# TeMA

# Journal of Land Use, Mobility and Environment

There are a number of different future-city visions being developed around the world at the moment: one of them is Smart Cities: ICT and big data availability may contribute to better understand and plan the city, improving efficiency, equity and quality of life. But these visions of utopia need an urgent reality check: this is one of the future challenges that Smart Cities have to face.

Tema is the Journal of Land use, Mobility and Environment and offers papers with a unified approach to planning and mobility. TeMA Journal has also received the Sparc Europe Seal of Open Access Journals released by Scholarly Publishing and Academic Resources Coalition (SPARC Europe) and the Directory of Open Access Journals (DOAJ).





# SMART CITY CHALLENGES : PLANNING FOR SMART CITIES.

# DEALING WITH NEW URBAN CHALLENGES 3 (2014)

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TeMA. Journal of Land Use, Mobility and Environment offers researches, applications and contributions with a unified approach to planning and mobility and publishes original inter-disciplinary papers on the interaction of transport, land use and environment. Domains include: engineering, planning, modeling, behavior, economics, geography, regional science, sociology, architecture and design, network science and complex systems.

The Italian National Agency for the Evaluation of Universities and Research Institutes (ANVUR) classified TeMA as scientific journal in the Area 08. TeMA has also received the Sparc Europe Seal for Open Access Journals released by Scholarly Publishing and Academic Resources Coalition (SPARC Europe) and the Directory of Open Access Journals (DOAJ). TeMA is published under a Creative Commons Attribution 3.0 License and is blind peer reviewed at least by two referees selected among high-profile scientists. TeMA has been published since 2007 and is indexed in the main bibliographical databases and it is present in the catalogues of hundreds of academic and research libraries worldwide.

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### SMART CITY CHALLENGES: PLANNING FOR SMART CITIES. DEALING WITH NEW URBAN CHALLENGES 3 (2014)

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### **REVIEWS PAGES**

## SMART CITY CHALLENGES: PLANNING FOR SAMRT CITIES. DEALING WITH NEW URBAN CHALLENGES

Starting from the relationship between urban planning and mobility management, TeMA has gradually expanded the view of the covered topics, always remaining in the groove of rigorous scientific in-depth analysis. During the last two years a particular attention has been paid on the Smart Cities theme and on the different meanings that come with it. The last section of the journal is formed by the Review Pages. They have different aims: to inform on the problems, trends and evolutionary processes; to investigate on the paths by highlighting the advanced relationships among apparently distant disciplinary fields; to explore the interaction's areas, experiences and potential applications; to underline interactions, disciplinary developments but also, if present, defeats and setbacks.

Inside the journal the Review Pages have the task of stimulating as much as possible the circulation of ideas and the discovery of new points of view. For this reason the section is founded on a series of basic's references, required for the identification of new and more advanced interactions. These references are the research, the planning acts, the actions and the applications, analysed and investigated both for their ability to give a systematic response to questions concerning the urban and territorial planning, and for their attention to aspects such as the environmental sustainability and the innovation in the practices. For this purpose the Review Pages are formed by five sections (Web Resources; Books; Laws; Urban Practices; News and Events), each of which examines a specific aspect of the broader information storage of interest for TeMA.

### 01 WEB RESOURCES

The web report offers 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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### 03 LAWS

The law section proposes a critical synthesis of the normative aspect of the issue theme.

author: Valentina Pinto

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### 04 URBAN PRACTICES

Urban practices describes the most innovative application in practice of the journal theme.

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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.

author: Gerardo Carpentieri

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e-mail: gerardo.carpentieri@unina.it

# Telland Journal of Land Use, Mobility and Environment

TeMA 3 (2014) 331-356 print ISSN 1970-9889, e- ISSN 1970-9870 DOI: 10.6092/1970-9870/2863

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评述页:

智能城市挑战:规划智能城市。应对新的城市挑战

TeMA 从城市规划和流动性管理之间的关系入手,将涉及的论题逐步展,并始终保持科学严谨的态度进行深入分析。在过去两年中,智能城市(Smart Cities)课题和随之而来的不同含义一直受到特别关注。学报的最后部分是评述页(Review Pages)。这些评述页具有不同的目的:表明问题、趋势和演进过程;通过突出貌似不相关的学科领域之间的深度关系对途径进行调查;探索交互作用的领域、经验和潜在应用;强调交互作用、学科发展、同时还包括失败和挫折(如果存在的话)。评述页在学报中的任务是,尽可能地促进观点的不断传播并激发新视角。因此,该部分主要是一些基本参考文献,这些是鉴别新的和更加深入的交互作用所必需的。这些参考文献包括研究、规划法规、行动和应用,它们均已经过分析和探讨,能够对与城市和国土规划有关的问题作出有系统的响应,同时还对诸如环境可持续性和在实践中创新等方面有所注重。因,评述页由五个部分组成(网络资源、书籍、法律、城市实务、新闻和事件),每个部分负责核查 TeMA 所关心的海量信息存储的一个具体方面。

### 01\_WEB RESOURCES

网站报告为读者提供与主题直接相关的网页。

author: Laura Russo

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### 02\_BOOKS

书评推荐与期刊该期主题相关的最新出版著作。

author: Floriana Zucaro

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### 03 LAWS

法律部分提供主题相关标准方面的大量综述。

author: Valentina Pinto

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### 04\_URBAN PRACTICES

城市的实践描述了期刊主题在实践中最具创新性的应用。

author: Gennaro Angiello

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### 05\_NEWS AND EVENTS

新闻与活动部分让读者了解与期刊主题相关的 会议、活动及展览。

author: Gerardo Carpentieri

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01

## SMART CITIES CHALLENGES: PLANNING FOR SMART CITIES. DEALING WITH NEW URBAN CHALLANGES

### **REVIEW PAGES: WEB RESOURCES**

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In this number PLANNING THE NEW SMART CITIES

With over half of the world population living in urban areas, cities have become the place to address the major challenges of our century. Today, ICT and big data are the main themes which are brought up when talking about smart cities, but although it is evident that the mere use of new technology is not sufficient to build better cities (Barresi, Pultrone 2013), it is undeniable that it provides new approaches not just to plan the city of the future but also to re-think existing cities.

This issue of TeMA focuses on these topics and, here in this section, the three websites proposed can be a very interesting source of inspiration for those who want to study the smart city, project it or work on it.

We start presenting the website of The Centre for Advanced Spatial Analysis (CASA), which is one of the leading research centers in the application of new technology for investigating, modeling and controlling the city; a mix of different expertise collaborate in order to develop new ways of representation of space in time, exploiting the potential offered by new technologies, especially in the field of big data.

The content of the second proposal of this issue isn't focused on the research aspect but more on the best practices is: the website dedicated to the exhibition Reprogramming the City: New Opportunities for Urban Infrastructure. Once again the chances provided today by new technologies take center stage, but, this time, for the tangible re-use of existent infrastructure in a smarter and more sustainable way that takes into account another of the most debated issues of our times, that of the soil sealing; the exhibition, in fact, presents several projects in different cities around the world where urban infrastructures have been repurposed with success, providing significant results both in terms of sustainability and energy saving and in terms of recycle of unused urban spaces or facilities, without land consumption.

Then, the third and last proposal presents an Italian research project, co-financed by EU, where new technologies leave the leading role to the boarder theme of the integrated planning of the smart city: the research project Smart Energy Master (SEM), carried out by the Federico II University of Naples, aims at developing a decision support system based on the different aspects that shape the city (physical, anthropic, functional, technological, etc) in order to identify the actions to improve energy efficiency and correct social behaviours that influence energy production and use.

In the following pages each proposal is described in detail



The Centre for Advanced Spatial Analysis (CASA) is part of the UCL's global faculty of the built environment (The Barlett), which includes ten amongst schools and labs.

The Centre can be considered one of the most dynamic examples in the science of cities, promoting *new knowledge and insights for use in city planning, policy and design and drawing on the latest geospatial methods and ideas in computer-based visualisation and modelling.* One of the main innovation of CASA is its focus on multidisciplinary method: a great variety of experts works for the Centre, including architects, geographers, mathematicians, physicists, archaeologists and computer scientists that share their skills in order to build a new approach which is able to better understand and model the complexity of our cities.

CASA's website provides all the necessary information about the research centre, organized in six main sections: Programmes, Research, Partnership, People, Latest and About Us. In addition to that, almost weekly, the newsworthy CASA Blog Network offers updates about the research carried out by the Centre; it counts a wide number of contributors and contributions, collected in an easily accessible archive.

In the *Programmes* section you will find information on how you can get involved with CASA. The Centre offers two Postgraduate Programmes – MSc Smart Cities and Urban Analytics, MRes Smart Cities, MRes in Advanced Spatial Analysis and Visualisation – and the PhD research degree.

Short skills-based courses, open to everyone, can be a different opportunity to be involved in the Centre, even tough they are not offered on a regular basis but run at various times throughout the year.

The *Research* section includes the description of current and past projects carried out by CASA, nationally and internationally.

CASA's research is focused on the application of computer models, data visualisation techniques, innovative sensing technologies, mobile applications and urban and regional theory linked to city systems. Spatial analysis, geographic information systems, computer aided design technologies and custom tool-kits are used as basic forms of representation for space-time data. These are explored via a wide range of methods from social physics, scaling to econometric and statistical models, augmented reality and hyper-local sensing.

CASA collaborates with different companies and organizations from diverse sectors, both for Research & Development and Consultancy; a list of examples can be found in the *Partnership* section.

Moreover, within the section *People*, the staff and students profiles involved in CASA are described: the Centre currently includes nineteen Research Associates and ten PhD students. In addition to this number, two or three excellent international Academic Visitors participate in the activity of the Centre for 2 – 12 months every year. The Centre aims at being a point of reference for the science of smart cities, integrating different expertise to promote a new approach for city planning in its widest perspective.



### REPROGRAMMING THE CITY http://reprogrammingthecity.com/

Reprogramming The City: Opportunities for Urban Infrastructure is a global overview of ways in which existing urban infrastructure is being re-imagined, re-purposed and re-invented to do more in the city.

The promoter of the exhibition is the American urban strategist Scott Burnham, who launched the initiative in Boston in June 2013 with the goal of collecting *ideas of how cities can do more with the structures and systems they already have.* After the incredible success of the first edition, a new expanded version of Reprogramming the City has opened at the Danish Architecture Centre, in Copenhagen, in October 2014.

The exhibition at DAC offers a great number of new projects mainly located in Denmark and Scandinavia, with a particular attention to those aiming at repurposing urban infrastructure for food production, such as the *BuzzBuilding* project, by Belathew Labs in Stockholm, that wants to use different infrastructural elements, such as traffic roundabouts, for producing food, or *Growing Underground*, in London, which aims at transforming not-used underground tunnels in safe environment for the future production of food; if we think at Expo Milano 2015, whose title is *Feeding the Planet, Energy for Life*, it seems that the theme of nutrition is exceptionally fashionable at the moment.

The US version of the exhibition is scheduled to open at the Virginia Center for Architecture in Richmond at the beginning of 2015.

The website dedicated to the exhibition collects a description of ten international projects – subdivided in structures, surfaces, systems – that have modified present urban infrastructures in order to re-use them in a smarter way.

Those are the projects presented in the first exhibition, that of Boston, while the ones offered these days at DAC will probably be part of the website in future.

The projects illustrate how today sustainability can be reach just re-thinking existing infrastructure, using new skills, new technologies and new materials. They provide very interesting ideas that can be proposed in different contexts with a relatively small investment.

For example, in Cambridge, the large gray metal boxes often found on street corners have been used to install retractable seating that people can use to rest and observe what's going on around; in Swedish city Umea, instead, with the *Light Therapy* project, the city's energy company replaced the existing lights in some of the city's bus stops with phototherapy anti-SAD (Seasonal Affective Disorder) bulbs, so to mitigate the negative effects on mood due to the dark winter months; in New York, the nowadays rarely used public phone boxes will be transformed in touch screen cabins for all kind of information, both for transportation news, emergency, tourist assistance, etc.

In this time when sustainability has become a necessity and it is important to start using what we already have instead of realizing new urban projects, Reprogramming The City represents a very interesting inspiration for those who want to collaborate for transforming our cities in better place to live in, because much can be done just re-thinking the existent heritage of our urban centres.



### SEM – SMART ENERGY MASTER http://smartenergymaster.unina.it

The project SEM – Smart Energy Master for the energy management of territory is carried out by the Department of Civil, Architectural and Environmental Engineering (DICEA) of Federico II University, in Naples, and it has been financed by PON 04a2\_E R&C Axis II.

It addresses the ever present theme of energy efficiency using an integrated approach which takes into account the different aspects of the city: urban activities, mobility, environmental sustainability and citizens behaviours. The aim is to identify and propose best practices inclined to energy saving and efficiency and to create a mathematical model that correlates the built environment, natural context, user behaviours and energy consumption to develop a decision support system for local administrations that wish to promote strategies, actions and operations to improve the energy efficiency of urban systems and correct social behaviours that influence energy production and use.

A dedicated website describes the project in details; the navigation through the website differs depending on the profile of the user: you can choose between five different profiles (Professional, Institution, Company, Researcher and Family).

Once you have selected your profile, you can surf the site picking one of the four areas of interest corresponding to the main activities within the project, which are Research, Experimentation, Dissemination and Education.

Each activity has its own products; for example, the Energy Efficiency Database is one of the Experimentation's products and it collects over seven hundred documents, including scientific publications, international and national datasets, laws, best practices and much more about the issues of energy efficiency, smart cities, urban sustainability and resilience. It represents a useful tool for those who are interested in these topics and want to know something more.

The section Diary describes the evolution of the project by showing the video of the meetings attended by all members of the research group, which counts almost forty senior and junior researchers. The group's structure is presented in an organizational chart followed by a brief biography of each researcher.

One more interesting section of the website is the Mediateca, the Audio-visual library, a collection of tv videos, interviews, events and press review attesting the work done by SEM's researchers in Italy and outside the national territory for the dissemination of the results of the project.

SEM officially started in February 2014 and it will end in May 2015, little more than a year to meet ambitious targets in the field of energy sustainability.

### REFERENCES

Barresi, A., & Pultrone, G. (2013). European strategies for smarter cities. *Tema. Journal Of Land Use, Mobility And Environment*, 6(1), 61-72. doi:http://dx.doi.org/10.6092/1970-9870/1455

### **IMAGE SOURCES**

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02

## SMART CITIES CHALLENGES: PLANNING FOR SMART CITIES. DEALING WITH NEW URBAN CHALLANGES

**REVIEW PAGES: BOOKS** 

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In this number

# SMART CITY PLANNING: WHICH APPROACHES AND TOOLS

The targets set by European Union for 2050 are almost ambitious: about 90% reduction in greenhouse gas emissions and the achievement of a near-zero carbon energy system. As assumed in several documents and debates, urban areas, responsible for most total energy demand, are the strategic places for intervention, in order to transform them into resource efficient and low carbon systems. Therefore, such a demanding and important transition requires changes in planning and decision making process and this approach is encouraged by the European Commission that pushes for the integration of the environmental, energy and climate change policies with land use ones. The problems generated by the current urban population growth and rapid urbanization processes cannot by tackled by a sectoral approach, but it is rather useful adopting an holistic one, considering cities as urban energy systems whose production and consumption of resources can become more sustainable and efficient by implementing synergic strategies and actions. In this building process of more efficient and sustainable cities, the paradigm of smart city has been developing, meaning as a city capable of integrating different dimensions of development, managing carefully natural resources and ensuring a greater transparency and participation to decision-making processes (Papa, Gargiulo, Galderisi, 2013). The smart city approach could provide the possibility of a new understanding and management of the city problems, on the one hand, and define new tools for the city transformation government, intended as a laboratory for innovation, on the other. In other words, the topic of smart city should be considered as an opportunity to reflect on the basic concepts of urban development, through a conscious use of ICT, supported by an urban community capable of revising its lifestyles, according to the sustainability and energy saving targets. According to these brief considerations, this section proposes three documents that help to better understand and plan the city: the first collects the latest experiences and knowledge on smart city, as a smart city should inevitably require contexts able to support its realization; the second benchmarks the future competitiveness of cities, as a city needs to improve its smart quotient in order to be more attractive and so more competitive (Papa, Gargiulo, Franco, Russo, 2014); the last one analyses the rules and codes that allow to facilitate the implementation of ICT in the smart cities.



Title: Towards Smart City – a scientific approach Author/ editor: AA VV Publisher: ARACNE

Download: n.d. Publication year: 2014

ISBN code: 978-88-548-7024-6

The publication of this volume has been driven by the aim of deepening the content, the opportunities and the potentialities that the new paradigm of the smart city is able to provide. The building of smart cities is a process still in progress and requires, therefore, the development of researches, reflections and experimentations, through which defining the context in which policy makers, planners and technicians have to operate. This volume collects a selection of the papers published in the TeMA Journal in the period 2011-2013, as well as some unpublished studies that deal with the relationship innovation-city within the perspective of smart city. Although there is not a univocal and shared definition of smart city yet, nor is possible to decline the urban dimension of this concept, there is a broad consensus that smart cities are characterized by the use of ICT to improve the quality of life. In this perspective, the volume can represent an important point of reference in order to offer a multidisciplinary framework paying special attention to the four components of the smart city: mobility, energy, security and sustainability, any of which is described from different points of view. The papers about transport aim at studying, on the one hand, how the use of ICT can help improve the efficiency of this sector, and on the other, what strategies and actions should be put in place to increase sustainability. If thanks to new technologies several benefits in terms of safety, viability and productivity can be achieved, it is also necessary to inquire how and to what extent the change of behavior and travel patterns contribute to the environmental sustainability and energy goals established by the EU. In addition to mobility, the building sector is another area responsible for a significant share of consumption in urban areas (40% according to EU data) and energy management for the built environment, building and architecture continues to be a theme of great interest in both research and practice in urban planning. The papers related to the energy component of the volume tackle the different levels of actions (the building element, the entire building, the neighborhood) and possible integration between urban planning and energy issues, through the description of some Italian best practices. Urban resilience is the underlying theme of the papers about the safety component. These contributions compare the different theoretical approaches for the study of urban resilience and the different strategies and actions implemented at national and local level, in order to identify the main properties and adaptability capacities that should characterize an urban resilient system. The last component of the smart city described within the volume is the sustainability and it has been studied in relation to the cultural heritage as a public good, to the urban evolution models and to the possible changes in lifestyle. The summary of the main contents of the papers that make up the volume allows to assert that the paradigm of the smart city is characterized by a holistic approach that allows to deal with the recent urban challenges, on the one hand, and to know how to exploit the advances offered by ICT on the other. Therefore, if the components and development opportunities can be defined, the effort required should be to create a «real shift in the balance between the power of ICT use by business, government, communities and ordinary people who live in cities» (Hollands, 2008).



Title: Hot spots 2025 Benchmarking the future competitiveness of cities

Author/ editor: AA VV Publisher: The Economist

Download: http://www.citigroup.com/citi/citiforcities/pdfs/hotspots2025.pdf

Publication year: 2012

ISBN code: n.d.

The 2025 City Competitiveness Index benchmarks the competitiveness of 120 cities across the world at today and in 2025 to identify those cities that best embody a growing economy, good infrastructure, a good legal system, an inviting and productive culture and good policy that determine long-term stability and success and, based on projections, where they will at the quarter-century mark.

This EIU's (Economist Intelligence Unit) latest report examines 32 indicators for each city and these indicators are grouped into eight thematic categories and assigned weights: economic strength (including GDP), physical capital (infrastructure equipment), financial maturity (the strength of a city's financial institutions), institutional character (including the fiscal autonomy), human capital (e.g. education), global appeal (including quality of higher education), social and cultural character (including crime rates), and environment and natural hazards. The eight category scores are calculated from the weighted mean of these indicators and scaled from 0-100, where 100 is the most favorable. The City Competitiveness Index includes a total of 27 qualitative and five quantitative indicators.

According to the report, North American and European cities are among the world's most competitive ones and are likely to retain their advantage until 2025. These cities will continue to attract capital, tourists and talent, despite concerns over aging populations, infrastructure, and lingering impacts of the financial crisis. However, the Eurozone crisis will impact cities in Southern and Eastern Europe, creating a <<competitiveness divide' in the region>>. For instance, Madrid (joint 46th), Rome (68th), and Bucharest (80th) fall in the rankings from 2012 to 2025.

Among the top 25 most improved no Chinese city is ranked and, according to the report, it is due to the progress that many Chinese cities made during the first decade of this century. By 2025, China will have surpassed the United States as the world's largest economy, thanks to strong growth, rapid urbanization and rising productivity. China and India are fast growing countries and their combined GDP is expected to exceed that of the major seven (G7) economies by 2025. The cities that top this list (e.g. New York, Tokyo, Paris) are among the wealthiest ones, because tend to be economically strong: in fact, five of the top 10 most competitive cities in both 2012 and 2025 are in the top ten for GDP. Most top ten cities have high scores in terms of both international attractiveness and accessibility, in addition to a rich and socially diverse culture. All these factors are important to attract talented people who often value working in a city that is different from the other ones in terms of entertainment and opportunities.

There is much greater change among cities outside of the top 10: much of the competitiveness growth in the next 13 years is expected to take place in Asian cities, such as Doha (Qatar) and Mumbai (India). Meanwhile, cities such as Madrid and Rome are expected to fall significantly from 2012 to 2025, mostly due to a weakened European economy. Summarising, this EIU research helps both enhance understanding which factors are driving urban competitiveness and illuminate how the highest performing cities continue to create competitive advantages.



Title: Smart Rules for Smart Cities: Managing Efficient Cities in Euro-Mediterranean Countries

Author/editor: Riva Sanseverino E., Riva Sanseverino R., Vaccaro V., Zizzo G.

Publisher: Springer Download: n.d. Publication year: 2014

ISBN code: 978-3-319-06421-5

This book proposes a methodological approach to provide local administrations with a smart building code, taking into account the current European regulatory framework (directives and technical norms) and evaluating the economic feasibility of the suggested measures, by studying as case study a large Mediterranean city in Italy. It is assumed that modern cities need new rules and codes dealing with environmental and energy issues and that should be characterized by an integrated and bottom up approach.

In this perspective Italy is considered as a paradigm of the evolution of cities, between historical heritage and bureaucracy. The first two chapters are oriented to deserve an overview of the meaning and the key features of the smart city and of some smart experiences developed in European cities Smart governance, smart mobility and smart energy are defined as the main pillars of a smart city, because a smart city means a city where the participation is the requirement for all decision processes, where there are public, innovative, low environmental impact and efficient transportation modes and where energy efficiency and saving characterize all the activities.

Even though these three components represent the conditio sine qua non a city cannot be smart, the authors point out that the smartness involves the change of people's habits towards sustainability and sharing and saving resources.

The importance of the energy issue is remarked since the very first pages of the book, endorsing the need to integrate energy and climate policies with the planning and management territory ones.

According to the authors and to the aim of the book, the municipal building codes can represent an efficient tool for achieving the goals both of reduction of energy consumptions and increase of renewable energy.

The building sector is a central point in the energy policy of Sicily region (the case study region analysed within the book) where more than 80% of buildings show a very low energy performance and where the existing building codes are not updated to the new quality control system.

In order to improve the energy performance of buildings, through the revision of the municipal building regulations, the guidelines for the definition of the energy annex to the municipal building codes are described. These guidelines are articulated into four areas that are composed of different articles: environmental sustainability and context appraisal, energy performance of building envelope, energy performance of technical systems and renewable energy systems.

After illustrating this concrete example of the definition of guidelines, the authors analyse the economic impact of some measures for energy efficiency, both active (Building Automation Control, Technical Building Management) and passive measures (passivhouse standard), in a single-family house located in Palermo. Definitively this book, on the one hand explores rules, codes and the economic impact of building automation and passive measures for energy efficiency, providing an evaluation both at Italian level and regional one, but only for Sicily region; on the other, offers some brief causes for reflections on what should be the urban smartness: the joint point among innovation, sustainability, participation and governance.

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03

## SMART CITIES CHALLENGES: PLANNING FOR SMART CITIES. DEALING WITH NEW URBAN CHALLANGES

### **REVIEW PAGES: LAWS**

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In this issue

### MEASURES ON TRANSPORT, BUILDINGS, ENERGY AND ENVIRONMENT TO CORRECT ITALIAN MACROECONOMIC IMBALANCES

The European Union's economic governance framework set up in 2011, named "Six Pack", has placed a greater emphasis on prevention and correction of macroeconomic imbalances for the European Member States. With the Regulation N.1174/2011, "on establishing enforcement measures to correct excessive macroeconomic imbalances in the euro area", and 1176/2011 "on the prevention and correction of macroeconomic imbalances", the European Union established an alert mechanism for detecting and correcting macroeconomic imbalances and provide for sanctions applicable if a Member State repeatedly fails to comply with the recommendations made at European level.

Each year, usually in November, the Commission prepare "the Alert Mechanism Report" comprising an economic and financial assessment based on a scoreboard that contain specific economic indicators for the detection of macroeconomic imbalances. The Alert Report identifies the Member States who are at risk of macroeconomic imbalance and that are expected to be subject to a more detailed analysis (the so called In Depth Review - IDR). If the IDR reveals that there is a country in serious economic imbalances, the Council adopt a recommendation asking the Member State to submit the "Correction Action Plan" with the identification of specific policy actions and specific terms of implementation.

On Novembre 13th 2013, adopted the third Alert Mechanism Report (EC 2013) adopted by the European Commission, recommends an in-depth review of economic developments in 16 Member States, including Italy, which have different challenges and potential risks that could spill over to the rest of the euro area and wider EU. As the European procedure stated, on 5 March 2014 the Commission published the results of its in-depth review for Italy concluding that Italy is "experiencing excessive macroeconomic imbalances, which require specific monitoring and strong policy action. In particular, the persistently high level of the public debt coupled with weak external competitiveness on account of sluggish productivity growth, and further exacerbated by protracted dismal growth, warrant decisive policy action and attention" (EC 2014a). Above all, the Commission stressed that the major impediments to the materialization of reforms' beneficial effects on the economy are represented by the bottlenecks of institutional nature and that the effective implementation of policy measures adopted recently and in previous years remains the country's Achilles' heel.

In April 2014, Italy submitted its Stability Programme and National Reform Programme (NRP), respectively outlining updated fiscal targets and planned policy measures to restore economic growth and help unwind imbalances (EC 2014 b).

In July 2014 the European Council published eight specific recommendations for Italy (the so called CSRs), targeted at the correction of the imbalances identified (high public debt and weak external competitiveness). The CSRs addressed to Italy concerned a wide range of policy domains: public finances, taxation, public administration, financial sector, labour market, education and network industries. Here the main content:

- Reinforce the budgetary measures for 2014 in the light of the emerging gap relative to the Stability and Growth Pact requirements,
- 2. Further shift the tax burden from productive factors to consumption, property and the environment, in compliance with the budgetary targets;
- 3. As part of a wider effort to improve the efficiency of public administration, clarify competences at all levels of Government.
- 4. Reinforce the resilience of the banking sector and ensure its capacity to manage and dispose of impaired assets to revive lending to the real economy;
- 5. Evaluate, by the end of 2014, the impact of the labour market and wage-setting reforms on job creation, dismissals' procedures, labour market duality and cost competitiveness, and assess the need for additional action;
- 6. Implement the National System for Evaluation of Schools to improve school outcomes in turn and reduce rates of early school leaving;
- 7. Approve the pending legislation or other equivalent measures aimed at simplifying the regulatory environment for businesses and citizens and address implementation gaps in existing legislation. Approve the pending legislation or other equivalent measures aimed at simplifying the regulatory environment for businesses and citizens and address implementation gaps in existing legislation. Foster market opening and remove remaining barriers to, and restrictions on, competition in the professional and local public services, insurance, fuel distribution, retail and postal services sectors. Enhance the efficiency of public procurement, especially by streamlining procedures including through the better use of e-procurement, rationalising the central purchasing bodies and securing the proper application of pre- and post-award rules. In local public services, rigorously implement the legislation providing for the rectification of contracts that do not comply with the requirements on in-house awards by 31 December 2014;
- 8. Approve the list of strategic infrastructure in the energy sector and enhance port management and connections with the hinterland (EC 2014 c).

A first step to reach these goals, and in particular the seventh one, is represented by the Decree law 133/2014, the so called "Unlock Italy", "Urgent measures on the opening of construction sites, the execution of public works, the digitalization of Italy, bureaucratic simplification, the hydrogeological emergency and the recovery of production" recently converted with amendments by Law no. 164 of November 11th, 2014.

This regulatory provisions, representing the effort put in place by Renzi's Government to revive the Italian economy, after it returned to its third recession in five years, is examined in depth in the next paragraph.



### THE "UNLOCKED ITLAY" LAW: MEASURES AND FINANCIAL FUNDS TO REACTIVATE ITALIAN ECONOMY

The measures contained in the Law no. 164 of November 11th, 2014 are aimed at relaunching Italian economy simplifying procedures and releasing financial resources to restart sectors such as: infrastructure, transport, construction, environment and energy, as well as support business and territorial authorities. The main measures introduced by the "Unlock Italy" law are explained below according to the first five sectors previously identified.

Measures on Infrastructure and transport (art. 1 - 16)

This first group of measures are aimed at promoting the implementation and the completion of public infrastructures, providing on the one hand administrative and procedural simplifications and, on the other hand, allocating funding for the projects.

In the period 2014-2020, the resources allocated to the development of public infrastructure and transport networks works amount to 3,9 billion. The initiatives implemented concern:

- The use of derogatory mechanisms than the ordinary rules governing the award and the appointment of special commissioners for the realization of high-speed railway axis such as the railway Naples – Bari, the rail axis Messina-Palermo-Catania, the rail axis Verona-Padova, and so on;
- The allocation of about 5,000 million euro for the development of the national railway network in addition to 220 million euro for the existent railway network's extraordinary maintenance. Additional resources for 335 million euro are allocated for unlocking works ready to start within certain dates including: the completion of the railway of Turin and of the metropolitan Line 1 in Naples;
- The exclusion from the Stability Pact in relation to some unfinished work by the municipalities;
- The investment of 200/250 million euro in ultra-wideband telecommunications networks in the next 5 years;

As observed by the Commission of the Chamber of Deputies, the conspicuous use of derogatory mechanisms, such as the appointment of special commissioners and special procedures for interventions for prevention of seismic and hydrogeological risk only on the basis of the "extreme urgency", was not always fully effective in the past, with negative impact on time and cost in the phase of execution.

A lot of transparency is then required (Cemera dei Deputati 2014).

Measures on on building stock (art. 17 - 27)

Many measures are introduced to stimulate the activity of the building sector and to steer development towards sustainable choices: administrative streamlining; incentives to the enhancement and restoration of existing buildings stock, both public and private, rather than its further extension; facilities for the support of the rental market. The main changes are made to DPR 380/2001 and concern:

 the possibility to split an apartment in more apartments or merge more apartments with a simple "Comunicazione di Inizio Lavori" (CIL), and no longer on request of the building permit, thereby shortening time and costs;  the issuance of the building permit notwithstanding planning instruments for building renovations and urban restructuring implemented in abandoned industrial areas, and not only for buildings and public facilities;

With regard to the tax benefits, for those who buy accommodation and places it to rent for the next 8 years there will be a deduction on taxable personal income tax equal to 20% of the purchase price of the property.

### Measures on environment and energy

Chapter VIII of the law introduces a series of measures aimed at regulating the procedure for environment reclamation and urban areas regeneration that are defined by their characteristics of "national interest" (eg. the areas of the ex industrial site in Bagnoli Coroglio). First of all, the regulatory text specifies that the provisions related to the process of reclamation and of the transfer of the areas, as well as the process of development, approval and implementation of the program of environmental rehabilitation and urban regeneration, are the exclusive competence of the State as stated by the Article. 117 of the Constitution.

The identification of the areas of national interest takes place by resolution of the Council of Ministers. For each area will be prepared a document of strategic urban regeneration and a specific program of environmental reclamation whose development and implementation concern to a Special Commissioner of the Government and an Actuator Subject. To accelerate the implementation of the programs the new law also provides for the halving of the terms of Legislative Decree no. 163/2006 for the completion of the public procurement procedure and the transfer of the areas of national interest to the implementing body.

In the same Chapter, a special attention is given to measures aimed at the construction of energy recovery starting from municipal and special waste, considered strategic infrastructure of national relevance in order to implement an integrated and modern waste management, achieve self-sufficiency at national level and overcome the European infringement procedures.

The legislator's attention to the measures on energy (Chapter IX) is justified by the growing political instability in some of the countries that are among the main Italian suppliers of energy commodities.

From the energy point of view, in fact, the measure recognizes as strategic the prospecting, the exploration and the production of hydrocarbons and the underground storage of natural gas in order to reduce the national energy dependence. It is expected that when those activities involve the change of planning tools, the authorization is granted to take effect in urban variant.

The legal provision also carries the revision of incentives for the purchase of low-emission vehicles overall provided for in Articles 17 to 17-k-decies of Decree. 83/2012, and the thresholds for recognition of the contribution.

In conclusion, the legislative initiative continues in the footsteps of many previous regulatory interventions that have introduced punctual and episodic measures related to different sectors and not framed in an organic reform plan. As noted in a recent report by the Chamber of Deputies., the most delicate phase will cover "the enactment of the second rank legislation to which the law refers the implementation of many measures; in the recent past this stage it is in fact proved to be one of the main weaknesses of the reform interventions" (Camera dei Deputati 2014).

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### **IMAGE SOURCES**

The image of page 2 is taken from www.mit.gov.it.

04

## SMART CITIES CHALLENGES: PLANNING FOR SMART CITIES. DEALING WITH NEW URBAN CHALLANGES

### REVIEW PAGES: URBAN PRACTICES

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## In this number URBAN DENSIFICATION: THREE CASE-STUDIES

According to the United Nations Population Fund, in 2009 the proportion of the global population living in urban settings exceeded 50% for the first time in history, with an estimated 3.4 billion people living in urban areas, more than the entire global population in 1960. This trend is expected to continue, with urban areas absorbing all of the expected population growth over the next four decades (UNFPA, 2014).

The city's population growth is naturally related to the world's general growth in population. Lower rate of mortality and a higher level of fertility are the principal drivers of growing of the population. However, statistics do not only indicate a general growth in cities' population due to the natural increase, the share of urban dwellers related to the total world population is increasing at another pace, not proportional to the natural growth but higher (UNFPA 2013). Indeed a growing share of population is moving to cities and towns in search of employment, educational opportunities and higher standards of living. These demands of living standards require an urban society where conditions like density, scale and economies of scale exist, conditions that are not present in rural areas (UNFPA 2013).

While cities are attracting a growing population, they have become a source of environmental concerns. Cities are responsible for 67% of the total global energy consumption and more than 70% of greenhouse gas emissions and these trends significantly intensify the severity of some of the two great challenges of our time: climate change and energy security (Hoornweg et al., 2010).

These trends in urban demographics impose a new challenge for contemporary cities: the need to accommodate a diverse and growing population within a limited land area in a more sustainable and resource efficient way. This challenge is even greater for those cities characterized by a strong economy, a culture of innovation, or a high quality of life, as the ones described in this contribution, whose population is growing at a faster rate, especially following the recent economic crisis.

In order to answer to this new urban challenge, many European cities have promoted the concept of 'compact city', which promotes high density and mixed land-use, on the basis of environmental arguments. Advocates of this approach present several attributes of the compact city (Dempsey et al., 2010; Vallance et al., 2010; La Rocca, 2010). It contributes to the preservation of rural areas outside of the city like farmlands and forests. In addition, it improves efficiency of transport systems and its profit due to an increase in the public transportation use (Newman & Kenworthy, 1989). Furthermore, in a compact city, the closeness enables

people to live near their workplaces. This is believed to reduce the overall transport emissions, as movement by foot or bike becomes a realistic alternative (La Rocca, 2011).

Many cities are currently promoting policy initiatives aimed at creating high-density mixed-use urban forms as a means to ensuring more sustainable development patterns. In this contribution, we present three European case studies: i) Helsinki (Finland); ii) Munich (Germany) and iii) Amsterdam (the Netherlands).



### **HELSINKI (FINLAND)**

Helsinki, the capital of Finland, has a population of approximately 620,000 and an urban population of 1.2 million, making it the most populous municipality in Finland and the world's northernmost urban area among those with a population of over one million ((www.scb.se). The surface area of Helsinki is 214 square kilometre, spreading across a number of bays and peninsulas, and encompassing a number of islands. The inner city area occupies a southern peninsula where the population density in certain parts can be as high as 16,500 inhabitants per square kilometres but, as a whole, Helsinki's population density of 3,050 per square kilometre ranks it as quite sparsely populated in comparison to other European capital cities. Indeed, much of Helsinki outside the inner city area consists of post-war suburbs separated from each other by patches of forest. Helsinki has experienced strong growth from the end of World War II up until the 1970s consisting in a massive exodus of people moving from the countryside to the city. After that period, due to an increasing scarcity of housing and the higher costs of living in the city, many residents began to move to neighbouring Espoo and Vantaa, where population growth has since soared. This dramatic movement of people from the city to the satellite neighbourhoods pushed the municipalities of greater Helsinki into more intense cooperation in such areas as public transportation, land use planning and waste management.

Today Helsinki is one of the fastest growing urban regions in Europe (IGEAT, 2010). The City of Helsinki pursues an explicit densification policy both through the assigning of brownfield sites to new development and by the promotion of smaller infill projects where practicable. These measures are often referred to as 'consolidation' or 'defragmentation' in a similar manner to the national level guidelines where the respective principle can be translated as either. These consolidation strategies have been defined in a number of planning documents. The principle of consolidation/defragmentation was agreed upon by the City Council in its Strategic Programme in 2009. It is also one of the key principles in the agreement that the municipalities of the Helsinki region made with the Finnish Government in 2012 in order to improve coordination of the land use relevant decisions made within the region. The principle of consolidation is also the fundament of the New City Plan, a long-term land use target condition extending to 2050. According to it, the population forecast for 2050 is 850,000 people, that means that the city will accommodate in the next years about 250.000 people and about 130.000job, which equals, according to the plan provisions, to about 18 million square meters to be built, i.e. 350,000 square meters a year. The Helsinki of 2050 will be more densely populated in all areas than that of today. New construction will be mainly located around the suburban railway stations.

The downtown area will also expanded from its current size. Space for new construction in the downtown area will be taken from along the motorways and motorway-like streets of today. Some parts of the motorways may have been covered or turned into tunnels. A strict system of planning rules and a particular situation in land owning are the key successful factors that are paving the way to a more compact and sustainable city. Indeed, the city of Helsinki owns about 65 % of the land within the municipal area of Helsinki. In addition to

this, the state owns about 13.6 %, which means that nearly 80 % of the land in Helsinki is owned by the public sector. The municipality can use the power derived from preserved ownership and strict guidelines to ensure for example infilling projects by demanding the developer to do a certain amount of infilling as a condition for building there, which might not be done if the developer owned the land since it is not always feasible for the developer. Finally, another important successful conditions is the coordination of all the densification initiatives under the same project called "Densification project" which is a project aiming to coordinate all projects in Helsinki that are being developed inside the existing building structure.



### **AMSTERDAM**

Amsterdam, the capital and most populous city of the Kingdom of the Netherlands, has a population of approximately 814,000 within the city-proper, 1.1 million in the urban region and 1,6 million in the greater metropolitan area (www.cbs.nl). It comprises much of the northern part of the Randstad, one of the larger conurbations in Europe, with a population of approximately 7 million as well as one of the top financial centers in Europe. The city surface area is 219 square kilometre, spreading across 90 islands, which are linked by more than 1,200 bridges, crossing about 100 kilometres of canals. Despite its unique morphology, the city is intensely urbanized. Indeed, the city proper has 4,457 inhabitants per square km and 2,275 houses per square km. Parks and nature reserves make up 12% of Amsterdam's land area.

Amsterdam has shown the fastest population growth rate among major Dutch cities, which in turn have grown three times faster than the 1% average of the Netherlands as a whole since 2009. Amsterdam increased by 25,000 people between 2009 and 2011, compared to an increase of less than 1,000 per year in the previous decade. (www.cbs.nl). Accelerated growth in Amsterdam is due to foreign and domestic inflow into the area. Since the seventies, concepts for compact forms of urbanization have played a major role in the city planning system. Amsterdam's Municipality started working towards a Compact City since 1978, when the citizens contested the transformation of the city core in a central business district and the relocation of the inhabitants of the city center in the periphery (Morbelli, 1997). As a result, the City Council, which was facing with the task of finding space for new developments, switched its planning policy and opted for the promotion of a 'compact city' in opposition to the 'fragmented city'. The new City Plan promoted the mixed-use, the diversity and the intense use of space to enhance spatial and functional efficiency and to fight social imbalances and the bad economy that have influenced the attractiveness of the inner city.

The concept of the compact city has been further confirmed with the publication of the report 'De compacte stad gewogen' (The Compact City Evaluated, NPPC, 1985) in 1985, which motto was 'the city in the centre', and with the 'City Central Structure Plan', that promoted the process of reversion of the de-urbanization in favor of developing a compact urban structure. The Amsterdam Structure Plans, 1991,1996, 2003, were adopted by the City Council that implemented the 'compact city' as the basic principle by introducing also policies for social renewal that were meant to provide a solution for socially disadvantaged people. New policies to reduce the commuter traffic has been also introduced, by increasing the connections with the most important employment areas with bus, tram ad trains and by developing a new system of good urban cycle routes linked with public transports.

Urban densification represents one of the six spatial tasks contained in the new city master plan named Structural Vision Amsterdam 2040 (City of Amsterdam, 2011). According to it, more intensive use of the space in the city will make it possible to accommodate many more people and businesses. This will increases the customer base for amenities, which will makes it possible to manage energy and transportation more efficiently and removes the need to infringe upon the landscape. In concrete terms, the plans includes measures to realize an additional 70,000 dwellings between now and 2040, with the corresponding amenities such as schools, shops and sports facilities. Furthermore, as a component of densification, various monofunctional business parks will be transformed into areas with an urban mix of residential and business functions.



### **MUNICH**

Munich is the third largest city in Germany, after Berlin and Hamburg and represents one of the European powerhouses of the rapidly expanding knowledge economy. With a population of around 1.49 million, the city forms the core of a fast growing urban region of 5.6 million inhabitants (www.destatis.de). The city surface area is of approximately 310 square kilometers spanning across the elevated plains of Upper Bavaria. With an average population density of 4.500 inhabitants per square kilometers, Munich is the most densely populated city in Germany.

Since 1950, population in the city has grown from 823,892 to about 1.49 million. Consequently, the built-up area as well as the space taken up by infrastructure has increased considerably. Space demand per capita for both living and working has grown continually and is still increasing; at present, no limit is visible. Currently the city is experiencing the strongest population increase in Germany. The population of the city of

Munich will grow further according to recent forecast by 5 percent until the year 2020, mainly by immigration from other parts of Germany and Europe; the region even more by more than 10 percent. One of the city's top priorities in housing is to annually complete 6'000 to 7'000 units (www.destatis.de).

The City of Munich pursues an integrated urban development strategy that explicitly tries to countervail urban sprawl and to densify existing build up areas. The principle of consolidation is one of the pillar of 'Perspective Munich', the city's strategic development plan. Its guidelines define new urban development aims and directions and consists of ten guidelines with objectives of economic, social, spatial and regional development. Key to countervail unwanted urban sprawl is two transversal strategies of 'Perspective Munich': "internal expansion" and "urban, compact, green". In the interest of sustainability, the use of previously undeveloped, unsealed land will be sharply reduced when new residential areas are being developed. The focus of 'internal expansion' lies on concepts designed to reuse and restructure existing build up areas fallen out of their use, for instance former industrial or railway land and former military barracks that lie within city-limits. The abundance of such type of areas close to the city center represents a big opportunity for the city to pursuit its densification objectives. Indeed, for most users it is very attractive to concentrate activities on these restructuring areas since they are embedded in existing infrastructure, available and partly reusable buildings and mostly have rather good integration into the public transport network. The already existing urban context offers the chance to ameliorate neighbouring areas by new housing, more open space and a better social infrastructure.

'Compact, urban, green' as one of Munich's key strategies for spatial development combines dense urban land use for all purposes with the promotion of mixed use developments whenever possible instead of mono-

functional commercial or housing areas. Together with the polycentric system of district-centers that spread over the entire city, the mixed-use approach will also secure a density of social life and short distances for many citizens to get to their jobs, schools and shops. This will help to increase walking and cycling and using public transport instead of private cars for the everyday mobility. The notion of "green" in this context implies that parks and green open spaces in the city must not only be safeguarded and enhanced, but also significantly augmented in quantity.

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Statistics Finland: http://www.stat.fi/index\_en.html

Statistics Netherlands: http://www.cbs.nl

### **IMAGE SOURCES**

The image shown in the first page is from http://www.domusweb.it; the image shown in the second page is from http://amsterdamsmartcity.com; the image shown in the third page is from http://www.wikipedia.org; the image in the fourth page is from http://www.online.wsj.com.

05

## SMART CITIES CHALLENGES: PLANNING FOR SMART CITIES. DEALING WITH NEW URBAN CHALLANGES

### **REVIEW PAGES: NEWS AND EVENTS**

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In this number URBAN CHALLENGES

In the recent decades the urban areas, especially the metropolises are interested to the growing of the resident population. According to data provided by the Department of Economic and Social Affairs of the United Nations Secretariat (UN DESA), the resident population of the urban areas is increased every year approximately of the sixty million. Currently there are some countries, like the US, Brazil, Mexico, France, Argentina and Belgium, in which the rate of the urban population is already over 75%. The UN DESA expected that by 2050 the resident population of the urban areas will be over six billion. One of the continents affected to the high rates of urban population is the Europe, where according to the Statistical Office of the European Union (Eurostat), more than 70% percent of the population lives in urban areas. So in the near future will be greater the necessity of the new physical spaces and energy demand, that are essential for the conduct of all economic and social activities. The European authorities have introduced a series of political and financial instruments so the cities of the future will be able to: Adopt a global model for sustainable urban development; Solve those challenges by an integrated and comprehensive approach; Combine the approaches based on land and people; Alongside the formal structures the governance, other structures more flexible and informal reflecting the level at which the various challenges present themselves; Develope a governance system capable to create a lot of shared visions and goals reconcile conflicting and divergent patterns of development; Work together to ensure territorial development consistent and efficient use of resources (Gargiulo et al., 2013).

In this perspective of sustainable use of resources is part of the new vision of the Smart City, thanks to what makes it differ from 'sustainable cities' or 'ECO cities' is the use of Information and Communication Technologies (ICTs) in the process of creating a more sustainable city, but also the availability and quality of knowledge communication and social infrastructure (Papa, 2013).

So through the use of ICTs, which will allow to collect and analyze large amounts of data and information, it will be possible to better understand the needs of those who live and use the city. So to start the planning process that can improve the efficiency, equity and quality of life of citizens and the ability to cope the future challenges.

In this issue were selected some international events taking place in the coming months and that highlight the importance of paying particular attention to the analysis of the phenomena affecting the development of urban areas in view of the smart city.



### 7TH INTERNATIONAL CONFERENCE ON SUSTAINABLE DEVELOPMENT AND PLANNING

Where: Istanbul - Turkey When: 19 - 21 May 2015

http://www.wessex.ac.uk/15-conferences/sustainable-development-and-planning-

2015.html

The Seventh International Conference of Sustainable Development and Planning addresses issues of regional development in an integrated way and in accordance with the principles of sustainability and builds upon a series that started in 2003 in Skiathos, Greece, followed by other meetings in Bologna (2005), Algarve (2007), Cyprus (2009), New Forest, UK (2011), and Kos, Greece (2013). One of the main arguments discussed in this series of conferences was to give primary importance to all those studies that focus on how to encourage the development of new types of integrated planning between the different subsystems that affect the urban and rural development, and also the different subjects involved in decision making.

The accelerated urbanization has brought to the environmental degradation and the loss of quality of life. The urban development may also aggravate the problems afflicting in rural areas, such as forests, the mountain areas and the coastal areas, among many others. Taking into consideration the interaction between the different regions and the development of new methodologies for monitoring, planning and implementation of new strategies to avoid solutions that promote environmental pollution and unsustainable use of natural resources. The energy saving and eco-building approaches have become an important part of modern development that places special emphasis to the optimization of resources. The Urban Planning has a key role to ensure that these solutions and processes are incorporated in the most efficient. The Seventh International Conference on Sustainable Development and Planning aims to bring together scientists and other stakeholders from around the world to discuss the latest scientific advances in this field. The conference will also seek to highlight developments in management strategies and assessment tools for policy and decision makers.



### ICURHR 2015: XIII INTERNATIONAL CONFERENCE ON URBAN RENEWAL AND HOUSING REHABILITATION

Where: Venice - Italy When: 13 - 14 April 2015

https://www.waset.org/conference/2015/04/venice/ICURHR

The XIII International Conference on Urban Renewal and Housing Rehabilitation, organized by the World Academy of Science, Engineering and Technology. It addresses to major academic scientists, researchers and scholars to present the experiences and results of their research on the issues that concern the urban renewal and housing rehabilitation. Also this constitutes an excellent opportunity for researchers, practitioners and educators to discuss with an interdisciplinary and multidisciplinary approach, the innovations, the trends and the issues on these themes.



**REGEN 2015** 

Where: Liverpool – United Kingdom

When: 18 - 19 March 2015 http://www.regen-2015.com/

The Annual Urban Regeneration conference and exhibition, now in its second edition, it becomes one of the main events on the themes of regeneration and economic development in the UK. During the two-day

conference will deal the latest issues in urban regeneration policy and implementation, highlighting the key successes made in major towns and cities, in areas such as city centre redevelopment and the development of the tourist industry. The theme of regeneration concerns about the people, the places, the economic growth and the investment that can create sustainable and resilient communities. The Conference will examine the challenges that face towns and cities, in terms of economic development and neighbourhood renewal, and will bring delegates to compare with the policy experts and the industry leaders on real-life case studies.



### INTERNATIONAL CONFERENCE ON TRANSPORTATION AND

CIVIL ENGINEERING Where: London – United Kingdom When: 21 - 22 March 2015

The International Conference on Transportation and Civil Engineering is opened to scientists, scholars, engineers and students from around the world and industry, and is an opportunity to present the researches in progress, and help start collaborations between the world of university research and industry. This conference provides an opportunity for the exchange of new ideas and experiences, to establish business relations or search and find new partners to start new collaboration. The main topics to be discussed during the two days of the conference concern the accessibility, the design for climate change, the designing the sustainable city of tomorrow and urban sustainability, the develop energy efficient buildings at design stage to secure long-term savings, the planning aspects for sustainable construction, the social inclusion, the transport and environment, the urban and regional planning and the urban design and development.



### **UITP WORLD CONGRESS & EXHIBITION 2015**

Where: Milan – Italy When: 8 - 10 June 2015

http://www.uitp.org/uitp-world-congress-exhibition-2015-call-sessions-and-papers

The International Association of Public Transport (UITP) organizes the UITP World Congress & Exhibition 2015, at Milano. This organization represents 1,300 members of transport companies giving access to over 14,000 contacts from the fields of urban, local, regional and national mobility from more than 92 countries on all continents. The UITP has set the goal of doubling the market share of public transport by 2025 compared to 2005.

The conference examines how to public transport is called to change, taking into account the needs of both internal and the socio-economic context. So the topics to be discussed at this event, from the experts in the industry, are designed to develop a public transport system can work better, be more efficient, to meet the needs of users, contribute to the growth and all 'employment, make cities more competitive, attract investors and reduce congestion.

This very ambitious challenge was included by the organizers in the slogan of Milan 2015: "Smile in the City", where "smile" is the acronym of the five key words directly related to these challenges (Sustainability, Mobility, Innovation, Lifestyle and Economy).



### 10TH INTERNATIONAL CONFERENCE ON URBAN REGENERATION AND SUSTAINABILITY

Where: Medellin - Colombia When: 1 - 3 September 2015

http://www.wessex.ac.uk/15-conferences/sustainable-city-2015.html

The 10th International Conference on Urban Regeneration and Sustainability (Sustainable City) will be held at the Universidad Pontificia Bolivariana in Medellin, Colombia. The conference addresses the multidisciplinary components of urban planning, the challenges presented by the increasing size of the cities, the amount of resources and sources required and the complexity of modern society.

This event follows a series of successful conferences starting in Rio de Janeiro in 2000 and then in different locations throughout Europe and Asia. The meetings always attract a substantial number of contributions from participants from different backgrounds and countries. The variety of topics and experiences is one of the main reasons behind the success of the series. The dynamic growth of Colombia and in particular the rapid development of Medellin, which has recently been designated the most innovative city in the world, led to its choice as the venue for the Sustainable City 2015 conference.

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