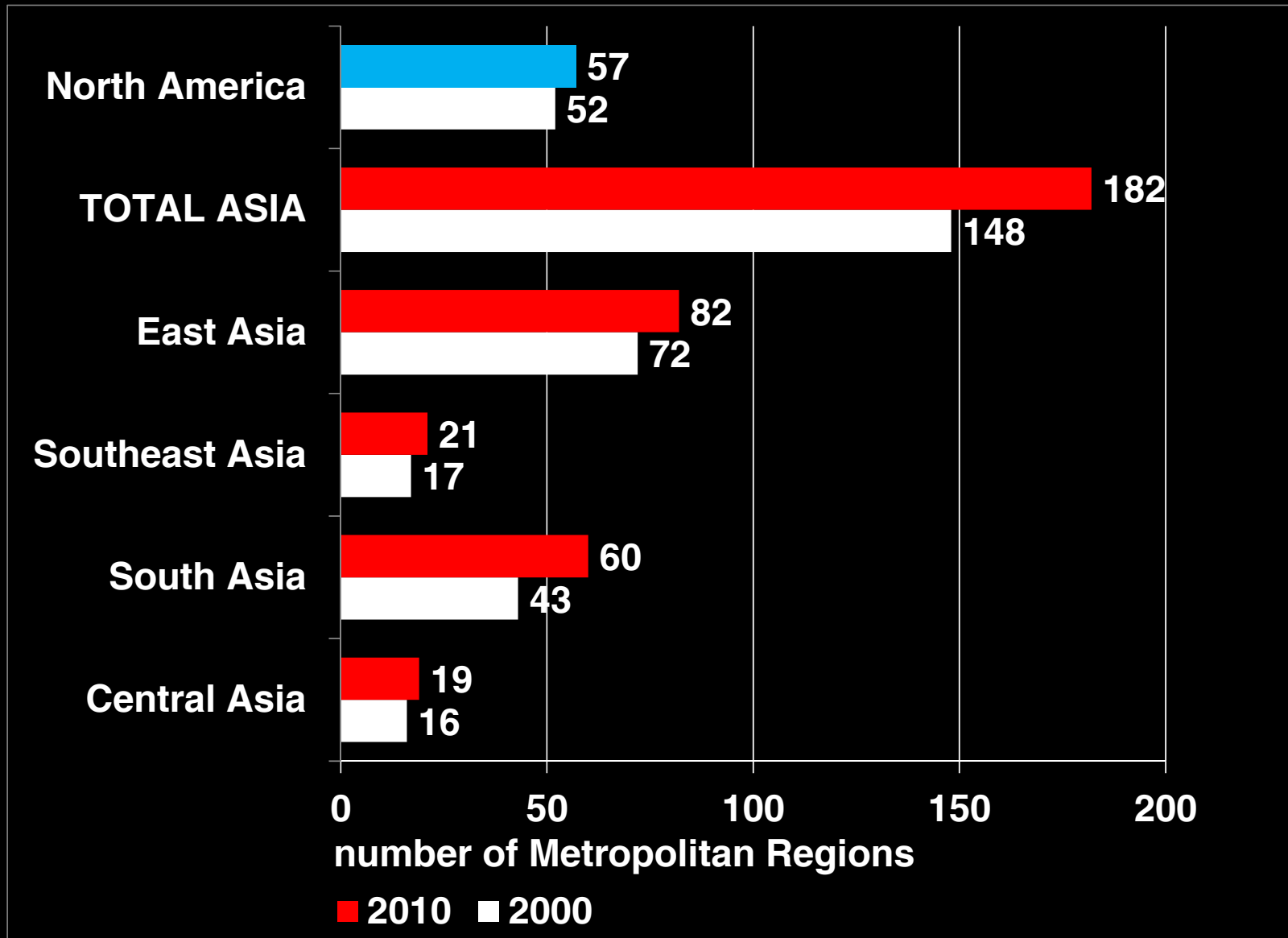


Asia's Metropolitan Regions (> 1 mn), 2010



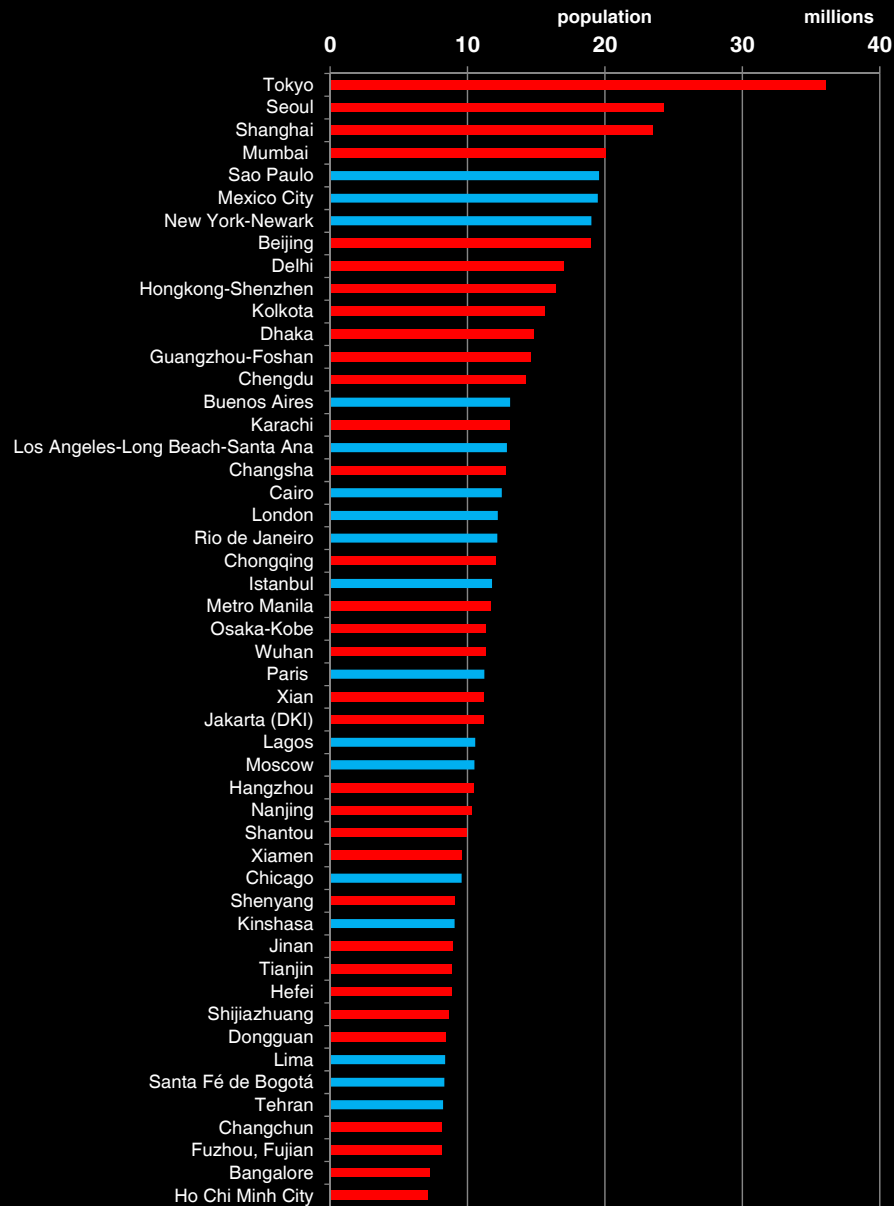
Source: Chreod Global Metropolitan Database

Population of Asia's Metropolitan Regions



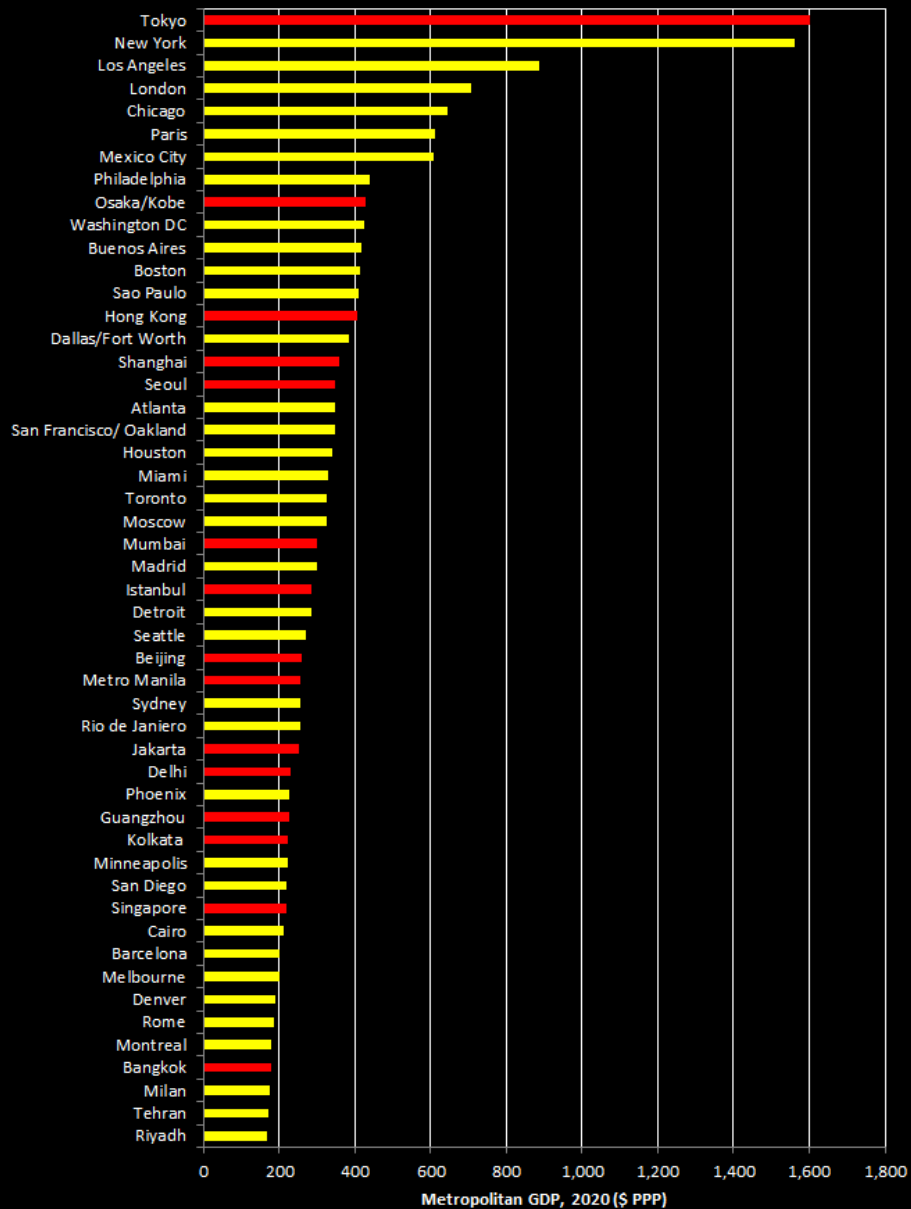
Source: Chreod Global Metropolitan Database

Number of Asia's Metropolitan Regions



35 of the world's largest metropolitan regions are in Asia; 21 are in China

Source: Chreod Global Metropolitan Database

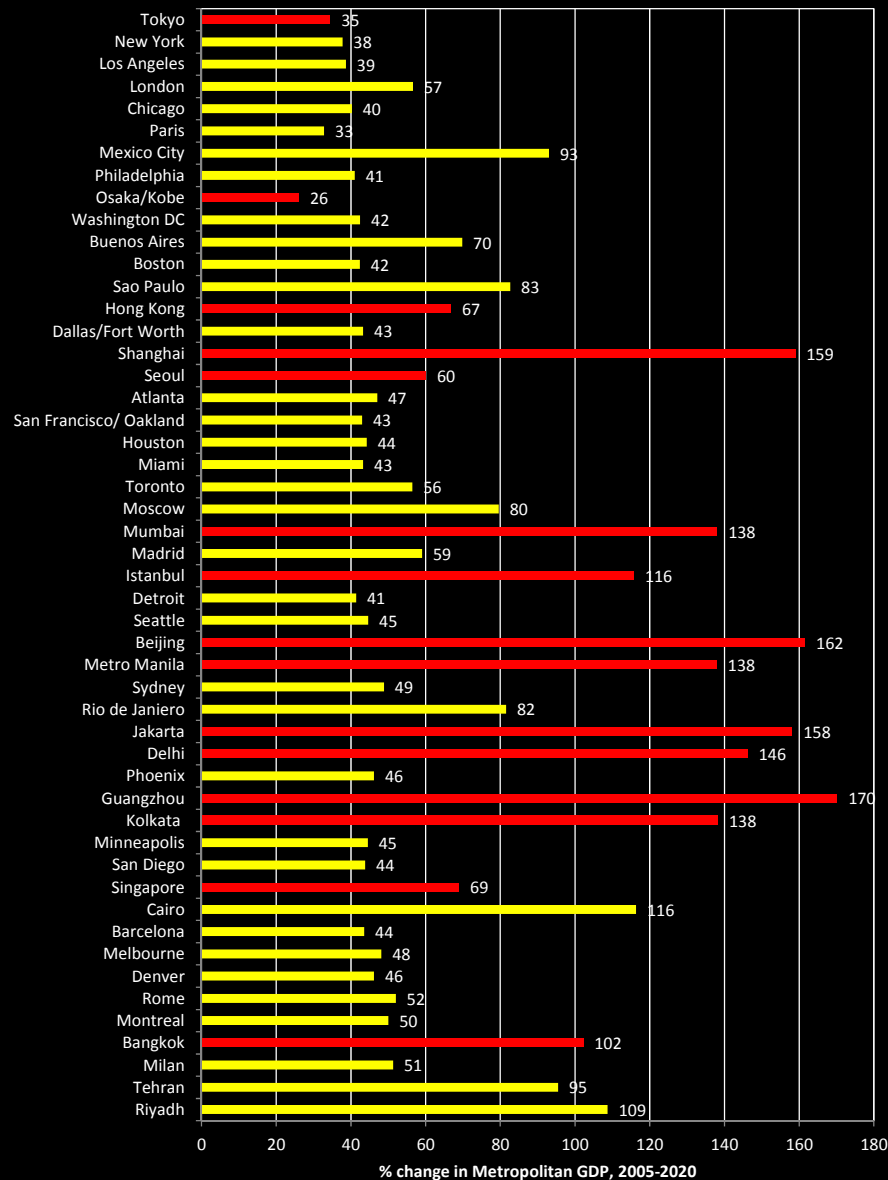


13 of the world's largest metropolitan economies in 2020 will be in Asia; 19 in North America

Source: PriceWaterhouseCoopers. UK Economic Outlook for March, 2007

50 Largest Metropolitan Economies, 2030





**fastest
growing
metropolitan
economies in
the world are
in Asia: 10 will
more than
double their
GDP from
2005-2020**

Source: PriceWaterhouseCoopers. UK Economic Outlook for March, 2007

Per cent Change in Metropolitan Economies, 2005-2020





1988



2012

Shanghai Pudong

**Not IF but HOW
to engage with
Asia's
metropolitan
regions**

**Canada's engagement
must be demand
driven...and go beyond
oil, gas and minerals.
We need to better
understand market
demands.**

What is needed?

- **lots of sustainable infrastructure**
- **lots of sustainable buildings**
- **huge mobility (transport) improvements within and between cities**
- **lots of investment**
- **innovative financing**

Growing middle class demanding:

- **better environmental quality**
- **safer cities (natural disasters)**
- **smarter cities (energy)**
- **affordable cities.**

Asia's metropolitan regions need to be **hugely innovative if they are to become environmentally, socially, and financially sustainable.**

Canada's innovators need to engage with Asian metropolitan regions:

- **companies**
- **design professions**
- **city governments**
- **public agencies**
- **universities.**

**Federal government
should take on a
coordinative and
supportive role in
Canada's engagement
with Asia's metropolitan
regions.**



**two parting ideas
on moving
forward...**

- **EDC and CPP Investment Board spearheading a \$1 bn innovative urban investment fund to support Canadian innovators in Asia's metropolitan regions**

- **NRC, SSHRC, IDRC, companies to capitalize a \$100 mn Urban Innovation Fund to support commercial and academic R+D on sustainable development of Asia's metropolitan regions.**

Sorry I couldn't make it to today's session. Best wishes from Beijing for a productive discussion!

