



For Smarter Sustainable Cities and Human Settlements: a Perspective from Italy

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See also EESC own opinion, largely inspired by the Italian Government policy initiative on Smarter Cities: Smart Cities as a driver of a new European industrial policy: TEN/568 EESC-2015-00586-00-00-AC-TRA [Official Journal of the European Union, C 383, 17 November 2015](#))

Smarter Cities and industrial policies

Smarter Cities can become drivers for a new industrial policy at a worldwide level, since they can influence the development of specific productive sectors and extend the benefits of the digital economy onto a large scale.

To do so, convergence is needed towards a less fragmented and more advanced development model with six enabling pillars:

1. Technologies and tools for energy efficiency and integration of renewable sources;
2. Dissemination of technology platforms and connectivity to set up the new digital service systems;
3. New digital services to improve the quality of life and work of the public and businesses;
4. Upgrading of infrastructure and urban redesign;
5. Education and training of individuals, businesses and the public sector in digital skills;
6. Economically and financially viable model for investment.

Strategy matters

Tools

- Figures & Indicators
- Stakeholders and Civic Society Engagement
- Coordinated Policy Making: multi-level governance plus standards
- Regulatory Review, i.e. on Innovative Procurement and Public Private Partnership
- Appropriate financing and sustainability model

Action

Step 1: Enabling Infrastructures

Step 2: Innovative Digital-enabled Service Ecosystems

UNECE-ITU SSC Indicators: few hints

(5) *The indicators were developed as a tool to evaluate how smart and sustainable a city is and serve as a starting point to implement concrete actions and measures and improve a city's sustainability level.*

They could be an useful tool to take action.

(9) *The main objective of the UNECE "United Smart Cities" project, within which the draft Smart Sustainable Cities Indicators (SSCIs) have been elaborated, is to support cities, in particular in developing countries and in countries with economies in transition, to improve their sustainable growth while focusing on a more transparent and efficient use of their resources. Sustainable growth can also be achieved with easier access to new and affordable technologies and will result in better living conditions for citizens.*

What about industrial policy for long-term sustainability and growth?

(11) *The objectives of using the indicators are the following. First, the indicators represent a tool to evaluate the performance of a city so that concrete measures can be recommended and then implemented by the city.*

What about enabling infrastructures?

(11) *Second, they can be used as a tool to monitor cities' progress towards sustainable urban development in the global framework of the Sustainable Development Goals (SDGs).*

The real challenge is how to transform monitoring into the exploitation of needs, then policy, then innovative solutions.



The Italian way *part 1*: Smartainability[®] Methodology



DEFINITION

Smartainability[®] is a new methodology which allows to evaluate the sustainability of a smart city.

TARGET

Evaluate the sustainability of technologies implemented to achieve smartness in cities.

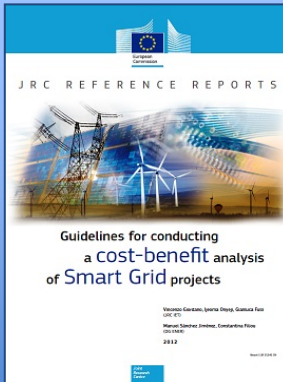
FEATURES

- Sustainability is directly connected to the analysed technologies.
- Ex-ante evaluation, before technologies implementation.
- Evaluation of technologies' best potentiality.
- Quantitative indicators weigh benefits, not assets or functionalities presence.
- Projected to the future of a city, not only for a present picture.

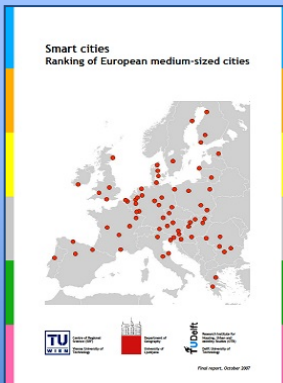
OPPORTUNITY

Find out how to integrate Smartainability[®] and UNECE-ITU Indicators.

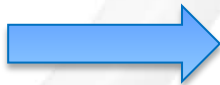
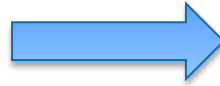




Evaluation of smart grid with assets-functionalities-benefits matrix assessment.



Evaluation of smart cities with Key Performance Indicators (KPI) organized in six dimension of analysis.



Methodology

Identify the assets of every innovative technologies



Find all the smart functionalities activated by the assets



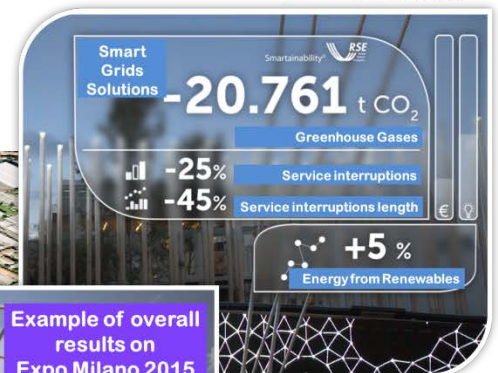
Determine all the benefits generated by the smart functionalities



Quantify the benefits with Key Performance Indicators (KPI)



KPIs evaluation is realised considering a Life Cycle Assessment (LCA) approach



LIFE CYCLE ASSESSMENT APPROACH

QUANTITATIVE INDICATORS

The Italian way part 2: Policy making

- *March 2014: **Governmental Delegation for Smart Cities policies** to the Under Secretary of State Sen. Simona Vicari*
- *September 2015: setup of a **Task Force for the Smarter Cities at the Ministry** of the Economic Development*
- *December 2015(upcoming): **First ever Governmental Directive** on Smarter Cities*
- *January – March 2016 (expected): Kick off of the **National Incentive Scheme for Smarter Cities***

Coordinated Policy Drafting

Policy Drafting and Funding Coordination

involvement of National Institutions,
Regions, Cities, EFSI Technical Hub

Private Stakeholders engagement

Policy Guidelines Drafting

Standardised Policy Schemes

Enabling

Infrastructures

National Incentive
Scheme for Smarter
Grids

Innovative Digital-enabled Service Ecosystems

National Incentive Scheme for
Innovation Partnership:
Pre-Commercial + Commercial +
Open to Market

One-stop-shop Support Office

for Smarter Cities +
Empowerment Program for
CIO

Measurable Impact

Pilot (2016)

14 Smarter Neighbourhoods in 14
Larger Cities

Follow-up (2017)

Middle-sized Cities +
Networked Smaller Towns