



Smart Cities

How digital technologies can contribute to sustainable urban development



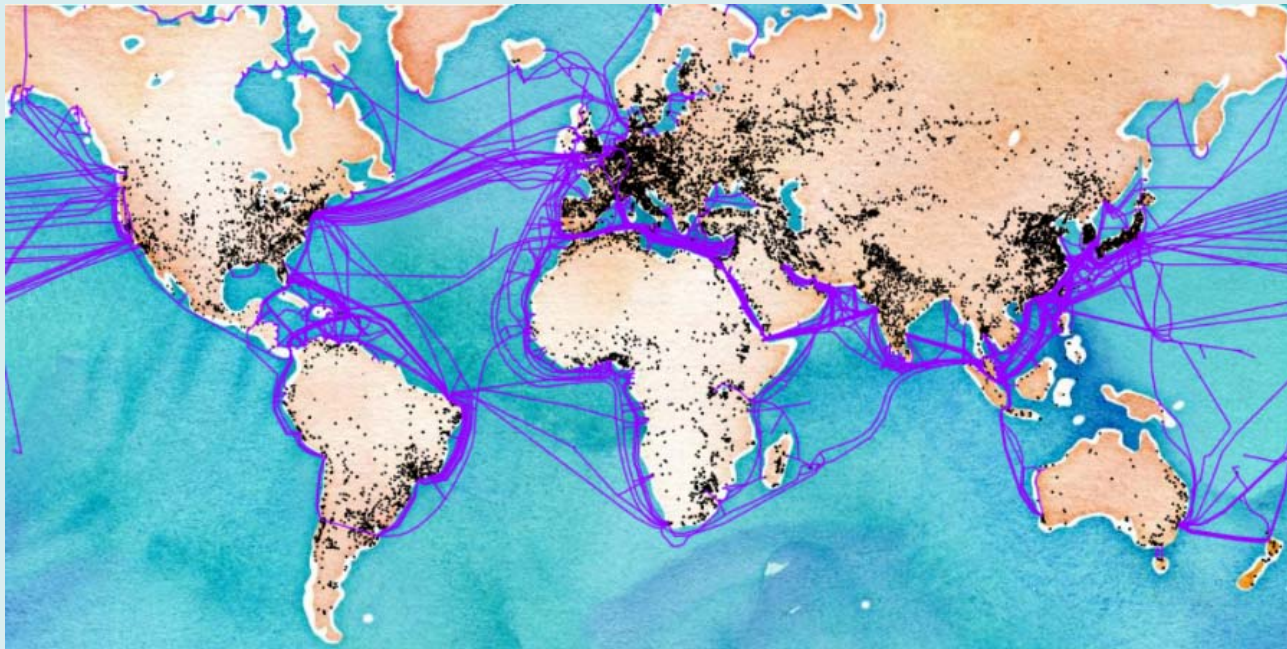
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DEVCO.C5 – Cities, Local Authorities, Digitalisation and Infrastructure

What is a Smart City?

A place where traditional networks and services are made more efficient with the use of digital and telecommunication technologies for the benefit of its inhabitants and business.

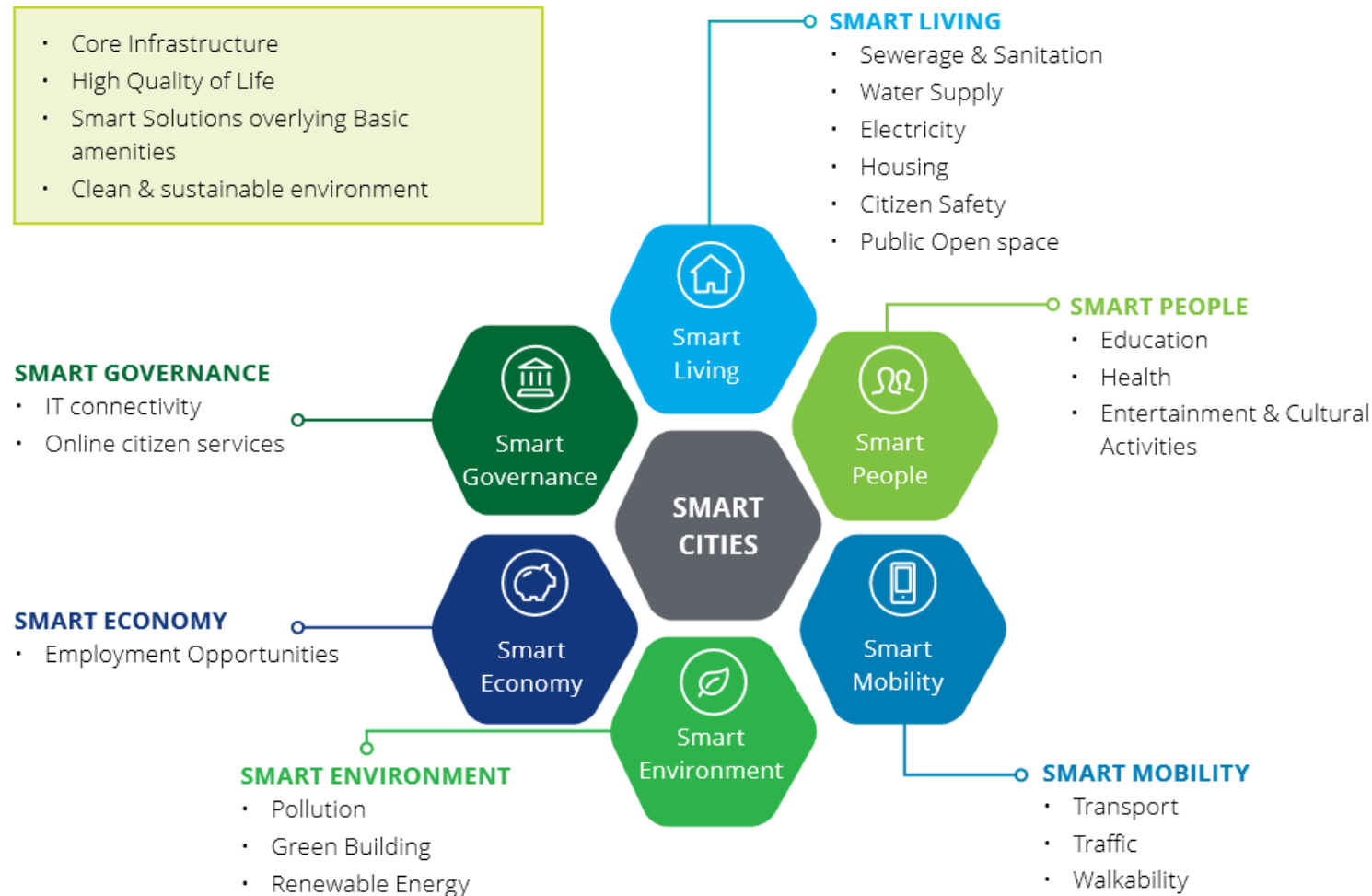


In other words...

A smart city is simply one that uses technology to improve outcomes across every aspect of city operations and enhance the services it offers to its residents.

Elements of a smart city

What all contribute towards making a city smart?

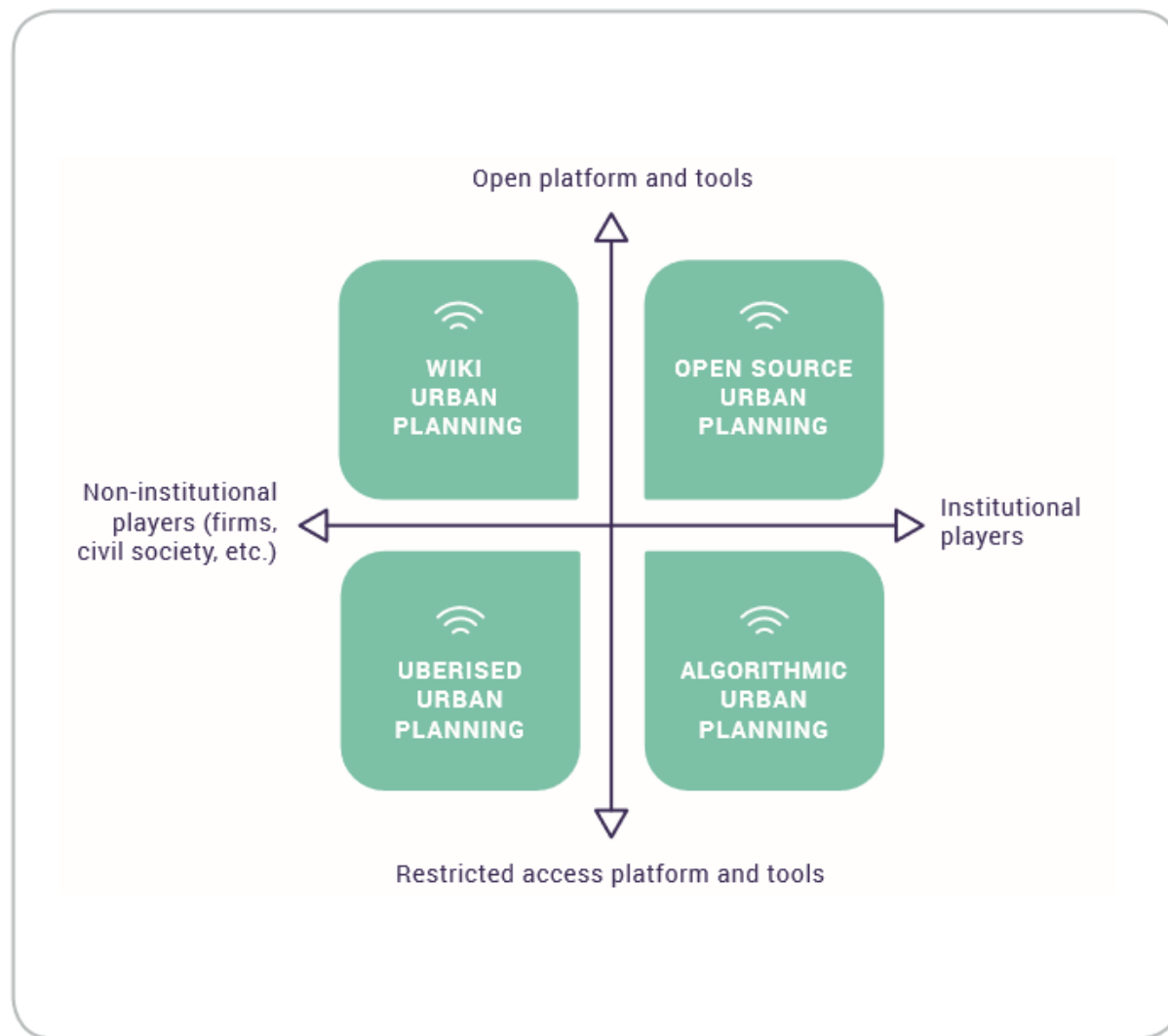


Source: Deloitte Analysis

Smart solutions



Smart city approaches/dimensions



Inspired by Douay, 2017.

Possible focus of smart city actions

Choose keywords that convey a digital vision



What must digital technology contribute to as a priority in my city ?

- **Local economic development?** : experimentation, innovation and creation of new services ; increasing competitiveness of firms ; improving the appeal and city image...
- **Social inclusion and local democracy?** : access for all to digital tools (public terminals and Wi-Fi) ; cooperative public services ; citizen participation and co-construction ; increased accountability and transparency...
- **The sustainability of my territory?** : planning and forecasts ; better knowledge of the territory ; constitution and analysis of databases ; preservation of natural resources, etc.
- **Modernisation of the local public action of my administration ?** : efficiency of the management procedures ; reduction of administrative costs and time-frames ; relevance and legitimacy of the decisions by defining priorities in accordance with the needs of the population.

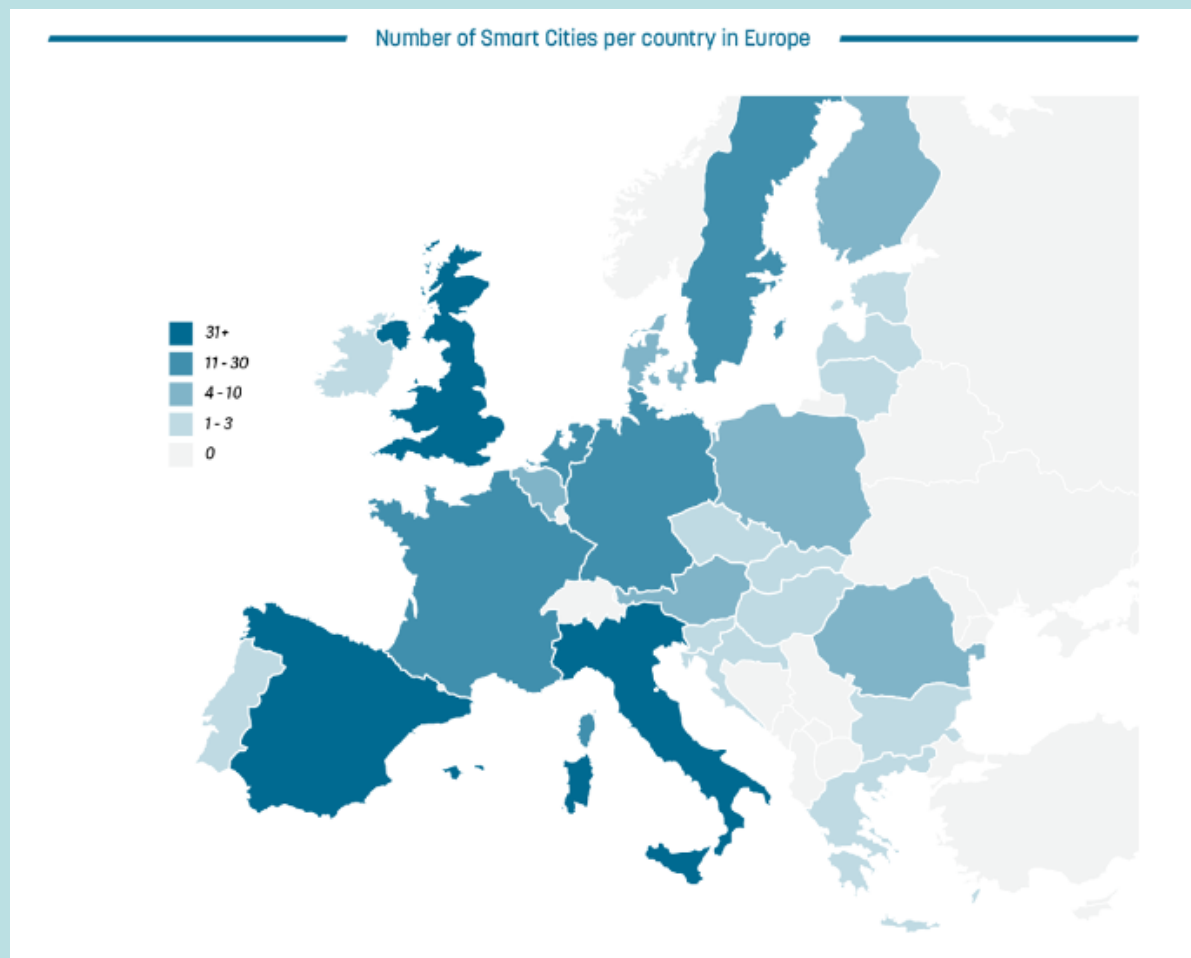


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Reflection time

- *Where are you with smart city approaches/readiness in your country*
- *What are core constraints*
- *What are opportunities*
- *Who could possible interlocutors be*

Smart Cities in the EU



According to the EP's in-house think tank, almost all cities in Nordic countries are smart cities. Most cities with populations over 100,000 in Italy Austria and the Netherlands are smart cities, as well as half of British, Spanish and French cities. In comparison, Germany and Poland are behind, while eastern EU MS have the lowest number of smart cities. Source: EURACTIV

Sources of EU smart cities



What does a conducive environment for smart cities look like?

To put digital innovation to use and integrate it into urban development policies, a city needs:

- overarching digital strategies, policies and legislation, and strong leadership to establish the framework;
- engagement and cooperation mechanisms among governmental silos within and across different territorial levels, from local to EU level, involving citizens, civil society, businesses and academia, for successful design and implementation;
- to promote the free flow of data and make use of data-driven intelligence, based on trust and privacy;
- tools and infrastructure that connect stakeholders, digital solutions and data to facilitate innovation.



Smart Africa

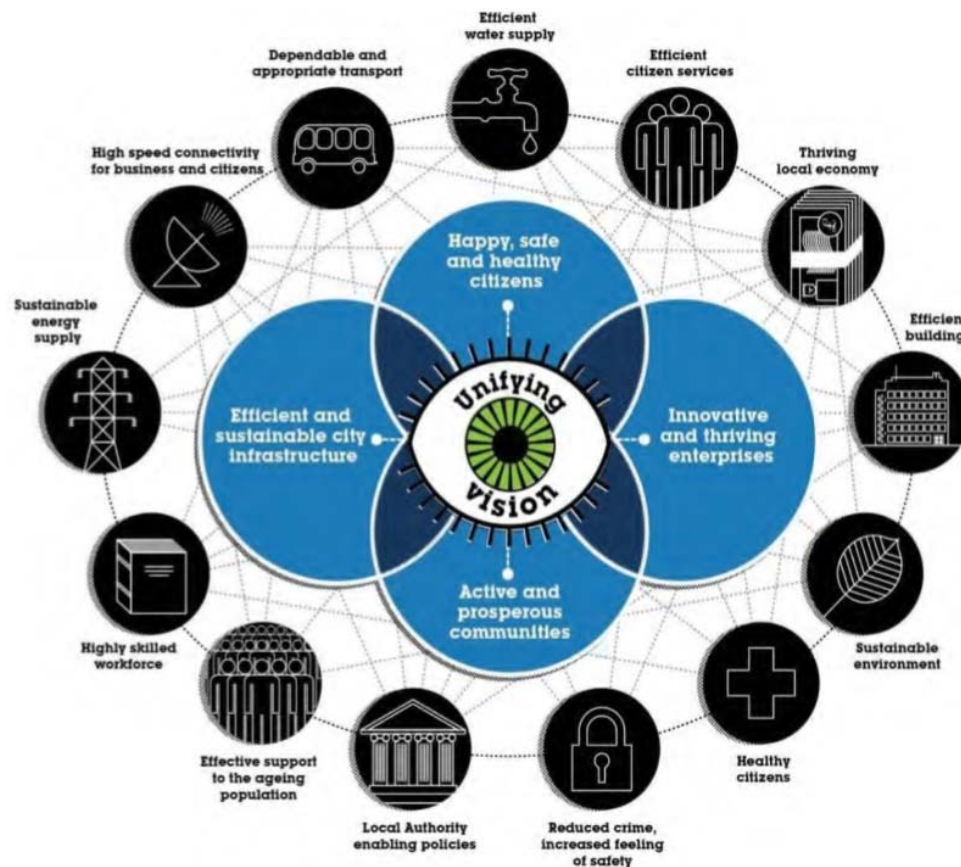
Smart Sustainable Cities, A Blueprint for Africa



Target: African City Leaders and Officials

Key definitions and of notions, trends, and drivers in Africa and around the world

Principles for Smart Sustainable Cities implementation and how to manage and control drivers



Through optimal use of information available to:

- Better understand and control of city operations;
- Optimize the use of limited resources;
- Enable better experiences, interactions and choices between people, their communities and their city;
- Balance social, commercial and environmental needs;
- Measure (and spur) progress and outcomes.

Smart Africa: Challenges, Objectives and Means

Challenges

- Rapid urbanisation
- Need for mobility and access to urban service
- Access to clean water and sanitation
- Public health and safety
- Capacity



Objective

An African smart and sustainable city in which leaders and citizens use data, information and knowledge to ensure a co-created resilient and sustainable future.



Means

inclusive data-led management & planning, efficient community-based infrastructure and services, localized and shared innovation and economic development.

Smart Africa

Smart Sustainable Cities, A Blueprint for Africa

Two major classes of systems considered:

1. Services delivered to people and businesses
2. Flows that run through a city's infrastructure

1. City Services:



Healthcare & Public Health



Fire response



Public Safety



Registration services



Revenue collection



Education



Ambulance



Social & Welfare Services

2. City Flows:



Water & Sewer



Air



Energy



Waste

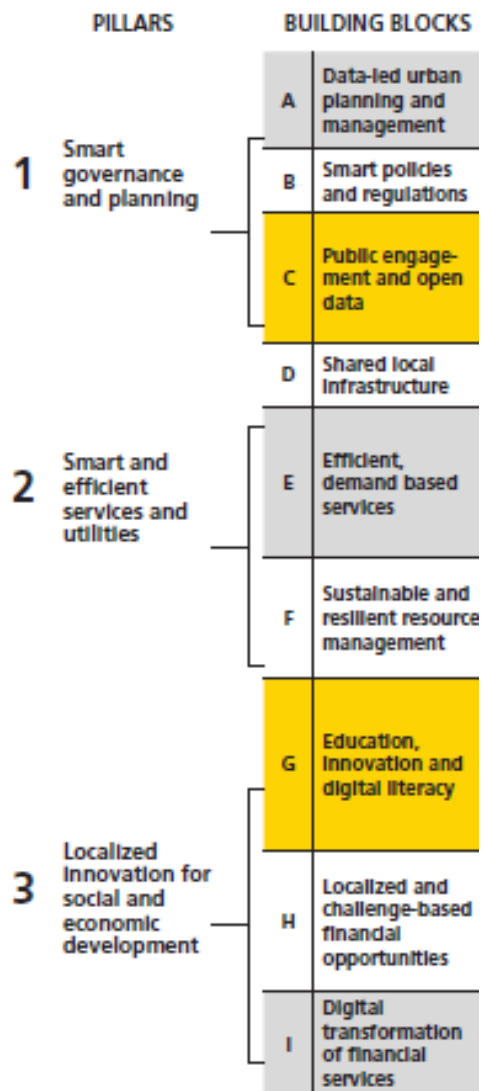


Goods & People

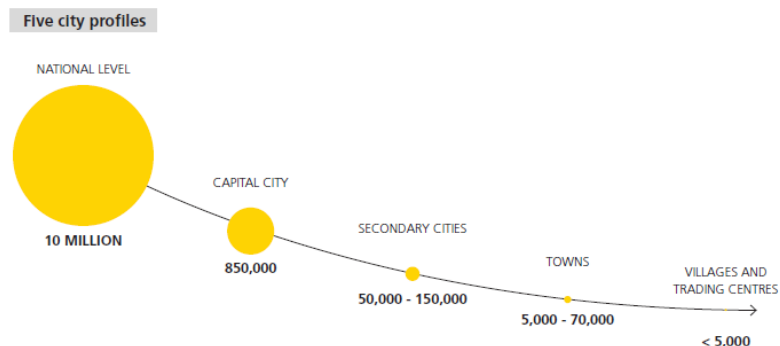


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Smart City Rwanda Masterplan



The Masterplan aims at driving Rwanda towards a knowledge-based economy by 2020 by using ICT services that improve productivity and efficiency.



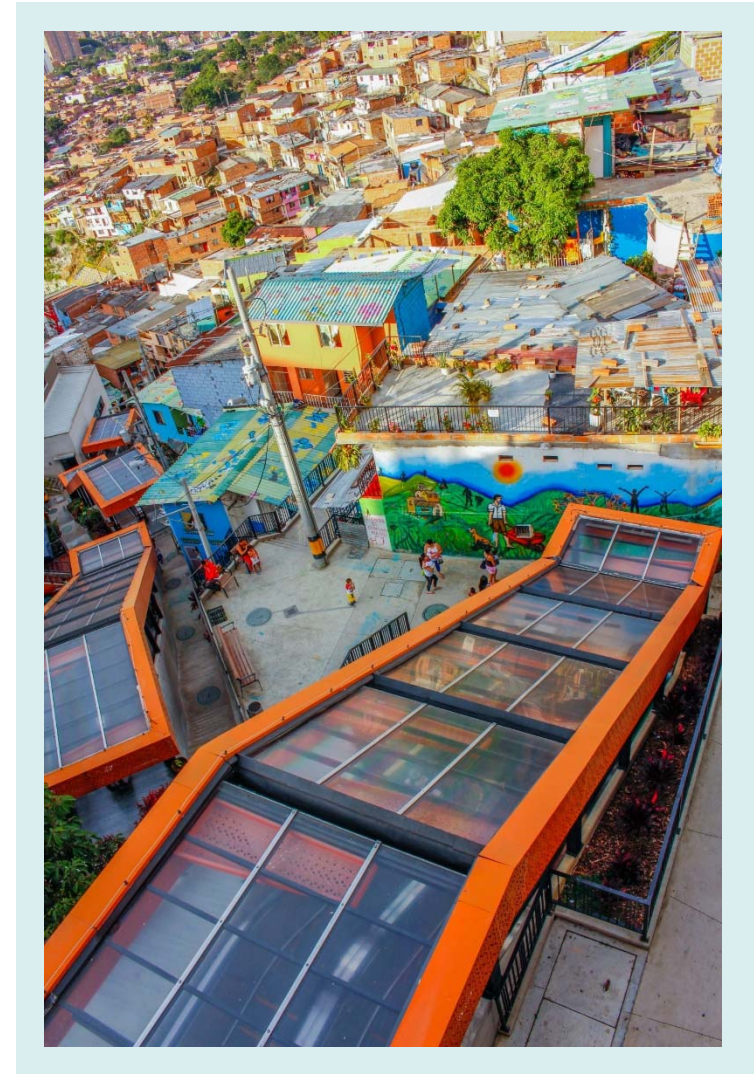
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Medellin Smart City Program

4 Cornerstones

Once one of the most violent cities in the world (most violent city in 1991), Medellín is now a hub for technology and innovation throughout Latin America, having cut its homicide rate by 80 percent in 10 years while building transportation infrastructure, increasing environmental sustainability and establishing citizen participatory budgeting.

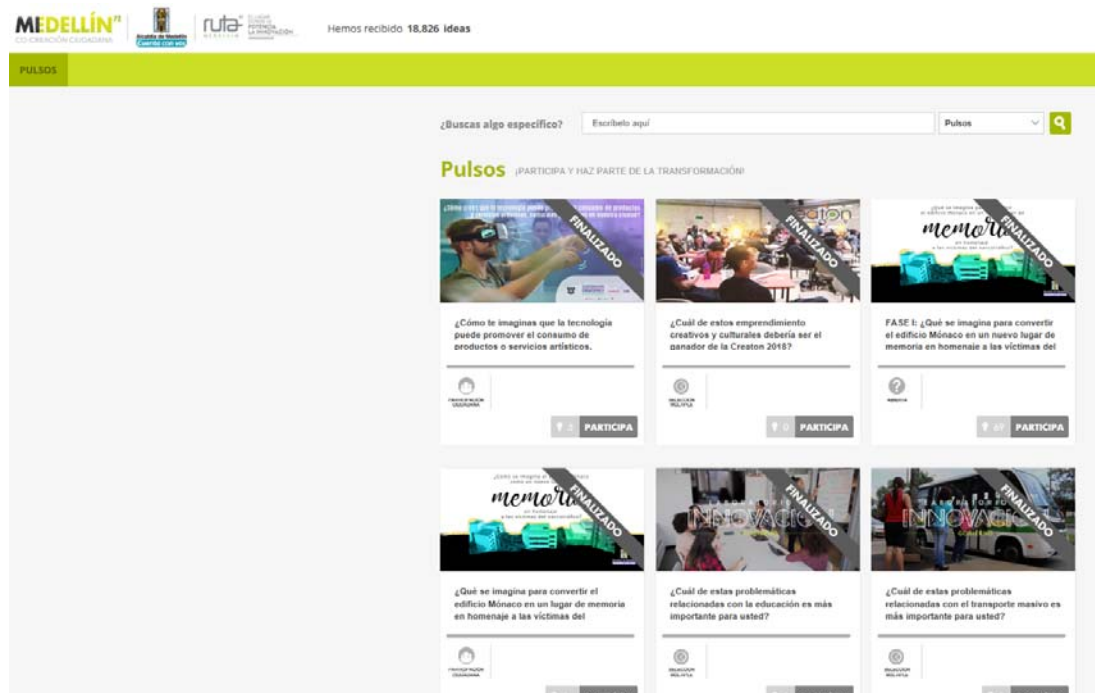
- **Citizen participation**
Create a culture of participation through adequate spaces that reflect residents' proposals for the city's public policies.
- **Open government**
Generate, promote, and position open data. The information developed by the municipal administration, public bodies, businesses, and academic institutions must be made available for the citizens' use and benefit, through ICTs, as social networks, webpages, and applications.
- **Social innovation**
Promote processes that allow citizens to modify their environment, transform their reality, and find solutions to their problems.
- **Sustainability**
Develop projects to promote sustainability and ensure economic, environmental, political, and social conditions for current and future generations.



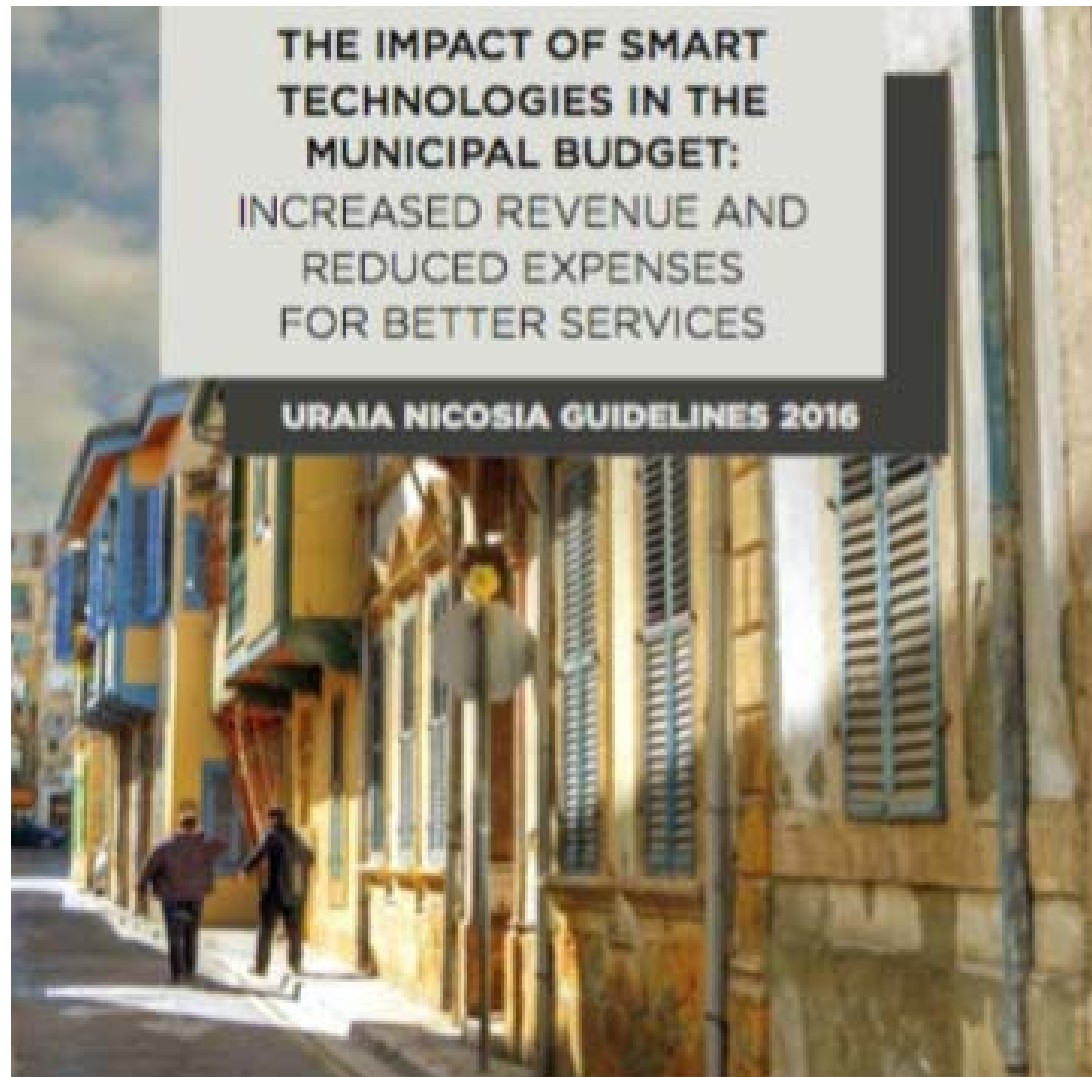
MiMedellín

Via **MiMedellín**, citizens can co-create with city government to come up with solutions to urban issues.

Keyword: Crowdsourcing



Digital solutions and savings



A document prepared by

Thanks to the support of

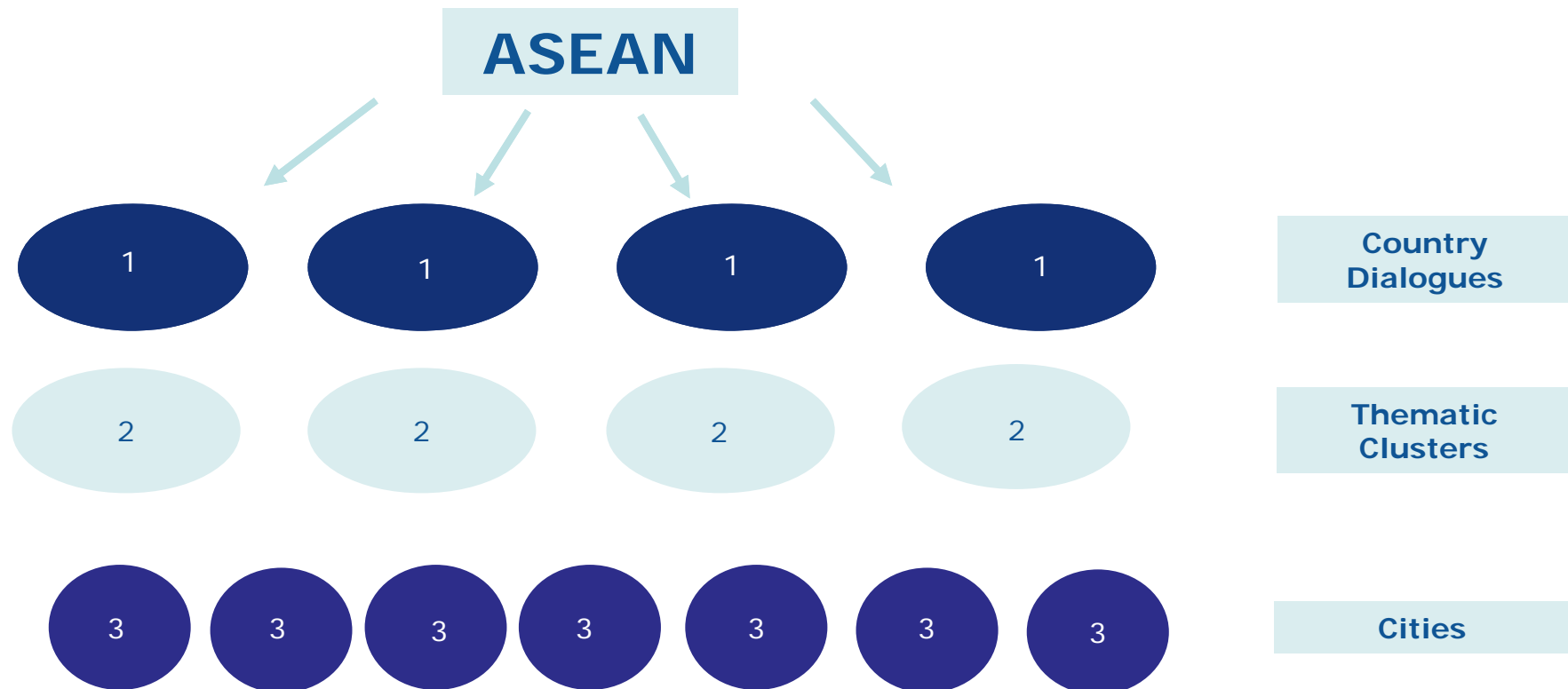


Lessons about digital government

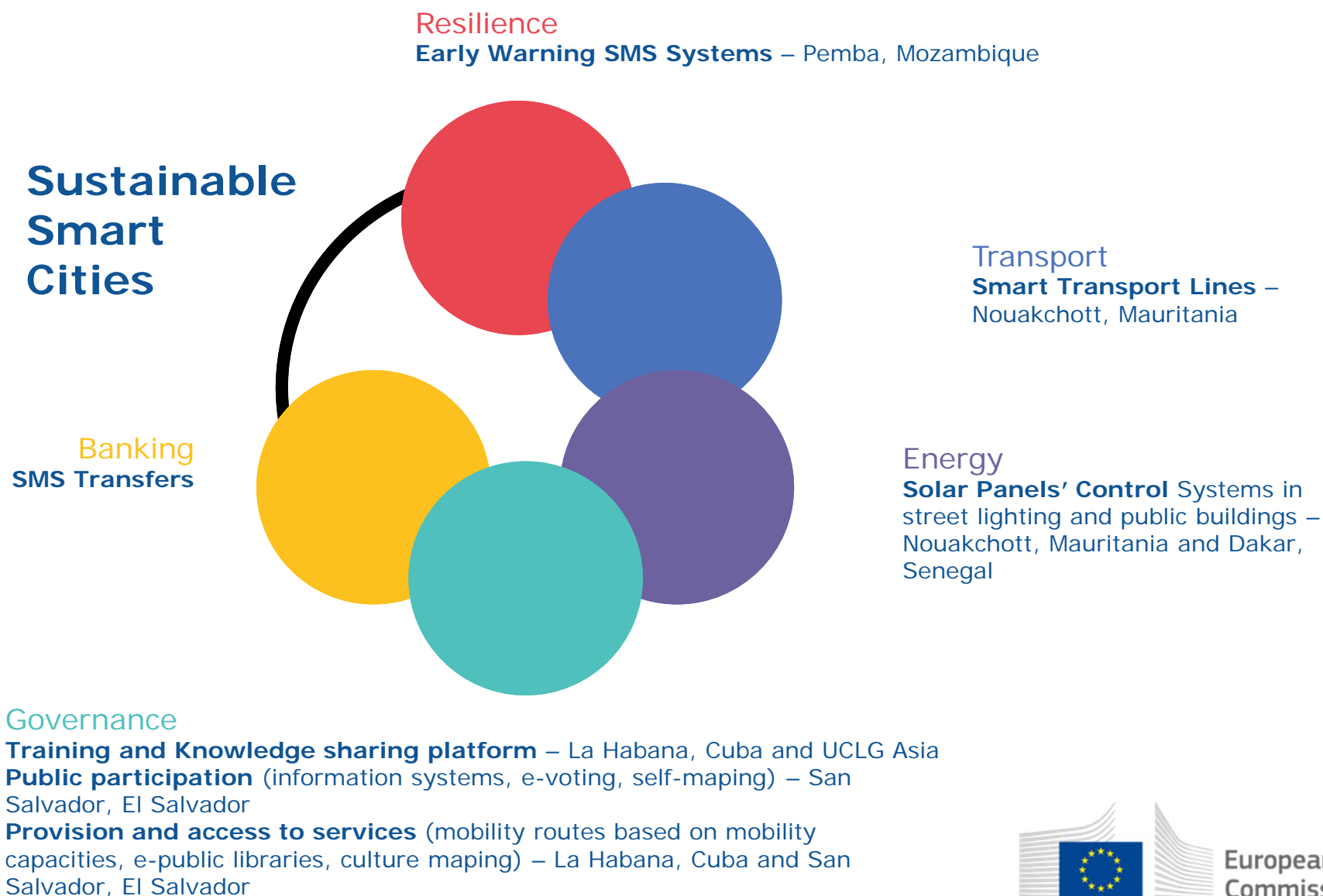
- *Make sure to have necessary IT and connectivity*
- *Build capacity of municipal team*
- *Define regulatory framework, e.g. data privacy*
- *Dialogue with stakeholders*
- *Avoid isolated initiatives (pilot – scale up)*
- *Political leadership*
- *Ensure services adapted to all*
- *Communication campaign*
- *Collaborate with national level and association of cities*

SMART Green ASEAN Cities

Smart solutions for environmentally sustainable urban areas



Some examples of City-to-City Partnerships



Ways of engaging on smart cities

- *Dedicated programme – NIP*
- *As part of a wider programme – e.g. local governance capacity building*
- *As part of investment projects – smart utilities*
- *City to city partnerships*
- *Facilities for smart city solutions*

- *Which options do you see in your country*