TeMA

The concept of "Smart City", providing a the solution for making cities more efficient and sustainable has been quite popular in the policy field in recent years. In the contemporary debate, the concept of smart cities is related to the utilization of networked infrastructure to improve economic and political efficiency and enable social, cultural and urban development.

SMART CITIES
RESEARCHES, PROJECTS AND GOOD PRACTICES FOR THE CITY

TeMA

SMART CITIES:

RESEARCHES, PROJECTS AND GOOD PRACTICES FOR THE CITY

1 (2013)

Cover image by: Roberto Matarazzo "Il Territorio della città", 100x70, inks, water based colors, courtesy of the author.

TeMA
Journal of
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The Reviews Pages keeps the readers up-to-date on developments in five reports: web, books, urban practices, law, news and events. Each report deals with the specific subject proposed in the TeMA issue. These reviews are specialist in nature but contain enough introductory material to make the main points intelligible to a non-specialist. The reader will not only be able to distinguish important developments and trends but will also find a sufficient number of references to the original literature, web and other resources .

01_WEB RESOURCES
The web report offer the readers web pages which are directly connected with the issue theme.

author: LAURA RUSSO
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02_BOOKS
The books review suggests brand new publications related with the theme of the journal number.

author: FLORIANA ZUCARO
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05_NEWS AND EVENTS
News and events section keeps the readers up-to-date on congresses, events and exhibition related to the journal theme.

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01

REVIEW PAGES: WEB RESOURCES

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In this number
SMART CITY AT URBAN SCALE

Everybody talks about sustainability, energy efficiency and innovation, lately. Struggling against the current financial, energy and social crisis, we are now considering the real importance of building a new type of city, capable of preserving the global urban future. In this context, several solutions have been proposed, and the so-called *smart city* concept seems to be the most successful one. A concise definition of *smart city* is hard to find since the idea has a broad application and the label *smart city* has been extensively used, yet we can think to a place where the physical world merges with the digital one, through active and creative participation of human capital. The main goal that the *smart city* project aims to achieve is to promote a sustainable development taking advantage of information and communications technology (ICT) to supply energy more effectively, increase efficiencies, reduce costs, and enhance quality of life, bringing large benefits to the population. Many cities, in Europe and around the world, have already taken up the challenge of becoming smart and they are working together, sharing information and best practices, supporting each other. The deep interest in the *smart city* approach has generated plenty of debate and discussion, and the web bears witness. Among a wide range of websites related to the *smart city* concept, it was chosen to point out some of them, each of which refers to a different scale/location of cities concerning the *smart city* process (European governments, Amsterdam local authority, megacities global network). The European Union's website is the first one signalized; it explores the Smart City and Communities (SCC) European Innovation Partnership (EIP), that aims to integrate different themes, such as energy, transport and communication, at European level.The Amsterdam Smart City website shows the effort made by local authorities to ensure the interaction between citizens and government about the projects planned for the city; Amsterdam has becoming one of the main examples of smart city in Europe. In the end, the C40 website presents the growth and mission of «a network of the world's megacities taking action to reduce greenhouse gas emissions. With a unique set of assets, the C40 works with participating cities to address climate risks and impacts locally and globally».

SMART CITIES AND COMMUNITIES
http://www.eu-smartcities.eu

On 10 July 2012, the European Commission launched the Smart Cities and Communities European Innovation Partnership (EIP). The partnership proposes to pool resources to support the demonstration of energy, transport and information and communication technologies (ICT) in urban areas. The energy, transport and ICT industries are invited to work together with cities to combine their technologies to address cities' needs. This will enable innovative, integrated and efficient technologies to roll out and enter the market more easily, while placing cities at the center of innovation (European Commission).

The Smart City Stakeholder Platform represents the core of the EIP; its objective is to promote the diffusion of technological solutions by practitioners. «To achieve its goal, the Smart City Stakeholder Platform will set up five groups: three thematic expert Working Groups (energy supply networks; energy efficiency in buildings; mobility and transport) and two horizontal Working Groups (Finance and Roadmap)».

An accurate explanation of each group is provided in the website of the EIP under the heading of *Working Groups*, together with the latest solution proposal, the next meeting scheduled, the members and documents available. The applications to join the Working Groups have been closed and the first meeting already took place, but any member of the platform, not just the Working Groups members, can propose technologies for the Working Groups to consider.

In the website *Home*, visitors are invited to join the Stakeholder Platform or submit a solution proposal by completing two different, but equally simple, forms. In addition, there are the *Highlights* section where the most important information is presented, and the *Smart City News* section, which contains the latest news about the project. In the bottom part of the *Home*, the *City Profiles* section includes a list of cities across Europe that promote smart city initiatives; each city profile gives information about climate, population, density, morphology and other characteristics that distinguish the city itself, allowing users to find smart city solutions suitable to their own city.

The most interesting part of the site is that dedicated to the innovation solution proposals that have been submitted by members; each proposal is described in details, providing information about the appropriate city context where it can be tested, energy supplied or savings expected, potential expected benefits, and more. Every member of the platform can publicly comment or ask for more information, as well as privately contact the author. From May 2012 to January 2013, thirty nine solution proposals have been submitted and they constitute a valuable set of information freely available to anyone. The Stakeholder Platform goal of promoting the wide diffusion of ideas and best practices does not seem to be far.

AMSTERDAM SMART CITY (ASC)
http://www.amsterdamsmartcity.com

In 2009, Amsterdam Smart City (ASC) inaugurated a new promising future for the Metropolitan Area, thanks to the collaboration between Amsterdam Innovation Motor, grid manager Liander and local authorities.

ASC aims to create new cooperation bringing partners together in order to facilitate sustainable progress and to implement climate and energy projects. «The ultimate goal of all activities is to contribute positively towards achieving CO2 emission targets, as well as aiding the economic development of the Amsterdam Metropolitan Area. In doing so, the quality of life will improve for everyone».

Several meaningful achievements have been reached since Amsterdam Smart City was born: 36 new technologies were tested; 6 partners meetings, 4 knowledge sessions, 60 presentations and 40 guided tours were organized; 132 companies joined the platform; 2422 users visited the website monthly. But most important of all, Amsterdam has rising in the ranking of the leading smart cities in Europe, working successfully. The key to this success is making the Metropolitan Area an urban living lab, giving the chance to partners for testing innovative products, services, technologies and approaches in a practical environment: for example, with the project *ship to grid* «almost 200 shore power stations were installed allowing ships to connect to green energy instead of relying on polluting on board diesel generators for their power supply», and thanks to the project *Geunzenveld-Sustainable Neighborhood,* «more that 500 homes were provided with new smart meters and some of them with an additional energy feedback display that should enable the residents to become more aware of their energy use».

Amsterdam Smart City website provides detailed information about the ASC partnership, which focuses of 5 themes (living, working, mobility, public facilities and open data) including 32 projects, implemented mostly in 3 areas in the Amsterdam Metropolitan Region (Nieuw West, Zuidoost and Ijburg); *themes*, *areas* and *projects* are the main sections of ASC website, that allow visitors to explore the new smart dimension of the city. By clicking on a single theme, or area, the related projects appear in the right part of the web page and a brief description of the theme/area is provided. On each project's page, you can find a detailed explanation with the monitoring of the project's phases and also the lists of partners and useful contacts concerning it; in some cases, a concise and straightforward video helps to better understand the project.

Additional site sections, such as *News*, *Knowledge Center* and *Partners*, provide extra information: *News* informs you of upcoming events, such as the World Smart Capital Partner Meeting or the inauguration of a new ASC project; the *Knowledge Center* contains documents, links, reports and more, about smart city's world, which can be useful to deepen understand this new idea of city; in the *Partners* section, however, the many organizations involved in ASC are listed, divided into 4 groups (Founding partners, Strategic partners, Project partners and Network partners).

C40 CITIES – CLIMATE LEADERSHIP GROUP
http://www.live.c40cities.org

The Climate Leadership Group was founded in October 2005, when the Mayor of London promoted a meeting for further action on reducing carbon emissions. The group, originally called C20, in 2006 has grown to 40 cities, and thus the name C40 was born. New York City Mayor M. R. Bloomberg is the present Chair of the C40 and before him, London and Toronto Mayors held the position. C40 mayors take part in rotation in the Steering Committee, leading the network and guiding its work. «C40 Cities are working to reduce greenhouse gas emissions significantly and provide proven models that other cities and national governments can adopt». The city is considered the key to ending climate change; in fact, the sum of local actions has the power to change the future, having immediate impacts and effects. The C40 network helps cities in three different ways: it provides direct assistance to its cities in the choice and monitoring of climate actions; it promotes peer-to-peer exchange of experiences and knowledge; it offers a research and communications service to C40 cities, by finding and spreading the most successful activities.

The C40 website is fundamental for the group because it represents its public face, and gives everyone information relating to the C40 and its initiatives. It is divided into 7 sections: *About, C40 Cities, Why cities?, Take action, Blog, Events* and *Media & Research.* The section *About* includes a description of the group and its mission, its history and leadership (chairperson, Steering Committee and Executive Team), with a video that sums it up. If you want to know how many and which cities are part of the C40 network, the section *C40 Cities* gives you all the information about it. Today, there are 58 affiliated cities, representing 18% of the global GDP and around 9% of global population. You can browse through cities by choosing from a list; every city has its own page with an overview (CO_2 emissions and target, carbon emissions and city data), news and case studies. The way a single city can effectively contribute in reducing greenhouse gas emissions is explained in the section *Why Cities?*, where a infographic content informs you about the current potential of cities, that working together can help to build a better urban future. Cities are made of people, which means that each of us, by acting in a different way, can make a difference: this is the message of the section *Take Action*, where citizens are invited to «spread the word about the C40 mission» and follow the recommendation contained in the «11 easy ways to cut your carbon and help your city» list.

The *Blog* includes posts subscribed almost on a daily basis, concerning the C40 group and, more generally, the commitment to reduce greenhouse gas emissions. The sections *Events* and *Media & Research* end the website and provide information about the upcoming events and the press releases, as well as news, reports and additional case studies. The website is full of information of interest and it is well worth a look.

IMAGE SOURCES

The images are from: www.ricercasit.it/mastersmartcity/; www.eu-smartcities.eu; www.amsterdamsmartcity.com; www. carbon-based-ghg.blogspot.it

02

SMART CITIES: RESEARCHES, PROJECTS AND GOOD PRACTICES FOR THE CITY

REVIEW PAGES: BOOKS

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In this number
THE SMART FUTURE OF THE CITIES

The concept of smart city is of great importance in relation to the tricky period we are passing through: the urban population growth (by 2020 the urban population will outgrow the rural population and the trend will continue until 2050), the worldwide economic crisis and the energy saving issue are some of the huge questions that have become important both from the perspective of environmental sustainability and progressive transformation of the economic development model and of behaviors.

Building resilient and intelligent cities is getting more and more a need in order to absorb disturbance and to ensure a better quality of life; although a lot of studies and researches have been carried on about the smart issue, we can provide neither a clear definition, nor conceive exactly this concept within the urban dimension. Nowadays smart is often a "trend" to which adhere, to attract considerable economic investment, and most cities claiming to be smart don't offer any evidence to support such proclamations (Hollands, 2008). Therefore it would be appropriate engaging the smart issue with a holistic approach in order to integrate and coordinate the several main elements that form a smart city: governance, mobility, participation, energy, economy, environment and living. The joining element among all these ones might be the ICT (Information, Communication and Technology), but actually is the community. Technology should be considered as a support to create a smart city, and not as the key factor, because it is people that use technology allowing in this way the cities to evolve and to become smarter: <urbanizing technologies, making them actually useful to the new urban needs> (Sassen, 2011).

According to this perspective and in order to underline the concept that smart cities should be able to deal with the challenges that are getting on in terms of competitiveness, sustainability and social cohesion, this section proposes three documents related to the experiences of those cities that can be defined smart: the first proposal is a research project focused on a smart city ranking; the second one describes the smart best practices; the third one aims at supporting Italian government to create a smart Country.

Title: Smart Cities-Ranking of European medium sized cities
Author/editor:AA VV
Publisher: Centre of Regional Science, Wien University of Technology
Download: http://www.smart-cities.eu/download/smart_cities_final_report.pdf
Publication year: 2007
ISBN code: n.d.

In 2007 the collaboration among the Wien University of Technology, the University of Ljubljana and the Delft University of Technology allowed to conduct a research project related to the medium sized cities development perspective. Infact because of radical economic and technological changes, cities are facing growing competition and especially in Europe competitiveness and sustainable urban development are two challenges that are contented concurrently. In this perspective the medium sized cities should detect <their strengths and chances for positioning and ensure and extend comparative advantages in certain key resources> against both other cities of the same level and larger metropolises. Furthermore most urban studies has been concentrated up to now on these great metropolises dismissing the medium sized cities. Basing on these assumptions this research project is concentrated on the Smart European Cities Ranking, depending on an extended group of indicators, for the medium-sized cities. The Smart European Cities Ranking approach has been developed according to the following objectives:

− transparent ranking of a selected group of cities;
− elaboration and illustration of specific characteristics and profiles of every city;
− the encouraging of benchmarking between selected cities;
− identification of strengths and weaknesses for strategic discussion and policy advice.

This Ranking approach considers the six main elements characterizing a smart city, according to literature: economy, people, governance, mobility, environment and living. All the characteristics are defined by 31 factors identified in several workshops and which in turn, each one of the factors are described by a certain number of indicators (74 in all). The indicators have been obtained from public and free available data, in the period 2001-2007. Most of indicators (65%) are defined at the local level, while the remaining ones (35%) are derived from data on the national level in order to provide additional information not only about the endowment of cities but also about the perception and assessment of specific developments. Since the indicators are defined in different ways they have both different levels of values and different ranges, which are not allowed to be merged in any form. Therefore, these indicators have been standardized by a z-transformation resulting in a distribution with an average value 0 and a standard deviation of 1. In the final ranking Scandinavian cities and Benelux and Austria cities are ranked in the top group, while cities ranked lowest are mainly in the new EU member states. The ranking results are illustrated by maps, tables, and graphs on the website of the project, and the online database allows to the comparative strengths and weaknesses on the level of characteristics and factors of the 70 cities. The Smart Ranking approach is an easy way for benchmarking and identifying strengths and weaknesses and <its utility will increase the more clear/similar are the criteria for the selection of cities and the more valid and reliable are corresponding indicators>. In author's opinion the real smart cities will be able to use this ranking approach as a tool both to benchmark with other cities and to learn from the better performing cities in order to enhance their territorial capital and setting up strategic policies.

Cittalia, the publisher of this publication, is a research center of Italian Towns and Municipalities whose goal is supporting local administrations in the challenges of urban and economic transformation; recently it is promoting several initiatives aimed at sustaining the local development processes in smart innovation. "World Smart Cities" is a report related to some of the most significant experiences in Europe and in the rest of the world and it provides an important contribution of ideas and suggestions to inspire the creation of similar initiatives in our Country. All the study cases are observed through the lens of the projects that cities have already implemented and that will be achieved in the near future; the description of each city starts both from its social and territorial characteristics and strengths of the policy realized in order to understand better the operating context. Therefore the report aims at underlining the added value of technological innovation for the sustainable development of urban contexts involved. The ICT (Information, Communication and Technology) is infact the common thread of all the experiences and represents the key to start an innovation digital process in the local policies.

Amsterdam and Seattle put the energy saving and efficiency as central themes of their political agendas in order to achieve mobility, working and public space projects, in this Flamish town, and to involve the local community in the planning process, in that American city. Both the towns want to achieve two main objectives: improving awareness of energy consumption with private citizens and promoting a greater consciousness of the impact of the individual on the quality of the urban environment. The independence from fuel fossil is the straight of Reykiavik where electricity is completely produced by renewable sources. The use of renewable energy, although facilitated by the availability of natural sources being in the territory, it can't be made without research, development and innovation processes, on which the city of Reykjavík has strongly focused.

Innovation technology has been used as catalyst for urban redevelopment in Paredes, Tallin and Monterrey; their goal is to attract capital and foreign investment in order to increase the urban competitiveness and to improve the quality of life. Mobility, environment, public health and other public services are the main axes of the growth strategies implemented in Cutiriba, Hlesinki, Portalnd and Houston; in these cities the ICT has been used to improve the dialogue between citizens and local administrations. This is the objective of Aahrus and Gent too, that have been realizing a digital revolution aimed at encouraging the participation of the local community. Especially Gent chose the crowdsourcing in order to put private subject services on the global market and to allow a better cooperation between private and public sectors. The reading of these experiences allows to understand two main elements: medium size cities can be drivers of development too, through targeted interventions; innovation technology represents an important prerequisite, but it is not completely sufficient; ICT is a way to improve the quality of life and to overcome the sustainability challenge, but the critical factor is the community. How can a city be smart if its citizens aren't smart too as well?

Title: Smart Cities in Italia: un'opportunità nello spirito del Rinascimento per una nuova qualità della vita
Author/editor: AA.VV.
Publisher: ABB e The European House-Ambrosetti
Download:http://www.abb.it/cawp/db0003db002698/bc72c938b3add52ac1257a53002fd811.aspx
Publication year: 2012
ISBN code: n.d.

ABB and the European House-Ambrosetti supported the draft of this report about the development of smart city in Italy, in order to define a virtuous and strategic growing path for our Country. Within the report there is a definition both of smart city and smart Country, in accordance with the aim of the same report: the smart city represents an <urban model able to guarantee a high quality of life and personal/social growth of individuals and business, while optimizing resources and sustainability> and a smart Country is <a forced choice that combines competitiveness of the Italian system and citizens wellness>. Our government should consider the "smart opportunity" as the first step to define a new systematic approach to the growth of the Country, considering all cultural identities, dimensions, vocation and peculiarities of Italian cities.

Seven proposals have been defined to create the optimal conditions for the smart development of Italy; these suggestions are the results both of the surveys referring to the stakeholders and to three studies processed for the report and they can be read in relation to the hypothesized effects on the Country:

– actions to participate successfully in international competition (proposals 5 and 6);
– actions to close the gap with the main Countries of international reference (proposals 3 and 4);
– actions to create competitive advantages (proposals 2 and 7);
– a proposal which is the cornerstone of the entire plan (proposal 1).

The report has been developed to answer three main questions related to the smart issue: what should Italy do to become more smart? What does smart mean? How smart is Italy and how much it will be in the future? Actually the real question is: how much will it cost to Italy the option not to choose, not to invest, not to engage a challenge that is approaching, despite any decision? The answer has been determined through studying data elaborated by Fondazione EnergyLab: Italy has to invest three percentage points of GDP each year from now until 2030. Nevertheless a smarter Country is worth up to ten points in GDP annually, without considering some aspects neither considered and nor quantified in the report, in terms of international competitiveness and image, social cohesion, innovation and livability. In order to achieve all these economical and social goals, the first action that should be implemented is disseminating the new smart culture; a survey on a representative sample of Italian population showed that four out of five Italian citizens have never heard of smart city, only the youngest and more educated segment of the population (25-34 years old and graduated) knows this subject. Instead everyone should feel the need to be part of a smart city, in order to build a real smart Country. Therefore this step related to the communication will has to be aimed at two aspects: the acculturation of the population on the smart cities and the public engagement to involve effectively the citizens.

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03

LANDSCAPES OF URBAN SPRAWL

REVIEW PAGES: LAWS

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In this issue

THE DIGITAL AGENDA: TOWARDS AN UNIFIED EUROPEAN REGULATORY SYSTEM FOR THE CONSTRUCTION OF SMART AND SUSTAINABLE CITIES

The relationships between the elements of the territorial system and the technological innovation system are well-established in scientific literature and also the possible effects related to the use of new technologies on urban organization and structure have already been widely predicted (Beguinot Cardarelli 1992, Gargiulo 1995). This awareness at theoretical level influences the policies adopted by the European Union over the last twenty years. In 1987 the discussion about the foundation of a single European market of telematic services was launched by the "Green Paper on the convergence of the telecommunications, media and information technology sectors and the implications for regulation - Towards an approach for the information society" (COM(97)623). At the moment, the most recent European documents oriented to the development of an European Information Society are the Lisbon Agenda in 2000, the i2010 strategy (COM(2005)0229) and the Europe2020 strategy (COM(2010)2020).

Also the impact of advanced communication technology in re-launching the role of cities and regions from local to global scale, already stated in the 1990s, is now confirmed by the European Commission which defines that: "in today's technological environment, any structural change must necessarily include a strong dose of digitisation. Europe's companies cannot remain competitive, nor can public services remain first-class, if they do not make extensive use of information and communication technology (ICT)" (Galderisi Gargiulo 1997, European Union 2012).

The above considerations show how both theories and EU policies for the construction of what today are called "smart cities", have been introduced years before the same definition of the "smart" concept.

The debate turns on again when techniques within the business environment starts to be adopted to the study of cities, that is when many device companies associated with new technologies realized that

expanding its scope from the building to the whole urban system would increase the market for such devices. Today, both Europe and Italy have not yet developed a regulatory system for the construction and the management of smart city. This is because the "smart city" concept is still undefined and has a multidisciplinary nature. Until now both the European and the Italian Parliament have issued lows that affect different aspects of a smart city: energy saving, digital networks, sustainable mobility. The step that now they are trying to put forward is to build up a unified regulatory system within which defining specific legislation in the different areas of interest. The objectives they seek to achieve in the short term, concern essentially the creation of a single digital market and the overcome of the digital divide that still affects a lot of Member States.

Based on these considerations, the structure that will be given to the Laws' Review Pages of TeMA vol 6, is the following:

– the first issue concern how the statutory provisions take into account the territory wiring;

– the second issue will be based on the examination of the European and Italian laws related to energy saving with specific reference to the building scale;

– the third number will offer some reflections on the need to adopt a holistic approach to the issue of smart city that is to integrate digital networks and energy saving to a knowledgment and social capital who knows how to operate, in order to allow an effective improvement of the quality of life.

DIGITAL AGENDA FOR EUROPE: THE KEY ROLE OF INFORMATION AND COMMUNICATION TECHNOLOGIES (ICT)

The Digital Agenda for Europe (DAE) (COM(2010) 245), lunched in May 2010, is the new ten-year planning document that takes the place of the European eGovernment Action Plan 2011-2015. It is the first of seven flagship initiatives of the Europe 2020 Strategy (COM(2010)2020), set out to define the key enabling role that the use of Information and Communication Technologies (ICT) will have to play if Europe wants to generate smart, sustainable and inclusive growth in Europe.

The objective of this Agenda is to chart a course to maximize the social and economic potential of ICT, spuring innovation, economic growth and improvements in daily life for both citizens and businesses in order to provide Europeans with a better quality of life through, for example, better health care, safer and more efficient transport solutions, cleaner environment, new media opportunities and easier access to public services and cultural content. Two are the challenges that Europe is to overcome with the DAE for the next decade:

− overcome the barriers that hinder the Member States in the adoption of ICT, such as: lack of interoperability, lack of investment in networks and lack of digital literacy and skills; insufficient research and innovation efforts and so on;

− stimulate demand and encourage investment in the development of infrastructure networks and in the promotion of digital contents and services.

For these reasons, the Digital Agenda proposes 101 actions, grouped around seven "pillars":

1. achieving the digital single market through opening up legal access to online content and by simplifying copyright clearance and management and cross-border licensing;

2. enhancing interoperability and standards of devices, applications, data repositories, services and networks.;

3. consolidating online trust and security by presenting measures on network and information security and the fight against cyber attacks.;

4. promoting competitively priced fast and ultra fast Internet access for all;

5. investing in research and innovation by encouraging private investment and doubling public expenditure to develop ICTs.;

6. enhancing digital literacy, skills and inclusion through the European Social Fund and by promoting e-accessibility in particular when the Member States apply the Audiovisual Media Services Directive;

7. leveraging smart use of technology for society exploiting the potential offered by the use of ICTs in the several areas such as: climate change, through partnerships with emitting sectors; digitisation of content, through Europeana; intelligent transport systems, by applying the proposed Directive.

The Implementation of the actions described is coordinated by a group of Commissioners, the current commissioner is Neelie Kroes, the Vice-President of the European Commission. The Commissioners are

responsible for ensuring that the principles of the agenda are recognized and implemented by all Member States. It's up to the Member States to adopt the digital agenda at national level.

On 18 December 2012, with the Communication COM(2012) 784 "Digital Agenda for Europe - driving European growth digitally", has been drown up a "to-do list" which sets up seven new digital priorities for 2013-2014. The Commission's top digital priority for 2013 is finalising a new and stable broadband regulatory environment. The remaining priorities concern: the adoption of measures to avoid one million ICT jobs going unfilled by 2015 because of lack of skilled personnel; the deliveration of EU cyber-security Directive; the update of EU Copyright Framework; the acceleration of cloud computing through public sector buying power; the development of new electronics industrial strategy to increase Europe's attractiveness for investment in design and production as well as growing its global market share.

Progress on implementing the Digital Agenda will be charted in the annual Digital Agenda Scoreboard. The last Scoreboard has been published in June 2012, reporting on the progress of those actions between June 2011 and May 2012 and assessing overall impact on the basis of 13 key performance targets. In particular, report underlines that "the progress towards achieving key performance targets is mildly positive, though some areas for concern should be noted, which can be partially attributed to the negative economic climate in which the strategy is being deployed. Regular internet usage is rising steadily, especially among disadvantaged groups. Fewer and fewer citizens have never used the internet. Similarly, online buying continues to increase, although the pace of growth in cross-border eCommerce is very slow. Importantly, high-speed broadband shows the first signs of taking off, including super-fast connections above 100 Mbps. Finally, the market share of LED lighting is expanding swiftly." (EU 2012).

DIGITAL AGENDA FOR ITALY: THE MODERNIZATION OF THE
RELATIONSHIP BETWEEN GOVERNMENT, CITIZENS AND BUSINESSES

The Digital Agenda for Italy (ADI) has been launched the 1st March 2012 by the Decree Law named "Semplifica Italia". The statutory provisions concerned with the Digital Agenda for Italy are within the item n. 47 of the D.L. 5/2012, named "Agenda Digitale Italiana", according to which " under the directions of the Digital Agenda, the Government is pursuing the goal of the modernization of the relationship between government, citizens and businesses, through coordinated actions aimed at encouraging the development of the demand and the supply of innovative digital services, at enhancing the broadband connectivity, at encouraging citizens and businesses to use digital services and at promoting the growth of industrial capacity adequated to support the development of innovative products and services". On December 18th, 2012 the D.L. 179/2012 "Further urgent measures for the country's growth" has been turned into the low n.221/2012, named "provvedimento Crescita 2.0", in which there are the measures for the concrete application of the ADI.

The goals that the Italian government aims to achieve are 3:

– encourage public funding to eliminate the digital divide by 2013;

– encourage the digitization of the relationships with the local administration and the communications between public offices;

– promote the development of smart cities, where government and technology come together to improve the quality of life of citizens. In this regard two announcements have already been issued: one for the northern Regions, for which have been allocated 665.5 million euro, and one for the central and southern Regions, of about 240 million euro.

To implement these goals a "Commissioners group" has been instituted. The task of this group was to establish, between the beginning of March and the end of June 2012, a series of regulations (decrees "Digitalia" package) that constitute, together with the operational projects, the strategy of the Italian Digital Agenda.

The Commissioners group is divided into six working groups which correspond to the six strategic areas: Infrastructure and Security; eCommerce, eGovernment Open Data, Computer Literacy - Digital Skills, Research and Innovation, Smart Cities and Communities. The task of carrying out the objectives set by the Commissioners group and of monitoring the implementation of plans of ICT in public administrations will be performed by the "Agenzia per l'Italia digitale", as stated in the D.L. n.147/2012, named "Decreto Sviluppo".

To make a complete and exhaustive list of the projects and of the plans contained in the Digital Agenda is practically impossible: on the one hand because it is a large amount of proposals and guidelines that affect several subjects, and secondly because the whole Agenda is still at a preliminary stage, with no clear and definitive measures of implementation.

Summarizing and simplifying, we can say that Italian Digital Agenda follows the seven pillars developed by the European Commission, adapting and directing them towards the real needs of Italy. The following innovations will be provided:

1. digital identity and innovative services for citizens: identity card, electronic health card and national services card (to access to the online services of public administration) starting from 2013; civil registry unified database, roads archive and certified e-mail for companies;

2. digital administration: allow to automate the range of organizational and procedural tasks of the services provided by public administrations. In particular, it has been stated that the public administrations has to execute all the services by Internet starting from 2014;

3. services and innovations to promote the digital education: electronic certificates and folders in the University starting from 2013-2014 period, digital textbooks starting from the academic year 2014/2015;

4. digital health measures: electronic health folders, electronic prescriptions;

5. broadband and ultra-broadband: the Agenda expects to complete broadband coverage (at least 2 Megabit) by 2013 and to improve the "ultra-wideband"[1]. For this reason two main plans have been issued: the first one named "National Broadband Plan",in the approval phase, for which have been allocated 150 million euro; the second one is the "National Plan for ultra-wideband" concentrated in the south of the country to which almost 600 million euro are assigned to;

6. electronic money and digital invoicing starting from 2014;

7. digital justice: notifications by electronic means, changes to the bankruptcy law to proceed electronically.

Every year, the Government will submit to Parliament a current report on the implementation of the Italian Digital Agenda.

The following are some considerations on the possible effects that the application of the measures contained in the Agendas presented above would entail.

The full implementation of Digital Agenda for Europe would increase European GDP by 5%, or 1500€ per person, over the next eight years. In terms of jobs, up to one million digital jobs risk going unfilled by 2015 without pan-European action while 1.2 million jobs could be created through infrastructure construction. This would rise to 3.8 million new jobs throughout the economy in the long term.

In Italy initiatives for approximately € 2.5 billion have been allocated; this investment is expected to produce 4.3 billion euro and up to 54.000 permanent employees. This strategy will allow the growth rate of national GDP of nearly a quarter of a point (0.24%); in this way it's possible not only to amortize the investment, but also to self-financing over time the public investment made through normal taxation.

In addition, the digitization of many services would dramatically decrease government spending and fraud against the State. For example, the electronic prescriptions, which should have started already in September 2012 as stated by the ex health Minister Renato Balduzzi, could save about € 7 million per year.

These measures will allow Italy to overcome the crisis and to compete in the global scenario.

The report "doing business 2012" by the World Bank, notes that Italy reveals a lower contribution of long-term ICT capital to GDP growth by investing in ICT only 2 per cent of its gross domestic product (that is, 10% of total investment), compared with 3.5% in the U.S. (which accounts for 25% of total investment). A reading of the Digital Agenda Scoreboard 2012 shows also the significant gap between the Italian and the other European Union countries.

An overview reveals that Italy has the following values below the European average:

− the population that has never used the internet (the 39% of the population declare that they have never used the internet), preceded only by Romania, Bulgaria, Greece, Cyprus and Portugal;

− the percentage of individuals using the internet regularly, that is one of the lower of the European States;

− the use of internet, such as searching for information, online banking, eCommerce, online purchases: books,magazine,/e-learning material.

The indicators in line with the European average mainly concern aspects regarding the infrastructure (eg, fixed and mobile broadband penetration). These results demonstrate that besides to continuing to invest in infrastructure it is now necessary to focus on strategic issues related to the increase in digital literacy skills and inclusion.

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IMAGE SOURCES

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NOTE

[1]"broadband" refers to the connection system that allows to send information at a rate that varies from 2 to 20 Mbps (megabits per second). The "ultra-broadband" travels instead at a major rate: from 30 to 100 Mbps

04

SMART CITIES: RESEARCHES, PROJECTS AND GOOD PRACTICES FOR THE CITY

REVIEW PAGES: URBAN PRACTICES

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In this number

SMART CITIES: THREE INTERNATIONAL CASE STUDIES

Larger cities of today are facing immense problems in terms of development, inclusion, housing transport, climate, infrastructure, security and many more. The current economic crisis is making it even harder for cities and their citizens, neighbourhoods and businesses to achieve their goals and many cities are in a state of decline (Pallagst et al.,2009). At the same time the cities themselves represent a promise for a brighter future: a vision of freedom, creativity, opportunity and prosperity (Schaffers et. al, 2012). They are the engine of economic growth , productivity and competitiveness.

In this context the concept of "Smart City" has attracted considerable attention over the past few years. The European Union (EU), in particular, has devoted constant efforts to define a strategy for achieving urban growth in a "smarter" and more sustainable way. Other international institutions also believe that "Smart Cities" represent an effective response to today's needs which have become crucial thanks to the rapid, pressing trends seen throughout the world. According to Caragliu et al. (2009) a city can be defined as "smart" when   "investments in human and social capital and traditional (transport) and modern (ICT) communication infrastructure fuel sustainable economic growth and a high quality of life, with a wise management of natural resources, through participatory governance". Cities around the world are currently developing strategies toward becoming "Smart Cities". In this paper three international case studies have been presented:

– Amsterdam (the Netherlands)

– Masdar City (United Arab Emirates)

– Curitiba (Brazil)

The case studies aim to analyze the currently emerging strategies, policies and technological opportunities offered by this new emerging approach to smart and sustainable growing.

 With different strategies and different solutions, the case studies analyzed have shown how a forward thinking approach, an innovative usage of green and ICT technologies and new forms of citizen's empowerment can be successful factors to tackle social, economic and environmental issues that cities are currently facing and pave the way to a smarter and greener environment.

THE STUDY CASE OF AMSTERDAM

As the commercial capital of the Netherlands and one of the top financial centres in Europe, Amsterdam is considered an alpha world city in the global economic system. The city strives to become one of the "greenest," most sustainable cities in Europe while continuing to attract businesses and maintain economic growth. Over the past four years, the city has successfully managed to become a leading European Smart City. Cooperation, smart technologies and behavioural changes are the key ingredients of "Amsterdam Smart City"(ASC), an ambitious strategy aimed to fuel sustainable economic growth and a higher quality of life, in combination with an efficient use of natural resources. The Amsterdam Smart City Project ties in with the New Amsterdam Climate Plan which aims to ensure that all the city's organisations are climate-neutral and to reduce CO_2 emissions by 40% by 2025 (compared with 1990).

Amsterdam Smart City started in 2009 as a collaboration project between Amsterdam Innovation Motor and the grid operator Liander, in close collaboration with the municipality of Amsterdam. Using a collective approach by bringing partners together and setting up local projects, ASC has grown into a broad platform. Today, the project involves over 70 different partners, and Amsterdam has become known as a Smart City all over the world. In a Smart City perspective, Amsterdam's main challenge is to save energy to reduce CO_2 emissions. To do this, Amsterdam Smart City has, during these years, introduced and tested a vast amount of projects, divided into five areas: Living, Working, Mobility, Public Facilities and Open Data.

Under the label "Living" Amsterdam Smart City has initiated a variety of projects which aim to raise awareness among residents about their energy use and behaviour. Indeed, with over 400000 households, Amsterdam is the largest city in the Netherlands; together these households are responsible for approximately one third of the total CO_2 emissions in city. By applying smart and energy-saving technologies, the City intends to greatly reduce CO_2 emissions and energy consumption. A successful example of this strategy is the West Orange Projects that aims to better inform residents about their energy consumption through a wireless energy display connected to the digital gas and electricity meters. In this project more than 400 homes were equipped with a smart energy management system which allows to view the power consumption of any electrical appliance and the overall consumption of the entire house. This system has fostered an energy and emissions saving by up to 14 percent for each home and is now going to be applied on a large scale. A similar initiative has been realized in 500 other dwellings within the project Geuzenveld that provided the gradual replacement of the old energy meters with new displays containing information and suggestions helpful to residential energy consumption. Even many local companies have been involved in energy saving projects. During the Smart Challenge, for example, eleven local companies competed with each other in saving the largest amount of energy.

"Working" is an area where Amsterdam Smart City has initiated a lot of projects. In the densely populated Netherlands, commuting is very common. To create a more sustainable environment, Amsterdam needed to tackle the many daily trips made by car. A first attempt was made by creating drop-in work places in areas where there were often traffic jams, but due to many factors this was not successful. Today, a very

successful project with drop-in offices within 5 minutes biking everywhere in Amsterdam is creating flexibility and reducing car-traffic within the city.

An example of a "Mobility" project is the Moet je Watt, where special electrical battery chargers have been relocated all over the city. What makes this project special is that the charging stations, apart from providing easy use services to electrical vehicles, also prevent over-charging, creating less energy waste. WeGo is another example of "Mobility" project aimed to reduce car ownership, congestion and pollution by stimulating car sharing. It consist in a new sustainable platform that allows neighbours and friends to safely rent their cars to each other. WeGo provides the insurance and technology to make sure every transaction is safe, convenient and easy.

"Public Facilities" includes projects such as Smart School and the Utrechtsestraat Climate Street. Smart School is a project where children in primary schools learn about saving energy, while their school competes with other schools in energy efficiency. The Utrechtsestraat Climate Street is another public space project where a city street works as an incubator and testing place for new climate friendly innovations and experiments.

"Open Data" programme consists in a number of separate activities, all required to stimulate the development of open access to publicly-available data. Key concerns include the decryption of data, the creation of sample applications and the organisation of a location platform for the data. According to ASC strategy access to share open data will fuel the information society: publicly-available data can be used and combined to provide citizens with new insights and the chance to make decisions based upon actual facts and figures.

THE STUDY CASE OF MASDAR CITY

Masdar City is a planned city of 640 hectares designed by British architectural firm Foster and Partners. Initiated in 2006, it will rely entirely on solar energy and other renewable energy sources, with a sustainable, zero-carbon, zero-waste ecology and will be a car free city. It will consume 75 per cent less energy than any traditional city of the same size.

Creating an entirely new city exclusively based on renewable energy sources and the latest technologies is considered a major challenge in the strategic plan Abu Dhabi Economic Vision 2030. As a clean-tech cluster and test-bed of renewable energy and sustainable technologies, Masdar City will not only help diversify the Emirate's economic base by providing a home to a new industry, but will also provide an environment where new technologies can pave the way to a smart green environment.

Today only a small part of the city is completed while construction is still ongoing. At full build-out by 2020, the city is expected to have 40,000 residents. Furthermore 60,000 workers are expected to commute to the city to work in hundreds of companies in the energy and clean technology that will settle there.

The Master-plan of city, financed by the Abu Dhabi Future Energy Company, meets in particular the criteria of urban sustainability: in addition to a particular attention to the buildings orientation (with regards to the sun and prevailing winds), the city has been designed to facilitate integration between work and leisure. A mix of land-uses has been designed in order to minimize the need to travel. Other key features of the city design are the high density of the blocks combined with a relatively low height of the buildings, which will reach a maximum of 5 floors, attention and care for the construction of public spaces, thus encouraging collective life and social relationships. The City, therefore, is an entirely pedestrian area with narrow streets, shaded walkways and a series of routes that encourage walking.

Sustainable urban development and high quality of life are the main concerns of the master-plan. To achieve these objectives, great importance has been given to the role of new technologies. These technologies have been applied in a variety of projects, divided into four main areas: energy management, water management, transport and supply chain, waste management.

In the area of energy management, several smart and energy-efficient techniques have been applied and stringent building efficiency guidelines have been set in areas such as insulation, low-energy lighting specifications, the percentage of glazing (i.e., windows), optimising natural light, and installing smart appliances, smart metres, smart building management systems, an integrated distribution management system, and a citywide energy management system that interacts to manage the electrical load on the grid – all along the system, from the utility to the consumer.

The City also aims to reduce water consumption by 40 per cent (compared with a "traditional" UAE city). To reach this objective the city is using a broad array of water-use reduction technologies and systems. Highly efficient fittings, fixtures and appliances, smart water metres that inform consumers of their consumption, and smart metres to identify leakage across the system are already in use. Furthermore treated wastewater is 100 per cent recycled to be used in landscaping. Indeed, through a variety of strategies, including highly efficient micro-irrigation, landscaping design that minimises plant evapotranspiration, and low-water-use and indigenous plants and trees, the city has achieved a 60 per cent reduction in water usage per square metre.

Transport is also another essential element for a city that aspires to be carbon neutral. For this reason, a public transportation system consisting of electric buses, electric cars and other vehicles powered by clean energy will carry out the transport service within the city, while a light rail will ensure the connection to the Abu Dhabi city centre. Masdar City is also experimenting with new sustainable transport solutions, such as the Personal Rapid Transit (PRT) and the Freight Rapid Transit (FRT). These vehicles that serve as taxis, but with electric traction systems and automated guideway transit, operating on a network of specially built guide ways and characterized by a single cabin to offer more privacy and comfort.

The Masdar City solid waste strategy seeks to minimise waste to landfill and maximise the resource potential of waste material by reuse, recycling and composting. The waste will be treated in the Resource Recovery Centre (RRC) of Masdar city: part of recyclables will be used for the construction of the city itself.

THE STUDY CASE OF CURITIBA

Curitiba, the capital of the Brazilian state of Parana, is a city that has been able in the course of nearly three decades to radically transform its face. Hailed as one of the world's first Smart Cities, Curitiba has linked flood control, environmental quality, transportation and economic development through a systemic approach.

With a population of nearly 2,700,000 inhabitants, the city faced during the last century a process of rapid urbanization, due to the emergence of new industrial activities which produced as a result a massive migration flow from the countryside to the city. Population growth has led to a drastic acceleration of the urbanization process, with the typical consequences known to modern megalopolis: poverty, unemployment, insecurity, traffic congestion, pollution. Problems that the city is facing using a mosaic of popular and creative solutions.

Today, Curitiba is the ecological capital of Brazil, with its 51 square meters of green area per inhabitant and an income per capita that almost doubles the average Brazilian income per capita.

The process of change that led the city to achieve these results can be traced to 1971,when the architect Jaime Lerner became the new Mayor of the City. Lerner previously was the head of the Institute for Research and Urban Planning of Curitiba (IPPUC), which was established in the previous years as a centre of excellence in the region. Immediately after his election, Lerner launched a new development strategy focusing on three main areas: mobility and traffic; environment and planning; health, social services and education.

The transportation network in Curitiba is a well planned and practical network that has been mimicked throughout the world. It is a system that limits the amount of car use and promotes sustainable modes of travel. The system integrates public transit with biking and walking, moving people efficiently and quickly while creating a pleasant atmosphere for travelling. The transportation network effectively serves the rapidly growing population while limiting the amount of urban sprawl. It is based on a fleet of buses which run on dedicated lanes. This way, not experiencing delays due to traffic of private vehicles, buses travel times are equal to those of the underground, which also caters for the same volume of people, but at one eighth of the costs. New innovative buses, locally produced by Volvo, have been designed with particular attention to energy consumption: in 2012 Volvo Buses has received its largest hybrid bus order to date. Indeed the city of Curitiba has ordered 60 buses that generate up to 35 per cent less fuel consumption. Efficiency is also due to the design of functional bus stops: the so-called "tube stations" consist of cylinders of steel and glass elevated above the street level with platforms parallel to the floor of the bus, these stations are wheelchair accessible, covered and safe. Since 2010 passengers benefit from automatic, contactless payment systems based on RFID technologies which allow them to purchase tickets by using their mobile phone. This system also provides passengers with better information about transit schedules and delays. New smart solution and

well-planned bus transit system has helped to significantly decrease the dependence of residents on driving, resulting in lower carbon emissions. About 85 per cent of Curitiba's population uses the bus transit system.

The results in the field of mobility are strongly related to the introduction of innovation in the field of planning. Planning has encouraged the spread of services and trade in the entire area of the city, contrasting zoning practices. Each district has a "Road of citizenship" for public offices and decentralized administration. The height of the buildings is inversely proportional to the distance from the public transport.

Curitiba has also promoted a smart waste management system and public awareness on waste separation and recycling. About the 95 per cent of the population benefits of a municipal waste collection system. One of the most popular solutions to achieve this result is the Green Exchange Program, based on social inclusion and the benefits that both the people and the environment derive from it.

It was born with the need to limit the pollution and the deterioration of the city, especially in the poorest neighbourhoods, and create jobs at the same time. Families who bring materials to recycling centers in return receive basic necessities such as bags of groceries and transit passes. There is also a program aimed at children in which recyclable waste is exchanged with school equipment, toys and books. Through this approach to the issue of waste management, the city has come to recycle 70 per cent of materials. The money acquired from the sale of materials is reinvested in the city, through programs of social utility or maintenance of the collection system. In addition, this guarantees the collection of waste even in areas where it is more difficult to organize a traditional system of collection.

An effort equally relevant is geared towards social integration, with particular attention to health care and education services. The low-income families are supported by several centres, located near schools, offering meals and educational activities to children and adolescents. These learning activities promote access to the labour market, also facilitated by the relief tax dedicated to companies willing to provide training. The Integration Program for Children and Adolescents helps creating social capital, teaching care for the public good, gardening techniques, energy savings, health promotion.

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IMAGE SOURCES

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05

REVIEW PAGES: NEWS AND EVENTS

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In this number
THE FUTURE AND DEVELOPMENT OF THE SMART SOLUTIONS

In the last years, it was necessary to focus policies and funds of European development, national and local through the improvement of living conditions in urban areas. Because of the high concentration of people that lives and works in these urban areas and it brought to the formation of numerous economic, social and environmental problems. In order to solve these problems, it was necessary to apply new models of smarter development, based primarily on a better understanding of the events influencing the evolution of the territory. Then the introduction of the concept of smart city, which engages the adoption of solutions involving the largest number of people and sectors, so as to increase the livability and local competitiveness. The start of urban development based on an integrated approach requiring a good knowledge of social and economic events that govern the evolution of the city.

The goal is to limit the negative effects of human activity, by reducing the use of non-renewable natural resources and the optimization of production and management processes. In addition to the objective of environmental sustainability for the future development of urban areas, there is also that of social sustainability. In fact, through the use of new technological solutions wants to promote the active participation of individual citizens in the decision making process of planning and management of services and territory. Then to generate the use of smart solutions is to facilitate the processes of social inclusion and the achievement of economic and environmental sustainability. To reach these objectives, the European authorities in collaboration with the European states and local authorities have started some multi-years programs for the development of these intelligent solutions.

In particular, the model of smart city that is proposed in Europe, with the application of these projects, is that of a city, that in the near future, will be equipped with the technologies of information and communication, to able to maximize the efficiency and guarantee a greater competitiveness, reducing the use of the natural resources. For example, the Strategic Plan for the European Energy Technologies (SET Plan) defines the smart cities, predisposing solutions for a 40% reduction of greenhouse gas emissions by 2020, through the use and production of energy from renewable sources. The interventions planned must regard the improvement of the quality of buildings, the installation of local energy networks and the systems of transport.

An essential element for the development of smart cities of the future is the development of digital networks, which can be considered a new category of public works. The greater use of these digital networks allows to obtain and interchange a large numbers of data and information, in a short time. In fact, the spread of these digital networks, will further allow the livability of the cities, providing a large and more immediate knowledge of the environmental and social factors that regarding the cities. Allowing a faster sharing and implementation of the choices for the city government and in general for urban areas. Finally the positive effects that can be generated by this new digital age will be able to provide and support a substantial rapprochement of the human to environment.

In the future, the increased requirement of mobility will require the development of new mobility models that consider the creation and use of new infrastructure, but also the reuse and reconversion of resources already used. Then there is a need to initiate a transition that intervene on the existing resources and in the same time to initiate long-term processes that go to radically transform the urban mobility. This process should encourage the use and development of new smart solutions. The goals desired to smart mobility will guarantee the possibility to manage the increasing traffic flows of mobility in order to reduce the congestion, to change the demand for mobility, so as to reduce the movements and promote the conditions for a system of mobility more sustainable, both environmentally and economically.

At the European level in 2007, it was published the Green Paper on the development of a new culture for urban mobility that clears the new common strategy on mobility that can obtain from the integration of the various practices of urban mobility . Then in it is also explained the necessity to promote at European level the sharing and exchange of good practices and also the need to provide EU funding in support of the application and research of smart solutions. One of the events that will be organized in the coming months to promote the knowledge and the diffusion of good practices of smart mobility is the Smart Mobility Forum & Awards 2013. During this event, this year arrived at second edition, there is also a session concerning training. This is directed at all those that work in the field of mobility and it is for their an opportunity of training at international level. It will allow, due to the presence of industry experts and decision makers, to learn the right knowledge for the implementation and management of smart strategies in their urban areas.

Among the sectors interested by the study and the development of new smart solutions, there is that of energy. To reduce and optimize the using, there is a necessity to implement innovative solutions, more effective and efficient, to able to meet the power needs of small and large users and manufacturers. Considerable importance is the application of smart solutions related to the energy sector in urban areas, where there are many solutions already developed successfully.

To provide to the public authorities and private investors the right knowledge and tools on intervention strategies, the sources of European funding and the possibility of a mixed public-private involvement, are organized events such as the Smart City Event. It takes place in Amsterdam, and now at the third edition and is considered one of the main European events in the industry.

To this event takes part numerous technology companies, industrial experts, the city already smart and energy producers and distributors that participate and show their projects already implemented successfully. Smart City Event is an opportunity for all that want to take example from experiences already consolidated, so to can evaluate which solutions and strategies are most appropriate to their need and the local context of origin.

In 2012, the previous edition, took part over 350 companies and organizations from all over the world, for the year 2013 are expected to more than 50 prominent international speakers.

The European Commission in 2007, to encourage the development and diffusion of technologies with low carbon use, in line with the international targets for reducing the pollution, drew up the Strategic Energy Technology Plan (COM (2007) 723). So the plan for the energy sector explains the new policies community strategic planning, the modalities of execution, the economic resources to use and the international cooperation. Fits into this logic the start in 2012 of the Smart Cities Stakeholder Platform that consists in a public platform for the exchange of information, where they can actively participate in the technical developers and local authorities of the European cities that adhere to the platform, and worked in the development of projects on Smart Cities. The work of platform is divided into two areas. In the first are developed the strategies for future development and in the second technological solutions can be adopted. Then the first area is divided into two subgroups: the first deals with the finance group and the other to define the roadmap. While the second area is divided into three subgroups of technical work, which respectively face the energy efficiency and buildings, the energy networks of power and the mobility and transport. Over the virtual sharing of information, annually is organized a workshop, this year at second edition. The workshop will be an opportunity for local authorities and all stakeholders involved in various ways in the development of intelligent solutions to meet and discuss on how direct the development of the European urban landscape in the coming decades and for present the results of groups of work and projects already started. This event allows the administrations to bring the requirements of the citizens and the problems found in the implementation of smart solutions in the cityscape. And the companies that operate in this sector to be able to illustrate the most recent elaborate smart solutions for the application in the urban contexts.

An important peculiarity for the development of future smart city is that on the use of Information and Communication Technology. The ICT is an essential tool to collect, manage and use in fast, effective and efficient high volume of data and information main to the management and governance of social, economic and environmental future of the city. So to be able the future challenges of development, will be necessary that businesses and governments find a appropriate technological solutions, able to adapt to individual needs, so that they can gather and store these large amounts of data within Big Data. In addition to collecting and archiving is also important to the development of software that are able to manage and draw the right information from these data. In fact, the right use of this information collected in the databases will can improve the existing services and develop for new citizen. The use of ICT has led to the development of a new business sector, with the creation of many businesses and jobs. So since this is an industry that is constantly changing, it is important to take part to appropriate training events. One of the upcoming events in the program is smart to Future Cites, to be held in London, where more than 80 case studies will be presented at an international level developed with the collaboration between the government and the main international companies in Information and Communication Technology. Therefore will discuss the business models that can actually promote the development of smart cities and the creation of new economic activities that can foster the implementation of integrated solutions for the energy, transport, retail and of health care. It will also be possible for companies and institutions interested to have of direct meetings with the experts of field, in order to obtain specific advice for the implementation of their smart projects.

SMART MOBILITY MANAGEMENT EVENT
Where: Brussels - Belgium
When: 30 May 2013

SMART CITY EVENT 2013
Where: Amsterdam - Nederland
When: 29-30 May 2013

SMART CITIES ANNUAL CONFERENCE
Where: Budapest - Hungary
WHEN: 5-6 June 2013

SMART TO FUTURE CITIES EUROPE 2013
Where: London – United Kingdom
When: 11-12 June 2013

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