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NEW CHALLENGES FOR XXI CENTURY CITIES

Multilevel scientific approach to impacts of global warming on urban areas,
energy transition, optimisation of land use and emergency scenario

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TeMA Journal was established with the primary objective of fostering and strengthening the integration between urban transformation studies and those focused on mobility governance, in all their aspects, with a view to environmental sustainability. The three issues of the 2025 volume of TeMA Journal propose articles that deal with the effects of Global warming, reduction of energy consumption, immigration flows, optimization of land use, analysis and evaluation of civil protection plans in areas especially vulnerable to natural disasters and multilevel governance approach to adaptation.

TeMA is the Journal of Land Use, Mobility and Environment and offers papers with a unified approach to planning, mobility and environmental sustainability. With ANVUR resolution of April 2020, TeMA journal and the articles published from 2016 are included in the A category of scientific journals. The articles are included in main scientific database as Scopus (from 2023), Web of Science (from 2015) and the Directory of Open Access Journals (DOAJ). It is included in Sparc Europe Seal of Open Access Journals, and the Directory of Open Access Journals.

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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.

With ANVUR resolution of April 2020, TeMA Journal and the articles published from 2016 are included in A category of scientific journals. The articles published on TeMA are included in main international scientific database as Scopus (from 2023), Web of Science (from 2015) and the *Directory of Open Access Journals* (DOAJ). TeMA Journal has also received the *Sparc Europe Seal* for Open Access Journals released by *Scholarly Publishing and Academic Resources Coalition* (SPARC Europe). TeMA is published under a Creative Commons Attribution 4.0 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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TeMA Journal was established with the primary objective of fostering and strengthening the integration between urban transformation studies and those focused on mobility governance in all their aspects, with a view to environmental sustainability. In other words, the mission of this initiative is to contribute to developing a novel theoretical and methodological framework that transcends the boundaries separating these research domains and develops innovative solutions for issues currently being addressed with methods and techniques rooted in the scientific culture of the last century.

The three issues of the 2025 volume of TeMA Journal propose articles that deal with the effects of Global warming, reduction of energy consumption, immigration flows, optimisation of land use, analysis and evaluation of civil protection plans in areas especially vulnerable to natural disasters and a multilevel governance approach to adaptation.

In this issue, the section "Focus" contains two studies. The first paper, titled "Landscape planning based on tourism uses in urban historical areas: the case of Bursa", by Zeynep Pirselimoglu Batman (Bursa Uludag University in Turkey), aims to optimise the use of these areas for both locals and tourists by revealing their character through landscape planning in urban historic regions. To ensure the sustainability of tourism and recreational uses in Bursa's historical city centres, landscape designs must be planned to preserve the historical fabric.

The second contribution is "Assessing the impacts of climate change on peri-urban land use in Nigeria. A study of Ibeju-Lekki LGA, Lagos State", by Chinenye L. Okafor, Olusola E. Orebiyi, Raimot T. Akanmu and Sandra O. Omonubi (Lagos State University and Lagos State University in Nigeria), investigating the impact of climate change on land use dynamics in the peri-urban region of Nigeria, focusing on Ibeju-Lekki Local Government Area in Lagos State.

The section "LUME" includes ten studies. The first contribution of the section is "Assessing heat stress risk to inform urban heat adaptation. A method applied in the Friuli Venezia Giulia region, Italy", by Davide Longato, Nicola Romanato and Denis Maragno (IUAV University of Venice in Italy). The paper aims to propose and test a spatially explicit risk index to assess the likelihood that urban populations will be negatively affected by heat-stress-related impacts.

The second contribution of the section is "Capacity assessment of the creation and development of regional brands in Guilan province", by Atefeh Faghieh Abdollahi, Ali Soltani and Nader Zali (University of Guilan in Iran and Flinders University in Australia). The paper investigates the capacity for regional branding for Guilan province concerning the existing brands' identification, new brands' creation opportunities, and development obstacles.

The third contribution of the section is "The Axis Contract for the regeneration of fragile territories. An experiment along the Civitavecchia Capranica Orte railway line", by Chiara Amato and Mario Cerasoli (INU Lazio and Sapienza University of Rome in Italy). The paper explores the revitalisation of Italy's "inner areas" - fragile territories facing challenges such as depopulation, abandonment, and a lack of essential services, primarily due to limited mobility.

The fourth contribution of the section is "GIS-based bikeability approach as a tool in determining urban bicycle infrastructure capacity for Eskisehir, Turkey", by İlker Atmaca and Saye Nihan Çabuk (Yozgat Bozok University and Eskisehir Technical University in Italy). The paper assesses the bicycle accessibility of Eskisehir, Turkey, by analysing both existing and planned bicycle infrastructure using GIS-based methods.

The fifth contribution of the section is "Risk as a wicked problem in planning: the role of future non-knowledge", by Maria Rosaria Stufano Melone and Domenico Camarda (Polytechnic University of Bari in Italy). The paper explores how to address "non-knowledge" in spatial planning, particularly by integrating local risk perceptions and decision-making dynamics into agent-based simulation models developed with NetLogo software.

The sixth contribution is "Urban physical characteristics for sense of security", by Mohammad Sedaghatfard and Ali Soltani (Shiraz University in Iran and University of New England in Australia). The study examines how four key urban physical characteristics, green space, land use, street lighting, and road networks, influence residents' sense of security in Shiraz, Iran.

The seventh article, "Developing the charging infrastructure for electric cars. Northwestern Italy facing European targets", by Luca Staricco and Angelo Sammartino (Politecnico and Università di Torino in Italy), analyses the development of charging infrastructure for electric light-duty vehicles in northwestern Italy in relation to the targets set by EU Regulation 2023/1804.

The eighth article, "Landscape enhancement and river preservation. The case of the Aniene River in Rome, Italy", by Donatella Cialdea and Fabio Massera (University of Molise in Italy). The paper integrates concepts of landscape restoration with improvements to river areas. The case study focuses on the Aniene River, situated in a region of Rome adjacent to the Rome Ring Road.

The ninth article, "The levels and correlates of paratransit use in Egypt and Lebanon before and during the outspread of COVID-19", by Dina M. Dief-Allah, Sofia A. Dawoud, Basma M. Khalifa and Houshmand E. Masoumi (Future University, Innovation University and Ain Shams University in Egypt and Technische Universität Berlin in Germany). The paper addresses informal public transportation or paratransit, investigating the behaviour and preferences regarding this mode in the Middle East and North Africa.

The last article, "Urban planning research from 2014-2024: a systematic literature review using text mining techniques" by Gerardo Carpenteri and Laura Ascione (University of Naples Federico II in Italy). The paper examines the evolution of urban planning research through a systematic review of the literature published between 2014 and 2024, with text-mining techniques.

The Review Notes section proposes five insights on the themes of the TeMA Journal.

The International Regulation and Legislation for the Energy Transition section of Review Notes is entitled "From RED II to RED III: Renewable Acceleration Areas as a new challenge for urban and territorial planning", authored by Valerio Martinelli. The RN explores the Renewable Energy Directive III, which introduces more ambitious targets for renewables and Renewable Acceleration Areas, where plants can be authorised more quickly. This makes urban and territorial planning crucial in the location of energy infrastructure. The Italian case highlights the central role of multilevel governance and digital tools in accelerating, making fairer, and making more sustainable an energy transition.

The Urban Strategies, Programmes and Tools section of Review Notes is entitled "Digitalization in urban planning: how Europe is building its digital future", authored by Annunziata D'Amico, aims to provide an overview of the policy tools deployed by the European Union for digital transformation, highlighting how this process is a crucial factor for the EU's competitiveness, resilience, and technological sovereignty and how it applies specifically to the governance of urban and territorial transformations.

The Urban Practices section of Review Notes is entitled "Competitive climate adaptation. Startups and urban innovation ecosystems driving climate change adaptation in cities", authored by Stella Pennino. The RN explores innovative urban planning tools that enable cities to integrate climate startups into strategic climate planning. It then presents three climate startup case studies, illustrating the proactive role these actors can play in driving effective climate change adaptation in urban contexts.

The Urban planning literature review section of Review Notes is entitled "Exploring open and green space characteristics for climate change adaptation: a focus on energy consumption", authored by Tonia Stiuso, provides an in-depth analysis of emerging issues in urban planning, mobility and the environment. The aim is to shed light on effective approaches and innovative strategies to deal with climate change effects and how different characteristics of urban open and green spaces contribute to reducing energy consumption.

The Urban planning literature review section of Review Notes is entitled "Global warming reports: a critical analysis of R&D centres publications", authored by Laura Ascione. This contribution explores the perspectives of research and development (R&D) centres on climate change, highlighting their role in advancing scientific knowledge and supporting its translation into actionable insights for society, while critically evaluating the strengths and potential shortcomings of their reporting approaches.

Finally, with the release of the third issue of 2025, this journal marks its 18th anniversary. The first issue was published in December 2007. Over the years, the journal has published 58 regular issues, initially quarterly, then every four months, comprising 690 scientific articles. Additionally, 18 Special Issues containing 288 articles have been released. During this period, over 800 authors worldwide have shared their research through TeMA Journal. For this milestone, sincere gratitude is extended to the Editorial Board, Associate Editors, Editorial Team, and Publisher (FeDOA - Federico II University Press), whose enthusiasm and voluntary efforts have significantly contributed to this achievement. The journal's esteem is reflected in its inclusion in major international indexed databases such as Scopus and Web of Science. Best wishes for TeMA's 18th birthday, with hopes that its reaching adulthood will bring even greater achievements.

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