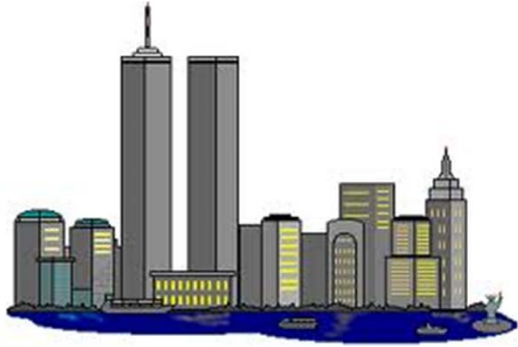




Realisation of Low Carbon Cities International Cooperation

**Gino Van Begin
ICLEI – Local Governments for Sustainability**

**International Forum on the “FutureCity” Initiative
Tokyo, Japan, 21 February 2012**

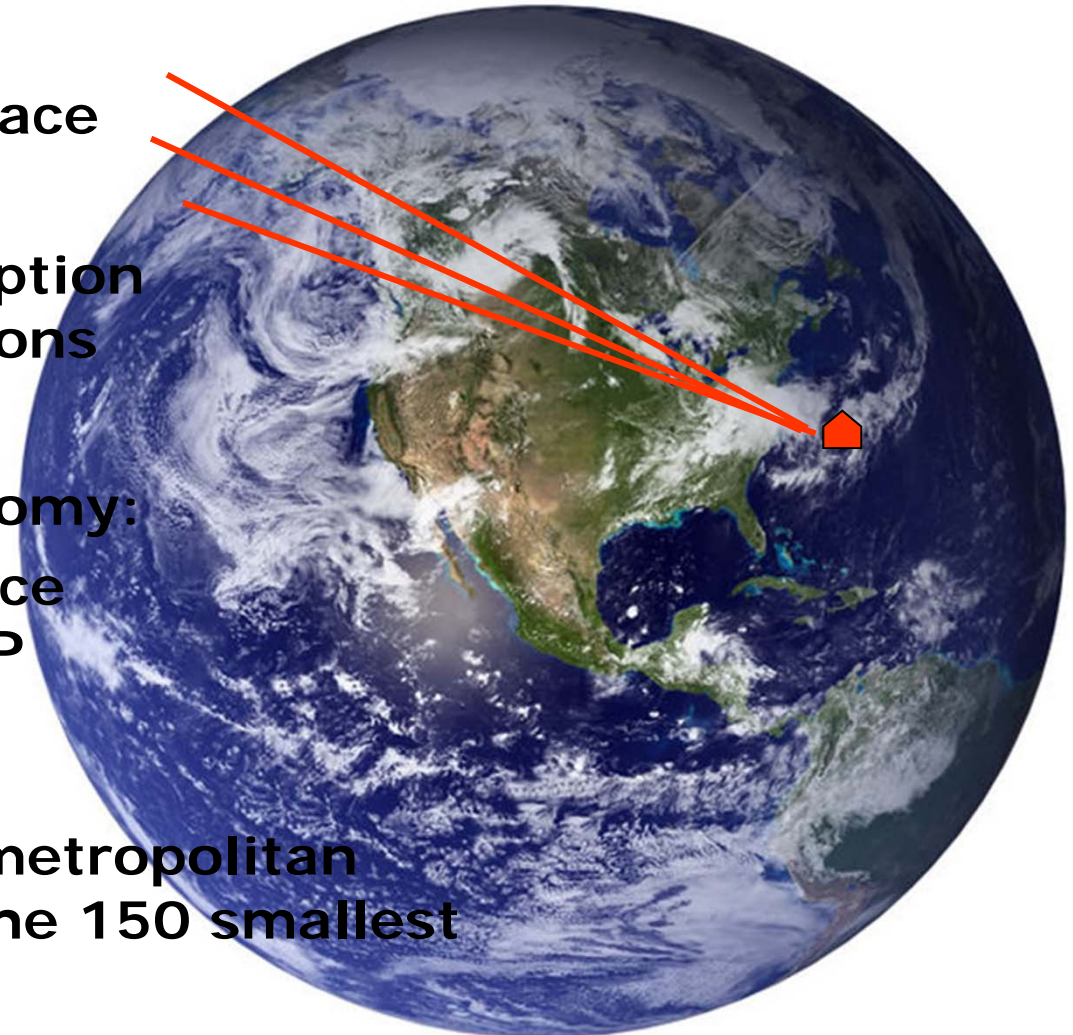


Cities on the globe

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 Tokyo metropolitan
is larger than each of the 150 smallest
UN member states



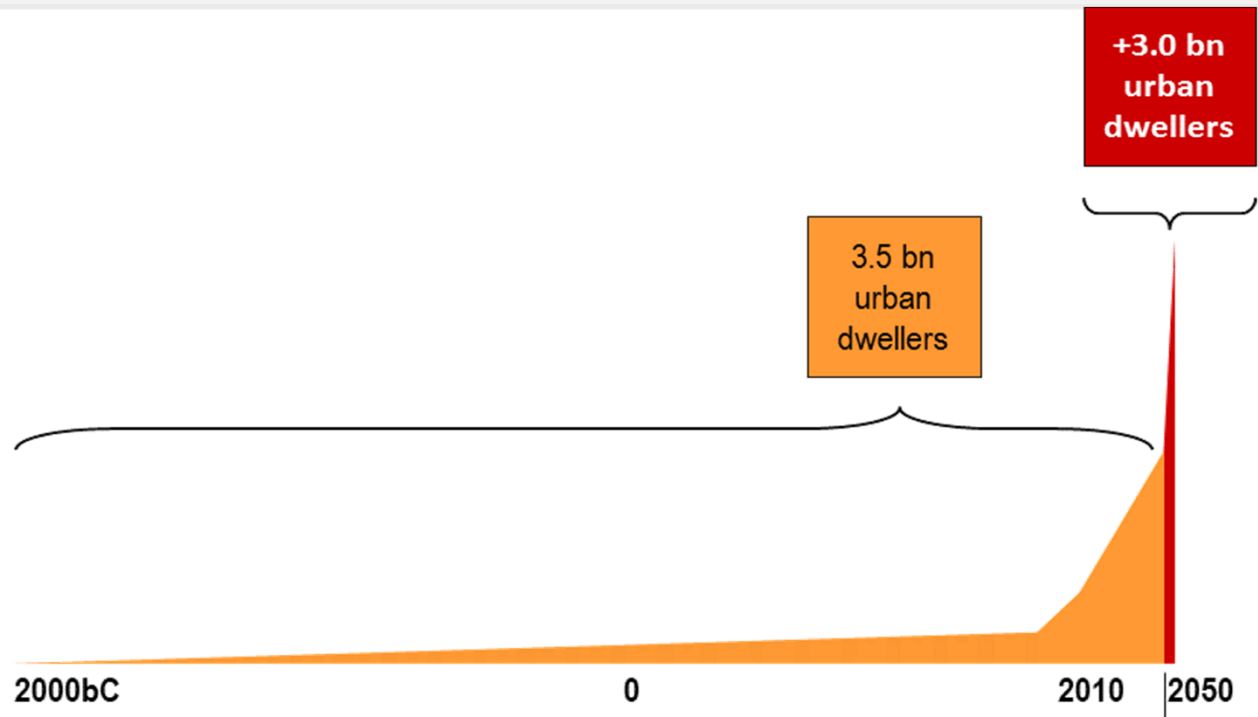


World population growth, urbanization

Unbroken global trends

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

The 1:100 challenge





Cities: rapid and radical transformation towards:

- **Eco-efficiency, low-carbon**
- **Climate- and disaster-resilience**
- **Green urban economy**
- **Low risk**
- **Healthy & happy community**



Energy Use

Planning paradigm:

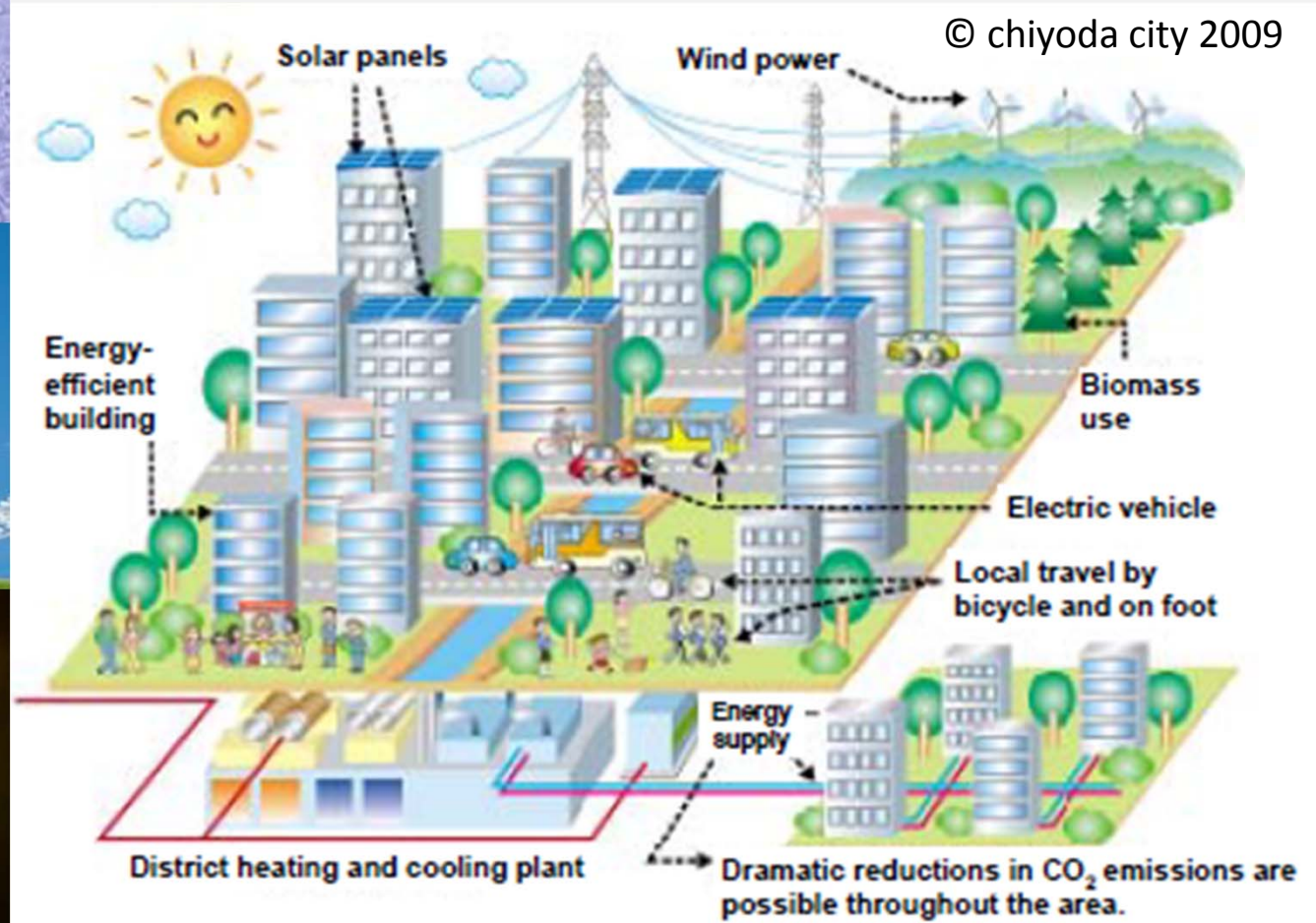
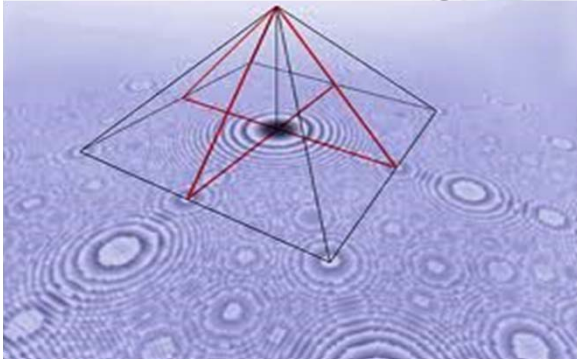
**Priority to energy security:
efficiency, renewable energy and low-
carbon, low-risk sources**

- 1. Avoiding energy use,
reducing needs, saving energy**
- 2. Energy-efficiency in consumption**
- 3. Local renewable energy supply**
- 4. Local energy from biomass, waste etc.**
- 5. Renewable energy via regional/
national grid**
- 6. Minimized use of coal and oil**
- 7. No excessive risks, no nuclear energy**



Energy Supply

Planning paradigm: Decentralized, local supply





Transport



Planning paradigm:

Priority to EcoMobility and integration of transport modes



1. Walking (pedestrians)
2. Bicycles, other non-motorized vehicles
3. Light electric vehicles
4. Public transport
(trains, trams, buses, taxis, people mover, ...)
5. Shared cars
6. Mobility management





Materials



Planning paradigm:
Decouple human well-being from
material through-put



1. Minimize material through-put
(reduce)
2. Re-use
3. Cascaded downcycling, waste to
energy, recovery of nutrients
4. Treat and dispose waste safely





Management



Management principle:

Measure, set targets, secure political commitment, implement, monitor, evaluate

Involve users in design

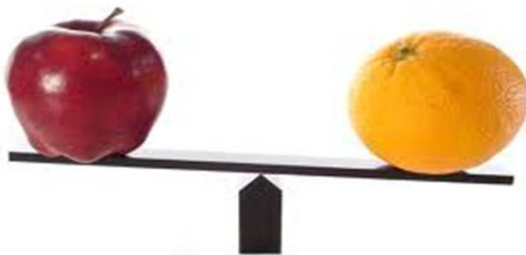


Guidelines

Indicators and tools

Measurement

Reporting



Benchmarking, comparing
Sharing successes

The Network

1,200 members in 70 countries

100 Green Drivers

XXL - 11 megacities of over 10 million

XL - 12 super cities of 5-10 million

L - 90 large cities of 1-5 million

Green Innovators

M - 460 cities of 100,000 - 1 million

Green Inventors

S - 650 towns up to 100,000





Cities' 8 goals ICLEI's 8 agendas



- **Integrated sustainability policy & planning**
- **Green urban economy**
- **Green infrastructure**
- **Low-carbon and climate-neutral city**
- **Disaster- and climate-resilient city**
- **Resource-efficient city**
- **Bio-diverse city**
- **Healthy & happy city**



Example: Low-carbon city

Online service
for urban ghg
emissions
accounting



HEAT

HARMONIZED EMISSIONS ANALYSIS TOOL



Center providing services:

- Cities Climate Registry
- Standards and tools
- Capacity-building and training



Global registry of cities' climate
targets, actions and performance –
measurable, reportable, verifiable



Thank you

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