

Successful large-scale applications of systemic planning, risk-assessment and safety planning in water use and reuse (including climate change and biodiversity)

- Tuesday, October 26, 2021
- 14:00 - 17:30
- [MEMO](#)
- Global Water Expo Room D2 Pav.
- Italian
- BOOK YOUR SEAT

Organized by: Ecomondo Scientific Technical Committee, University of Bologna, Polytechnic University of Marche, UTILITALIA and Italian Institute of Health, PRIMA FIT4REUSE, H2020 Digital Water City, H2020 ULTIMATE, H2020 HYDROUSA

CALL FOR PAPERS

The Sustainable Development Goals on water, energy, food and biodiversity sit at the heart of the Agenda 2030. Higher sustainability and circularity of water management call for systemic cross-sectoral collaboration and risk-based approach. Water-Energy-Food-Ecosystem nexus should drive decisions to overcome the current silo-driven disproportionate use. From regional planning to practical case studies the workshop will address those issues focusing on large-scale planning of sustainable and safe water use and reuse, including digital systems for monitoring and real data analysis, early warning and decision support systems and risk management plans for water reuse for irrigation. The nexus between water treatment and reuse, energy and environmental footprint, sustainable agricultural production and climate change will also be taken into consideration.

Section Chairs

Attilio Toscano, University of Bologna, Ecomondo Scientific Technical Committee

Lucia Bonadonna, Italian Institute of Health

Francesco Fatone, Marche Polytechnic University, Ecomondo Scientific Technical Committee

Programme

14.00 Introduction by the Chairs

14.05-14.20 *Current status for the development of the guidance on Water Reuse Regulation*

Roberta Maffettone, European Commission – JRC

14.20-14.35 *Planning and innovation projects for agricultural water reuse in Emilia-*

Romagna

Attilio Toscano, University of Bologna and PRIMA FIT4REUSE Consortium

14.35-14.50 *A nation-wide study on wastewater treatment and reuse potential in Italy: challenges and possibilities*

Elena Mauro UTILITALIA, Alessandro Di Martino Wastewater commission Coordinato of UTILITALIA (Italian federation of energy, water and waste utilities)

14.50-15-05 *Sanitation safety planning and WEFEX nexus assessment for water reuse in urban and peri-urban irrigation of Rome and Milano*

Luca Lucentini and Susanna Murtas Italian Higher Institute of Health and H2020 DWC Consortium

15.05-15.15 Q&A and panel discussion

15.15-15.30 *From territorial carbon footprint to water reuse and WEFEX nexus: regional case studies*

Francesco Fatone, Marche Polytechnic University and Emilio Caporossi, Gruppo HERA

15.30-15.45 *The role of High Performance Computing and open climate data for climate-proofing water and natural resources management*

Gabriella Scipione, CINECA and CEF Highlander project

15.45-16.00 *Strategies of the irrigation consortia for a sustainable and smart irrigation water use and reuse within the new EU policies*

Adriano Battilani, ANBI (National association of consortia for the management and protection of the territory and irrigation water)

16.00-16.15 *Systemic irrigation planning in Italy through integrated computer modeling and monitoring*

Claudio Gandolfi, University of Milano

16.15-16.30 *Microplastic pollution in large lakes and associated urban water infrastructures: mid-term results of EU LIFE BLUE LAKES*

Elisa Scocchera, LEGAMBIENTE

16.30-16.45 *Digital Twin for Water Management in Smart Agriculture*

Mark Carvalho, Digital Twin Consortium, Co-founder, The Green Alliance International

16.45-16.55 *Numerical Modelling in Acea – From planning to management through innovation*

J. Eusepi, G. Cecchini, A. Filippi, ACEA Elabori SpA

16.55-17.05 *Recovery of adsorbent materials from sewage sludge to promote water reuse*

Massimo Aiello¹, Sandra Vitolo^{2,6}, Gemma Mannarino³, Massimo Manobianco⁴, Francesco Fatone⁵, Riccardo Gori^{3,6}, Monica Puccini^{2,6} - 1ACEA Ambiente s.r.l.,

2University of Pisa, 3University of Florence, 4Ingelia Italia SpA, 5Marche Polytechnic University, 6INSTM Consortium

17.05-17.15 *The metrological verification of water meters as a tool for reducing water losses*

Cecchini.G., Frugis A., Felice E., Raponi F., Cesari A. - Acea Elaborasi SpA

17.15-17.25 *Waterjade: the hydrological basin Digital Twin*

Matteo Dall'Amico, MobyGIS Srl

17.25-17.30 Q&A and conclusions

Poster Session

Ambiente, acqua, biodiversità e cambiamenti climatici: fattori per realizzare un bilanciamento tra resilienza sostenibile e sostenibilità resiliente

Carlo d'Orta, Comitato Scientifico "Fondazione UniVerde" Università Internazionale per la Pace di Roma (UniPace)

Measurement of water salinity using a capacitively coupled contactless conductivity sensor

Marco Grossi, University of Bologna

Determinazione, analisi e studio di future soluzioni di abbattimento di MPs in drinking water

Gioia.V, Lazzazzara M., Filippi A., Cecchini.G., Frugis A. - ACEA Elaborasi SpA

The Alliance for Water Stewardship Certification: a sustainable solution to global water management

Beatrice Bizzaro; Eugenio Capponi; Ilaria Troncia; Martina Serangeli - HPC Italia

Water footprint in the Sicilian wine industry

Roberta Munforte, Aurora Caggegi, Carla Serrano - Department of Economics and Business, University of Catania

Rosalba Ruggirello - Donnafugata s.r.l. Soc. Agr.