

ECOMONDO

The green technology expo.

Tuesday, 5 November, 14.00-16.00, Ravezzi 1 Room, South Hall

Earth Observation and Digital Twins to improve Urban Resilience. Utilization of digital mapping, artificial intelligence and ICT, to support the development of modern (near real-time) urban management

Organized by: Italian Exhibition Group, Ecomondo Scientific Technical Committee & Polytechnic University of Turin

In collaboration with



Earth Observation, with its Digital twins, as virtual replicas of physical entities, enable the dynamic modeling of ecosystems and infrastructure networks, providing actionable insights into sustainable urban development, environmental protection, and resource management. By integrating high-resolution Earth Observation data, these digital models can offer near real-time monitoring and predictive analytics for urban planning, environmental conservation, and sustainable green energy transition strategies.

This year's workshop, organized by the Foresight and Strategic Planning Office of the Politecnico di Torino, will delve into the modern applications of digital mapping, artificial intelligence, and ICT. Participants will uncover how these technologies enable near real-time capabilities, focusing on urban planning improvements in carbon-free mobility, building energy performance (including buildings of historical interest), and environmental management.

ECOMONDO 2024 serves as a prestigious platform to exchange ideas among leaders and innovators as they discuss the pivotal role of advanced technologies in making urban management more efficient, resilient, and sustainable. This event is not just a platform for learning but a beacon for change, providing actionable insights that can be implemented to foster the green transition.

Session Chair

Giovanni Federigo De Santi, Polytechnic University of Turin

Programme

14.00-14.15 *Welcome address*

Giovanni Federigo De Santi

Fabio Fava, ECOMONDO Scientific Committee Chairman

Institutional greetings

Gilberto Pichetto Fratin, Italian Minister of Environment and Energy Security (TBC)

14.15-15.00 Keynote speeches:

The Road to Carbon-Free Mobility

Jan Pettersson, Swedish Transport Administration, PIARC, International Technical Committee 3.5 President

Monitoring Urban Landscapes: The Power of Data and Digital Twins

Piero Boccardo, Politecnico di Torino, ITHACA President

Earth Observation Technologies to improve environmental management

Silvano Pecora, Italian Ministry of Environment and Energy Security

15.00-16.00 Round table “Advancing the future of urban resilience”

Chaired by:

Stefano Corgnati, Politecnico di Torino, Rector

Giovanni De Santi, Chairman

Participants:

Francesco Tresso, City of Torino, Councillor

Stefano Bonaccini, Emilia-Romagna Region President (TBC)

Franco Cotana, RSE CEO (TBC)

Silvano Pecora, Italian Ministry of Environment and Energy Security

Luigi La Rocca, Italian Ministry of Culture, Director General (TBC)

Alessandra Zampieri, European Commission DG JRC Director

Veronica Manfredi, European Commission DG ENV Director

Francesco Ubertini, CINECA President

Edoardo Valente, ANAS President