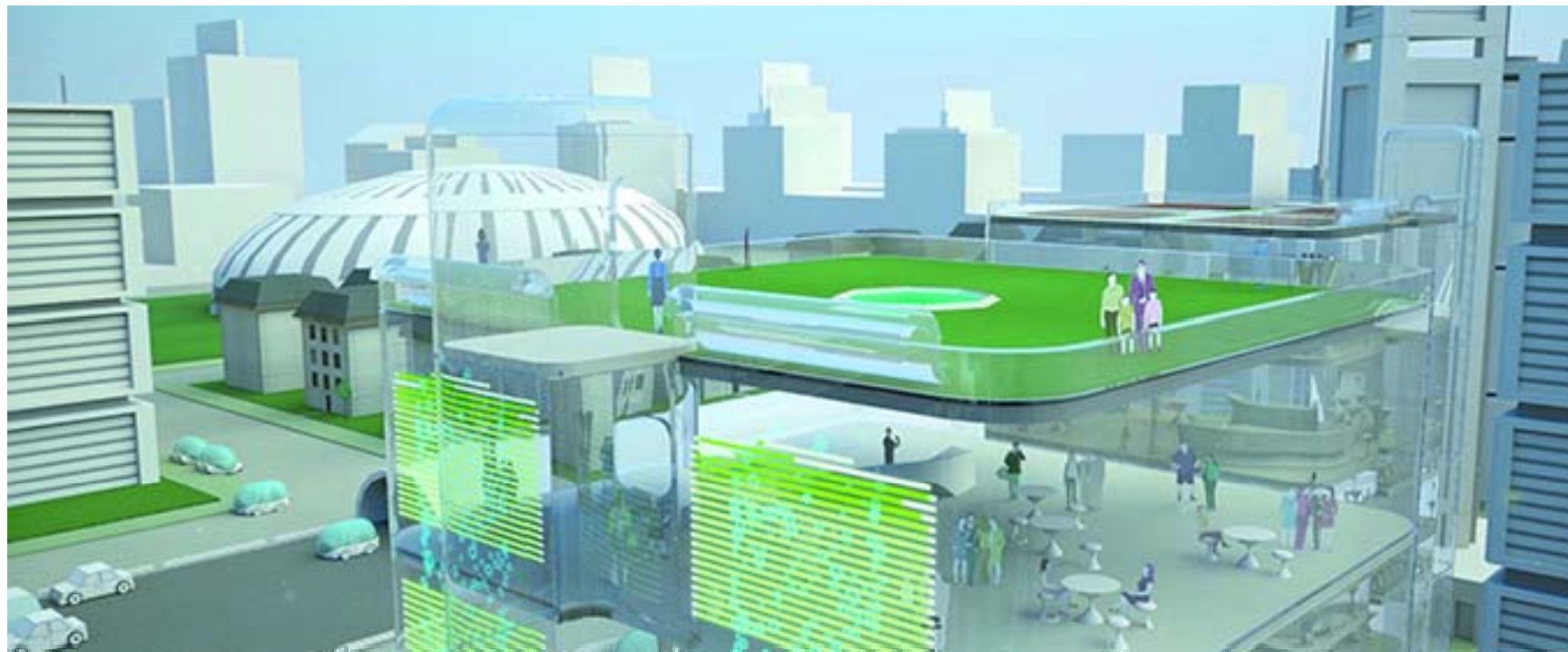

CITIES AS HUB FOR AN INNOVATION-DRIVEN DEVELOPMENT STRATEGY

"Innovation Beijing" International Forum 2017

Knut Koschatzky



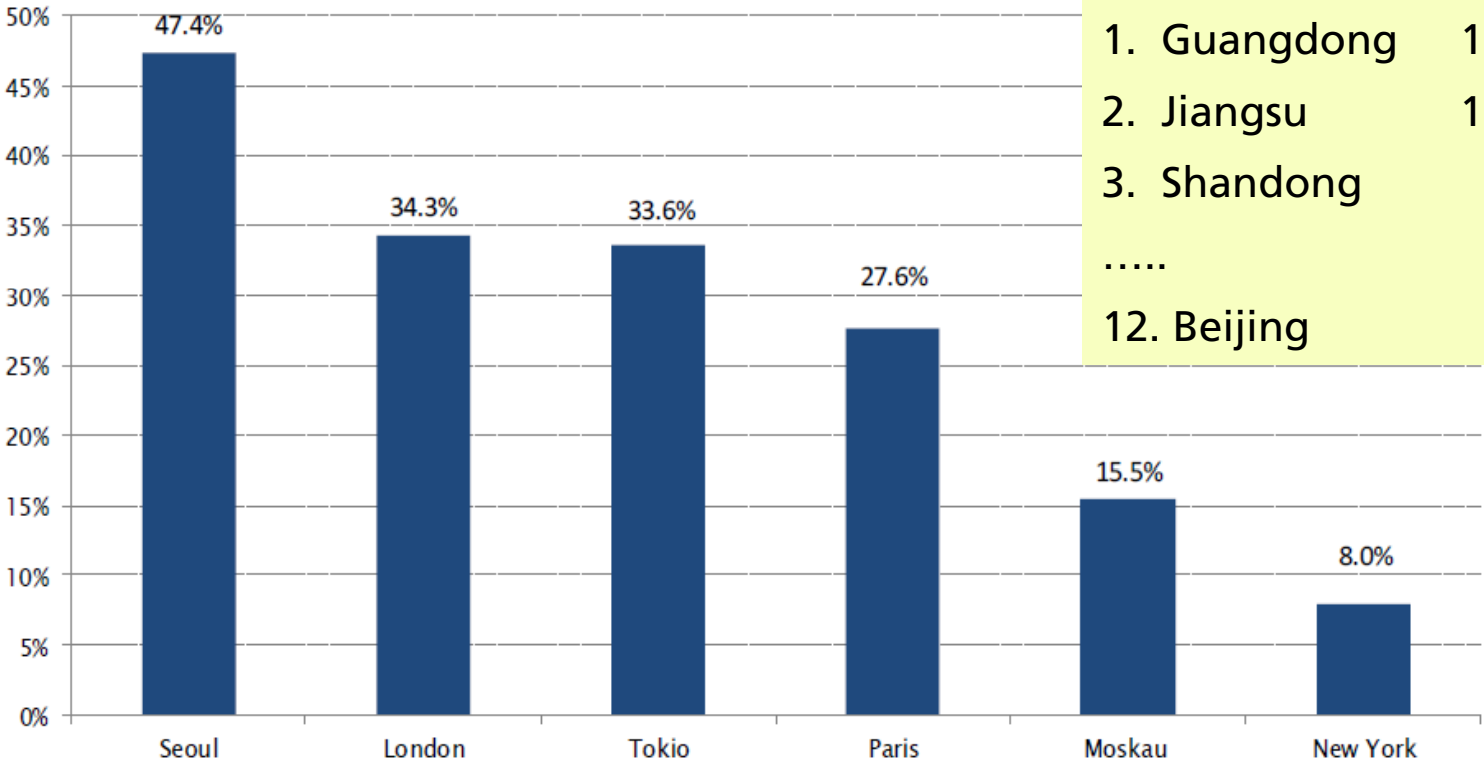
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AGENDA

- Urban agglomerations in the real world
- Concepts and definitions
- Functions of cities
- Cities and innovation
- New demands for urban innovation
- New tasks to promote urban innovation
- Conclusions

URBAN AGGLOMERATIONS / MEGA CITIES IN THE REAL WORLD

■ Cities contribute strongly to national GDP



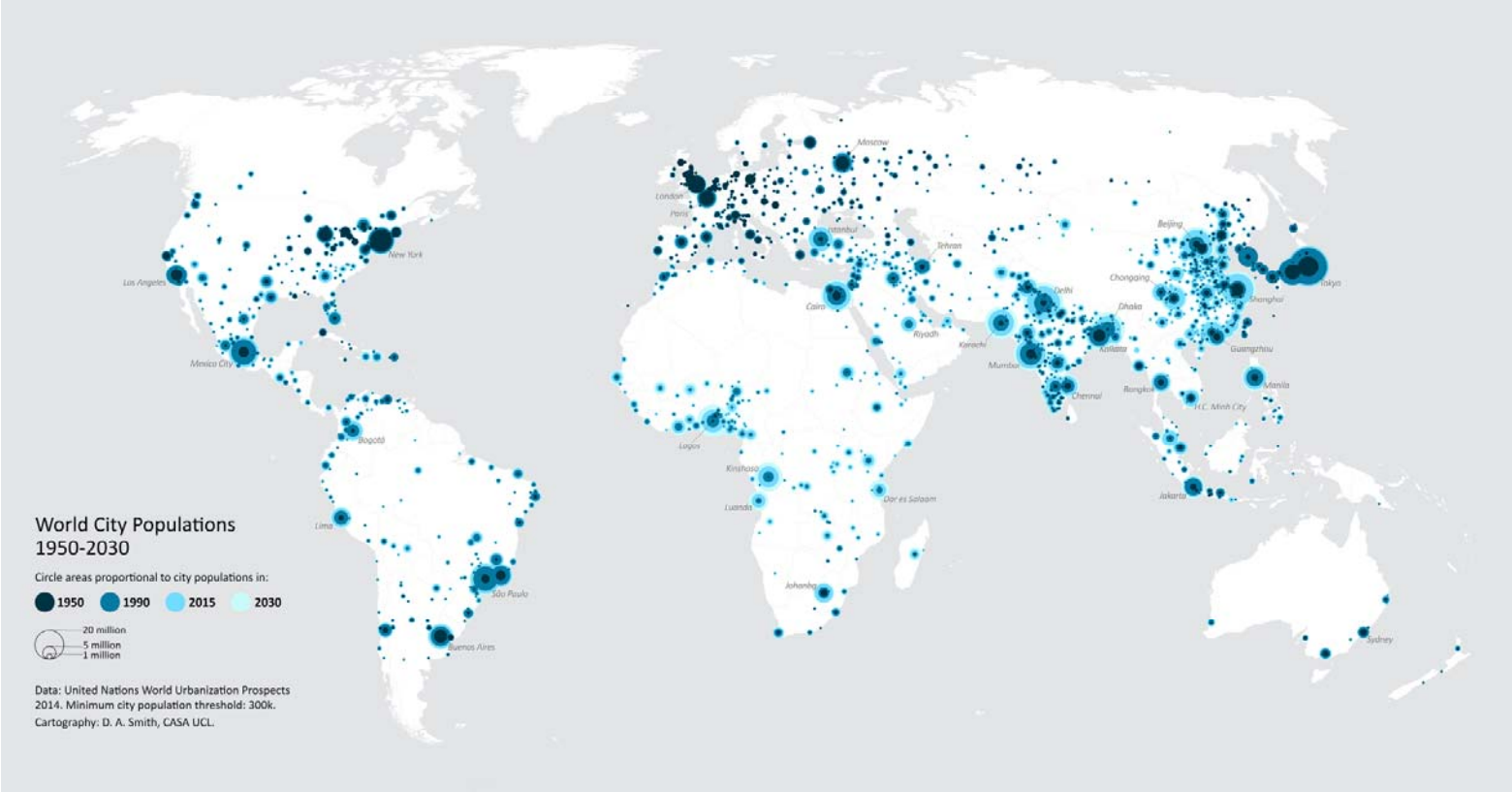
China (2016):

1. Guangdong	10.69 %
2. Jiangsu	10.22 %
3. Shandong	9.0 %
.....	
12. Beijing	3.35 %

Sources: World Bank, National Bureau of Statistics China

URBAN AGGLOMERATIONS / MEGA CITIES IN THE REAL WORLD

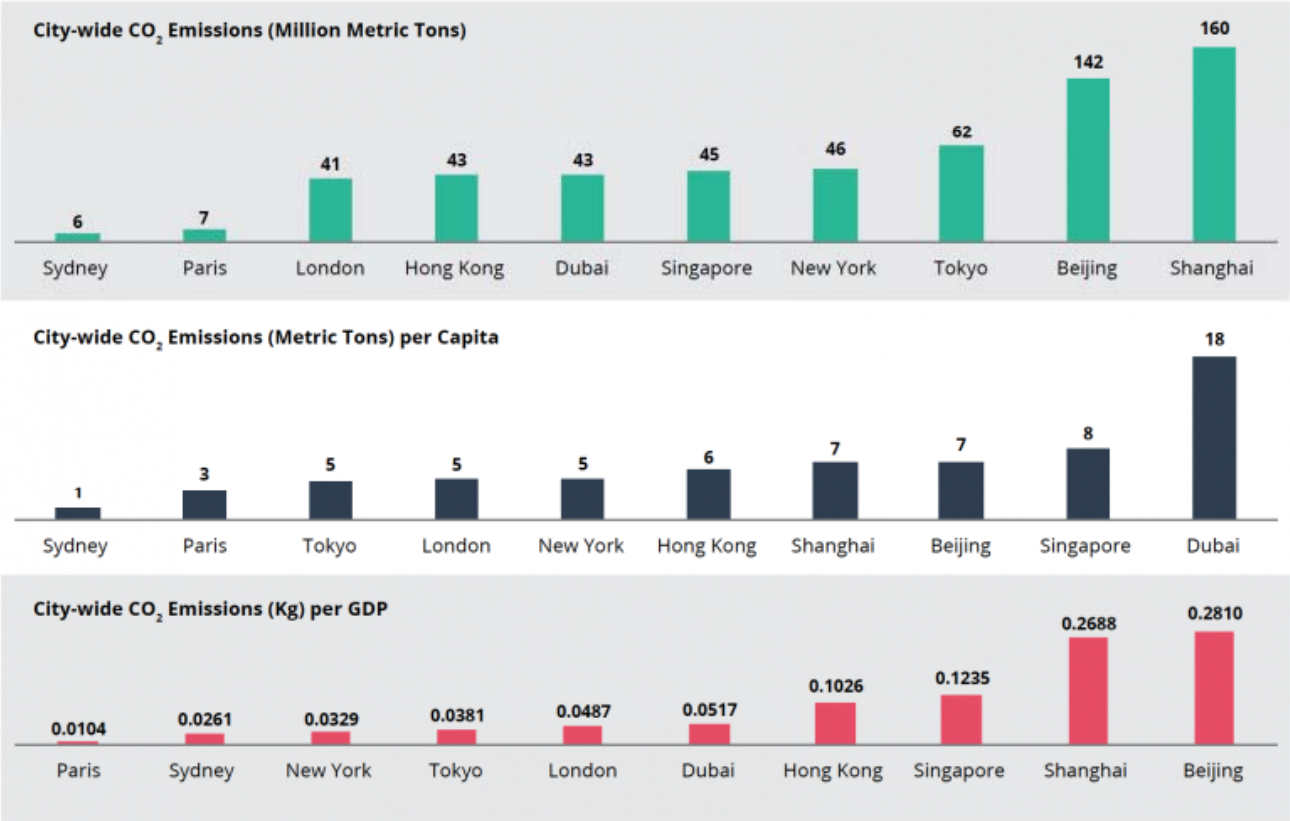
- Cities are the engine and object of urbanization and population growth



Source: citygeographics.org

URBAN AGGLOMERATIONS / MEGA CITIES IN THE REAL WORLD

■ Cities contribute strongly to CO₂ emissions



Source: C40 Cities Report

CONCEPTS AND DEFINITIONS

■ **Smart City / Digital City / Innovative City :**

Innovation based city, focusing on the development and use of applied technologies referring to smart grids, smart meters, and other infrastructure for energy efficiency, water supply, waste reduction, and transport to improve the quality of life and the local/regional economy

■ **City of the Future:**

City which develops new conceptions with regard to the current technological, economic, ecological and social changes (such as globalization, demographic change, economic and climate change, limited natural resources) as a model for complex systems and the optimization of processes, technologies and infrastructures



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FUNCTION OF CITIES

- Cities offer manifold **proximity advantages** and generate **significant externalities and spillover effects**
- Cities are a **knowledge hub** in which **early stage implicit knowledge** is concentrated → **innovation**
- Cities are a **supplier of production infrastructures** like (high quality) labour, capital, communication, research and development, physical infrastructure, socio-cultural amenities
- Cities offer a variety of **networks and cooperation partners** (from SMEs to multinational companies) → **impacts on knowledge exchange and transaction costs**
- Cities are **open economic systems** and act through spread effects (spillover effects) and backwash effects (pull effects) as **economic engine**
- Cities offer an **urban milieu** and can be regarded as **urban production system**

CITIES AND INNOVATION

- Cities as **innovative hot spot and lead market** (population, income)
 - Cities as **location** of firms, research institutes, supporting organizations, and value added chains / networks
 - Cities as **spaces for exchange and sharing** → emerging niches (e.g. sharing models) → new forms of innovation
 - Cities as **attractive places for IT businesses and culture** → new actors and actor configurations are possible (e.g. merger of IT specialists and artists)
 - Cities host **capital** → new forms of capital provision (e.g. crowd funding, philanthropists)
 - Cities as **networks** → great importance of social and relational capital (ability of cooperate), values and lifestyles (e.g. electric mobility)
 - Cities as **infrastructure hot spots** → IT infrastructure (high speed internet) as basis for new user concepts (e.g. app based on demand transportation)
-

NEW DEMANDS FOR URBAN INNOVATION

- Strengthening and supporting **communal transformation**
- **Sustainable reconstruction** of urban settlements and spatial structures
- **Civil society actors** as drivers of urban transformation
- **Pioneering projects** for urban infrastructures
- **Tools and procedures** for planning and knowledge management
- **Strategic financial management** and business models
- New framework conditions for **urban innovation**



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NEW TASKS TO PROMOTE URBAN INNOVATION

- **Analyze and test new framework conditions** in order to improve the institutional co-operation between municipal, private, scientific, political and civil society actors.
- **Simplify regulatory frameworks** for the design of new or reconstruction of existing town districts.
- **Analyze current guidelines and legal requirements** in terms of their impact on accelerated transformation processes.
- **Allow representatives of the civil society** (communities, co-operatives or non-profit associations) to be part of community-based research and development projects.
- **Develop new experimental and digital-based planning approaches** (e.g. gamification, serious gaming) in order to develop innovative action plans.
- **Integrate the user perspective** into development processes from the beginning.

Source: BMBF (2015)

NEW TASKS TO PROMOTE URBAN INNOVATION

- **Develop and test new economic models for urban value creation and capital formation**, e.g. financing platforms or incentive systems.
- **Identify and test the opportunities and risks of digitalization for urban processes**. Hardly anything will change processes for life and work in cities more than the increasing digitalization of society and economy.
- **Define new formats for urban innovation** (e.g. real labs, experimental fields or temporary use cases) and develop and test them in scientific-practical co-operation.

Source: BMBF (2015)



CONCLUSIONS

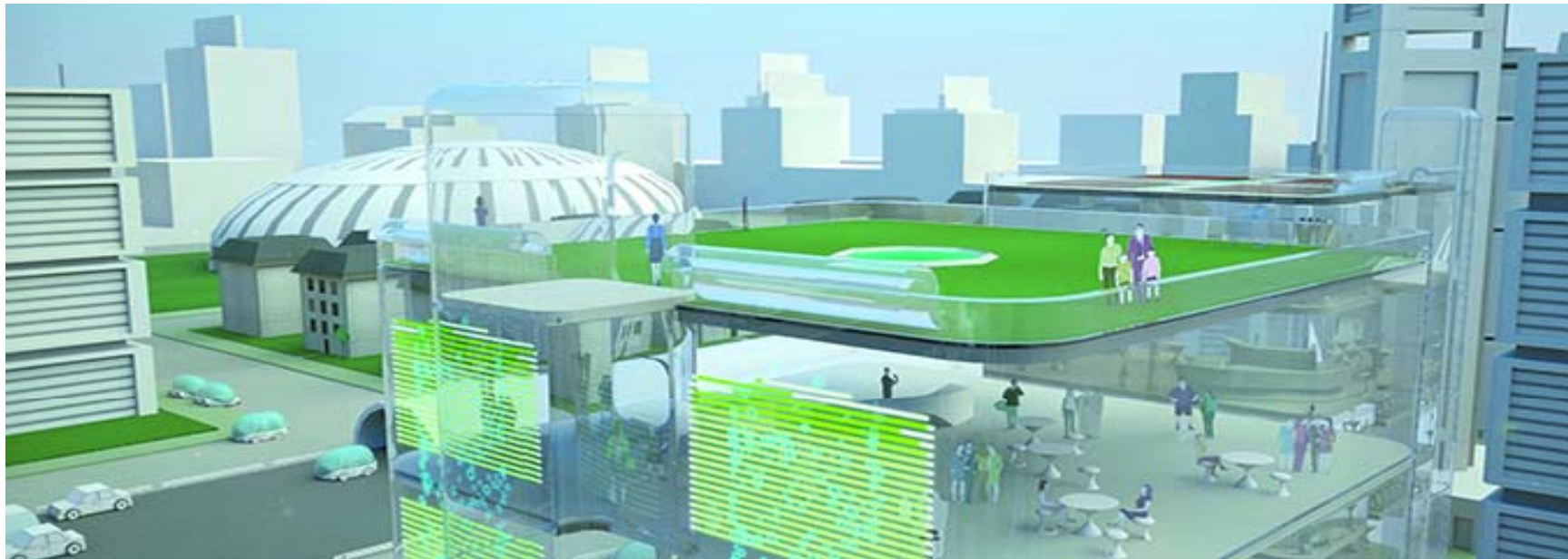
- Cities should be an **open, flexible and dynamic innovation system**
- **Innovation, knowledge management and new business models** are closely interlinked
- A **new understanding of innovation** as an open cooperative process is necessary to promote urban innovation
- **Pioneering, innovative projects** (often emerged in niches) should play a major role in innovative cities
- **Knowledge of new actors, actor groups and their activities** are an essential asset for city governments by which public and private activities can be merged and coordinated



Thank you for your attention!

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