Smarter, Sustainable Cities as a source of Growth and Competitiveness

The Smart City Program of the Italian Ministry of Economic Development
Issues

- Growth, Employment, Competitiveness: Smarter Cities and Industrial Policies
- The Italian Perspective
- Policy Into Practice
- International perspectives and cooperation

This arrow marks the key elements
Section I

GROWTH, EMPLOYMENT, COMPETITIVENESS: SMARTER CITIES AND INDUSTRIAL POLICIES
*Smarter* stands for ... 
a radical change in Cities’ role

**A holistic approach to build a «Smarter City»**

Smart Cities could become a new platform to «promote» our countries’ economic and social growth and contribute to the recovery of our economies. Smart Cities will generate innovative services, increase the quality of life of citizens and help business thrive. Cities will become laboratories for a new industrial policy and drive the 4th Industrial Revolution.
So many advantages in becoming «Smarter»...

- Increase the quality of life of citizens
- Create a better process to promote business
- Enable savings for Citizens, Business and Public Sector, while producing new ways of revenue
- Reduce global carbon footprint for citizens, business and public sector
- Build a specialized and enabling platform to boost entrepreneurial and social innovation and foster local development
- Lead to industrial spill-overs through RD&; Smart Specialization; Growth with Employment

... require a policy and sustainability model
Section II

THE ITALIAN PERSPECTIVE
You need a vision to maximise your «Internal Return Rate»

OVERALL SMART CITY PROJECTS

1308

Overall Investments at the date in Italy

€ 3,710,158,989

Citizens involved 15,446,552,084

Municipalities involved 158
A sounder policy framework...

Finally, Smart City came at the very heart of the Italian Policy Making

- **March 2014**: Governmental Delegation for Smart Cities policies to the Under Secretary of State of the Italian Ministry of Economic Development

- **September 2015**: setup of a Task Force for the Smarter Cities at the Ministry of the Economic Development

- **February 2016**: First-ever Governmental Directive on Industrial Policy for Smarter Cities

- **First half 2016**: Kick off of the National Incentive Scheme for Smarter Cities
Smarter Cities: not only a mean to improve Citizens’ quality of life and Business’ framework…

... but also a specific context to introduce a new industrial policy

Smarter Cities represent for the Italian Government pivotal areas where citizens, companies, administrations will be able to test the effectiveness of innovative, scalable and replicable solutions.

The implementation of the pivotal areas will also represent the ideal setting to promote an experience of "living lab" for citizens and businesses in selected territories, facilitate cooperation processes between large companies and dynamic SMEs and encourage "open innovation“ and further exploitation of the products at an international level.
... based upon 6 Enabling Factors plus a sustainability model

1. Smart Grids
- Smart management of energy sources and linking
- Integrating Internet Protocol and Smart Metering
- Integrating different energy sources
- Smart mobility
- Smart logistics

2. Information and Communication Technology enabling and integrated platform
- Integrated access to the Internet Wide- and narrow-band adaptative access
- Widespread Sensor Platform
- Internet-of-Everything compliant platform for physical / virtual goods and security services
- Widespread of enabling devices (cameras, parking meters, hotspot, wallscreens, smart trash bins etc.)
- Access to Open and Big Data

3. Digital Services Ecosystems
- Digital Public and Private Services
- Access to public and private Services
- Integrate Intermediate Goods and Services (under a 4.0 paradigm)
- Open Innovation
- Crowdsourcing

4. Financial and Regulatory «up-to-date» Tools
- Public Private Partnerships
- Energy Saving Companies Integration
- Royalties-friendly schemes for Public Entities, to share revenues from Services
- Integration of supporting schemes belonging to multi-level governance (EU, EIB, National, Regional)

5. Urban Redesign

6. Education

...
Section III

POLICY INTO PRACTICE
Policy into practice

1. Coordinated Policy Drafting

Policy Drafting and Funding Coordination
- involvement of National Institutions, Regions, Cities, European Fund for Strategic Investment Technical Hub
- Private Stakeholders engagement
  - Policy Guidelines Drafting

2. Standardized Policy Schemes

<table>
<thead>
<tr>
<th>Enabling Infrastructures</th>
<th>Innovative Digital-enabled Service Ecosystems</th>
<th>One-stop-shop Support Office</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Incentive Scheme for Smarter Grids</td>
<td>National Incentive Scheme for Innovation Partnership: Pre-Commercial + Commercial + Open to Market</td>
<td>for Smarter Cities + Empowerment Program for CIO</td>
</tr>
</tbody>
</table>

3. Measurable Impact

<table>
<thead>
<tr>
<th>Pilot (2016)</th>
<th>Follow-up (2017)</th>
<th>Follow-up (from 2016 on)</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 Smarter Pivotal Areas in 14 Larger Cities</td>
<td>Middle-sized Cities + Networked Smaller Towns</td>
<td>Smart Specialization for International Cooperation + FDI</td>
</tr>
</tbody>
</table>
Policy measures

1. **SMART GRID ENABLING INFRASTRUCTURES**
   - Will promote energy efficient and connected services and infrastructures, starting from Smart Grid integrated with Ultra Wide Band, Sensors and Big-Data platform.
   - **15 million euros** initial endowment to be multiplied x 8/10 times thanks to the European Fund for Strategic initiative
   - Recipients: Energy Companies and PPP plus Telco and IT Companies

2. **INNOVATION PARTNERSHIP ON DIGITAL SERVICES ECOSYSTEMS**
   - Will support the spread of services, solutions and devices that improve the quality of life and the business context of the final users, i.e. citizens and companies.
   - **50 million euros** will finance 14 Pre-Commercial Contract designed on the basis of Italian Municipalities’ needs.
   - Recipients: IT Companies, Hardware Vendor, R&D Centres

Investments will be multiplied thanks to the involvement of Italian Regional Authorities
Economic lifecycle: simulation

HP: Implementation of Smart Grids enabling infrastructures on 30% of Larger Metropolitan Areas and deployment of Service Ecosystems on 15% of the population of Larger Metropolitan Areas involved

Indirect Investment: + 700 Mio Euros of Public / Private Investments

11,000 new jobs

91 Mio Euro of net value generated each year through savings (energy efficiency)

54 mio (60%) of revenues for private companies

36 mio (40%) of savings for Municipalities

Overall 22 mio euros to be reinvested in innovation each year

30% of savings to be reinvested in innovation each year

100% to be reinvested in innovation each year

10% of revenues shared with Public Sector

Direct Investment: 50 Mio Euros of Pre-commercial + TBD Mio Euros from Public Tenders

100 mio euros of revenues each year (ext)

10% of revenues shared with Public Sector

109 Mio Euro of net value generated each year through savings (energy efficiency)

54 mio (60%) of revenues for private companies

36 mio (40%) of savings for Municipalities

Overall 22 mio euros to be reinvested in innovation each year

30% of savings to be reinvested in innovation each year

100% to be reinvested in innovation each year

10% of revenues shared with Public Sector
Section IV

INTERNATIONAL PERSPECTIVES AND COOPERATION
Interest for Italy’s approach is soaring...

Could lead to stronger cooperation on Smart Cities R&D, Pre-Commercial and Deployment at an international level

Cooperation on Technology Transfer and International Cooperation among Italian and US Smart Cities within the United States of America «Smart City Challenge Initiative»

Forum on «Shaping Smarter and more Sustainable Cities: Striving for Sustainable Development Goals» (May 18-19, 2016 in Rome)

... and could lead to even more fruitful international cooperation on Smarter Cities

- Italy will become an «open innovation Laboratory» to develop innovative infrastructures and services ecosystem for Smarter Cities
- The Ministry of Economic Development is ready to support joint-investment initiative promoted by consortiums of Large International Companies and «on the edge» Italian companies, willing to realise R&D, on-field testing of services and devices and international deployment: recent investments by Cisco (on Corporate Venture), Apple (on Education), Huwaei (on Safe & Smart City), testify this opportunity.
- Furthermore, the Italian Government could partner with other Governments in order to lead to best-practice transfer and policies coordination.
Thank you for your attention!
For any further enquiry

smartcity@mise.gov.it