

SMART FOREST MONITORING
Science and Industry Green technology for citizen services
Connecting knowledge to Action

**“Final Symposium of the Smart Urban Forest Monitoring project, a collaboration between
Senseable City Lab and Arma dei Carabinieri”**

Venezia, Biennale di Architettura
Friday, October 24th 2025

- 10.00 Opening of the Arsenale, guests can enter the Biennale premises
- 10.30 Welcome and Opening remarks
Luigi Brugnaro (Mayor of Venice), Matthew Golden (ESTH Counselor – U.S. Embassy Rome), prof. Carlo Ratti (MIT Senseable City Lab), Gen. C.A. Fabrizio Parrulli (CUFAA)

SECTION I: Integrated frameworks for urban greenery monitoring

- 10:45 Updates on the Carabinieri’s Smart Forest Monitoring Program
Col. Giancarlo Papitto
- 11:00 Smart Forest Monitoring--Green Technology for Citizen Services & EUDR
Stefano Vaccari (Director General ICQRF – EUDR Competent Authority)

SECTION II: Sensing

- 11.15 Eyes in the Sky and Minds in the Machine: Tracking Urban Greenery with Satellites and AI
Rosa Lasaponara (CNR-IMAA)
- 11.30 Multi-platform remotely sensed data for mapping and modelling urban forests in Italy
Gherardo Chirici (Accademia Italiana di Scienze Forestali)
- 11.45 Advanced monitoring of trees and forests with Earth observation
Greet Maenhout (JRC)

- 12:00 Satellite data and remote sensing systems to measure urban green areas and their effects on urban heat islands (UHT).
Fabrizia Buongiorno (IGNV)
- 12:15 Beyond Greenery Scanner: multi-perspective urban tree health monitoring
Simone Mora e Gaetano Saurio (SCL team MIT)
- 12.30 Lunch break

SECTION III: Ecosystems and biology

- 13.30 Digital twinning of trees ecosystem services: state of the art and emerging AI applications
Riccardo Valentini (University of Tuscia)
- 13:45 Biocities for ever - Signals and indicators for urban future
Giuseppe Scarascia Mugnozza e Fabio Salbitano (EFI Biocities)
- 14.00 Urban street trees: navigating challenges and smart management solutions
Piermaria Corona Giuseppe Pignatti e Matteo Clemente (CREA)
- 14.15 Monitoring biocities and beyond - Ab urbe ad silvam
Marco Marchetti (DiAP, Sapienza Università di Roma e Fondazione AlberItalia)

SECTION IV: Science & Industry

- 14.30 Roundtable: Science & Industry: New perspectives on tech-based forest monitoring systems.
Panelists:
 - European Space Agency (IRIDE ESA IPT): Federica Mastracci, Luca Sapia
 - Agenzia Spaziale Italiana (ASI): Francesco Longo, Rocchina Guerini
 - E-geos / Leonardo International: Fabio Volpe
 - Planetek Italia: Massimo Zotti
 - FAE Technology: Dario PennisiModeration: MIT and CUFAA
- 15.25 Concluding remarks
- 15:30 End of session