EPICUR Hubs *Transformative Cities* Joint Lecture Series

Short Description and Scope of Lecture Series (Winter 2025/26)

The *Transformative Cities* lecture series brings together leading scholars from seven EPICUR partner universities to examine critical urban challenges and innovative responses shaping the cities of tomorrow. With an interdisciplinary lens, the series connects climate change, urban planning, sustainable development, socio-ecological justice, and post-neoliberal economic models to offer new ways of thinking about urban transformation.
Running from November 2025 to February 2026, the series invites Master students, researchers, and practitioners to engage with a wide spectrum of perspectives. Each lecture highlights a unique dimension of how cities are reimagined in times of crisis and transition—ranging from climate adaptation, energy-efficient buildings, and resilient water systems to urban mobility, collaborative housing, green infrastructure, and the role of rivers in urban life. Further themes include public space, health, and equity linkages, energy communities and socio-technical transitions, and the historic entanglements of land and financialization.
Scope and Objectives

This lecture series aims to:

- Foster interdisciplinary dialogue across urban studies, architecture, geography, environmental science, and political economy.
- Highlight pioneering research and practices from diverse European contexts including Freiburg, Thessaloniki, Strasbourg, Vienna, Amsterdam, Karlsruhe, and beyond.
- Encourage critical reflection on dominant urban development paradigms and support new imaginaries of inclusive, resilient, and sustainable urban futures.
- Strengthen transnational collaboration among EPICUR universities, enriching students' learning through comparative and cross-campus perspectives.

From mobility experiments in Lyon and Geneva to collaborative housing in Freiburg, from water-smart Thessaloniki to riverfront design in Strasbourg—the *Transformative Cities* lecture series showcases cutting-edge research and real-world innovations across Europe. Join us for a journey into the ideas and practices that are shaping the future of urban life.

The *Transformative Cities* lecture series reaches far beyond the scope of individual university courses in architecture or urban planning, such as those at one single university. By bringing together renowned scholars from seven EPICUR partner universities, it offers a truly international and interdisciplinary platform to explore the future of cities.

Target Audience:

This lecture series is designed mostly for Master students that are interested in urban planning, landscape architects, hydrologists and anyone engaged in shaping the future of urban environments. It welcomes both academics and practitioners who are passionate about integrating ecological thinking into city design

Format: hybrid
Access:Zoomlink: **https://kit-lecture.zoom-x.de/j/63444478449**

Registration: Registration: Joint Lecture Series: Transformative Cities Winter term 2025/26 – Formular ausfüllen

Academic Credits & Participation Options

Participants can choose between the modes of recognition as needed:

Lecture Attendance

- Open participation
- No credits or certificate awarded. (Analog participation statement upon request)

1 ECTS *(all IfR students)*

- Award of 1 ECTS without grading - pass/fail, (Studienleistung)
- Requires attendance of at least 10 out of 12 lectures (83%).

2 ECTS

- Award 2 ECTS credits without grading - pass/fail, (Studienleistung)
- Requires attendance of at least 10 out of 12 lectures (83%).
- Essay of 1300 words.

3 ECTS *(upon request)*

- Award 3 ECTS credits with grading, (Prüfungsleistung)
- Requires attendance of at least 10 out of 12 lectures (83%).
- Essay of 3000 words + oral defense (20 minutes).

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Transformative Cities: Joint Lecture Series Overview (Winter 2025/2026)

Lecture 1: November 6th, 2025, 14.00 – 15.30 hrs

Lecturer: Prof. Dr. Daniel Lang (Karlsruhe Institute of Technology)

Title: Fostering Urban Sustainability Transformations through Transdisciplinary Real-World Laboratory Research

Transdisciplinarity as a research practice enables solution-oriented mutual learning processes between scientists from different disciplines as well as relevant actors from other societal domains. The aim is both (i) to contribute to solving fundamental sustainability challenges and (ii) to gain new scientific insights. The production of action-oriented knowledge plays an essential role in this processes.
In the lecture, I will first explore some theoretical foundations of transdisciplinary research and action-oriented knowledge. Furthermore, I will introduce real-world laboratories as innovative research settings for transdisciplinary inquiry.
Building on these conceptual foundations, I will present concrete insights from real-world lab research, focusing on:

(i) exemplary real-world experiments in urban contexts; and
(ii) accompanying research aimed at identifying success factors and preparing cross-case analyses.

Finally, I will offer reflections on the challenges of real-world laboratory research and transdisciplinary sustainability research more broadly, and outline relevant areas for further development of this research setting and practice—particularly in relation to sustainability transformations of socio-technical systems.

Additional reading:

Parodi, O., Ober, S., Lang, D. J., & Albiez, M. (2024). Reallabor versus Realexperiment: Was macht den Unterschied?. *GAIA-Ecological Perspectives for Science and Society*, *33*(2), 216-221.

Bergmann, M., Schäpke, N., Marg, O., Stelzer, F., Lang, D. J., Bossert, M., ... & Sußmann, N. (2021). Transdisciplinary sustainability research in real-world labs: success factors and methods for change. *Sustainability Science*, *16*(2), 541-564.

Caniglia, G., Lüderitz, C., von Wirth, T., Fazey, I., Martín-López, B., Hondrila, K., ... & Lang, D. J. (2021). A pluralistic and integrated approach to action-oriented knowledge for sustainability. *Nature Sustainability*, *4*(2), 93-100.

Lang, D. J., Wiek, A., Bergmann, M., Stauffacher, M., Martens, P., Moll, P., ... & Thomas, C. J. Transdisciplinary research in sustainability science: practice, principles, and challenges**.**

Lecture 2: November 13th, 2025, 14.00 – 15.30 hrs

Lecturer: Prof. Franziska Meinherz (Karlsruhe Institute of Technology),

Title: Urban mobility governance

During COVID-19, many cities built pop-up infrastructure for cyclists and pedestrians. We analyse the experiences of Geneva and Lyon through a qualitative approach based on document analysis and interviews with institutional and societal actors. We explore what contributed to the development of pop-up infrastructure during COVID-19, and how these interventions were shaped by and affected policy-making processes and actors' agency. We found that COVID-19 accelerated social and political trends regarding urban mobility. In both cities, authorities used the crisis to push through existing plans. Authorities' commitment and the existence of ready-to-implement plans proved crucial. The implementation processes constituted a breach from usual procedures. In Geneva, this empowered actors who usually act from the margins. In Lyon, authorities adopted pop-up infrastructure as a way to reduce costs. Our study clarifies the potential of experimentation in a context of crisis for urban climate governance and highlights the democratic implications of such interventions.

Additional Reading:

Promoting urban pedestrian traffic. Participatory research of the real-world laboratory GO Karlsruhe | Den Fußverkehr in Städten fördern Partizipative Forschung im Reallabor GO Karlsruhe

Häußler, E. , Blaszczyk, R. , Eckart, J. (2019) Gaia Ecological Perspectives for Science and Society

The utilization of public spaces as interplay of citizen initiatives and urban planning

Lazarevski, S.(2024) Social Cohesion and Resilience Through Citizen Engagement A Place Based Approach

Furnituroid: Shape-Changing Mobile Furniture Robot for Multiple and Dynamic Affordances

Nakanishi, Y. (2022) ACM IEEE International Conference on Human Robot Interaction

Lecture 3: November 20th, 2025, from 14.00 – 15.30 hrs

Lecturer: Prof. Dr. Philipp Späth/Dr. Benedikt Schmid (Freiburg University),

Title: Collaborative Housing: past – present – future

The provision of housing is generally influenced by market dynamics, private property, and financial interests. Addressing negative implications of these circumstances, some housing initiatives aim to provide housing in explicitly alternative forms - labelled either "collaborative", "community-led" or "cooperative". Housing provided by and for residents, according to many scholars, holds significant potential to provide more inclusive, more affordable, and more sustainable housing. Using such expectations as a heuristic device, we discuss observable or expectable achievements of a) the housing cooperative "Genova e.G.", which built ~75 housing units between 1999 and 2001 in Freiburg-Vauban and b) the contemporary district development plan "Freiburg-Kleineschholz". We conclude with a brief outlook on how collaborative forms of housing provision can be supported politically.

Additional reading:

Schmid, B. /Fricke, C. / Zengerling, C. (2024): Towards a "Freiburg Model" of Housing for the Common Good? Fostering Collaborative Housing in Urban Development. Urban Planning; Volume 9, Article 8191; https://doi.org/10.17645/up.8191

Lecture 4: November 27th, 2025 , from 14.00 – 15.30 hrs

Lecturers: Prof. Theodoros Theodosiou/ Prof. Aikaterini TSIKALOUDAKI (Aristotle University Thessaloniki),

Sustainable and Energy Efficient Buildings

The aim of the course is to introduce the overall environmental footprint of the building sector, following its evolution in time, from the first human settlements to modern building structures. During this progress students can understand the main causes of today's problem of buildings being the main energy and resources consumption and the biggest single producer of waste (construction materials) and CO_2 emissions. Based on this analysis students can further understand the potential to elevate the energy and overall environmental performance of buildings, policies, approaches and tools already in action to support this transition and also approaches to further support the goals of climate neutrality.

Lecture 5: December 4th, 2025, from 14.00 – 15.30 hrs

Lecturer: Prof. Nicolaos Theodossiou (Aristotle University Thessaloniki), June 17th, 2025,

Title: Urban Water Management

This lecture provides a comprehensive overview of the principles, challenges, and innovative solutions in managing water resources within urban environments. Participants will explore

key topics such as urban hydrology, water supply and distribution systems, wastewater treatment, stormwater management, and climate-resilient infrastructure. Emphasis is placed on sustainable and integrated approaches that balance environmental, social, and technical considerations. Through real-world case studies and interdisciplinary perspectives, the course equips learners with the knowledge and tools to address complex urban water issues in a changing world.

Lecture 6: December 11th, 2025 from 14.00 – 15.30 hrs

Lecturer: Prof. Yusak Susilo (University of Bodenkunde, Vienna),

Title: Transport, 15-Minutes Cities and Societal Changes

In this lecture we will talk about the roles and importance of transport infrastructures in shaping the city and in enabling behavioral transformation. Different concepts of spatial and city planning will be discussed, including the recent 15-minutes city concept. Different components of design elements of the built environment and how it can impact the environments and energy use of its residents will be touched upon.

Additional Reading:

Driving Urban Transformation (2024) Mapping of 15-minute City Practices, https://dutpartnership.eu/wp-content/uploads/2024/04/DUT_15-minute-City-Mapping_04-2024.pdf
Golledge, R. and T. Gärling (2004). Cognitive Maps and Urban Travel.
In: Handbook of Transport Geography and Spatial Systems, pp. 501-512, Elsevier.
Hägerstrand, T. (1970) What About People in Regional Science? Papers of the Regional Science Association, 24, 7-21.
Litman T. (2024) Transport and Land Use, http://vtpi.org/landtravel.pdf

Lecture 7: December 18th, 2025, 14.00 – 15.30 hrs

Lecturer: Prof. Dr. K. Matthias Wantzen (University of Strasbourg),

Title: Human River Encounter Sites in Cities

Urban design aims to create pleasant, efficient, and long-term, low-risk life conditions for citizens. Nature is wild and dynamic, it undergoes a permanent turnover of matter and a patchy re-organization of space. Urbanism has homogenized wild space and stilled rhythmic dynamics, and thereby (fatally) changed the survival conditions for non-human life and for many life-supporting ecosystem functions (anthropocentrically termed “services”). The consequences of this practice have been visible for many years (e.g., water pollution, health issues) but are now menacing more and more human lifes, exacerbated by Climate Change. While humans are mostly indolent facing the biodiversity crisis and remain resilient against scientists’ predictions about future life conditions, the current critical events (e.g., frequently occurring extreme drought/heat/flood events, previously known as “millenial events”) may have a cathartic effect and set the stage for a new value system that is better adapted to nature. In my talk, I will present examples on how people have understood the necessity for changing urban design according to nature’s (and their own!) needs, e.g., from stream daylighting, riverfront design, human-nature-encounter sites, restoration, de-novo creation of urban waterbodies, and eco-social justice

between metropoles and the hydrographic basin. I will also make a plea for a drastic, socio-ecological urban re-design inspired by Haussmann's Paris.

Lecture 8: **January 15th, 2026**, from **14.00 – 15.30 hrs**

Lecturer: Prof. Aude-Zingraff-Hamed (University of Strasbourg and Technical University of Dortmund)

Title: Urban Green Infrastructure und Nature-based Solutions

Urban Green Infrastructures play a central role in shaping transformative cities, as they provide ecological, social, and urban functions that enhance sustainability, resilience, and quality of life. Examples include parks, green spaces, green roofs, urban forests, and river corridors, which help regulate the urban climate, support biodiversity, and foster social interaction and well-being. The lecture "Urban Green Infrastructures" provides in-depth knowledge about the planning, design, and multifunctional benefits of these systems in urban contexts.
The aim of the course is to explore the concept of Urban Green Infrastructure and, through a case study site, understand its multiple functions. The course also examines how the planning of green infrastructure needs to be rethought to meet the challenges and demands of future cities in the context of an uncertain and changing climate, biodiversity and society.

Additional Readings:
European Commission.*Green infrastructure (GI): Enhancing Europe's natural capital.*https://doi.org/10.2779/54125

Jones, L., Anderson, S., Læssøe, J., Banzhaf, E., Jensen, A., Bird, D. N., Miller, J., Hutchins, M., Yang, J., Garrett, J., Taylor, T., Wheeler, W. B., Lovell, R., Fletcher, D., Qu, Y., & Vieno, M. (2022). *A typology for urban Green Infrastructure to guide multifunctional planning of nature-based solutions*. *Nature-Based Solutions*. https://doi.org/10.1016/j.nbsj.2022.100033

Li, L., Carter, J. (2025) Exploring the relationship between urban green infrastructure connectivity, size and multifunctionality: a systematic review. *Landscape Ecololy* 40, 61. https://doi.org/10.1007/s10980-025-02069-1

Lecture 9: **January 22nd, 2026**, from **14.00 – 15.30 hrs**

Lecturer: Dr. Denise Böhnke (Karlsruhe Institute of Technology)

Title: The challenge to adapt Cities to climate change

The lecture sheds light on the challenges that cities face and must solve with regard to climate change. The focus is on municipal climate adaptation, i.e. the tasks of municipalities to adapt today's urban neighbourhoods and buildings to the climate conditions in 10, 30, 50 years' time. The lecture provides background knowledge on the topic of urban overheating, heavy rainfall prevention and planning aspects. It offers scientific approaches to researching relevant climate change issues in this context and

discusses their practical relevance. The lecture also provides a broad overview of existing solutions and strategies for increasing the climate resilience of cities.

Additional Reading:

Boehnke, D., Jehling, M., Vogt, J., 2023. What hinders climate adaptation? Approaching barriers in municipal land use planning through participant observation. Land Use Policy 132, 106786.

Boehnke, D., Krehl, A., Mörmann, K., Volk, R., Lützkendorf, T., Naber, E., Becker, R., Norra, S., 2022. Mapping Urban Green and Its Ecosystem Services at Microscale-A Methodological Approach for Climate Adaptation and Biodiversity. Sustainability 14 (15), 1-28.

Gallacher, C., Boehnke, D., 2025. Pedestrian thermal comfort mapping for evidence-based urban planning; an interdisciplinary and user-friendly mobile approach for the case study of Dresden, Germany (eng). Int J Biometeorol, 1-18.

IPCC (Ed.), 2022. Climate Change 2022 - Impacts, Adaptation and Vulnerability. Cambridge University Press.

Bastin, J.-F., Clark, E., Elliott, T., Hart, S., van den Hoogen, J., Hordijk, I., Ma, H., Majumder, S., Manoli, G., Maschler, J., Mo, L., Routh, D., Yu, K., Zohner, C.M., Crowther, T.W., 2019. Understanding climate change from a global analysis of city analogues (eng). PloS one 14 (7), e0217592.

Lecture 10: **January 29th , 2026**, from **14.00 – 15.30 hrs**

Lecturer: Prof. Nicola Tollin (University of Southern Denmark)

Title: Building resilient cities: climate change and health interlinkages in the planning of public spaces

Greenhouse gases emissions resulting from the combustion of fossil fuels are worsening air quality and affecting the climate system. While climate change impacts on meteorological variables affects air quality by altering the concentration and distribution of pollutants, air pollution significantly influences the climate, leading to negative impacts on human health. Due to the combination of high temperatures, air pollution, and high population density, cities are particularly vulnerable to climate change impacts. The planning and design of public spaces aimed at climate change mitigation and adaptation can result in multiple co-benefits for human health, while reducing social inequalities. To address the major research gaps in the communication between health and planning experts, and the lack of capacity among public sectors and policy makers, it is necessary to promote capacity building and knowledge sharing between the planning and health sectors. The purpose of this article is to develop preliminary recommendations for a process that allows a comprehensive assessment of the interlinkages between climate and health, social, environmental, and economic vulnerabilities, and the quality of the urban spaces, to support local governments, policymakers, and education institutions in making informed decisions for public spaces. The methods applied were a literature review and interviews with experts.

Lecture 11: **February, 5th, 2026**, from **14.00 – 15.30 hrs**

Lecturer: Prof. Dr. Maria Kaika (University of Amsterdam)

Title: Class meets Land: the embodied history of land financialization

The topic « Class Meets Land" reveals something seemingly counterintuitive: that nineteenth-century class struggles over land are deeply implicated in the transition to twenty-first-century financial capitalism. Challenging our understanding of land financialization as a recent phenomenon propelled by high finance, Maria Kaika and Luca Ruggiero foreground 150 years of class struggle over land as a catalyst for assembling the global financial constellation. Narrating the close-knit histories of industrial land, industrial elites, and the working class, the authors offer a novel understanding of land financialization as a "lived" process: the outcome of a relentless, socially embodied historical unfolding, in which shifts in land's material, economic, and symbolic roles impact both local everyday lives and global capital flows.

Addition Reading:

NEW HORIZON PROJECT. PREFIGURE: Prototypes for addressing the housing-energy-nexus

NEW BOOK
Class meets Land: The Embodied History of Land Financialization

Special Issue: **Urbanizing Degrowth: Five Steps towards a Radical Spatial Degrowth Agenda**

Book:

Book: **Turning Up the Heat: Urban Political Ecology for a Climate Emergency**

The Political Ecology of Austerity

Other Publications - Open Access

Austerity: an Environmentally Dangerous Idea
"Don't call me resilient again": the New Urban Agenda as Immunology
Upscaling without innovation: taking the edge off grassroot initiatives with scaling-up in Amsterdam's Anthropocene forest
The refugees' right to the centre of the city: City branding versus city commoning in Athens
Between the frog and the eagle: claiming a 'Scholarship of Presence' for the Anthropocene

Publications list https://independent.academia.edu/mariakaika
Web page https://tinyurl.com/http-mariakaika-uva

Lecture 12: **February 12th, 2026**, from **14.00 – 15.30 hrs**

Lecturer: Dr. Mendel Giezen

Title. Towards a deeper understanding of up-scaling in socio-technical transitions: The case of energy communities

Energy communities—initiatives where citizens collectively produce, share, and save energy—are at the forefront of socio-technical transitions. They not only advance renewable energy but also strengthen local democracy, generate economic value, and foster social cohesion. Yet, their ability to scale is neither automatic nor uniform.

Scaling can take different forms: expanding membership, replicating successful models in new regions, diversifying activities, or influencing policy frameworks. These pathways are shaped by the interaction of community, market, and state logics, often leading to tensions between democratic participation and efficiency. Barriers such as limited awareness, financial constraints, regulatory hurdles, and infrastructural lock-ins further complicate scaling efforts.

Local strategies are crucial in overcoming these challenges—building partnerships with municipalities, professionalizing organizational structures, and fostering peer learning between initiatives. Research highlights several necessary conditions for scaling, including strong leadership, supportive governance structures, and continuity of external support.

Ultimately, up-scaling in socio-technical transitions is not a linear process. It requires navigating institutional complexity and leveraging polycentric governance. Energy communities demonstrate that with the right mechanisms in place, small-scale grassroots initiatives can grow into powerful drivers of systemic change in the energy transition.

Additional Reading:

Petrovics, D., Cobut, L., Huitema, D., Giezen, M., & Orsini, A. (2024). Diverse scaling strategies of energy communities: A comparative case study analysis of varied governance contexts. Earth System Governance, 19, 100203. https://doi.org/10.1016/j.esg.2024.100203

Petrovics, D., Huitema, D., Giezen, M., & Vis, B. (2024). Scaling mechanisms of energy communities: A comparison of 28 initiatives. Global Environmental Change, 84, 102780. https://doi.org/10.1016/j.gloenvcha.2023.102780

van Doren, D., Giezen, M., Driessen, P. P. J., & Runhaar, H. A. C. (2016). Scaling-up energy conservation initiatives: Barriers and local strategies. Sustainable Cities and Society, 26, 227–239. https://doi.org/10.1016/j.scs.2016.06.009