

Sustainable Cities

David Cadman

President, ICLEI – Local Governments for Sustainability

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Cities on the globe

1.2% of the Earth's surface

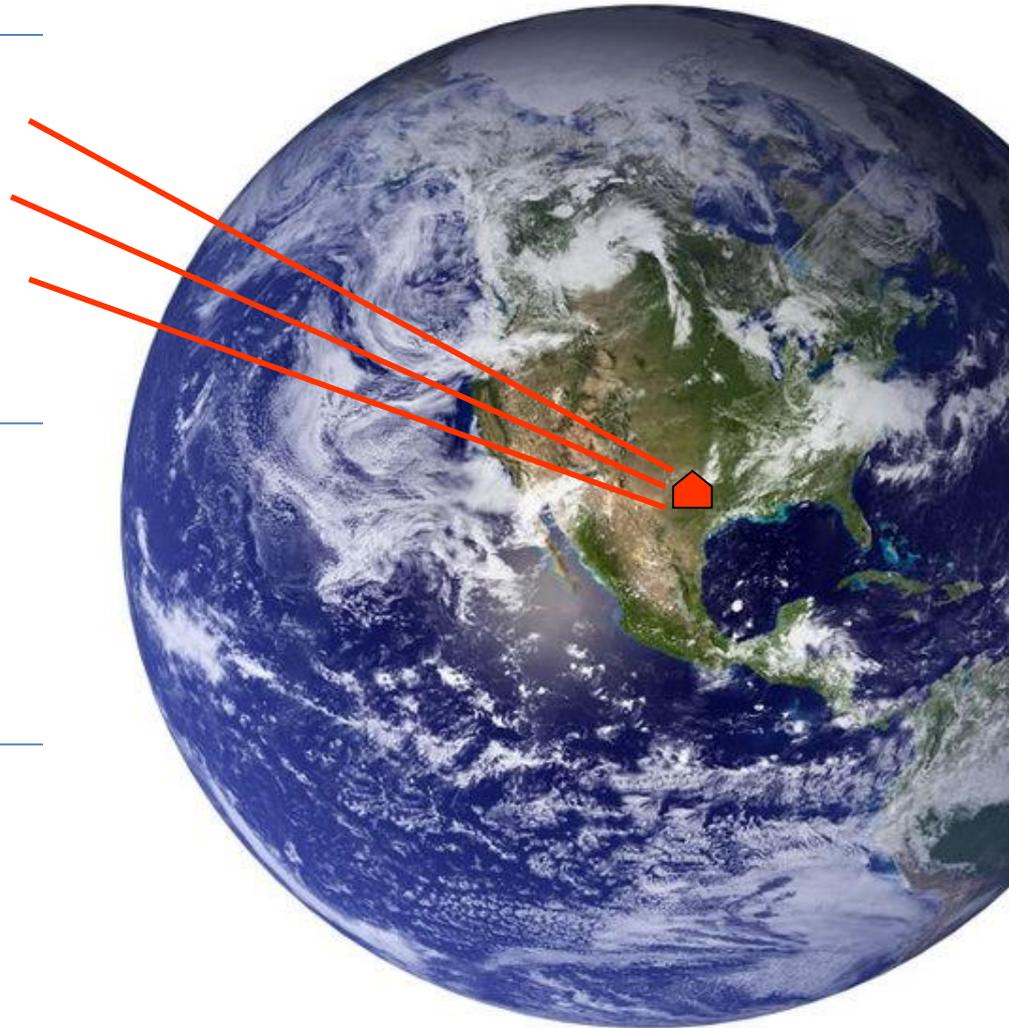
50% of the population

**75% of energy consumption
and CO2 emissions**

Hubs of the global economy:

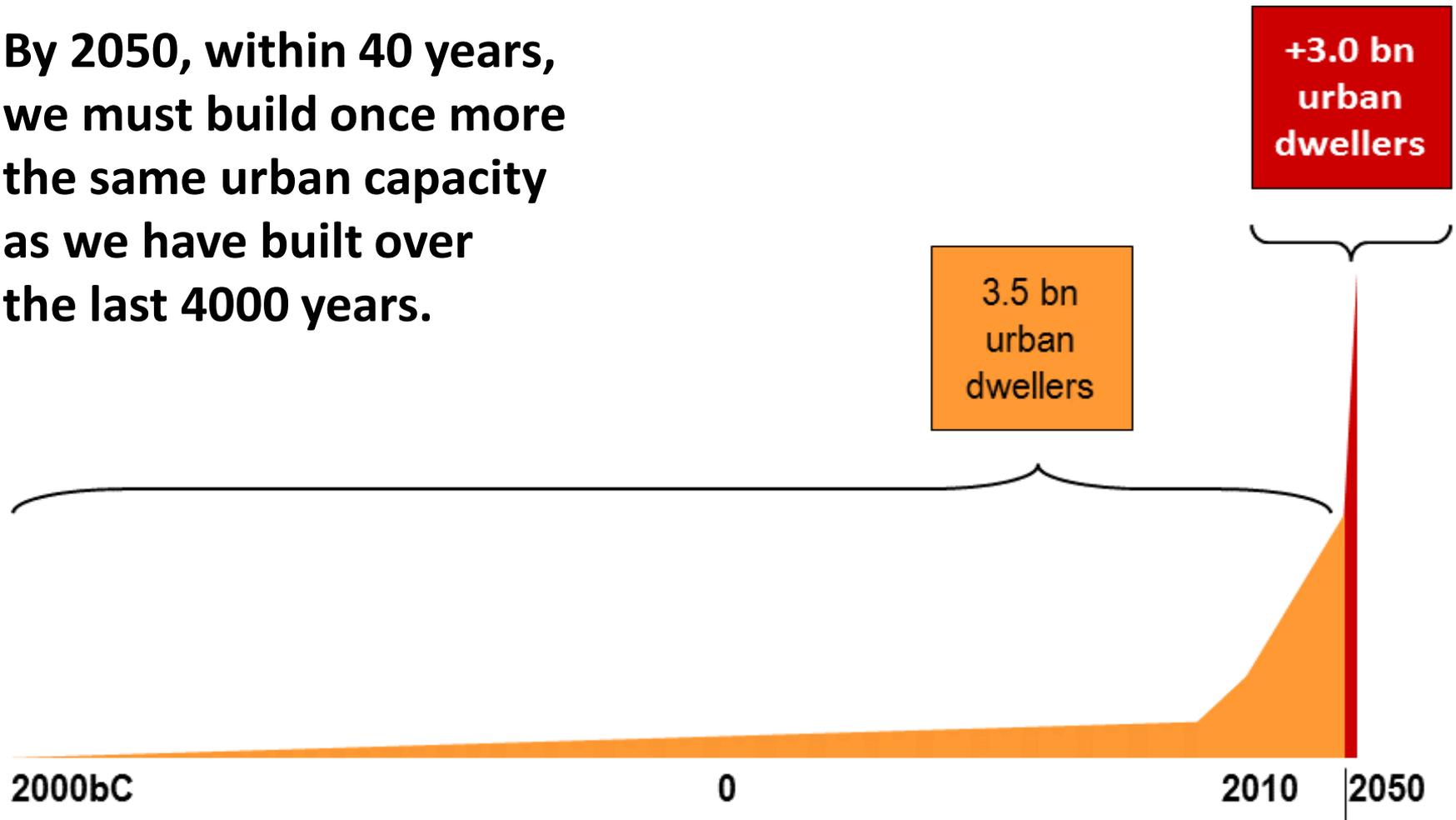
**100 largest cities produce
30% of the global GDP**

**1 Megacity like Beijing is larger
than each of the 150 smallest
UN member states**

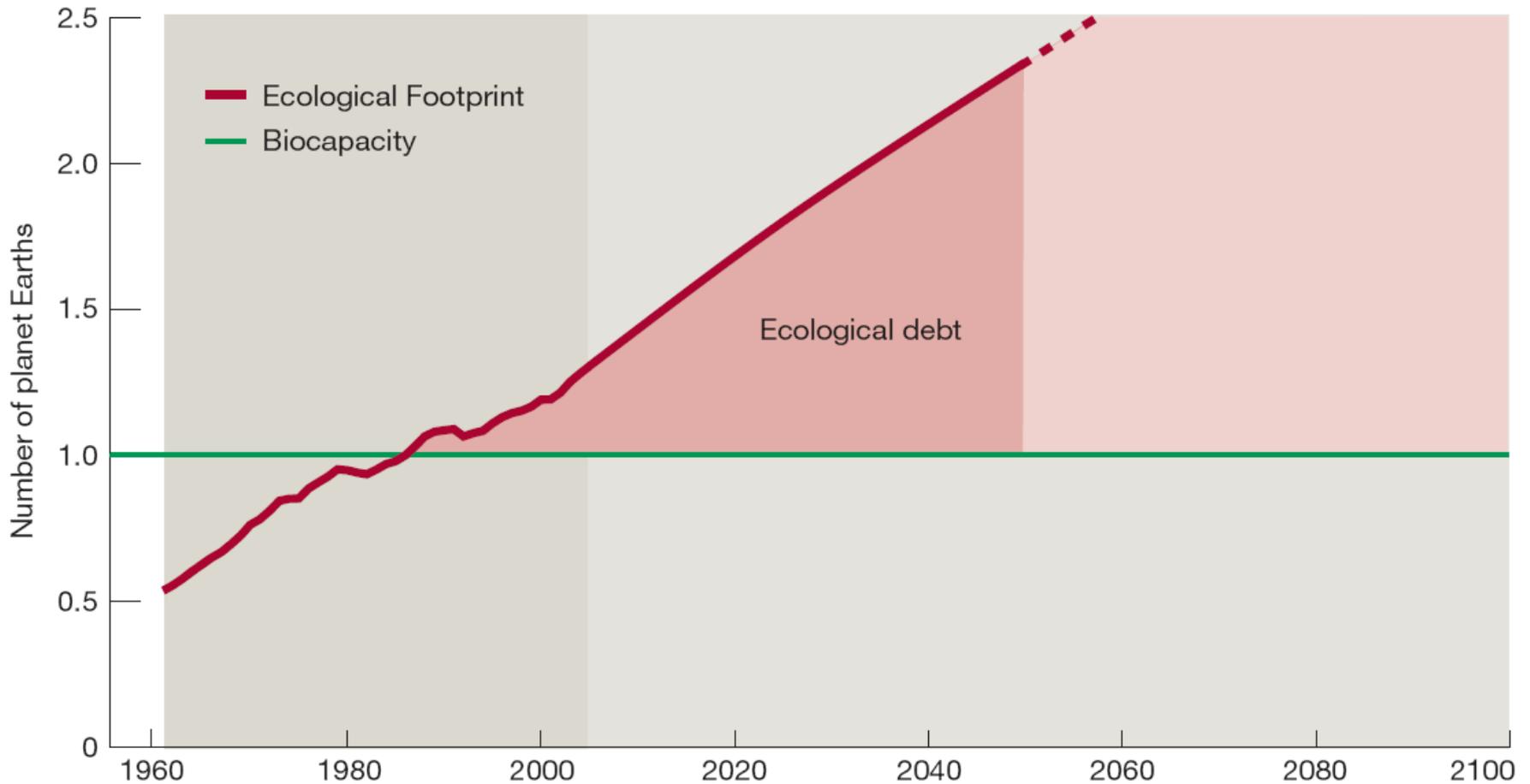


Urbanization: the 1:100 challenge

By 2050, within 40 years, we must build once more the same urban capacity as we have built over the last 4000 years.



Urban lifestyle increases ecological footprint



Urban investment goals

- **Sustainable city:**
integrated sustainability policy and planning
- **Healthy & happy community**
- **Green infrastructure**
- **Low-carbon city**
- **Disaster- and climate-resilient city**
- **Resource-efficient city**
- **Biodiverse city**
- **Green urban economy**

ICLEI supports cities in each of these fields.

Urban investment

- **Huge demand for infrastructure worldwide:**
 - Housing
 - Transport
 - Power
 - Water
 - Sewerage
 - ...
- **Retrofit of old cities**
- **New cities**

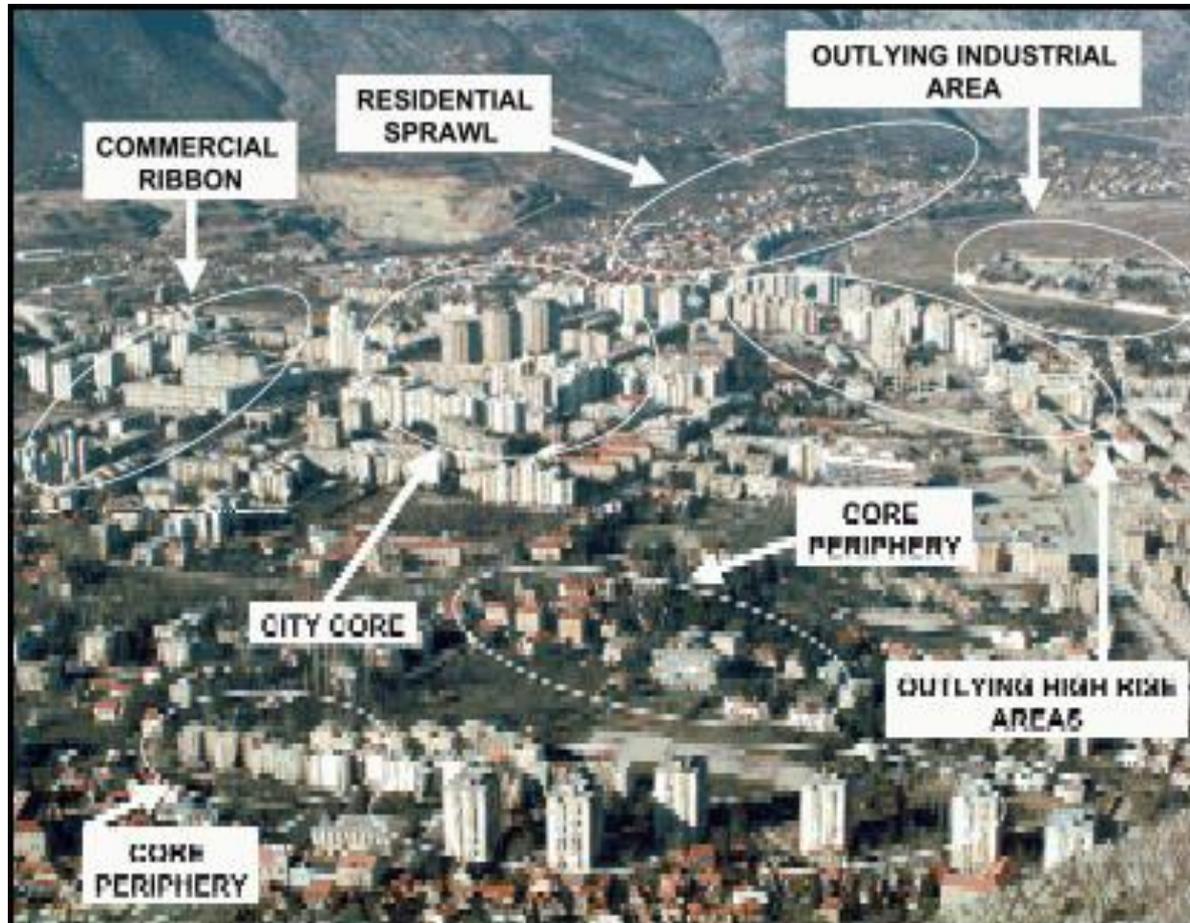


Investment examples

- Local renewables
- Green buildings
- Waste management
- Water & sanitation
- NMT and public transport
- Green fleets
- Ecosystems and parks
- Resilience and risk reduction



From project focus to «urban area performance»



www.globalsecurity.org

Resilience performance



Transport performance



Cycling and walking paths

Mixed Land Use

Traffic control system

Accessible Infrastructure

Bike sharing station

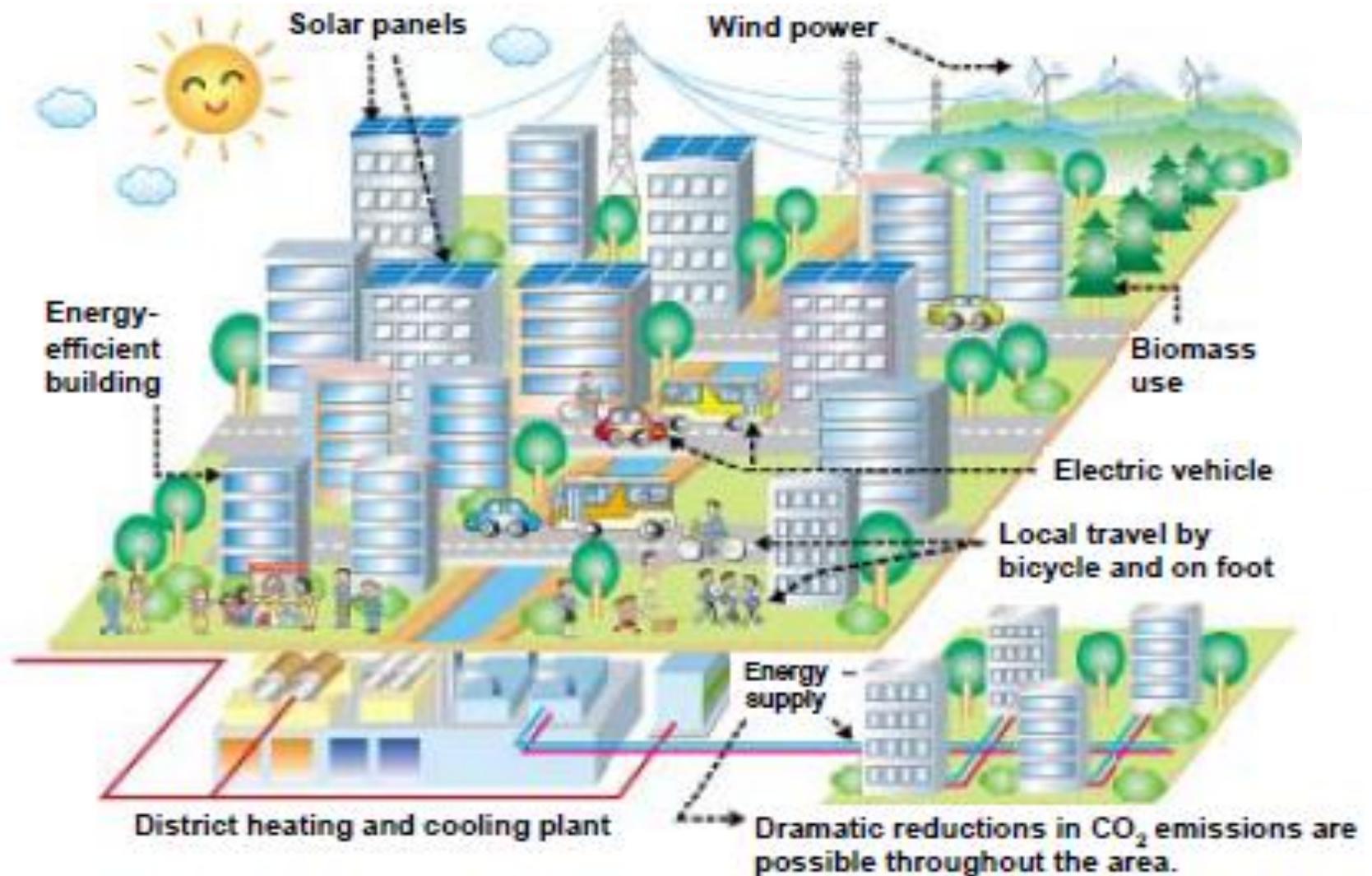
Rapid Bus Lane

Rapid Bus Transport Stop

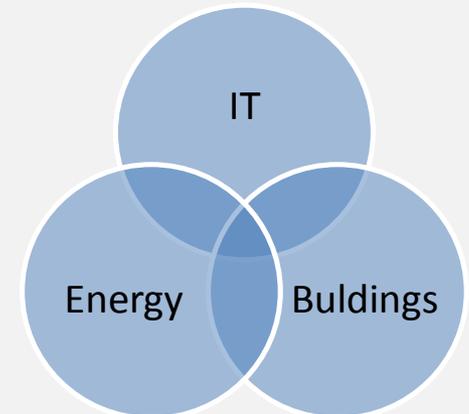
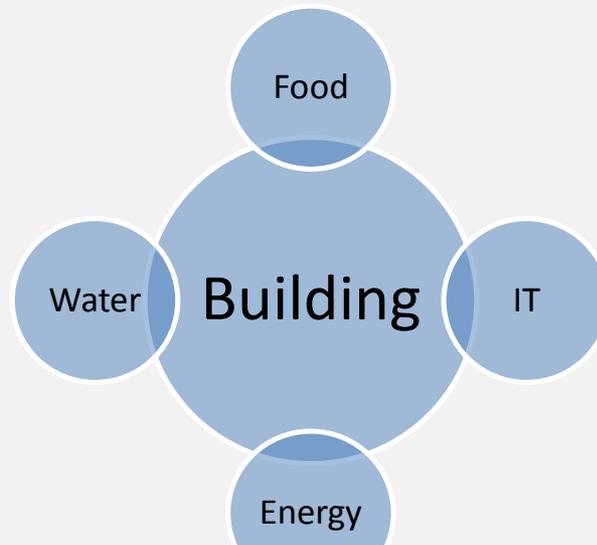
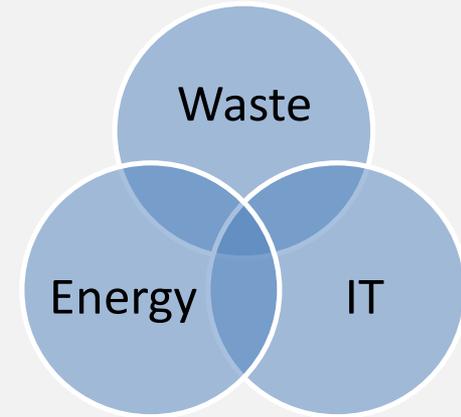
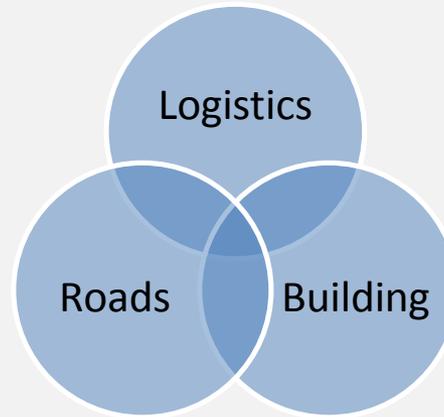
Proximity to other modes of transport

Rapid rail system

Energy performance



Intelligent through connections



Governance performance



Who...



**... has what mandate and powers
... and which means**



**... and cooperates with whom
... to fulfil which task**

„The city“ is no single actor



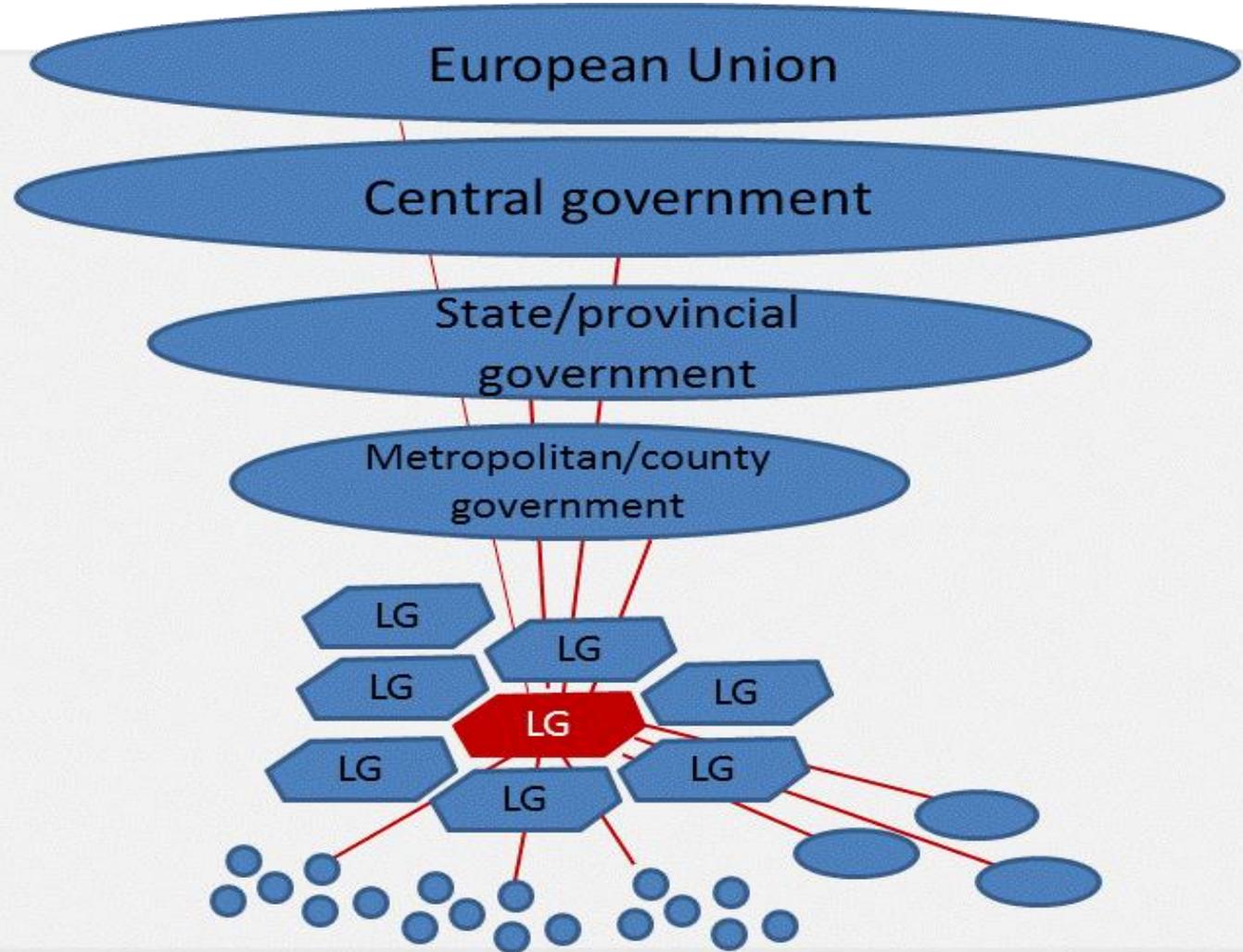
Fiction: City = Institution = Actor



31 municipalities
18 utilities
67 housing companies
8 power plants
125 fuel oil distributors
178 construction companies
870 kindergardens

3 million private households
1 provincial government
61,000 taxis
165 furniture stores
18 Internet provider
383 engineering firms
34 bus/tram operators
277 trucking companies
4 million car owners

Smart governance through connections



Factors of cities' performance



What's ok, what's needed?

Money

Projects

Technology

Policies

Know-how

Institutions

Financial
instruments

Planning
routines

**AREA
PERFORMANCE
ENHANCEMENT**



Needed: city leadership

Individual leadership:

(a) Tokyo

(b) Quezon

(c)...

Collective leadership and up-scaling of initiatives

(a) ICLEI and other networks

(b) World Mayors Council

(c) Mexico City Pact and Durban Adaptation Charter

City leadership: Tokyo

(A) CO2 Emissions Reduction Program (2000-)

- Voluntary CO2 Emission Reduction Plan to be submitted to Tokyo MPG, and disclosure of plan and results
- Results: average target level: 3-4% of the reduction = not ambitious enough
- TMG collects emission data of target sector which was used to up-grade their measures
- ⇒ Up-graded to Cap and Trade system

City leadership: Tokyo

⇒ Up-graded to Cap and Trade system

Target: same as above: approx. 1,340, 1% of all the business entities in Tokyo but 40% of all CO2 emissions from industrial and commercial sectors in Tokyo)

- Requirement of 6-8% of CO2 reduction in 2010-2014, 17% in 2015-2019

- Credit:

- Surplus reductions achieved by other targeted facilities

- CO2 reductions achieved by SME in Tokyo

- Renewable energy credits

- Results in 2009: Targeted facilities had planned to reduce their reductions by 10%. Approx. 59% of the facilities can be expected to comply with their reduction obligations

City leadership: Tokyo

(B) Green Building Program (2002-)

- Target: owners/developers of newly built buildings with over 5,000 m² total floor area
- Legal requirement:
 - follow TMG green building design guidelines (tailored to Tokyo and higher requirement than national standard)
 - submit building plans prior to building permission applications
 - disclosure of the plan, rating of the environment quality
- Results: more than 1,300 buildings with improved insulation and use of energy efficient technology and higher grade buildings increased

City leadership: Tokyo

Success factors:

- Strong leadership of Governor Ishihara to introduce Cap & Trade system, which has not yet been introduced at national level
- Stakeholder involvement and accurate data to convince business sector in order to introduce C & T system
- Advice and guidance by TMG staff
- More appropriate and tailor made than nation-wide unique standard

City leadership: Tokyo

Replication:

- 15 Japanese LGs require by their ordinance submission of the CO2 reduction plan to business sector, control and disclose the data
- Some prefectures near Tokyo introduced similar Cap & Trade system
- Interest shown by Chinese cities, States in Brazil, Singapore etc.

Recognition:

- TMG C&T got Most Groundbreaking Policy Award of World Green Building Council

City leadership: Quezon

Leadership example:

- Parks and open spaces development program

Initiator and implementation leader:

- City Mayor's Office through the Parks Development and Administration Department



**Mayor Herbert Bautista,
Former Mayor Feliciano Belmonte, Jr.**

City leadership: Quezon

Achievements:

- Since 2003 recovery and rehabilitation into parks of 111 public open spaces (i.e. 44% of such spaces)
- Establishment of biodiversity corridors to support wildlife habitats, exchange and migration between biodiversity areas
- Deterring informal settlers from occupying open spaces as dwelling areas; preventing individuals from using open spaces for personal commercial purposes.
- La Mesa Ecopark: venue for raising public awareness and for environmental and biodiversity education

Recognition:

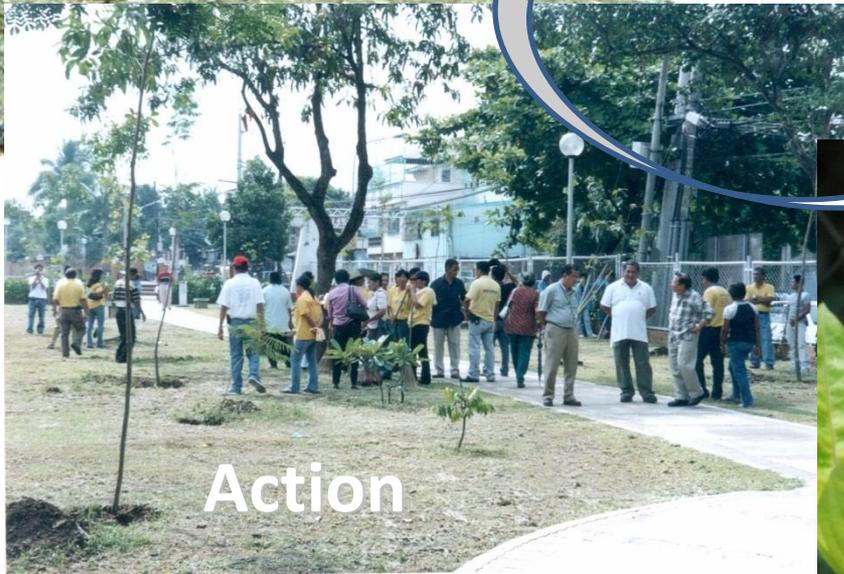
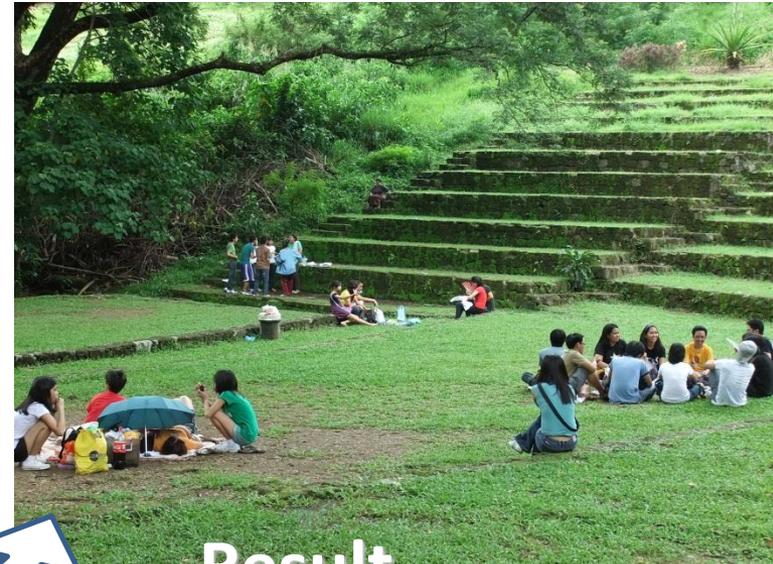
- City received Galing Pook award 2009

City leadership: Quezon

- **Success factors / lessons learned**

1. Leadership commitment. Strong support from previous Mayor was critical in getting program started. Current Mayor is a key advocate for the continuation and further development of the Parks Development Program
2. Involvement of city staff. Active involvement and continuity of city development council staff played crucial role in maintaining institutional memory and sustaining momentum
3. Development of a clear vision at the beginning of the process, shared by all stakeholders, is key to reaching consensus on operational issues, ensuring successful implementation and increasing the probability of achieving desired impacts.

City leadership: Quezon



City leadership: Ahmedabad

Bus Rapid Transit System

- Public Private Partnership (PPP): Public sector represented by Ahmedabad Janmarg Limited (AJL), a Special Purpose Vehicle, chaired by the Municipal Commissioner
- Role of AJL: planning of services, selection of operators, monitoring of service quality, fare revisions, coordination with relevant departments and future BRTS expansion plan.
- System with new technological applications in operation for one year. 90,000 passengers daily. Deployment of 45 diesel buses with commercial speeds greater than 24 kms per hour.



City leadership: Ahmedabad

Awards/Recognition

- Awarded by Ministry of Urban Development as Best Mass Transit Project under JNNURM in the year 2008-2009
- 2010 Sustainable Transport Award for visionary achievements in sustainable transportation and urban livability
- 2011, Daring Ambition Award and Knowledge & Research Award at UITP World Congress in Dubai

Leadership

Project initiated under then Municipal Commissioner Mr I.P. Gautam (current Municipal Commissioner is Dr GuruPrasad Mahapatra) and championed by Mayor Shri Asit Ravindraprasad Vora

Collective leadership: ICLEI



12 Mega-cities



100 Super-cities



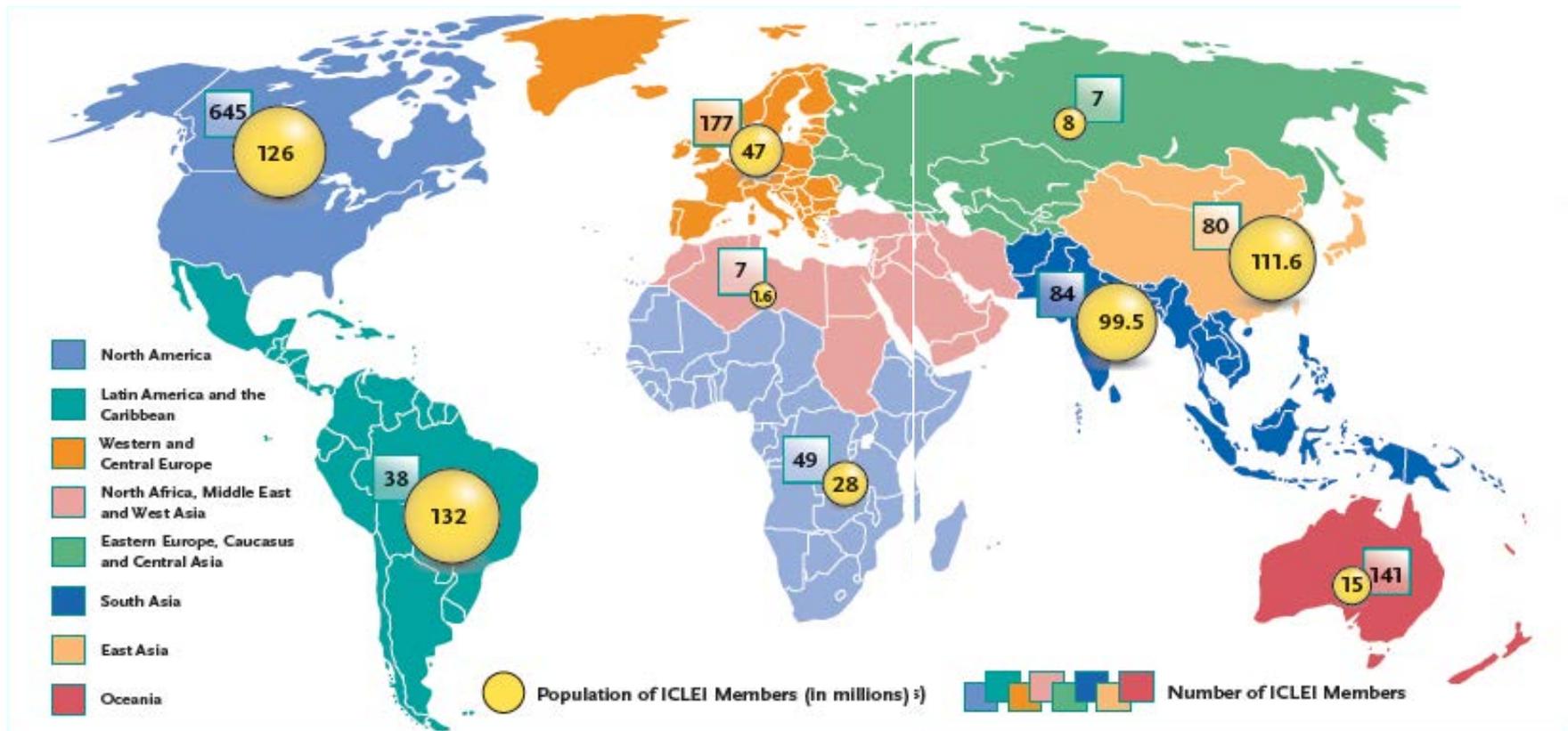
450 Large cities and urban regions



450 Small and medium-sized cities & towns

Collective leadership: ICLEI

Membership: 1,010 local governments in 83 countries



Collective leadership: ICLEI

**Connecting
leaders**



**Accelerating
action**



**Gateway
to solutions**



Collective leadership: World Mayors Council



World Mayors
Council on
Climate Change



Collective leadership: World Mayors Council



- 2005 – Founded at UNFCCC COP11 in Montreal, Canada
- 2007 - Kyoto Climate Declaration released.
 - Local Government Climate Roadmap established.
 - World Mayors and Local Governments Climate Protection Agreement opened for signature.
- 2009 - Bonn Center for Local Climate Action and Reporting (carbonn) launched
 - Copenhagen World Catalogue of Local Climate Commitments launched
- 2010 - First Mayors Adaptation Forum convened in Bonn adopting the 2010 Bonn Declaration of Mayors
 - World Mayors Summit on Climate in Mexico City,
 - Global Cities Covenant on Climate (Mexico City Pact) and carbonn Cities Climate Registry (cCCR).
- 2011 - Durban Adaptation Charter adopted
 - Mexico City Pact and carbonn Cities Climate Registry (cCCR) Annual Reports released.



Collective leadership: Mexico City Pact

- 1. Reduce local greenhouse gas emissions**
- 2. Adopt and implement local climate mitigation measures**
- 3. Develop local adaptation strategies**
- 4. Register emission inventories, commitments, climate mitigation and adaptation measures & actions in a measurable, reportable and verifiable (MRV) manner**
- 5. Seek creation of mechanisms allowing direct access to international funding for local climate actions**
- 6. Establish a Global Cities Covenant on Climate Secretariat**
- 7. Promote involvement of civil society in the fight against climate change**
- 8. Advocate, and seek partnerships with multilateral institutions and national governments**
- 9. Promote partnerships and city-to-city cooperation**
- 10. Spread the word**

Collective leadership: Mexico City Pact



carbonn[®] Cities Climate Registry Annual Report May 2012



The 2011 cCCR Annual Report was launched at the Durban Climate Conference in November 2011 as an initial step of local governments to collectively share with the global climate community their measurable, reportable and verifiable climate action. The May 2012 Update* summarizes encouraging progress achieved in data compilation, new partnerships and future vision that have been developed over the past 6 months.

51 cities
19 countries
83 million inhabitants
447 million tCO₂e/yr
90 GHG inventories
107 commitments
555 actions

1 GLOBAL GOAL

Nov 2011

164 cities
21 countries
170 million inhabitants
1195 million tCO₂e/yr
270 GHG inventories
319 commitments
680 actions

1 GLOBAL GOAL

May 2012

“The Mexico City Pact and the carbonn Cities Climate Registry will continue to demonstrate achievements of local action regardless of whether nations agree on a global deal.”

Marcelo Ebrard, Mayor of Mexico City and Chair of World Mayors Council on Climate Change

* Nuevo informe de datos preparado por city climateaction (30 de April 2012).