UNITED NATIONS
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UNECE HOUSING AND LAND MANAGEMENT

UNITED SMART CITIES:
Smart urban solutions for transition and developing countries

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Outline

- Urbanization in the ECE region: statistics
- Smart city: definition
- United Smart Cities project: objectives, outcomes, pilot cities
- Methodology: indicators
- Conclusions

Urbanization in UNECE region

Urbanization

1900 | 2 out of every 10 people lived in an urban area

1990 | 4 out of every 10 people lived in an urban area

2010 | 5 out of every 10 people lived in an urban area

2030 | 6 out of every 10 people will live in an urban area

2050 | 7 out of every 10 people will live in an urban area

Our definition: A Smart City for all

SDG: Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable

Our «smart city» should:

- ensure access to adequate and affordable **housing**
- provide access to safe, affordable and sustainable **transport** systems
- enhance inclusive and sustainable **urbanization**
- safeguard the world's cultural and natural **heritage**
- reduce the number of deaths, displacement and losses caused by **disasters**
- reduce their **environmental impact**
- provide universal access to safe and accessible green and public **spaces**
- support positive economic, social and environmental links between **urban and rural areas**
- integrate innovative technologies and **ICT** within the different sectors

UNECE smart cities initiative: Summary of activities

«UNITED SMART CITIES: smart urban solutions for transition and developing countries

Launched in May 2014

Phase 1

- Methodology with indicators
- Selection of pilot cities
- Development of "smart city profiles" with recommendations
- Creation of a smart city platform

Phase 2

- Creation of a city action plan
- Creation of a website to disseminate information
- Implement recommendations
- Monitor the activities
- Measure the changes

Phase 3

- Publication of a report
- Running platform of cities

Parallel activities

- Meetings and capacity building workshops
- Expanding the smart cities platform to exchange best practices

The project's partners

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FOR A STRONGER AND GREENER ECONOMY
UNECE

UNECE HOUSING AND LAND MANAGEMENT

umweltbundesamt
ENVIRONMENT AGENCY AUSTRIA

ISOCARP
Knowledge for better Cities

UN HABITAT
FOR A BETTER URBAN FUTURE

UNDP

RICS

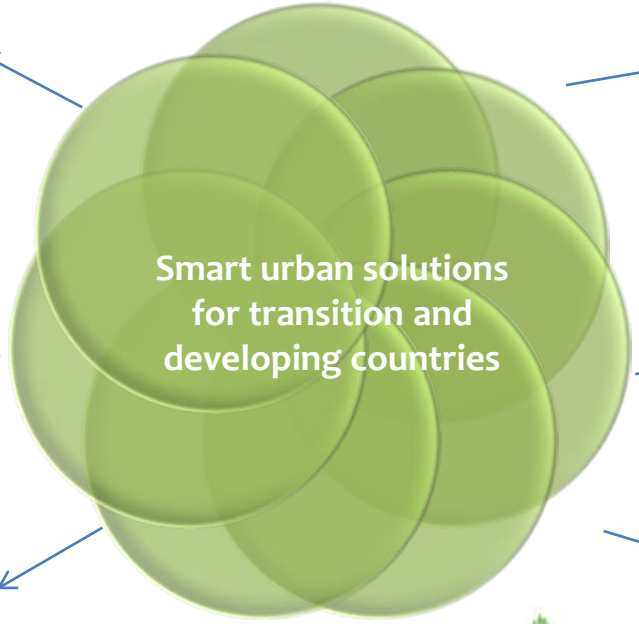
CTY

Objectives

Promote **KNOWLEDGE** and **BEST PRACTICES TRANSFER** on sustainable urban development

Extend the concept of smart cities to **LOW-** and **MEDIUM INCOME** economies

Promote **SUSTAINABLE DEVELOPMENT** in cities at a global level



Improve the inhabitants' **QUALITY OF LIFE** and make the most efficient use of **RESOURCES**

Help national and local authorities to develop **POLICIES** on sustainable urban development

Identify and develop smart **FINANCING MECHANISMS**

Establish partnerships and **COOPERATION** between stakeholders

Outcomes

- Unification of the indicators for evaluating a smart and sustainable city approved by UNECE member States

- Creation of a multi-stakeholder platform and content hub for smart city initiatives (in English and Russian)

The selected cities

Pilot cities

- Aktau - Kazakhstan
- Goris - Armenia
- Vologda – Russian Federation
- Stavropol - Russian Federation
- Turov - Belarus
- Dushanbe - Tajikistan
- Vinnitsa – Ukraine

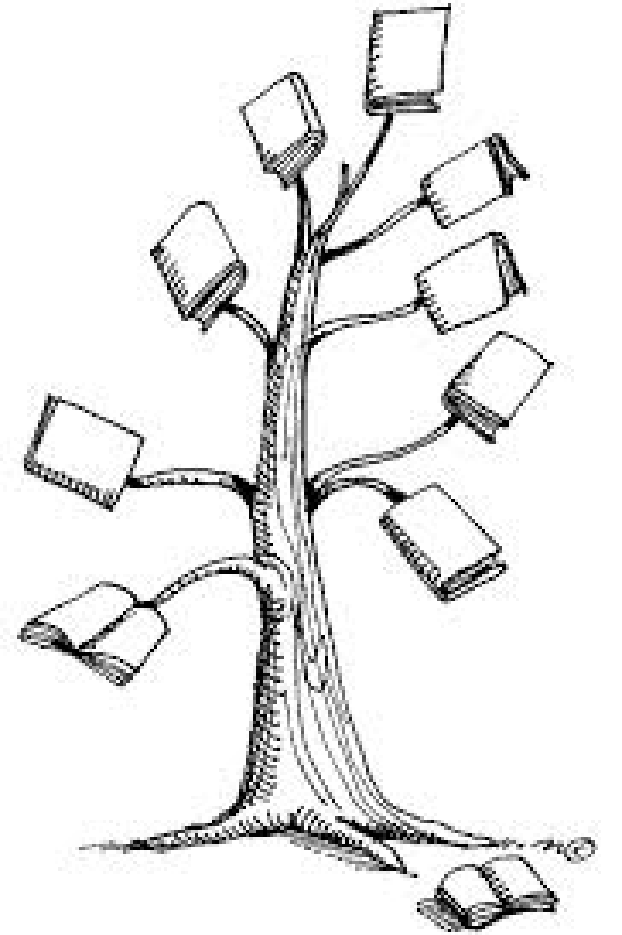
Urban Indicators: yes & not

- Tool for setting priorities
- help to assess a city and their strengths and weaknesses
- facilitate the communication between people with different expertise and background

- are not a remedy as such

Sources

- More than 25 worldwide initiatives
- Available statistical data (EUROSTAT, Urban Audit, World-Bank, WHO, FAO etc.)
- Thematic maps (likelihood of drought, earthquakes, flooding, precipitations)
- Other (perception surveys, check lists, expert judgement etc.)



Analysis

- **Data gaps.** Many existing indicators are not feasible in transition countries due to a lack of data

- **Neglected issues:**
  - **Resilience**
  - **Citizen participation**
  - **Robustness** of an economy towards future challenges (rapid population growth, unforeseeable hazards or shortages)

Methodology: indicators

Developed by **Environment Agency Austria** – development phase (pilot city Goris, Armenia)

Criteria:

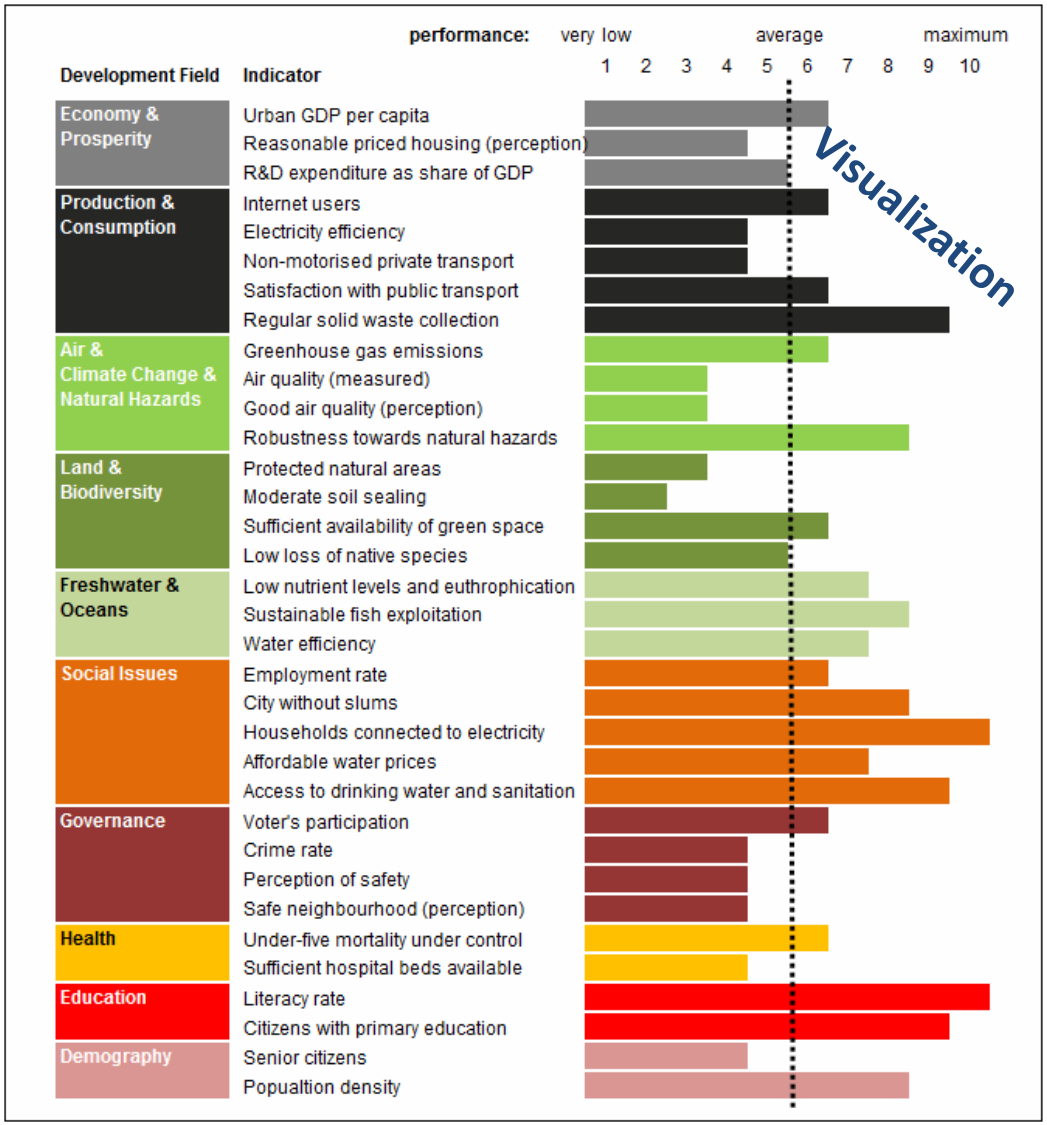
- Flexibility: 2 indicator sets
- Data availability
- Available references
- Implementation options
- Feasibility of measures

Approach

3 main areas
10 development fields
35 measurable indicators

Economy	Environment	Society
1/ Economic Development	3/ Air, Climate Change, Natural Hazards	6/ Social Issues
2/ Production & Consumption	4/ Land & Biodiversity	7/ Governance
	5/ Freshwater & Oceans	8/ Health
		9/ Education
		10/ Demography

Indicators



ECONOMY		ENVIRONMENT		SOCIETY	
Development field	**Sub-Topics (very impor-tan / relevant)**	**Development field**	**Sub-Topics (very impor-tan / relevant)**	**Development field**	**Sub-Topics (very impor-tan / relevant)**
Economy & Prosperity	**Economy** **Innovation** **Housing** Employment Social Equity Green econ. Tourism	**Air & Climate Change & Natural Haz-ards**	**Air emissions** **Air quality** **Climate** **Natural haz.** Noise Diseases Medicare	**Social Issues**	**Employment** **Poverty** **Housing** Social Social Equity Wastewater Water quality
Production & Consumption	**Energy** **Transport** **Waste** **E-Communic.** Generic Housing Infrastructure Recreation Transp. safety	**Land & Biodiversity**	**Urban Biodiv.** **Biodiv. Man.t** **Land Take** **Recreation** Urban Planning Ecosyst. Serv. Housing	**Governance**	**Administr.** **Safety/Secur.** **Paticip/awar.** **Social equity** Economy Environ. policy Generic Housing Medicare Urban planning
		Freshwater & Oceans	**Water quality** **Water quant.** **Wastewater** **Fisheries** Eutrophication Tourism	**Health**	Diseases Life expect. Medicare Recreation
				Education	**Literacy** **Primary edu.** **Skills/Training** Higher educa-tion Edu. quality Generic Social equity Culture
				Demography	**Aging** **Pop. Stat.** Life Expect.

Tematic structure

Conclusions

- **Endorsement by the Commettee on Housing and Land Management**
- Use: Assessment of cities' status
- The assessment helps stakeholders:
  - to identify priorities
  - to monitor progress, and
  - to learn from others/share with others

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Thank you !

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