

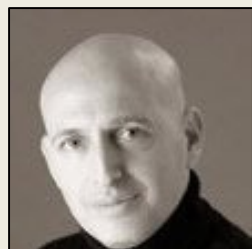


EIP Water

Boosting opportunities – Innovating water



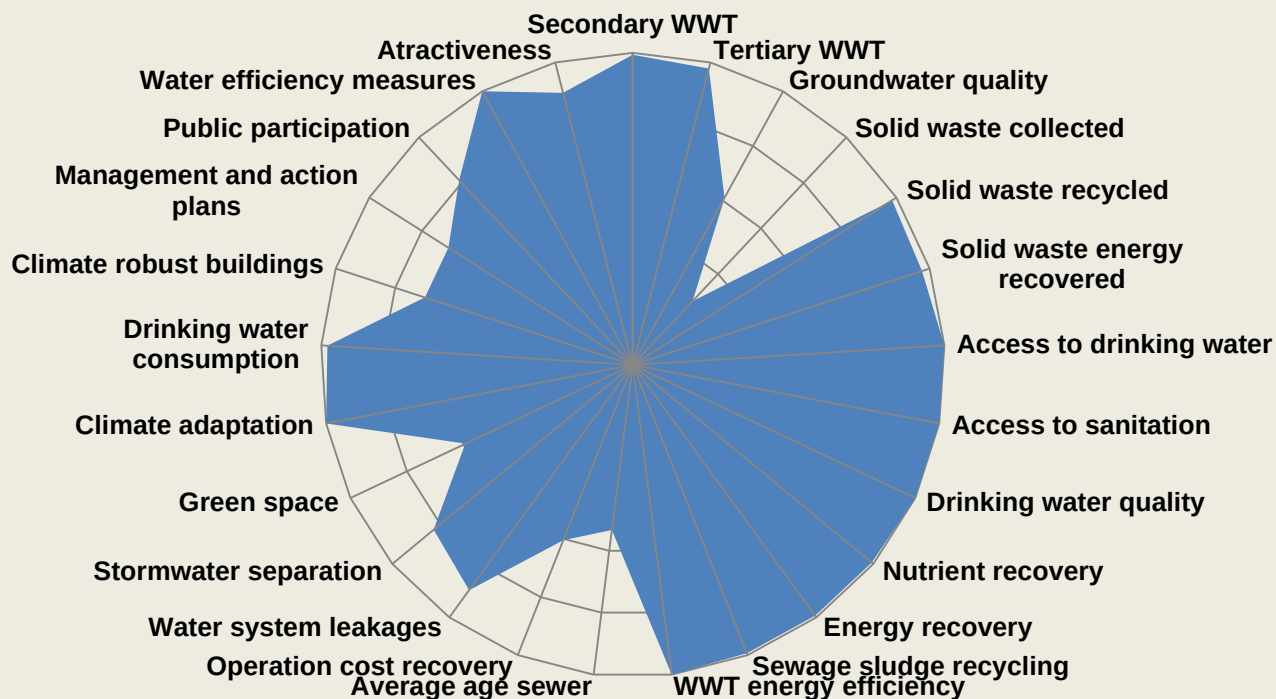
Kees van Leeuwen



Richard Elelman

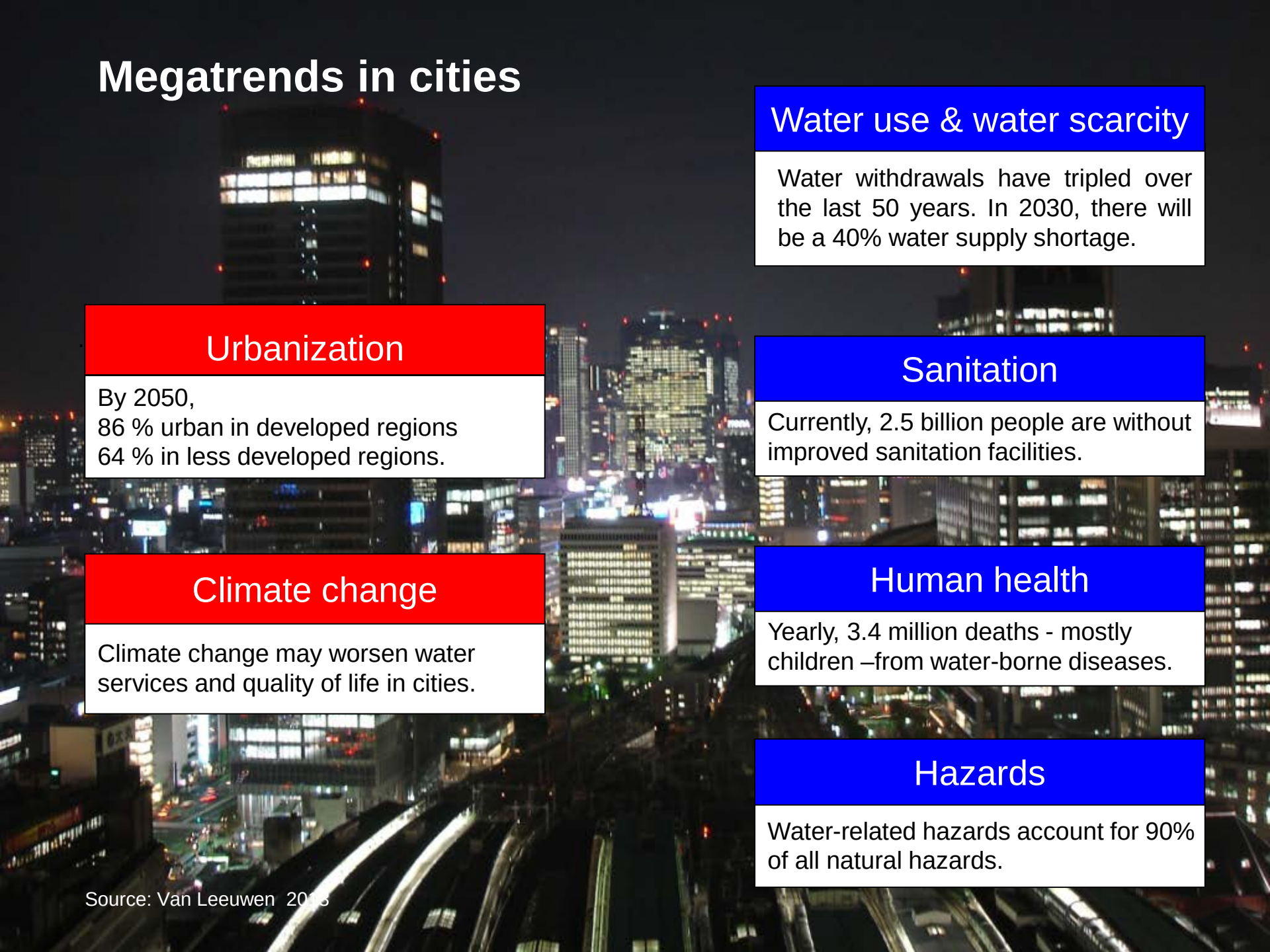


Stef Koop



CITY BLUEPRINTS

Megatrends in cities



Urbanization

By 2050,
86 % urban in developed regions
64 % in less developed regions.

Climate change

Climate change may worsen water services and quality of life in cities.

Water use & water scarcity

Water withdrawals have tripled over the last 50 years. In 2030, there will be a 40% water supply shortage.

Sanitation

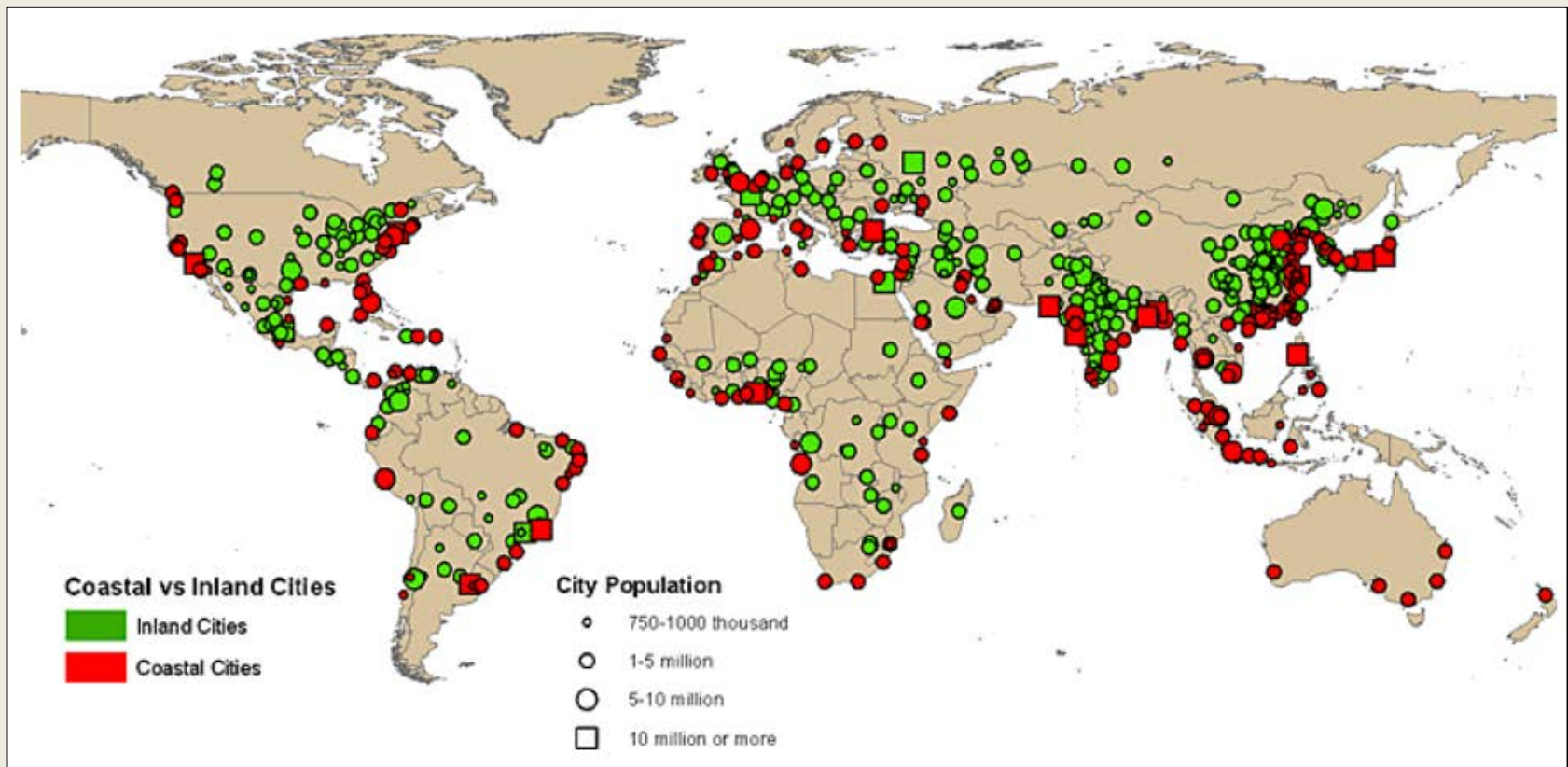
Currently, 2.5 billion people are without improved sanitation facilities.

Human health

Yearly, 3.4 million deaths - mostly children –from water-borne diseases.

Hazards

Water-related hazards account for 90% of all natural hazards.



Urban heat islands



Flooding



Water scarcity



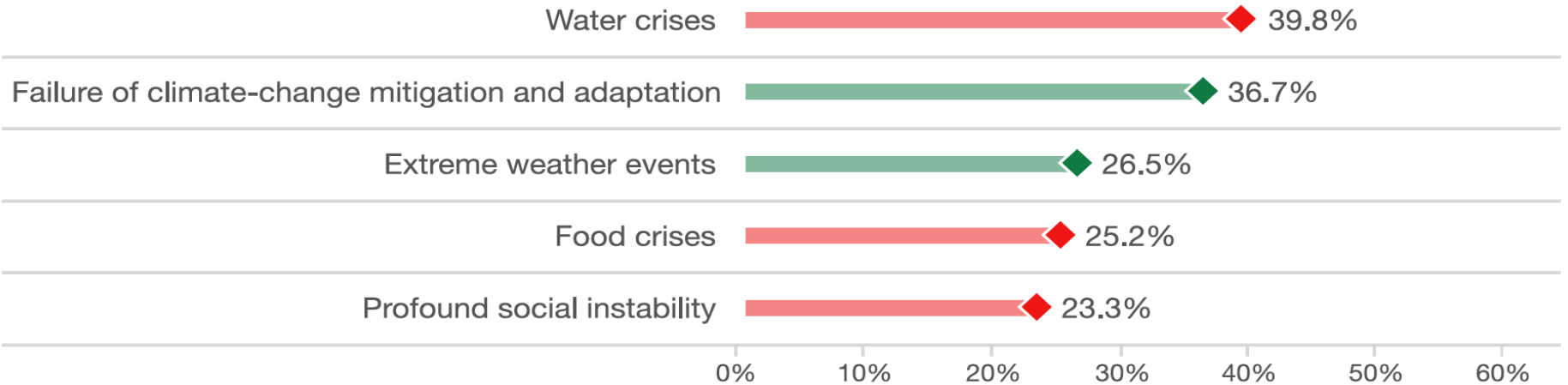
Water pollution



CITY BLUEPRINTS

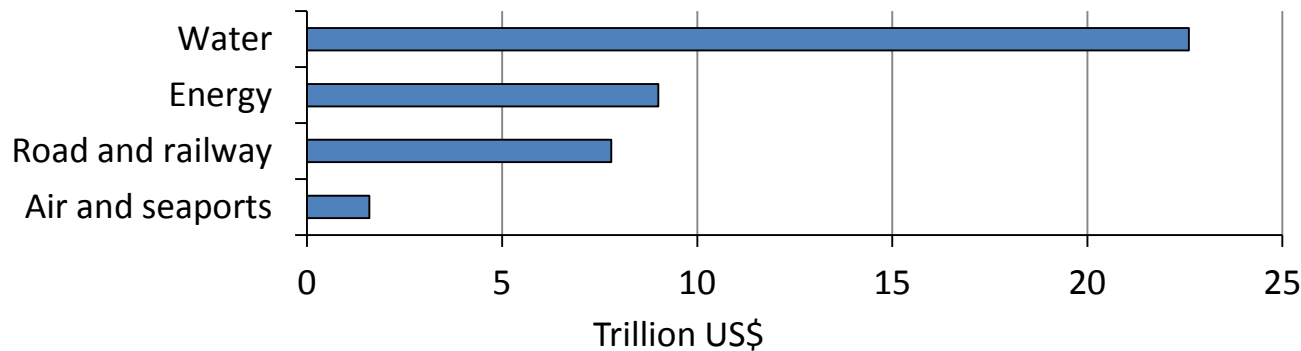
EIP Water Action Group
Pooling resources – Innovating water

For the next 10 years



World Economic Forum, 2015

41 trillion (10¹²) US\$ infrastructure expense up to 2025



UNEP, 2013

CLIMATE CHANGE MITIGATION & ADAPTATION

Cost of Floods in EU (IIASA 2014):

€ 4.9 billion a year on average from 2000-2012 and € 23.5 billion by 2050

→ damage per year will increase 5 times

Cost of Katrina (USA):

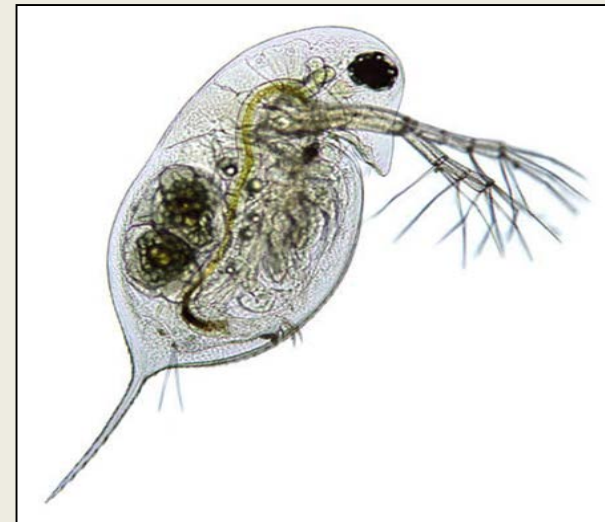
† 1,836 and US\$ 81 billion

Copenhagen: Climate adaptation savings for the next 100 years : 2.6 - 3.2 billion.

COSTS of INACTION: Benefits of Climate Change Mitigation and Adaptation are beneficial for cities. **Cities need to be prepared!**

GENERATION TIMES OF SOME 'SPECIES'

Species	Generation time
Bacteria	≈ 0.1 d
Algae (<i>Chlorella sp.</i>)	≈ 1 d
Waterfleas (<i>Daphnia sp.</i>)	≈ 10 d
Snails (<i>Lymnaea sp.</i>)	≈ 100 d
Rats	≈ 1 y
Politicians	≈ 5 y
Man	≈ 25 y
Cities	>100 y



The Journey of a Thousand Miles Begins with One Step (Lao Tzu)



This is true, however,.....

1) It starts with the orientation where we are

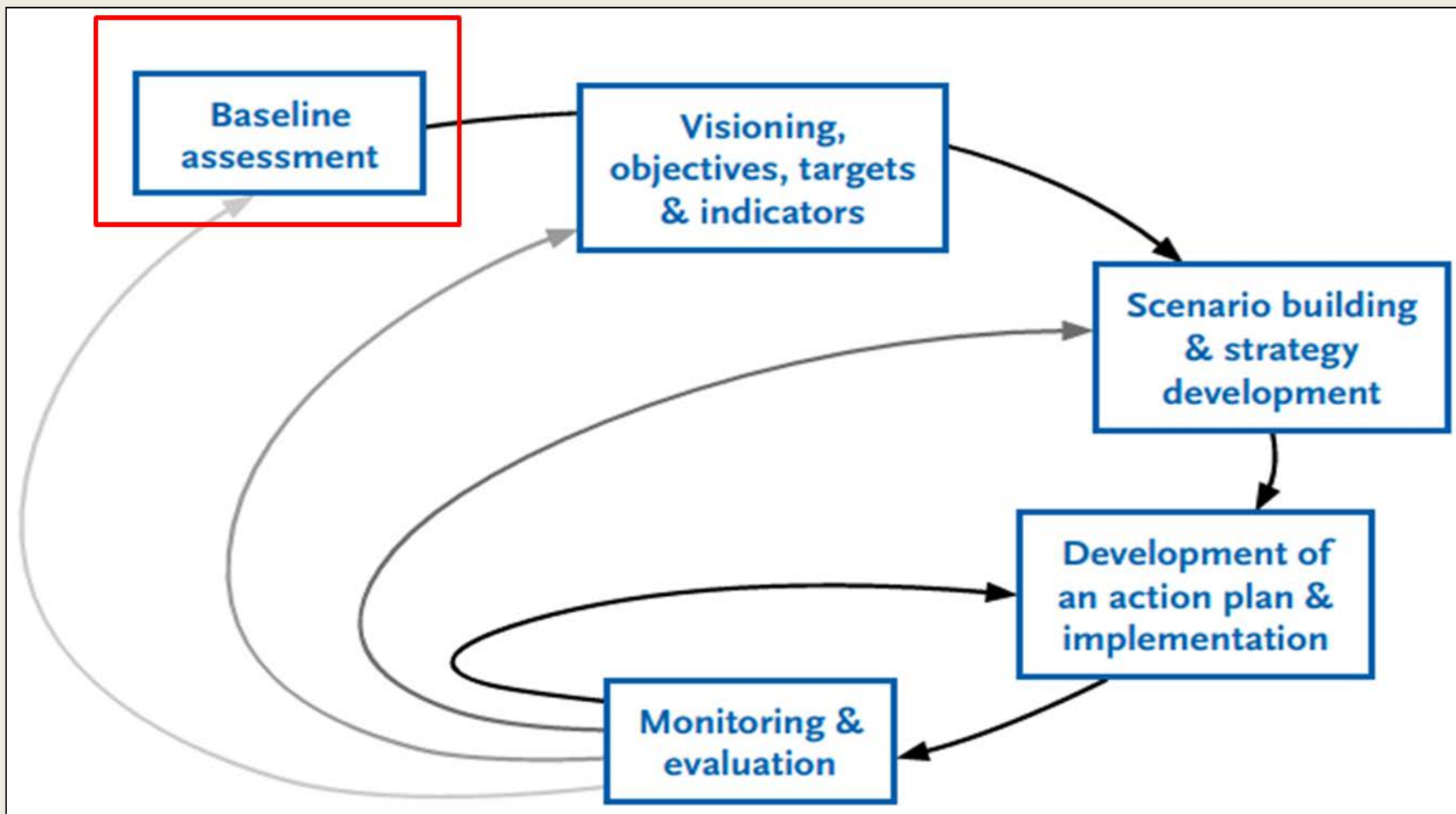
(City Blueprint)

2) ...and where we want to go

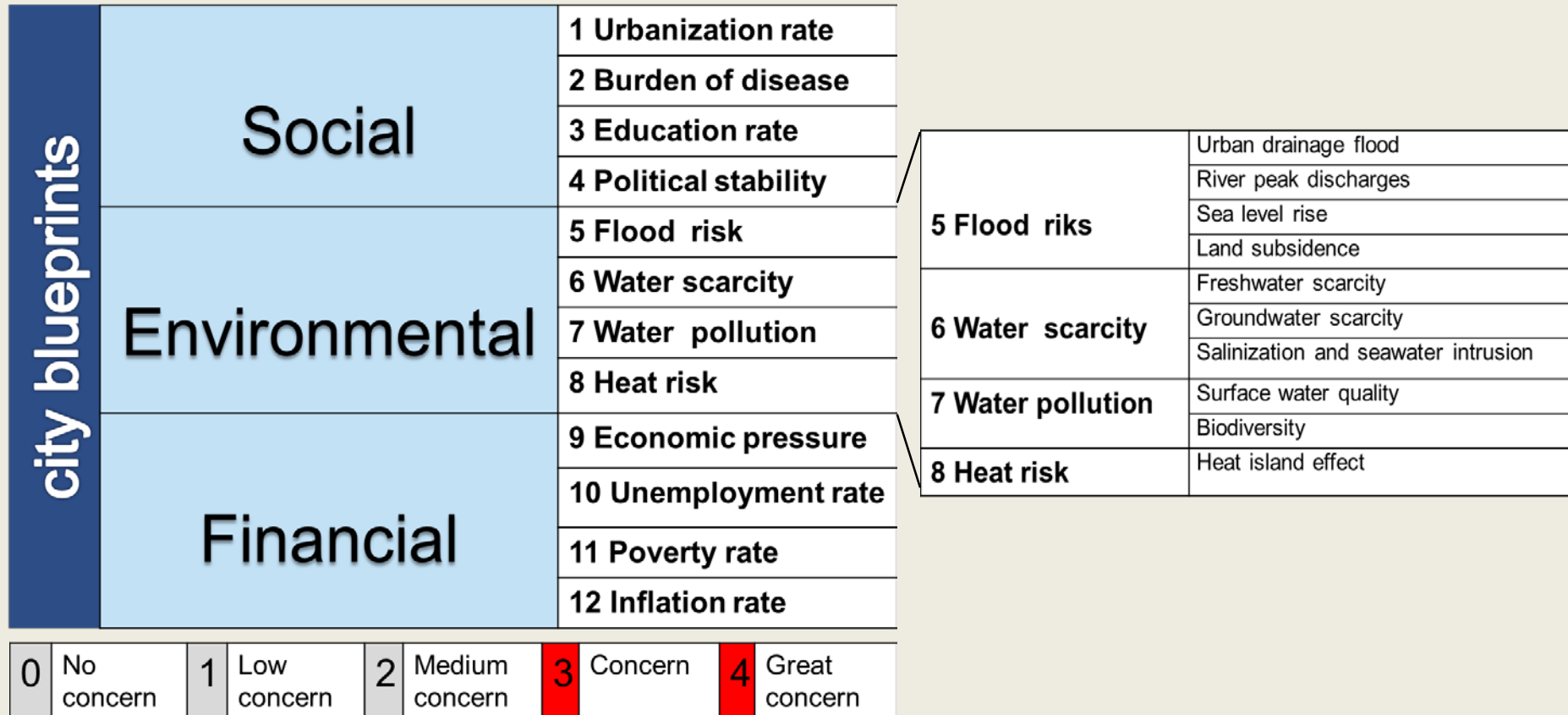
(European Urban Agenda)

3) ...and how to walk; SMART implementation

(Tailor-made roadmap for each city with a focus on win-wins (co-benefits))



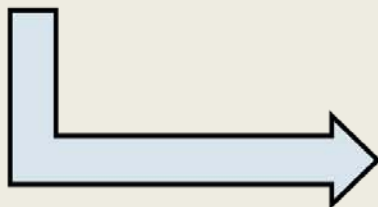
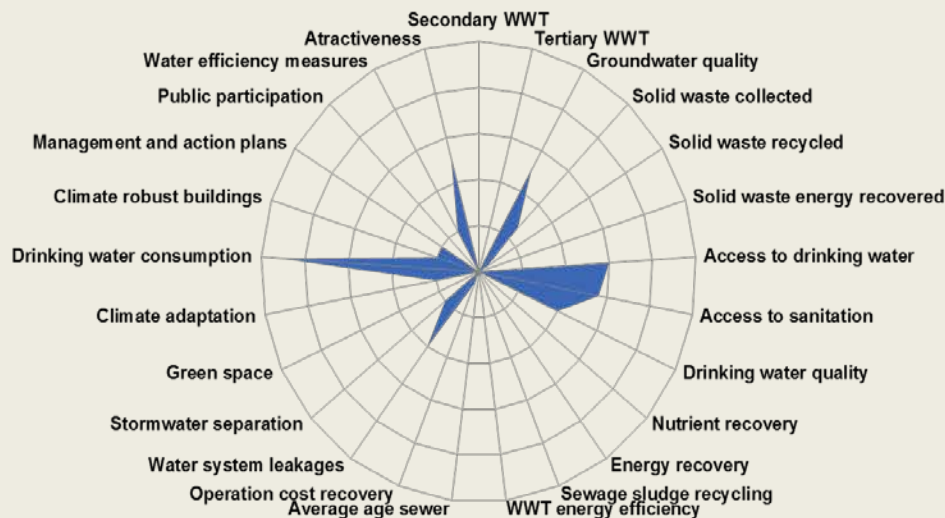
Trends and pressures framework



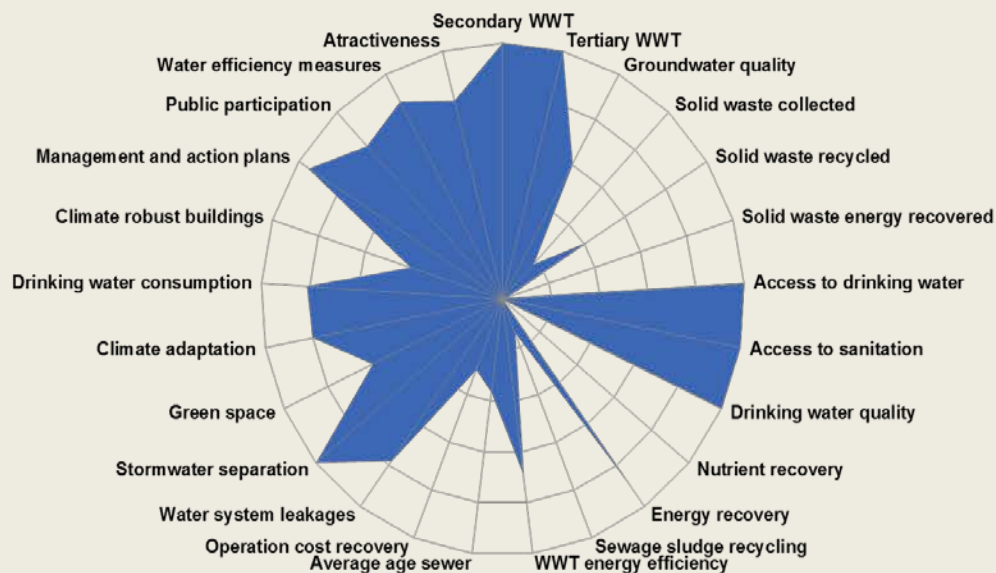
City Blueprint performance framework

Goal	Baseline assessment of the sustainability of Urban Water Resources Management
Indicators	Twenty-five indicators divided over seven categories: 1. Water quality 2. Solid waste treatment 3. Basic water services 4. Wastewater treatment 5. Infrastructure 6. Climate robustness 7. Governance
Data	Public data or data provided by the (waste) water utilities and cities based on a questionnaire
Scores	0 (concern) to 10 (no concern)
BCI	Blue City Index, the geometric mean of 25 indicators which varies from 0 to 10
Stakeholders	Water utility, water board, city council, companies, NGOs, etc.
Process	Interactive with all stakeholders involved early on in the process

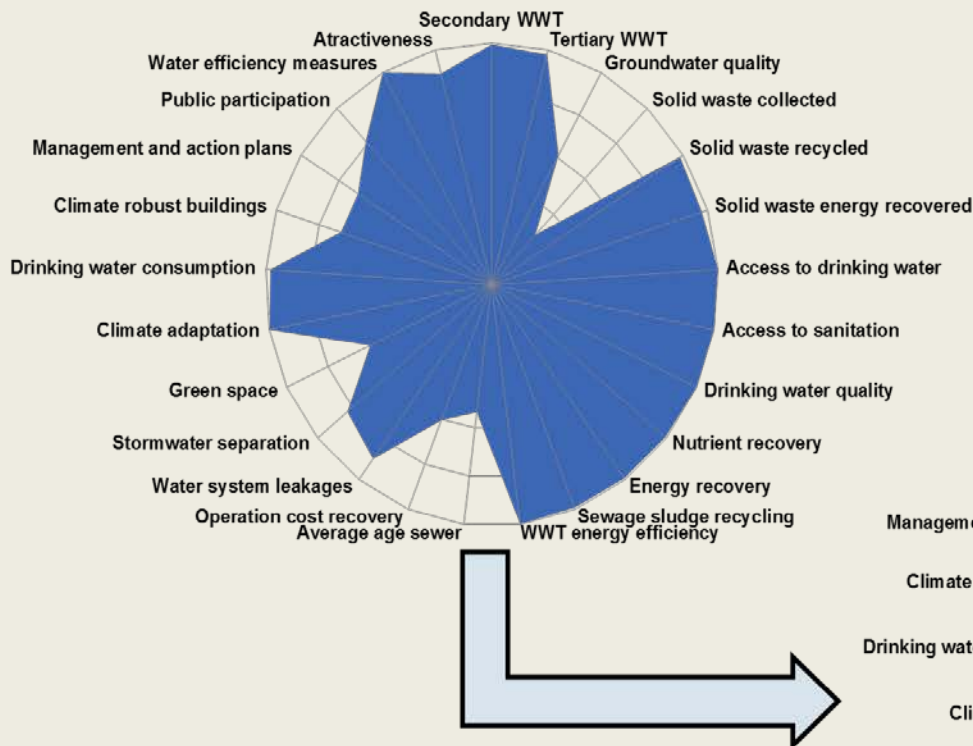
Dar es Salaam BCI: 1.3



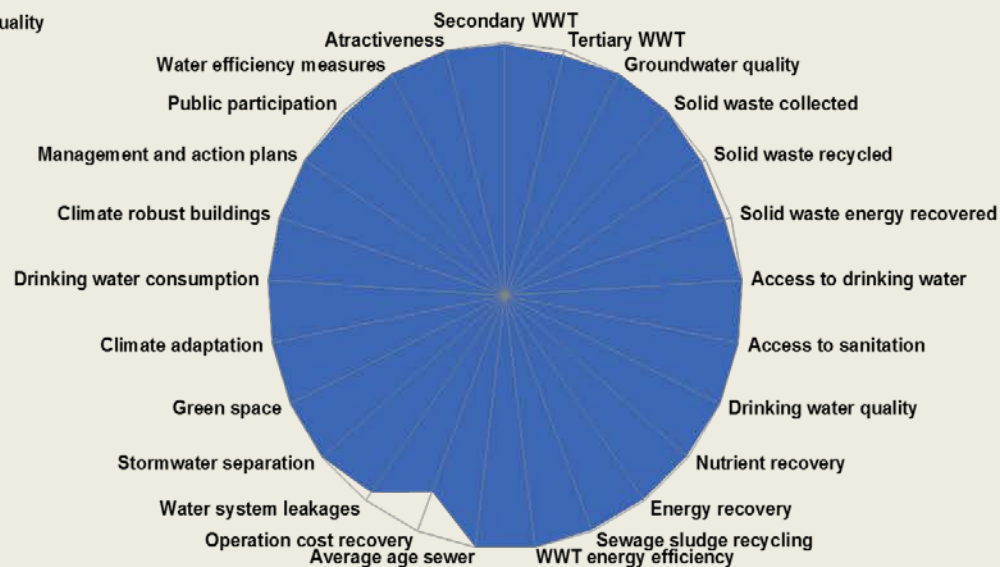
Melbourne BCI: 5.4



Amsterdam BCI: 8.3

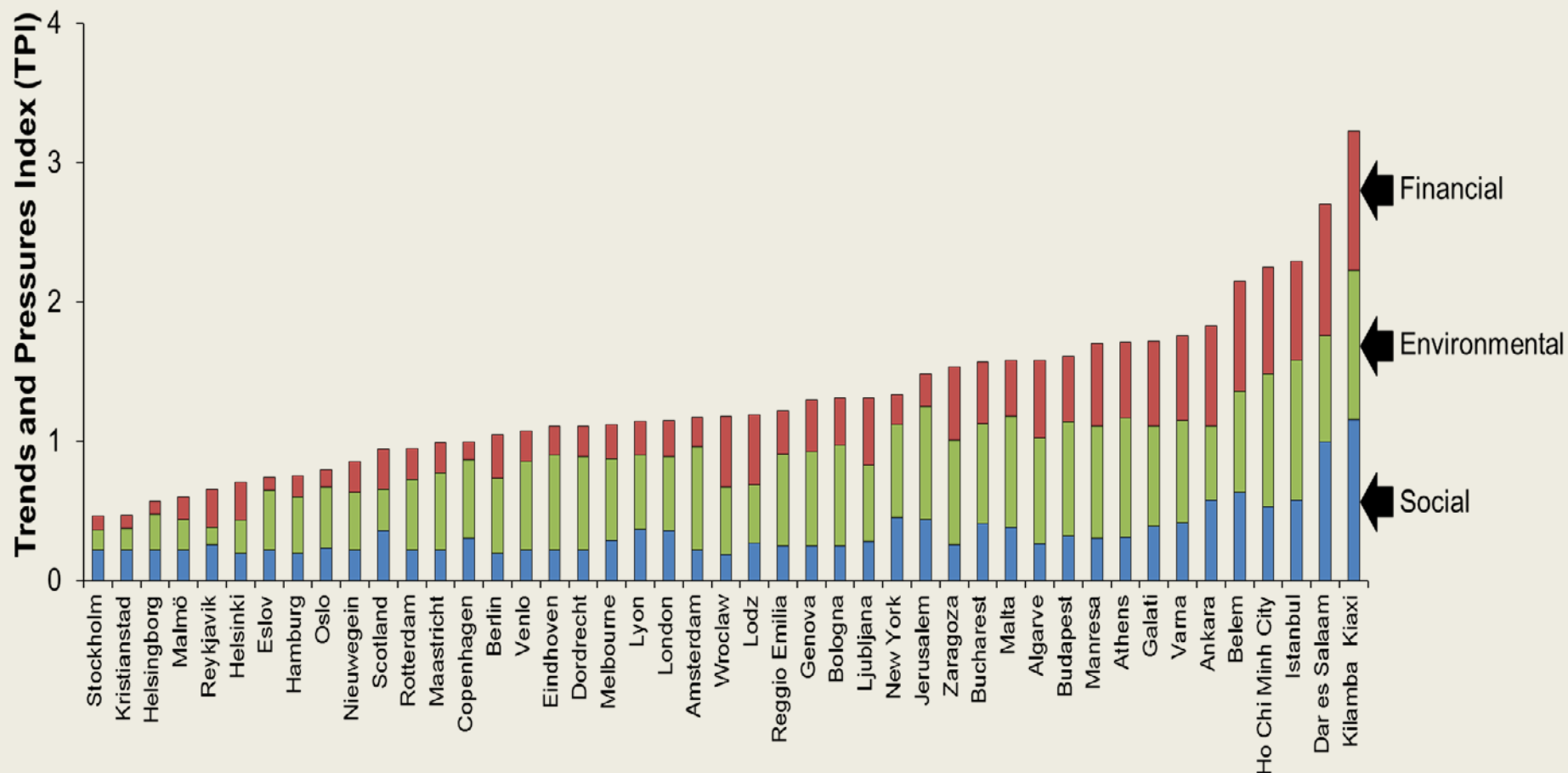


Collaboration between cities matters!

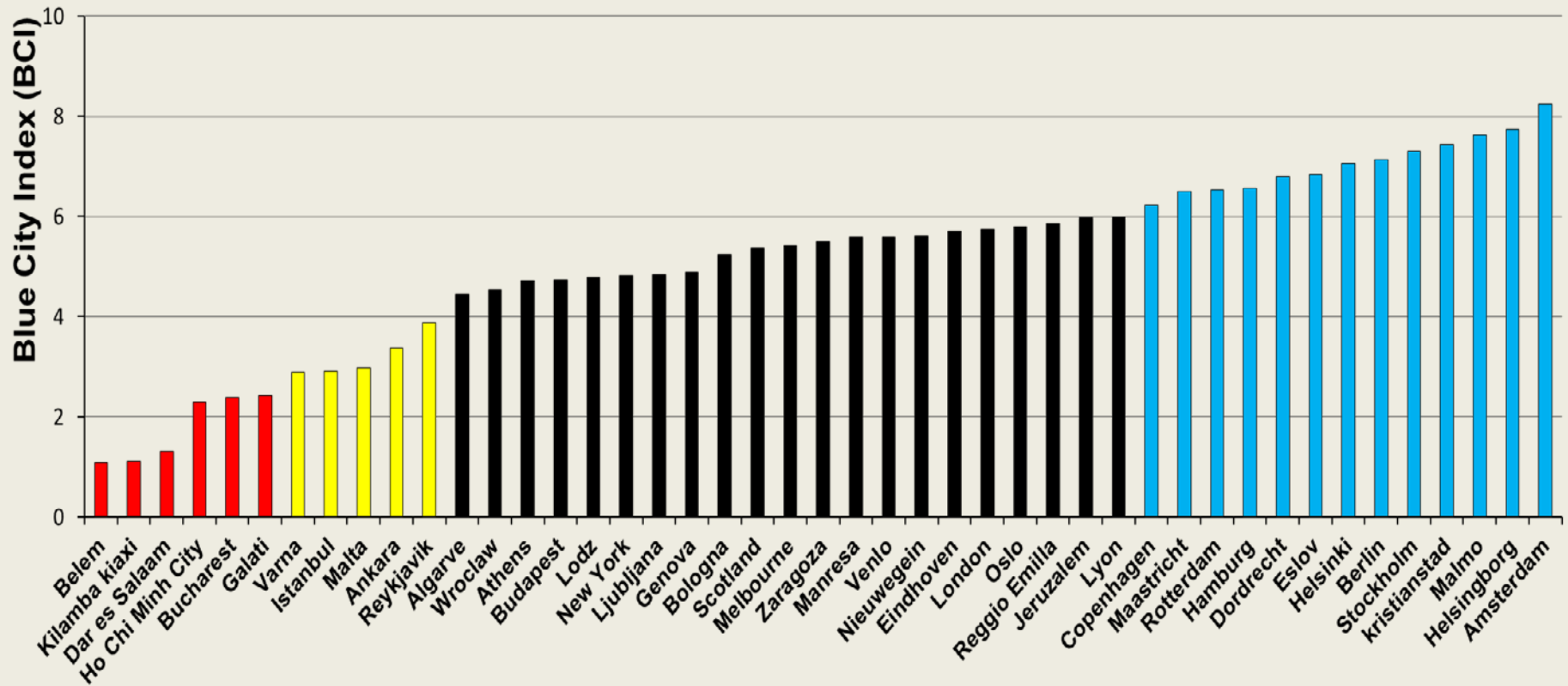


The best scores for each indicator of 45 cities

Trends and Pressures Index



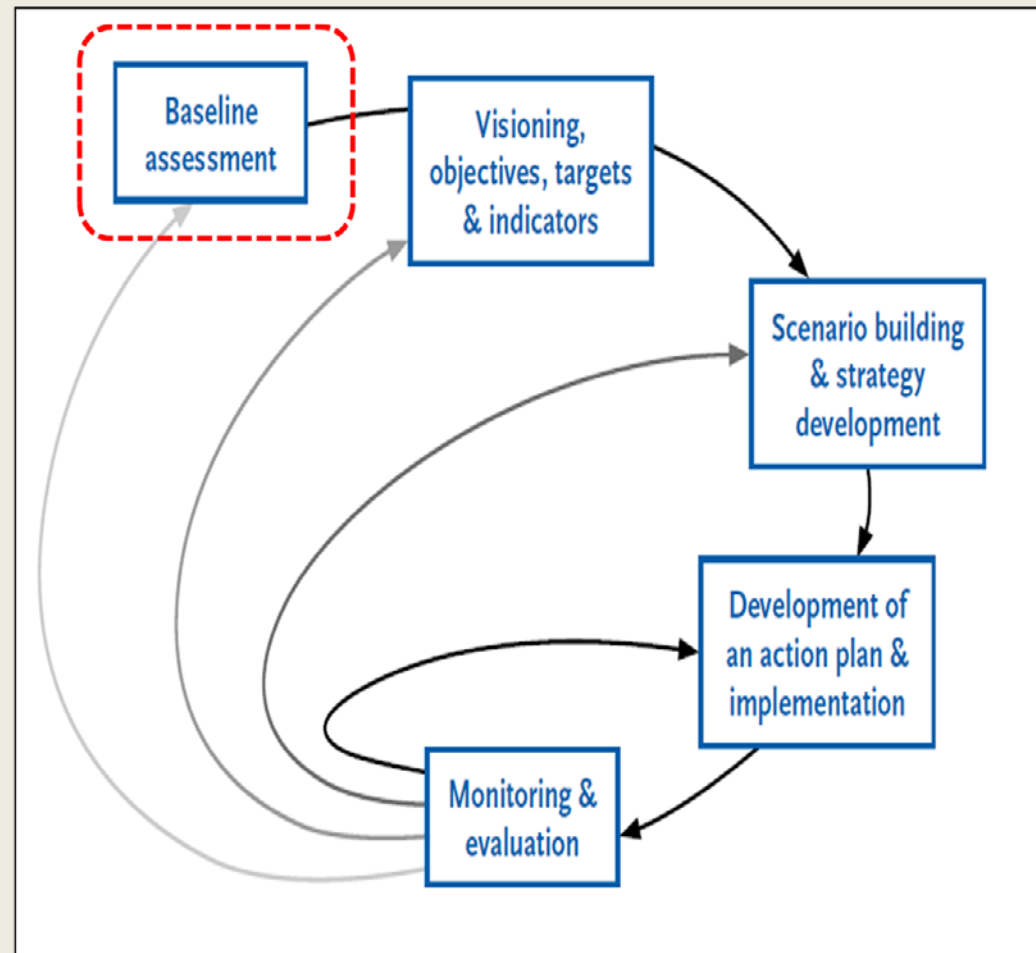
Blue City Index (BCI)

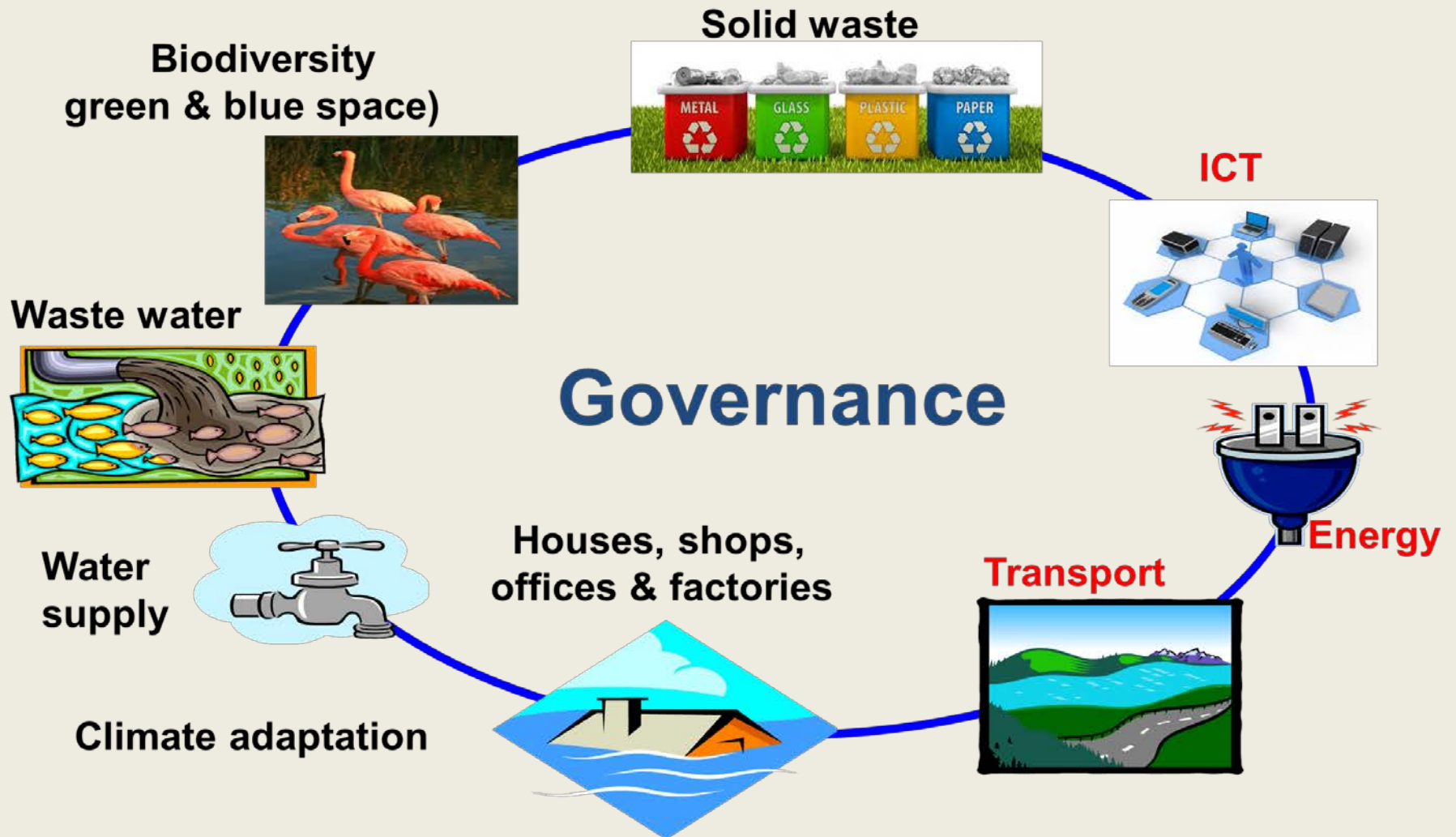


Cities need a long-term vision and strategy

Cities need to start investing in adaptation measures based on a **long-term vision and strategy** and by sharing best practices (Van Leeuwen, 2014).

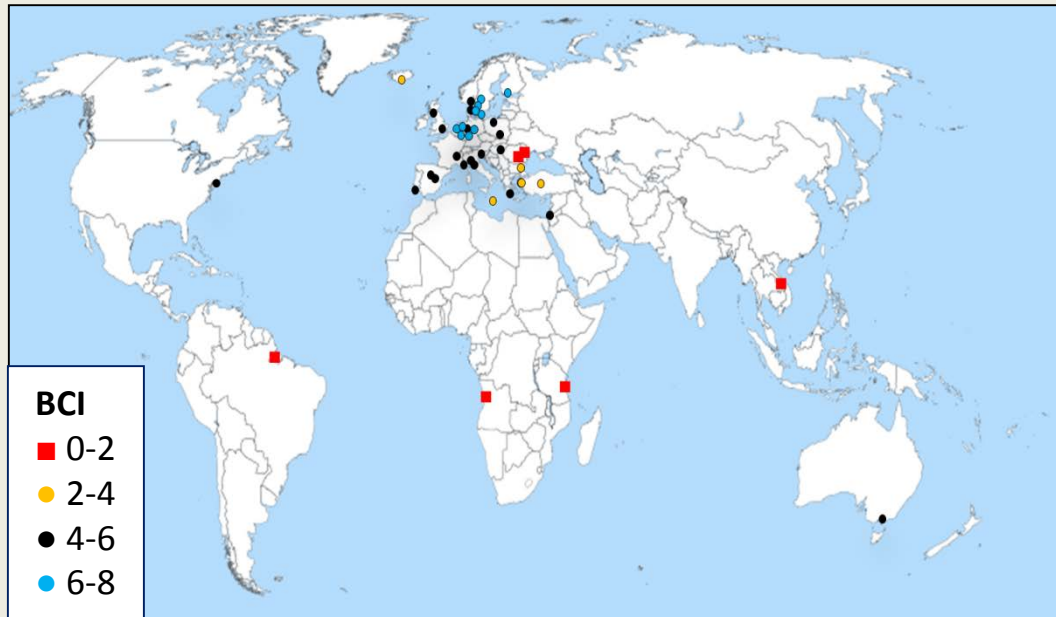
The longer political leaders wait, the more expensive adaptation will become and the danger to citizens and the economy will increase (Jacqueline McGlade, former EEA Executive Director).





City Blueprint successes

- EIP-Water
- BlueSCities
- POWER
- Network H2O
- Declaration of Dubrovnik
- Habitat III



CITY BLUEPRINTS

EIP Water Action Group
Pooling resources – Innovating water

EIP-water Help or hindrance?

- HELP to get water on the EU SMART City Agenda → BlueSCities
- Inclusion of East-European Cities (Ciprian Nanu)
- Further expansion of cities in Middle-East (Israel, Jordan)
- AG needs further help from EIP to include North-African cities
- AG needs further (financial) support to collaborate (with OECD, UN-Habitat, and City platforms) to do 100-150 cities

Lessons learnt

- Simplicity in communication is key to bridge science and policy
- Water is a governance challenge
- Transitions towards water-wise cities require **much** more (financial) support
- Proactive cities are actually reactive cities after a big accident
Amsterdam (1953), New Orleans (2005), Copenhagen (2011), New York (2012)



New York 2012



Copenhagen 2011

Improving Implementation Capacities of Cities and Regions by sharing best practices on Urban Water Cycle Services



FURTHER INFORMATION

1. City Blueprint website of EIP Water: http://www.eip-water.eu/City_Blueprints
2. City Blueprint website of Watershare®: <http://www.watershare.eu/>
3. Netwerch2o: <http://www.netwerch2o.eu/>
4. BlueSCities: <http://www.bluescities.eu/>

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