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## NEW CHALLENGES FOR XXI CENTURY CITIES

Global warming, ageing of population, reduction of energy consumption,  
immigration flows, optimization of land use, technological innovation

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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 2024 volume of TeMA Journal propose articles that deal the effects of global warming, the ageing of population, the reduction of energy consumption from fossil fuels, the immigration flows from disadvantaged regions, the technological innovation and the optimization of land use.

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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### **Editorial correspondence**

Laboratory of Land Use, Mobility and Environment  
DICEA - Department of Civil, Building and Environmental Engineering  
University of Naples "Federico II"  
Piazzale Tecchio, 80  
80125 Naples

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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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Tonia Stiuso, Research fellowship at University of Naples Federico II, Italy

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## NEW CHALLENGES FOR XXI CENTURY CITIES:

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ROCCO PAPA

DICEA - Department of Civil, Building and Environmental Engineering

University of Naples Federico II, Italy

ORCID: <https://orcid.org/0000-0003-3355-1418>

e-mail: [rpapa@unina.it](mailto:rpapa@unina.it)

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 2024 volume of TeMA Journal propose articles that deal with the effects of global warming, the ageing of the population, the reduction of energy consumption from fossil fuels, the immigration flows from disadvantaged regions, technological innovation and the optimization of land use.

In this issue, the section "Focus" contains three researches. The first paper, titled "Building type classification using deep learning for transport planning" by Aniruddha Khatua, Arkopal K. Goswami, and Bharath H. Aithal (Indian Institute of Technology Kharagpur in India), illustrates how outputs generated by a deep learning-based approach can be effectively applied in land-use and transportation planning. By leveraging advanced deep learning techniques, this study aims to produce high-quality building classification data that has information about residential and non-residential structures.

The second contribution is "From smart city to artificial intelligence city. Envisaging the future of urban planning" by Romano Fistola, Rosa Anna La Rocca (University of Naples Federico II in Italy). The article highlights the urgent need to build a theoretical and disciplinary foundation that recognizes AI's creative capacity and effectively utilizes its capabilities to design sustainable future urban configurations in harmony with existing resources.

The last contribution of the section is "Measuring the walkability of areas around Addis Ababa LRT stations by integrating Analytic Hierarchical Process (AHP) and GIS" by Ashenafi Wondimu Tekolla, Abraham Gebre Tarekegn, Getu Segni Tulu (Addis Ababa University in Ethiopia). This research aims to find a spatial method to measure the existing circumstances that encourage walking around Addis Ababa LRT stations by integrating the Analytic Hierarchy Process (AHP) and Geographical Information System (GIS). The results clustered areas with similar levels of walkability in the group and represented them with different colours.

The section "LUME" (Land Use, Mobility and Environment) contains three articles. The first, "Exploring the use of active mobility in selected rural areas of Nigeria", by Marcela Juliana Cargnin, Cintia de Castro Marino, and Thaísa Leal da Silva (University of Johannesburg in South Africa) study employed a robust research design, collecting primary data through a multi-stage sampling method. Specifically, 50% of the wards in the rural areas of Ondo State, Nigeria, were randomly selected, and a total of 496 structured questionnaires were administered using a systematic sampling approach.

The second contribution is "Farmers decision on land use land cover change from agriculture to forest and factors affecting their decision: the case of Gurage Zone, Central Ethiopia" by Tesfanesh Ababu, Alemtsehay Eyasu, Mister Abebe, Alemayehu N. Ayana, Asabeneh Alemayehu, Mulatu Mengist (Central Ethiopia Forestry Development Center in Ethiopia and University of Tuscia in Italy). This study investigates the direct and indirect drivers of the change, as well as factors affecting farmers' decisions regarding the conversion to provide necessary policy input. The data was collected from 311 households through household surveys, key informant interviews (KIIs), and focused group discussions (FGDs). Descriptive statistics and a binary logit model were used for analysis.

The third article, "Environmental factors affecting living comfort perception in different localities in Sri Lanka" by Mohamed Thariq Mohamed Gazzaly, Mohamed Mujithaba Mohamed Najim (South Eastern University of Sri Lanka in Sri Lanka and Sultan Sharif Ali Islamic University in Brunei Darussalam), investigates the factors influencing the living comfort perception in an urban and a non-urban locality in Sri Lanka. A pre-tested questionnaire was conducted to solicit the people's perceptions of identified environmental factors, randomly selecting fifty households from each locality.

The fourth article of the section, "Technological applications in sustainable urban logistics: a systematic review with bibliometric analysis", by Suzan Oguz and Mehmet Tanyas (Cag University and Maltepe University in Turkiye), aims to identify sustainable urban logistics and the role of technological applications in urban logistics. This research, designed as a systematic study based on the existing literature, examines the basic concepts, trends, researchers, and countries working in sustainable urban logistics using the bibliometric analysis method.

The Review Notes section proposes four insights on the themes of the TeMA Journal. The Urban planning practice section of Review Notes, "Energy transition and renewable energy policies in Italy", by Valerio Martinelli, discusses the importance of territorial governance plans and urban transformation tools in promoting the use of renewable energies and reducing emissions. Renewable Energy Communities (RECs) are identified as key instruments, thanks to the direct involvement of citizens and local energy autonomy. The second section, "Strategies and instruments for active mobility: a European overview", by Annunziata D'Amico, analyses the policies and actions taken in Italy to promote active mobility. Concrete examples of solutions implemented in some cities are presented, highlighting the commitment to promoting the transition from car-based mobility to a more sustainable and healthy one. The third contribution, "Global warming or global warning? A review of urban practices for adaptation to urban floods", by Stella Pennino, provides an overview of the challenges that global warming poses and the risks in terms of climate change that it generates for territories and cities, with a specific focus on the urban flooding phenomenon. The challenges that adaptation to urban flooding events commonly faces are outlined and a brief review of international case studies is carried out. Finally, the fourth section, "Exploring approaches and solutions for urban safety: a focus on the elderly", by Tonia Stiuso, provides a comprehensive overview of the challenges and solutions for creating safe and accessible cities for older people. Various scientific sources and practical resources are used to illustrate effective approaches and innovative strategies. In this final issue of 2024, I would like to express my sincere gratitude to all of TeMA Journal's editorial staff members who, with dedication and selflessness, undertake this challenging and demanding scientific endeavour without any financial compensation. A special thanks to Prof. Gerardo Carpentieri, who, for over a decade, has been instrumental in coordinating all activities necessary for the publication, promotion, and enhancement of the journal's scientific quality.

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