Workshop "Towards a sustainable Clean Energy Transition in Cities: technical and societal perspectives"

Jointly organized by EERA Joint Programmes e3s and Smart Cities

Vienna, 10th October 2025 | Hosted by the Austrian Institute of Technology (AIT)

Across Europe, cities are playing a central role in driving the transition toward climate neutrality and long-term sustainability. Supported by flagship EU initiatives such as the European Green Deal, the New European Bauhaus, and the Horizon Europe Mission for 100 Climate-Neutral Cities by 2030, urban areas are becoming key testbeds for systemic innovation in energy, mobility, governance, and the built environment.

However, with cities accounting for around 75% of global energy use and 70% of greenhouse gas emissions, the path to a clean energy future is complex. Urban environments face intertwined technical, social, and governance challenges—from aging infrastructure and limited space to socio-economic inequalities and fragmented policy frameworks.

The **workshop *"Towards a Sustainable Clean Energy Transition in Cities: Technical and Societal Perspectives"*** offers a platform to **explore** these **challenges and opportunities** through an **interdisciplinary lens**. By fostering dialogue between the energy sector, urban planners, and the Social Sciences and Humanities (SSH) communities, the workshop **aims to build a shared understanding of the systemic changes needed**. It highlights the importance of **integrating technological innovation with social inclusion** to co-create actionable, equitable, and scalable solutions for cities across Europe.

AGENDA

Date: 10 October 2025
Time: 9:00 – 17:30
Location: Die Hauswirtschaft, Bruno-Marek-Allee 5/1, 1020 Vienna, Austria

9:00 – 9.30	**Registration**	
9.30 – 9.45	**Welcome greetings from AIT**	*tbd*
9.45 – 10.10	**Introduction from EERA JP e3s & Smart Cities**	Alessandro Sciullo EERA JP e3s coordinator, *University of Turin* Sonia Giovinazzi EERA JP Smart Cities coordinator, *ENEA*
10:10 – 10:30	**Keynote speaker 1**	*tbd*
Coffee Break (30')		
Plenary session: Strategies for Clean Energy Transition in Cities Presentations & panel discussion		

Chair of the session: Ayşen Sivrikaya (Hacettepe University)		
11.00 – 11.45	Ravenna's virtual Positive Energy District: a model for energy transition in port cities	Michela Pirro *ENEA*
	Systemic transformation of the mobility sector: a legal perspective on urban public policies in France and the EU	Louise Leray *CEA I-TÉSÉ*
	Citizen-empowering PED strategy – case report from Austria	Bahanur Nasya *Wonderland*
	New Mobility Habits and Urban Sustainability: A Systemic Approach to Energy-Conscious Planning	Roberta Roberto *ENEA*
	Public-Private Partnerships for Climate-Neutral Urban Development: Case Studies from Three European Cities	Barbora Hejtmanková *Czech Technical University*
11.45 – 12.30	Panel discussion	
Lunch break (60')		
13.30 – 13.50	Keynote speaker 2: Federal Ministry Innovation, Mobility and Infrastructure (BMIMI) & SET-Plan IWG 3.2 Positive Energy Districts	Anna Wang, Susanne Meyer *tbc* *BMIMI*
Plenary session: Approaches and methodologies for Clean Energy Transition in Cities Presentations & panel discussion Chair of the session: Ali Hainoun (AIT Austrian Institute of Technology)		
13.50 – 14.30	Justice and equity in the climate plans of 112 Italian cities	Monica Salvia *CNR*
	Climate-Informed Grid Management: A Danish Model for Renewable Energy Transitions	Tatiana Ferrari *DTU*
	Urban-Scale Techno-economic Assessment Using UBEM and Simulations: A Methodology for Cost-effective Energy Renovation Planning	Ipek Gürsel Dino *METU*
	An open-source framework for the optimal design and operation of renewable energy communities	Marios Karmellos *The Cyprus Institute*
	Development of an UrbanWeGeneration Model to guide Sustainable and Inclusive Urban Transition	Vicky Albert-Seifried *Fraunhofer ISE*
	Virtual PED Labs: Emerging Framework for the Conceptualization, Implementation, and Scalability of Positive Energy Districts	Jelena Brajkovic University of Belgrade
14.30 – 15.15	Panel discussion	
Coffee Break (30')		

15.45 – 16.30	**Parallel session: Case studies for Clean Energy Transition in Cities** Presentations & panel discussion Chair of the session: Monica Salvia (CNR)		**Parallel session: Technological Solutions for Clean Energy Transition in Cities** Presentations & panel discussion Chair of the session: Paola Clerici Maestosi (ENEA)	
	A participatory approach for imagining Territorial Hydrogen Futures in the South Tyrol's energy mix	Federica Viganò *University of Bolzano*	Design and Deployment of a SCADA PTP Test Emulator for Enhancing Grid Resilience and Reducing Urban Energy Interruptions	Canan Şişman Korkmaz *Inavitas*

	Achieving Holistic Energy, Digital and Resilience Transition in Villages and Small Cities: The Open Blue-Sky Lab in Pitigliano, Tuscany (Italy)	Sonia Giovinazzi *ENEA*	Techno-economic analysis of solar power systems and energy storage deployment in Western African Power Pool	Xiaojing Lin *University of Groningen*
	Climate Positive Circular Communities and Sustainable Plus-Energy Neighborhoods: From Vision to Reality	Niki Gaitani *NTNU*	DHOMUS: Empowering Renewable Energy Communities Through Smart Monitoring and User Engagement.	Valerio Pfister *ENEA*
	A Sociotechnical Imaginary of the Clean Hydrogen Mobility in Capo d' Orlando: A Case Study	Raffaele Albanese & Agatino Nicita *CNR*	Advanced controls (DRL and MPC) for activating demand side flexibility: applications in district heating, swimming pool facilities and PED	Rongling Li *DTU*
	Citizen Science to Improve Urban Resilience to Extreme Heat in Mediterranean Cities. A baseline for co-designing cool shelters in Rome	Ezilda Costanzo *ENEA*		
16.30 – 17.00	Panel discussion		Panel discussion	
17.00 – 17.20	**Plenary and parallel sessions wrap up**			Chair xx Chair xx
17:20 – 17:30	**Concluding remarks**			Sonia Giovinazzi EERA JP Smart Cities coordinator, *ENEA* Alessandro Sciullo EERA JP e3s coordinator, *University of Turin*