Policy and Positioning for Smart Sustainable Cities (SSC)

The Importance of Stakeholder Engagement for SSC

Smart Sustainable Cities Training Program Module 4

SSC-4

What do Stakeholders expect in Smart Sustainable Cities?

Source: http://www.urenio.org/2012/04/02/current-smart-city-research-projects-in/

Contents

1. Aims and overview of the module
2. Introduction to the Technical Report
3. City stakeholders challenges
4. Methodology for SSC stakeholder identification & Engagement
   – Identification
   – Categorization
   – Detailed stakeholder analysis
5. Summary & expected results
6. Practical exercise

Aims of this module

1 • Present an overview of challenges facing SSCs stakeholders

2 • Enable you to identify and classify SSC stakeholders

3 • Enable you to analyze stakeholders based upon the Logical Framework Approach (LFA)

4 • Enable you to understand the importance and priorities of SSC stakeholders and set the basis to engage them.

Introduction to the Technical Report

"Setting the stage for stakeholders' engagement in smart sustainable cities" (march, 2015)

SMART SUSTAINABLE CITIES

Rapid urbanization increases demand for scarce resources

ICT tools enable lots of interactions among population & devices

1st time in history a urban initiative brings such a variety of stakeholders

Source: FG-SSC "Technical Report Setting the stage for stakeholder´s engagement on SSC", page 6

Introduction to the Report

Technical report on
"Setting the stage for stakeholders' engagement in smart sustainable cities"

- ✓ Developing an initial stakeholder identification process

- ✓ Categorizing and identifying relationships among them and their engagement potential

- ✓ Conducting a detailed analysis of all stakeholders interest to define their role and expected contribution
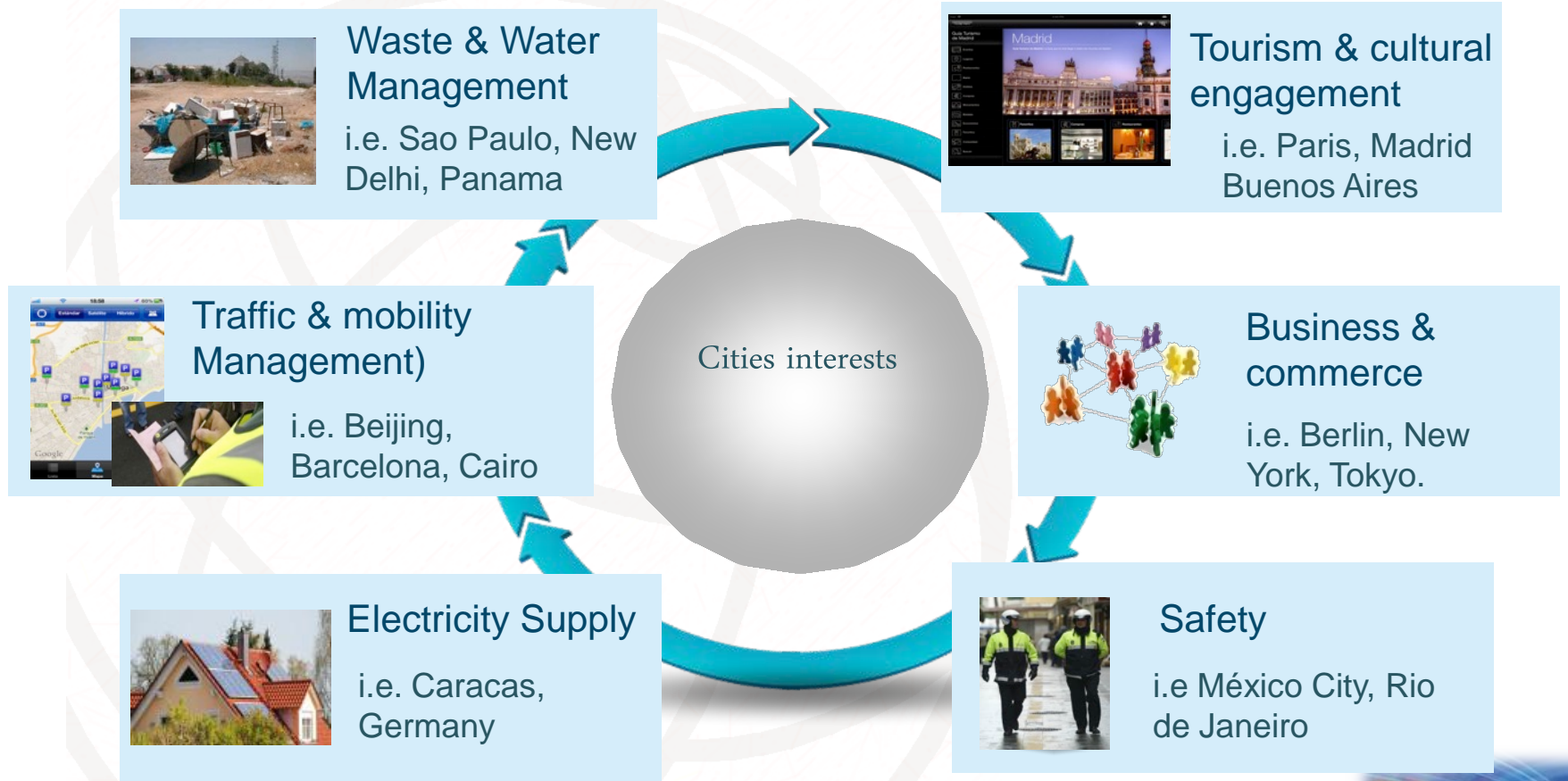
Smart & Sustainability Challenges

- The FG-SSC has brought to light several challenges that cities are currently facing, and that should be addressed as part of the design and implementation of SSC strategies in a complex multi-stakeholder urban environment.

Cities Challenges vs Citizens Interests

Cities face quite similar challenges, most of them related to sustainability

Waste & Water Management

i.e. Sao Paulo, New Delhi, Panama

Tourism & cultural engagement

i.e. Paris, Madrid Buenos Aires

Traffic & mobility Management)

i.e. Beijing, Barcelona, Cairo

Cities interests

Business & commerce

i.e. Berlin, New York, Tokyo.

Electricity Supply

i.e. Caracas, Germany

Safety

i.e México City, Rio de Janeiro

Smart & Sustainability Challenges

1) Achieving a City Vision

- Each city starts from a different baseline → SSC Key Performance Indicators are essential to quantify future improvements.

- Cities must be holistic and inclusive → Traditionally, city management is divided into different departments with little cooperation between them.

2) Achieving Economic Success

- Lack of funding are a common obstacle in cities → SSC projects find difficulties to advance and escalate.

- Job creation and quality of life improvements → SSC give the opportunity to create new employment opportunities in cities

Smart & Sustainability Challenges

3) Providing ICT infrastructure

– SSC require important changes in ICT infrastructure → widespread internet broadband & comprehensive mobile networks for communication or sensing.

– New technologies should focus on → adaptability, scalability, accessibility, safety and flexibility of this infrastructure.

4) Engaging Citizens

- Citizens must be engaged in city planning: → citizens participation improves city management, promotes social cohesion and reinforces political engagement.

- Need of the integration of the perspective and opinions of city residents into local policies → this can support the adaptation of city services to their daily needs.

Smart & Sustainability Challenges

5) Managing Scarce Resources

– Cities require improvements in basic city services infrastructure to deliver efficient services → ICT can play a crucial role in the efficient management of water and energy.

6) Managing Environmental Quality

– City administrations are responsible for management of the environmental quality of the city (air, soil & water), **waste management, sanitation,** and pollution control → health related impacts

Smart & Sustainability Challenges

7) Managing Climate Change

- **Mitigating Climate Change:** cities generate CO_2 emissions in sectors such as transport, waste management, electricity.

  → Smart Services reduce CO_2 emissions (Smart buildings, smart transport, smart grids, etc)

- **Adapting to climate change**: cities will be vulnerable

  → Cities are called to become much more resource-efficient & resilient in the face of extreme weather events.

  → Infrastructure needs to be introduced to cope with rising sea level, floods, heat waves, and storms.

  → **ICTs have roles to play in sensing, mitigation and adaptation**.

Smart & Sustainability Challenges

8) Widening the skills of Professionals

- Urban planners, technologists, economists, apart from being experts on their specific field, should gain a general knowledge of all the other aspects that define and shape cities.

- An example is an urban planner that also understands how the Internet of Things (IoT) can be applied to cities and its ICT infrastructure

9) Combating inequality

- A recent study by Oxfam* suggests that "almost half of the world's wealth is now owned by just 1% of the population".

    → Since SSCs strive for social sustainability it is important that the projects include all the levels of society.

*Source: Working for the few, Oxfam 2014;

Methodology for SSC stakeholder identification and engagement

What is a Stakeholder?

- A stakeholder is an institution or an individual that has an interest in SSCs or that can significantly influence or be influenced by its deployment (LFA Methodology)

What is Stakeholder Engagement?

- Stakeholder engagement may be viewed as a technique of enhancing the (i) relevance, (ii) responsiveness (iii) accountability (iv) transparency (v) inclusiveness (vi) legitimacy (vii) effectiveness (viii) efficiency (ix) equitability of the decision making process. (UNEP)

A Three Step Methodology

- Is proposed to identify and engage stakeholders…
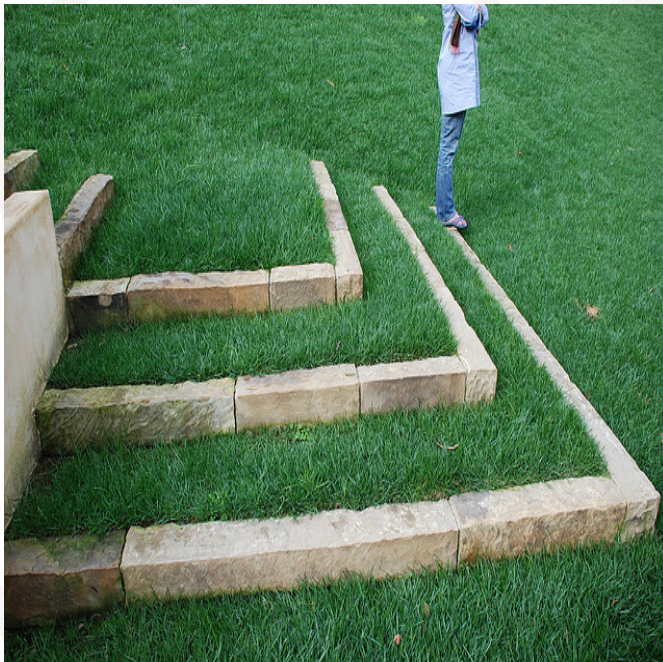
✓ Based on the Logical Framework Approach (LFA) → tool for project management

✓ Aims a broad identification and categorization of the stakeholders involved in any project, which is an essential prerequisite for the sustainability of a project.

Source: FG-SSC "Technical Report on Setting the Stage stakeholders engagement in Smart Sustainable Cities", page 9

The Process

IDENTIFICATION
- First list derived from the definition of SSC
- Validation of the List based on general classification of stakeholders.
- Define a non-exhaustive list of stakeholders

CATEGORIZATION
- Assign a particular category to each stakeholder
- Categorization of listed stakeholders in a graph

DETAILED ANALYSIS & ENGAGEMET
- Identify individual characteristics & expected implications for the project
- Studying relationships between stakeholders: map of relations.
- Foster stakeholder's engagement.

Source: FG-SSC "Technical Report on Setting the Stage stakeholders engagement in Smart Sustainable Cities", page 10

Step 1: Identification of all Stakeholders Involved

- Candidate stakeholders for participation in an SSC project include:

  ✓ Municipalities and city administration
  ✓ National and regional governments
  ✓ City services companies
  ✓ Utility providers
  ✓ ICT Companies
  ✓ NGOs
  ✓ International, Regional & Multilateral Organizations
  ✓ Industry associations
  ✓ Academia, research organizations & specialized bodies scientific community
  ✓ Citizens and citizen organizations
  ✓ Urban Planners
  ✓ Standardization Bodies

Step 2: Categorization of Stakeholders Involved

- According to their role and participation in a project or projects related to SSC, this classification is based on the LFA methodology, as follows: *

→ **Active**: this refers to all the actors that have the resources and the power to influence the initiative

→ **Beneficiaries**: are the stakeholders that will directly benefit from the deployment of a SSC

→ **Affected stakeholders:** will be somehow affected by the deployment of the SSC

→ Both *supporters* and *potential opponents*

Source: FG-SSC "Technical Report on Setting the Stage stakeholders engagement in Smart Sustainable Cities", page 11

# Step 2: Categorization of Stakeholders Involved

- According to their role as drivers or enablers of SSC processes and solutions:

→ **Drivers of technology**: incorporate technology and SSC solutions into their processes in city services or provision processes

→ **Enablers of technology:** provide the technology and/or the technological solutions

→ **Enablers of the SSC:** facilitate the technical & policy framework needed for SSC by using KPIs, infrastructure development, standardization, etc

Source: FG-SSC "Technical Report on Setting the Stage stakeholders engagement in Smart Sustainable Cities", page 12
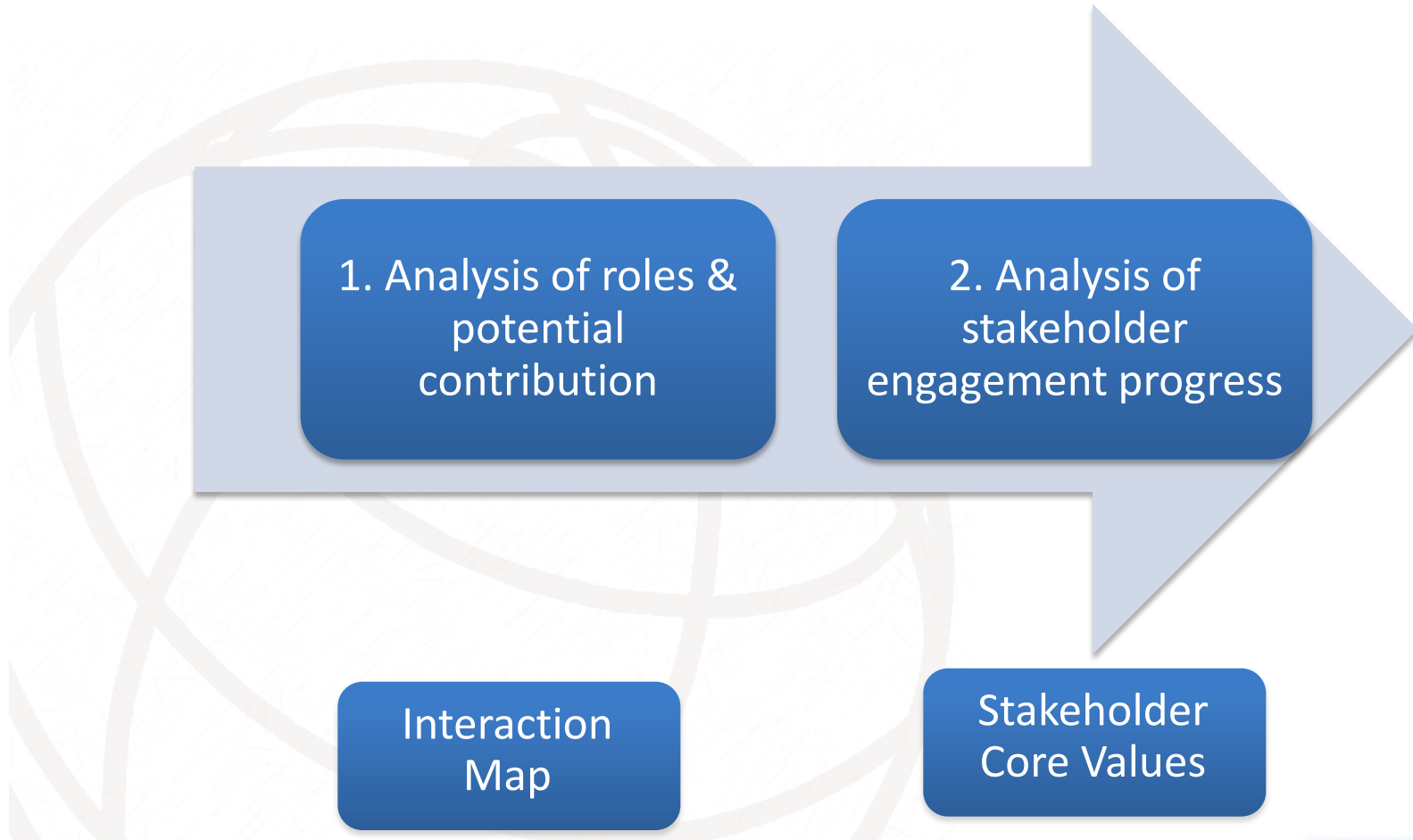
Step 2: Stakeholder Mapping. Stakeholder Classification
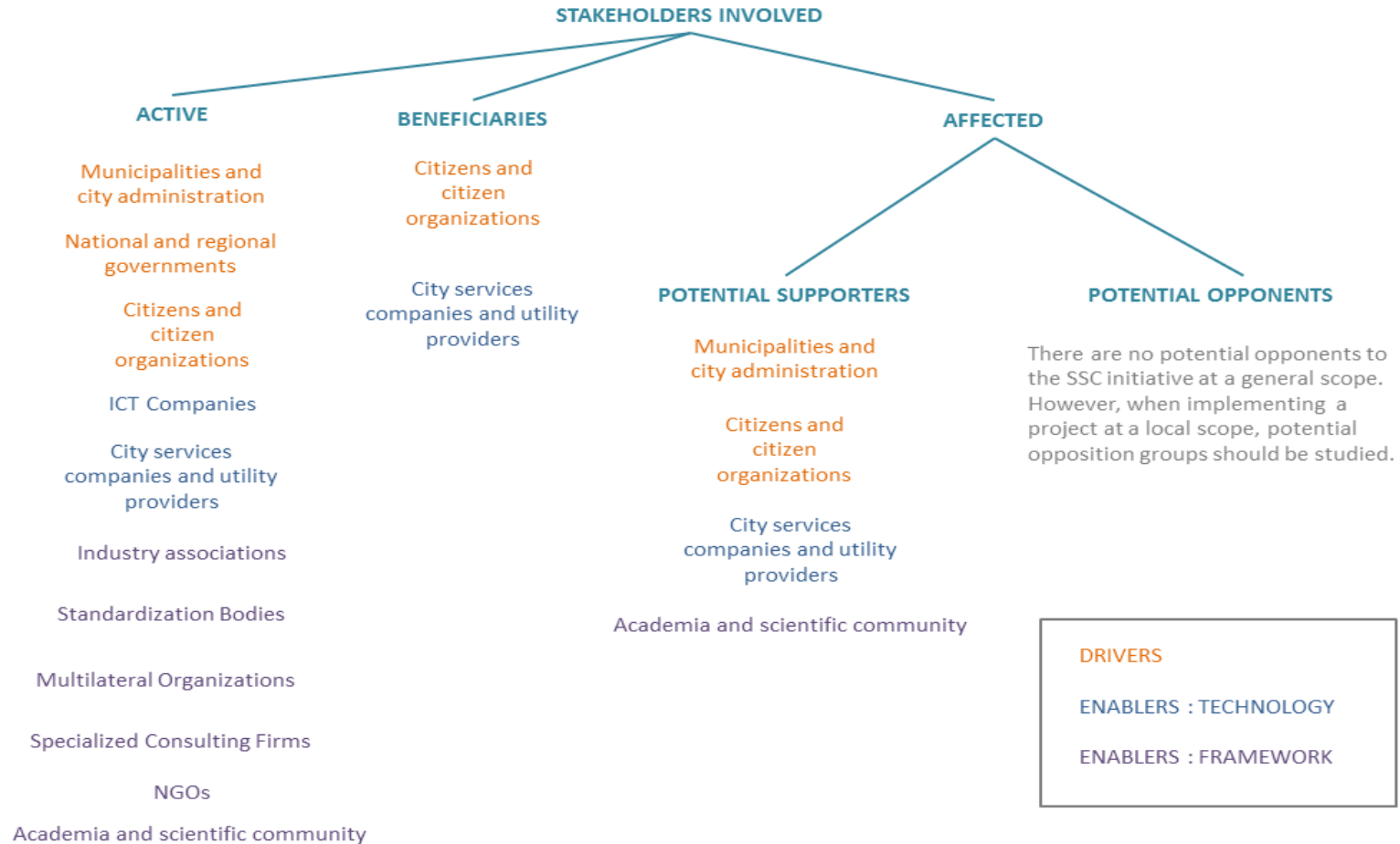
Adapted from the LFA Methodology

Step 3: Detailed Analysis of Stakeholders Involved

1. Analysis of roles & potential contribution

2. Analysis of stakeholder engagement progress

Interaction Map

Stakeholder Core Values

Source: FG-SSC "Technical Report on Setting the Stage stakeholders engagement in Smart Sustainable Cities", pages 12-14

Step 3.1: Detailed Analysis of Stakeholders Involved
Analysis of roles & potential contribution

| No	Aspect	Details
1	**Scale and Sector**	The scale at which the stakeholder operates e.g. local, regional or national scale e.g. public or private sector
2	**Aims & Challenges**	The key objectives or advantages they seek from their involvement in SSCs
3	**Potential**	Their knowledge, experience and know-how
4	**Constraints**	The issues that limit the realization of their role within SSC, including lack of coordination, lack of expertise, limited financial resources, etc.
5	**Role and Contributions**	The role of the stakeholder with respect to SSC's goals, and the contributions towards their achievement.

Reiterative Process

Source: FG-SSC "Technical Report on Setting the Stage stakeholders engagement in Smart Sustainable Cities", pages 12-13

Step 3.1: Detailed Analysis of Stakeholders Involved
Map of Relations
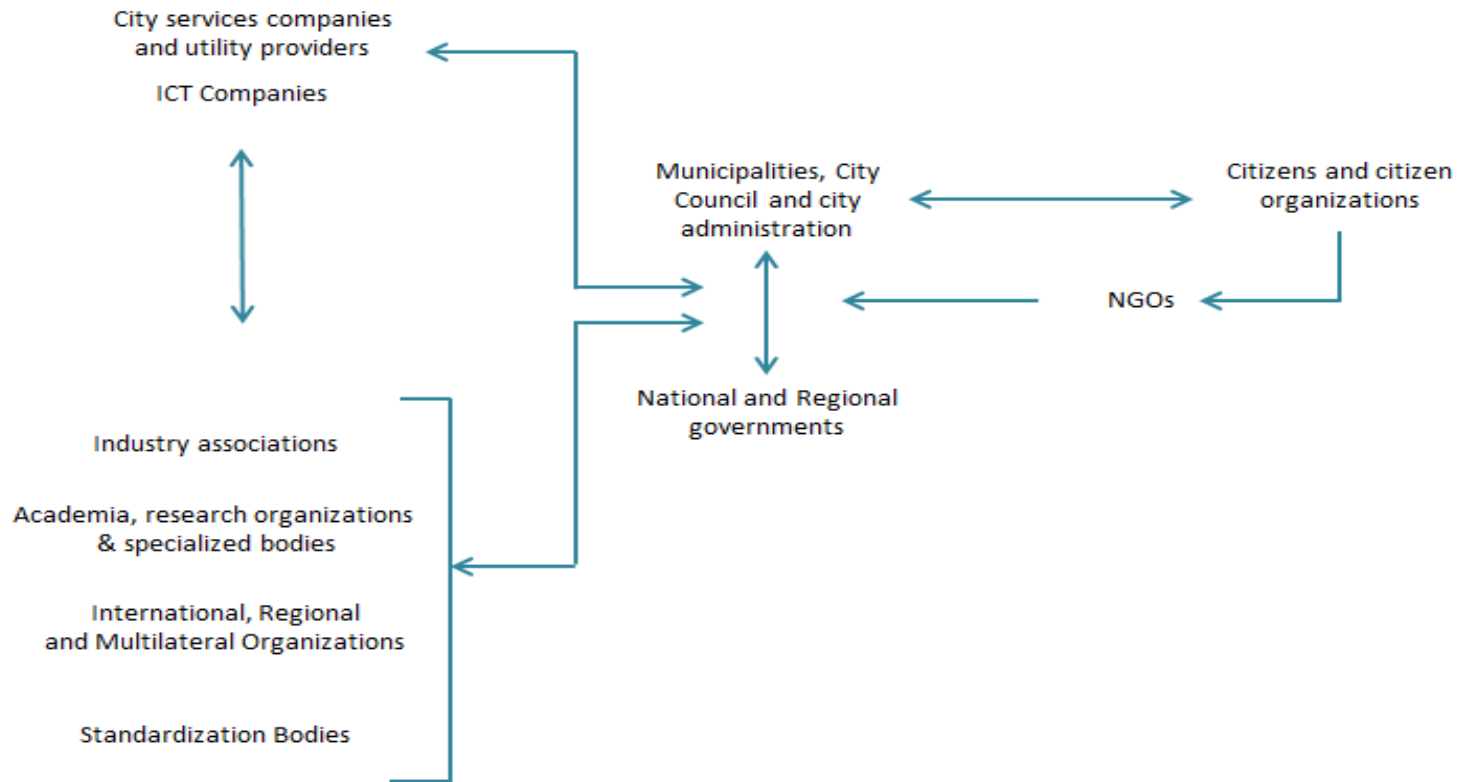
Source: FG-SSC "Technical Report Setting the stage for stakeholder´s engagement on SSC", page 13

Step 3.2: Analysis of stakeholder engagement progress
Core values of stakeholder participation

- After selecting the stakeholders the engagement progress should be also mapped.

→ **Active**: this refers to all the actors that have the resources and the power to influence the initiative

→ **Beneficiaries**: are the stakeholders that will directly benefit from the deployment of a SSC

→ **Affected stakeholders:** will be somehow affected by the deployment of the SSC

→Both *supporters* and *potential opponents*

Source: FG-SSC "Technical Report Setting the stage for stakeholder´s engagement on SSC", page 13

Step 3.2: Analysis of stakeholder engagement progress
Core values of stakeholder participation

- **Engagement Progress**
  - → Power perception
  - (money vs administrative)
  - → Efficient process
    (engagement costs & burocratic process)
  - → Exclusive process
    (priveleged groups & non-organized groups)

- **Core Values**
  - → All stakehodlers should participate & be heard
  - → All interests should be recognized
  - → All should recieve the same information
  - → Communicate their contribution to the process

Source: FG-SSC "Technical Report Setting the stage for stakeholder´s engagement on SSC", page 13

Step 3: Detailed Analysis of Stakeholders Involved
Final Summary Table

Stakeholder	Scale/sector	Aims and challenges		Potential and constraints		Role/contribution to SSC rollout
Municipalities, City Council and city administration	Local Public	– Increase efficiency (energetic as well as economic). – Increase environmental sustainability – Aim to give the best service to citizens.	– Shrinking budgets. – Growing demand of the voters for transparency, citizen participation. – Pressure by local, national and international agreements and targets for sustainable development	– Expertise on city management. – In charge of city services provision.	– Lack of interdepartmental coordination. – Lack of professionals with specific knowledge on SSC. – Constrains in allocating budget.	– It is a strong driver of SSC. – Promote SSC initiatives and decide the roadmap to follow and specific solutions to be implemented. – Engage citizens and communicate them benefits of SSC. – Monitor city services: define KPIs and evaluate them. – To promote SSC services provision and integrated management.

Source: FG-SSC "Technical Report Setting the stage for stakeholder´s engagement on SSC", Annex 1

Summary & expected results

✓ Stakeholder identification for SSC is a critical component in the design and implementation of SSC Strategies and projects

✓ Each city differ in terms of the existent infrastructure for SSC as well as the multi-stakeholder ability to implement SSC projects in the cities

✓ This methodology provides a framework to carry out an stakeholder identification & engagement process. Each city should carry its own analysis but can take this model as reference.

✓ Cooperation among stakeholders is needed. In a Smart Sustainable City stakeholders interact together to build a resilient city who is smart, sustainable & innovative.

Source: FG-SSC "Technical Report on Stakeholders for Smart Sustainable Cities", page 22

Exercise (20 Minutes)

- Form into groups of 3-5 people (ideally familiar with a particular city)

- Select a leader/reporter

- From the **list of stakeholders in Slide 18**, select two of them and identify their role based on the **Analysis of roles & potential contribution Table** in Slide 23

- Report back to your facilitator (e.g. for 2 minutes in a 10 minute plenary session)

Thank you

Daniela Torres
alisdaniela@gmail.com