Ecomondo 2026

03/04/05/06 November

Legend

- Resource Efficiency and Circular Economy
- Sustainable and Circular Textiles
- Circular and Healthy Cities
- Agrifood, Forestry, Bioenergy and Circular Bioeconomy
- Sites and Soil Maintenance and Restoration
- Water Cycle and Blue Economy
- International Cooperation and Partnerships with Mediterranean and Africa
- Financing
- Policies and Regulatory Frameworks
- Research and Innovation, Start Ups and Scale Up

Tuesday 3 November
09:30 - 17:30

Agorà Luciano Morselli - Sites & Soil Restoration Area Hall C1

Sites and Soil Maintenance and Restoration
Click here

Recent developments in geotechnical engineering for environmental protection and land safeguarding

Organized by: Comitato Tecnico Scientifico di Ecomondo & Associazione Geotecnica Italiana AGI-IGS

Language: Italian

In recent years, the development of innovative methods and technologies in the field of geotechnical engineering has received a significant boost in the context of land and environmental protection, particularly with a view to designing sustainable and resilient structures and interventions.

The conference, which is divided into two distinct sessions, is dedicated to these topics.
The first session, focused on landslide risk analysis and mitigation, addresses the latest advances in the assessment of risk to viaducts potentially affected by landslides, in the prediction of the inception of debris flows—also for early warning purposes—and in the advanced design of sustainable mitigation measures for debris flow risk.
The second session focuses on landfills and environmental applications and addresses the latest advances in the sustainable geotechnical design of new and existing landfills using innovative technologies and materials, in accordance with current performance-based regulations, with particular emphasis on proper and targeted geotechnical monitoring.

Session Chairs

Daniele Cazzuffi, CESI SpA, Milan and President of AGI-IGS
Nicola Moraci, Mediterranea University of Reggio Calabria and Vice President of AGI-IGS

Program

9.30 Registration

10.00 *Introduction*
Daniele Cazzuffi, CESI SpA, Milano, and President of AGI-IGS
Nicola Moraci, Mediterranean University of Reggio Calabria, and Vice President of AGI-IGS

Session 1: *Landslide risk analysis and mitigation*

10.15 *Viaducts and landslides: a new procedure for the assessment of landslide risk to viaducts*
Claudio di Prisco, Polytechnic University, Milano

10.40 *Advanced models for predicting the inception of rapid flow landslides for early warning purposes*
Lorella Montrasio, University of Brescia

11.05 *Innovative reinforced soil protection works for landslide risk mitigation*
Sabatino Cuomo, University of Salerno

11.30 *An innovative energy-based approach to the design of protection measures for landslide risk mitigation: the case study of Favazzina (RC)*
Marilene Pisano, Mediterranean University of Reggio Calabria

11.55 *Presentations by Ecomondo exhibitors*

12.30 Discussion

Session 2: *Landfills and environmental applications*

14.15 *Innovative and sustainable technologies for the expansion and safety upgrading of existing landfills*
Quintilio Napoleoni, Sapienza University, Roma

14.40 *Sustainable design of landfills: equivalence criteria and design parameters*
Andrea Dominijanni, Polytechnic University, Torino

15.05 *Innovative and sustainable technologies for soil stabilization in environmental applications*
Evelina Fratalocchi, Polytechnic University of Marche

15.30 *The use of geosynthetics in landfills: technical and environmental benefits*
Piergiorgio Recalcati, Vice President of IGS TC-Hydraulics & National Association of Geosynthetics Companies

15.55 *Geotechnical monitoring of landfills*
Stefano Veggi, Desmos, Milano

16.20 *Presentations by Ecomondo exhibitors*

16.50 Discussion

17.15 Concluding remarks and closing
Daniele Cazzuffi, CESI SpA, Milano
Nicola Moraci, Mediterranean University of Reggio Calabria

Tuesday 3 November
09:30 - 18:00

Tiglio Room Hall A6

International Cooperation and Partnerships with Mediterranean and Africa
Click here

Technological solutions for resources recovery from end-of-life products and materials in the Mediterranean landscape

Organized by: Ecomondo STC & Italian Chemical Society – Division Environmental and Cultural Heritage Chemistry, ISWA international, ATIA – ISWA

Language: English

Despite growing attention to circular economy principles, large quantities of waste continue to be disposed of rather than recovered, leading to the permanent loss of materials that still hold considerable value. In many cases, it is the lack of adequate technological solutions that prevents these resources from re-entering production cycles. This situation entails not only an economic problem but also a strategic weakness, as it increases reliance on primary raw materials imported. For this reason, advancing innovative processes – developed both by research centers and industrial actors – and promoting the exchange of successful practices among countries, especially within the Mediterranean region, becomes essential for supporting industrial development in a more sustainable direction.
During this seminar, several emerging technologies capable of improving resource recovery and enhancing environmental performance across various sectors will be presented and discussed.

Session Chairs

Fabrizio Passarini, Ecomondo STC, University of Bologna
Lucia Rigamonti, Politecnico di Milano
Paola Muraro and Paolo Massarini, ATIA – ISWA

Program

9.30 Introduction by the Chairs

Invited lectures

9.45 *Horizon Project RENOVATE: A circular and chemistry-neutral approach for recycling and recovery of battery waste feeds*
Eliana Quartarone, University of Pavia

10.00 *AI systems applied to the waste treatment*
Pietro Navarotto, Stadler Italia S.r.l.

Speeches selected from the Call for Papers

Topic: Biowaste treatment

10.30 *Depackaging Done Right: Reducing Reject-to-Incineration while Feeding High-Quality Slurry to Anaerobic Digestion*
Sander D., Rolf Harald C., Dennis G. (Norsk Biogass AS, Norway)

10.42 *Cold preservation of the organic fraction of municipal solid waste as a strategic technology to prevent resource loss and enhance recovery. A scenario LCA in the Mediterranean region*
M. Tarantino, E. Limiti, E. M. Mosconi (Università degli Studi della Tuscia), M. Fosco (Ecof Italia S.r.l.)

10.54 *WoodTreat: Innovative technologies for resource recovery from end-of-life contaminated wood*
Francesco Balducci (Manifaktura Srl, Pesaro, Italy)

11.06 *Regenerative Biocomposites from Posidonia oceanica as a Systemic Approach to Coastal Resource Recovery and Ecological Restoration in the Mediterranean Landscape*
Alejandra Ruiz (DIATI, Politecnico di Torino), Nicolò Bottero (Politecnico di Torino), Elena Comino (DIATI, Politecnico di Torino), Daniela Garibaldi (DIST, Politecnico di Torino), Margherita Palagi (Politecnico di Torino)

11.18 *An integrated process for valorization of crustacean processing residues into high-value chitin and chitosan products for agriculture and animal feed applications*
Khaled Wael, Innovation Lead (Chitosan Egypt LLC)

Topic: Resources from aquatic matrices

11.30 *LIFE GreenLife4Seas: circular recovery and valorisation of dredged sediments and shell wastes*
S. Doni1, E. Peruzzi1,2, C. Macci1,2, I. Rosellini1, M. Di Leo3, C. Vitone4, M. Mali4, R. Petti4, G. Masciandaro1,2 (1CNR-IRET, Pisa, Italy; 2National Biodiversity Future Center, Palermo, Italy; 3CNR-IRSA, Taranto, Italy; 4Politecnico di Bari, Bari, Italy)

11.42 *Green4Sludge: reducing and valorising tanning sludge through hydrothermal carbonisation on a pilot scale*
Daniele Pirini, Alisar Kiwan (B-Plas Sbrl), Simone Gilioli

11.54 *NEOFOS: Gruppo CAP's Contribution to Phosphorus Recovery from Wastewater Treatment*
Tomaso Amati, Erika Pasciucco

12.06 *Mobile pilot-scale recycling plant for sustainable management of beach litter*
Brixhilda Lleshi 1, Valentina De Pinto 2, Milvia Elena di Clemente 1, Paolo Garofoli 2, Francesco Todaro 1, Michele Notarnicola 1 (1 Politecnico di Bari, 2 Regione Puglia)

Topic: Plastics, bioplastics & textiles

12.18 *From Marine Litter to Certified Maritime Parts: Circular Micro-Factories for Coastal Resilience*
Rafa Millan (GREEN3D), Ezio Scatigna (GREEN3D), Nicola Buquicchio (GREEN3D), Rocco Lagioia (TheGreenTech)

12.30 *Circular Bioplastics from Mediterranean Waste: High-Performance Polymers via Cascaded Biorefinery and Enzymatic Polycondensation*
L. Fonseca1, R. Varotto2, A. Jester2 (1 IST-ID / IBB, Lisbon, Portugal 2 NSBproject S.r.l., Italy)

12.42 *Towards tradable recycled fibres: defining quality criteria and carding process windows in mechanical textile recycling*
Bettina Cherdron (ITA Augsburg gGmbH/TH Augsburg)

Lunch Break

Topic: Circular economy solutions at a territorial level

14.00 *An Integrated Port-Based System for the Management, Material Recovery, and Energy Valorization of Accidentally Collected Waste, Voluntarily Recovered Waste, and End-of-Life Fishing Nets - Law 60/2022*
Gianluca Barducci, Gianni Franci (Studio Barducci), Federico Filesi, Ingrid Roncarolo (Autorità di Sistema Portuale del Mar Ligure Orientale), Simona Giovagnoni (ANSEP - UNITAM)

14.12 *From Innovation to Implementation: The Role of Public Administration in Enabling Circular Economy Solutions*
Oreste Patrone (Regione autonoma Friuli-Venezia Giulia)

Topic: Metals, inert & inorganic materials

14.24 *Gold-REC2-Based Hydrometallurgical Recovery of Platinum Group Metals from Spent Automotive Catalysts: a sustainable process*
Nicolò Maria Ippolito1, Svetlana Zueva1, Francesca Ramunno1, Ionela Birloaga1, Francesco Ferella1, Enrico Cappellini2, Giovanni Faoro2, Walter Murru3, Hossein Shalchian4, Alfredo Mancini4, Francesco Vegliò5 (1 DIIIE, University of L'Aquila, Italy 2 IKOI SPA, Tezze sul Brenta (VI), Italy, 3 BFC Sistemi S.r.l. Busnago (MB), Italy, 4 ORIM S.r.l., Macerata, Italy, 5 Smart Waste Engineering S.r.l. L'Aquila, Italy)

14.36 *Sustainable Leaching of Critical Metals from Lithium-Ion Battery Waste using Organic Acids and Pressurized Carbon Dioxide*
Luca Pierotti (University of Bologna, Chalmers University of Technology), Philipp Mikšovsky (Chalmers University of Technology), Fabrizio Passarini (University of Bologna), Ioanna Teknetzi (Chalmers University of Technology), Burçak Ebin (Chalmers University of Technology)

14.48 *Selective Recovery of Critical Raw Materials from Lithium-Ion Batteries through Electrodialysis within the BRAVE Project*
Benedetta Boriani (UNIVPM / Iuss Pavia)

15.00 *Microwave-assisted thermochemical conversion of spent lithium iron phosphate battery black mass for selective recovery of lithium and phosphate*
Francesca Bianchi, Alberto Mannu, Elza Bontempi (INSTM and Department of Mechanical and Industrial Engineering, University of Brescia, Italy)

15.12 *Selective Palladium recovery by EPS-based biosorbents and valorisation into ORR electrocatalysts*
M. Bonechi (1), W Giurlani (1), C. Giovani (1), I. Maggini (1), M. Bellini (2), B. Pagliaccia (4), T. Lotti (4), M. Severi (1), C. Lubello (4), M. Innocenti (1,3), E. Carretti (1) (1 Department of Chemistry Ugo Schiff, University of Florence, Italy, 2 CNR-ICCOM, Florence, Italy, 3 INSTM, Florence, Italy, 4 DICEA, University of Florence, Italy)

15.24 *From Waste to Feedstock: Upcycling of End-of-Life Photovoltaic Aluminium Frames into Additive Manufacturing Powder via Ultrasonic Atomisation*
Camilla Zanoni, Matteo Vanazzi, Filippo Galli (f3nice), Mariangela Quarto, Sergio Lorenzi (Università di Bergamo), Gianmarco Malagoli (Garc spa), Veronica Sarbach, Alessandro Fumagalli (Materially), Federico Molteni (Kilometro Rosso)

15.36 *Resource Recovery from Mixed Industrial Residues through Mineral Carbonation: Enhancing CO_2 Sequestration and Environmental Stabilization*
Erica Pietrobelli1, Matteo Giosuè Vezzuto1, Alessandra Zanoletti1, Alessandro Sorze2, Giulia Fredi2, and Elza Bontempi1 (1 INSTM and Chemistry for Technologies Laboratory, Department of Mechanical and Industrial Engineering, University of Brescia, Italy, 2 Department of Industrial Engineering and INSTM research unit, University of Trento, Italy)

15.48 *Green solutions for porcelain stoneware: using exhausted FAV as resource*
Arletti Rossella (UNIMORE)

16.00 *Innovative Marine Magnesium Minerals for Safe, Sustainable, and Circular Chemical Production: The MareMag LIFE Project*
Fabrizio Vassallo (1), Fabrizio Vicari (1,2), Antonella Filingeri (1), Giulio D'arpa (2) (1-ResourSEAs S.R.L., 2-MareMag S.R.L.)

Topic: Other recovery processes

16.12 *NAKI: From Industrial Food Waste to Sustainable Aviation Fuel – A Circular Economy Approach for Resource Recovery*
Barak Manbar, CEO & Co-Founder, NAKI

16.24 *Creating endless possibilities: turning different waste streams into circular value*
Anna Marchisio, Orhun Dedeci (Hensel Recycling)

16.36 *From Research to Market: Transforming the Textile Industry through Circular Carbon Innovation*
Chandra Gracia Anweta (PNO Innovation Digital)

16.48 *Mechanochemical Treatment of Municipal Solid Waste Using an ATTRITOR MILL: Dewatering, Sanitisation, Accelerated Stabilisation, and Production of Low-Contaminant Solid Recovered Fuel*
Paolo Plescia (CNR-GEO, Rome), Marcello Reale, Mario Reale (REALSPA Srl, Catania)

17.15 Discussion and closure by the Chairs

E-POSTER SELEZIONATI

1 – Surface engineering strategies for high-performance ballistic protection materials: a review / Georgiana Ghisman Alexe 1, Gabriel-Bogdan Carp 1, Tudor-Viorel Țigănescu 2, Daniela- Laura Buruiană 1 (1 Interdisciplinary Research Centre in the Field of Eco-Nano Technology and Advance Materials CC-ITI, "Dunarea de Jos" University of Galati, Romania; 2 Military Technical Academy "Ferdinand I", Bucharest, Romania)

2 – Technological Pathways for Recovering Materials from End-of-Life Wrecks: A RoSIBEFD-Based Approach for Waterway and Coastal Resource Management / Viorica Ghisman, Gabriel Bogdan Carp and Daniela Laura Buruiana (Interdisciplinary Research Centre in the Field of Eco-Nano Technology and Advance Materials CC-ITI, "Dunarea de Jos" University of Galati, Romania)

3 – Integrating Life Cycle Assessment and the Critical Raw Materials Index for Recovery in Eco-Designed Electric Vehicle Batteries / Amrutha Rajamani1, Francesco Romagnoli1, Nidhiben Patel1, Michele Perani2 (1Institute of Energy Systems and Environment, Faculty of Natural Sciences and Technology, Riga Technical University, Latvia; 2Hyba srl, 24044 Dalmine, Bergamo, Italy)

4 – Circular Resource Recovery from Sugarcane Residues via Bio-Assisted Pyrolysis: Biochar and Bio-Oil Production for Environmental Applications / Rinny Ermiyanti Yasin, Muhammadiyan University of Jakarta

5 – Comparison of Erosive Wear on Composite and Metallic Propellers in Slurry / Marc Tusenko, Sebastian Winkler, Matthias Martin, Hannah Linde, Detlef Klatt, Kay Rostalski (PTM GmbH)

6 – Bio-Based Insulation Materials from Olive Pomace for Energy-Efficient Buildings in Mediterranean Climates / Saad Dahleb (Blida 01 University)

7 – The Impact of EU Waste Export Restrictions and Recycled Material Import Constraints on the European Recycling Market: Opportunities and Risks for Stakeholders / Daniele Pacifici, Benedetta Russetti (WSP Italia)

8 – From End-of-Life Washing Machines to Certified Reuse: Industrial Recovery and Consumer Demand Activation in LIFE Phoenix WEEE / Fatimah Anwar Ali, Gabriele Prati, Luca Pietrantoni, Federico Fraboni (Department of Psychology, Alma Mater Studiorum – Università di Bologna)

9 – From Waste Management to Resource Management: An Integrated Methodology for Industrial Resource Efficiency / Maor Diminsky, Tal Golan (Sutok Environmental Engineering)

10 – TunChar: A Territorial Biochar-Based Framework for Organic Waste Valorisation, Water Resilience and Climate Adaptation in Tunisia
Abdelhalim Latrach (Independent Researcher and Project Developer, TunChar – Biochar for Water & Soil Resilience Initiative, Tunisia)

11 – Industrial Circularity in Nitrogen Oxide Reduction: The Regeneration Process of Bio Protect Group SCR Ceramic Catalysts / Mario Martinez

12 – Portable Instruments for the Analysis of the Dynamic Respiration Index (IRD) / Paolo Plescia (CNR IGAG), Marcello Reale (REALSPA Srl)

13 – The Circular Lean Model: A Kaizen-Based Framework for Transforming Waste Streams into Circular Value Streams through Resource Recovery and Valorization in Industrial, Agricultural & Service Operations / Andrea Brasco Pampanelli (The Green Factory)

14 – From Asbestos Transformation to Mineral Resource Recovery: FOR-LI Technology for Circular Economy Applications and Secondary Raw Material Valorization / Paolo & Andrea Tuccitto

15 – Closing the Loop on Agricultural Waste: Life Cycle Insights into Bagasse Gasification and Energy Recovery Pathways / Ana Ramos, LAETA-INEGI, Associated Laboratory for Energy, Transports and Aerospace - Institute of Science and Innovation in Mechanical and Industrial Engineering

16 – Plant Engineering Solutions for Water Sustainability: The Role of Circularity / Fabrizio Ferrari (Wilo Italia)

17 – Enhancing Phosphorus Bioavailability from Sewage Sludge Ash through Microwave-Assisted Thermochemical Treatment and Cr(VI) Formation Control / Sonia Calce 1, Mattia Massa 1, Vlad Sebastian Popescu 2, Andrea Mastinu 2, Elza Bontempi 1 (1 INSTM and Department of Mechanical and Industrial Engineering, University of Brescia, Italy. 2 Department of Molecular and Translational Medicine, University of Brescia, Italy).

18 – A Flexible Digital Twin Architecture for Data-Driven Modelling and Optimisation of Waste Recovery Processes / Jesus Marcelo Martin-Gomez, Jose Manuel Rodriguez-Fortun, Javier Orus, Bruno Berenguel-Baeta (Aragon Institute of Technology), José Antonio Albajez (Zaragoza University)

19 – Closing the Loop in Wind Energy: Recycling and Reusing Carbon Fibers from End-of-Life Turbine Blades / Sabrina Portofino, Sergio Galvagno, Carmela Borriello, Loredana Tammaro, Pierpaolo Iovane, Giuseppe Pandolfi

20 – Resource recovery of granite-processing sludge for extrusion-based 3D printing of ceramic products / Ioannis Kakogiannos, Georgios Chalkias, Marija Veskova, Laura De Breuck (KYKLOS), Claude Schneider (3D Minerals), Luc Segonne (Association Granit et Pierres du Sidobre)

21 – Landfill biogas: a technological and visionary solution for resource recovery and environmental remediation within the circular economy in the Mediterranean context / Alessia Bertolotto

22 – Composite Materials from End-of-Life Tire Crumb Rubber with Photoluminescent and Retroreflective Features for Road-Safety Devices / Luigi Madeo, Anastasia Macario (Dipartimento di Ingegneria per l'Ambiente, Università della Calabria, CS, Italy), Pierantonio De Luca (Dipartimento di Ingegneria Meccanica, Energetica e Gestionale, Università della Calabria, CS, Italy).

23 – Fluorine in Waste Plastic Pyrolysis Oil: A Novel Analytical Approach via Combustion – Molecular Absorption Spectrometry / Giorgio Constante (FKV SRL, Bergamo, Italy), Olga Weisheit, Holger Sievers, Stefan Jezierski-Räcke (Analytik Jena GmbH & Co KG, Jena, Germany)

24 – A Proposed Standard Aimed at Improving Quality in the Waste Management Sector: UNI 1612790 / Pietro Cerami, Massimo Furanti, Leonardo Benuzzi (ACISM, federata ANIMA Confindustria)

25 – Recovering Resources from Shrimp Shell Waste: A Life Cycle Assessment of Chitosan Production / Matteo Ciapetti (1), Antonio Javier Caro Reina (1), Araceli García Núñez (2), Jacopo Bacenetti (1) (1 Department of Environmental and Policy Science, Università degli Studi di Milano, Italy, 2 Department of Organic Chemistry, Universidad de Cordoba, Spain)

26 – Technical-economic considerations on phosphorous recovery strategies for in situ and decentralized hubs / M. Pecchi, S. Cavana, L. Zanetti, M. Tenardi, D. Basso (HBI s.r.l.)

27 – Thermal Plasma Processing of Metal Powders for Additive Manufacturing Applications / P. Iovane, C. Borriello, S. Portofino, A. Di Girolamo Del Mauro, S. Galvagno1 (SSPT-TIMAS-CMS CR. ENEA "Portici")

28 – The "HEMP REVIVE" project in the Taranto area: the hemp supply chain as a model for ecological transition in the Mediterranean basin to produce secondary raw materials / Melissa Sardano1,2, Ilaria Savino1, Aurora Rutigliano1,2, Anna Barra Caracciolo3, Paola Grenni3, Ludovica Rolando3, Pietro Cotugno4, Roberto Carlucci5, Vito Felice Uricchio1, Verdiana Toma6, Valeria Ancona1 (1Consiglio Nazionale delle Ricerche – Istituto per le Tecnologie della Costruzione, Bari, 2Dipartimento di Scienza del suolo, della Pianta e degli Alimenti, Università di Bari A. Moro, 3Consiglio Nazionale delle Ricerche – Istituto di Ricerca Sulle Acque, Roma, 4Dipartimento di Chimica, Università di Bari A. Moro, 5Dipartimento di Bioscienze, Biotecnologie e Ambiente, Università di Bari A. Moro, 6You're up Benefit- Sava, TA)

29 – Valorization of saline sludge through vermicomposting: challenges and opportunities for circular bioeconomy systems / Cristina Macci1, Alberto Pardossi2, Serena Doni1, Eleonora Peruzzi1, Grazia Masciandaro1, Irene Rosellini1, Marco Carlo Mascherpa1, Davide Manzi1, Giulia Carpi3, Marco Calcaprina3, Francesca Vannucchi1 (1Research Institute on Terrestrial Ecosystems (IRET), National Research Council of Italy (CNR), Pisa, Italy, 2Department of Agriculture Food and Environment, University of Pisa, Italy, 3Centro Lombricoltura, Toscano srl agr, Vecchiano - PI, Italy)

30 – LCA of the INNOVATILE Semi-Wet Granulation Technology for Porcelain Tile Production / Alessandra Cesaro, Massimiliano Fabbricino, Giovanni Panico, Grazia Policastro (Università degli Studi di Napoli Federico II; Dipartimento di Ingegneria Civile, Edile ed Ambientale)

31 – Ri-uso: Eco-Design Methods and Tools for the Management and Utilization of the Digital Product Passport to Support the Certifiable Circularity of Fashion SMEs, Including Through Service Centers / Centro Qualità Tessile

32 – BioPackMan: Advancing Circular Biodegradable Packaging through Material Innovation, Sustainable End-of-Life Management and Bio-Based Resource Valorisation / Tatjana Kosanovic Milickovic, Eleni Gkartzou, Melpo Karamitrou, Athanasios D Porfyris, Christina Podara, Costas Charitidis (Research Lab of Advanced, Composite, Nano Materials & Nanotechnology (R-NanoLab), School of Chemical Engineering, National Technical University of Athens, Greece)

33 – Life Cycle Assessment and performance evaluation of a graphene-enhanced polymeric compound asphalt mixture: a case study in Rome / 1) Carlo Carpani (Iterchimica S.p.A.), Alessandro Marradi, (Department of Civil and Environmental Engineering, Università degli Studi Firenze), Chiara Mignini, (Marradi Consulting Partners S.r.l.), Loretta Venturini (Iterchimica S.p.A.)

34 – Regenerated End-of-Life Hemodialysis Membranes for Advanced Wastewater Treatment: Full-Scale Demonstration to Combine Circular Economy and Water Purification / C. Ceci, A. Paoletti, M. Spizzirri (Acea Ato2), S. Leoni, C.A. Checa Fernandez, G. Cecchini (Acea Infrastructure), S. Murtas (Istituto Superiore di Sanità), M. Negrin (NUF Italia S.r.l.)

35 – Digital Product Passport workflows for semiconductor critical raw materials recycling: the Calabria pilot across CLOSER, EVEN CLOSER and Attesta / Caterina Loddo (Regione Calabria), Andrea D'Intino (FORKBOMB BV), Carlo Polidori (VELTHA ivzw)

36 – Eco-Friendly High-Density Boards from Mulberry: How Starch Type Dictates Physio-Mechanical Properties / B.E. Ferrández Garcia, M. Ferrández-Villena, T. García Ortuño, M.T. Ferrández Garcia

37 – A Multidimensional Parametric Model for the Strategic Ranking of Rare Earth Elements / Rosalia Ferri (Napoletana Plastica)

38 – When Is Resource Recovery Worthwhile? A Dynamic Resource Assessment for Industrial Symbiosis / Rosalia Ferri (Napoletana Plastica)

39 – The Time of Technology and the Time of Law: Regulatory Misalignment as a Barrier to Resource Recovery / Oreste Patrone – Friuli Venezia Giulia Region

Tuesday 3 November
10:00 - 13:30

Agorà Tiberio - Water Cycle Area Hall D8

International Cooperation and Partnerships with Mediterranean and Africa
Click here

Water Resilience In and Beyond Europe: Euro-Mediterranean Cooperation, Innovation and Global Leadership

Organized by: Ecomondo STC & WATER4ALL, Water Europe, Imperial College, Beta Tech Centre, Italian Institute of Health, UTILITALIA, Marche Polytechnic University

Language: English

This workshop will explore the international dimension of water resilience, positioning Ecomondo as a key Euro-Mediterranean platform for dialogue, cooperation, and innovation. A strong focus will be placed on international research and innovation projects, highlighting their role in developing, testing, and scaling up sustainable water solutions across regions. In this context, the session will showcase EU-funded R&I projects and flagship initiatives such as the Global Gateway and the Union for the Mediterranean. The session will also look ahead to the UN Water Conference 2026, emphasizing the importance of water diplomacy in addressing shared challenges and fostering strategic partnerships. Particular attention will be given to strengthening the global competitiveness of EU water technologies, supporting industrial leadership, technology transfer, and market uptake through research-driven innovation. Innovative financing mechanisms, including nature credits and blended finance, will be discussed as tools to unlock investments and support the scaling of results emerging from research and innovation actions. The workshop will further reflect on the evolution of the European and Mediterranean Innovation Action, reinforcing collaboration between research institutions, industry, and public authorities. Overall, the session aims to position Ecomondo as a strategic hub connecting European and Mediterranean stakeholders, with a strong emphasis on international R&I collaboration, driving innovation, investment, and policy alignment in the global water agenda.

Session Chairs

Sergio Ponsá Salas, Ecomondo Scientific Technical Committee (STC) and BETA Technological Centre
Evina Katsou, Ecomondo Scientific Technical Committee (STC) and Imperial College London
Francesco Fatone, Ecomondo Scientific Technical Committee (STC) and Università Politecnica delle Marche
Luca Lucentini, Ecomondo Scientific Technical Committee (STC) and Italian Institute of Health (ISS)

Program

10.00 Introduction by the Chairs

10.15 **Opening High-Level Panel:**
European Strategies and International Cooperation for Water Research and Innovation
Chair: Francesco Fatone, Ecomondo Scientific Technical Committee (STC) and Università Politecnica delle Marche

Impact and Future Perspectives of the European Framework Programmes for Water Research and Innovation
Bertrand Vallet, European Commission, DG Oceans, Seas and Waters, Unit B4 (TBC)

Water4All: Aligning National Programmes to Maximise the Impact of Water Research and Innovation
Benjamin Lopez, Water4All Partnership
Maria Chiara Sole, ISPRA

Strengthening Water Cooperation in the Mediterranean
Representative of PRIMA / Union for the Mediterranean (TBD)

Italian Water Utilities as Drivers of Innovation: Scaling Research into Practice through European and International Projects
Monica Manto and Yuri Santagostino, UTILITALIA (TBC)

Building a Smart Water Economy in the Euro-Mediterranean Region: Evidence from 1,500 Companies
Daniela Bernacchi, Executive Director UN Global Compact Network Italy (TBC)

Strengthening International Water Cooperation: The Experience of the Hungarian Water Partnership
Balázs Varga, International Business Specialist of the Hungarian Water Partnership

Speeches selected from the Call for Papers

11.15 **Panel 1 –** ***Building Water Resilience: Nature-Based Solutions, Governance and Regional Strategies***
Chair: Sergio Ponsá Salas, Ecomondo Scientific Technical Committee (STC) and BETA Technological Centre

Focus: Nature-based Solutions, groundwater recharge, urban resilience, governance, regional cooperation and Mediterranean strategies for climate adaptation

Blue Credits for Boosting Groundwater Recharge
Alessandro Bosso and Marco Ottolenghi, ART-ER

Decoupling Urban Runoff through Nature-Based Solutions: A SuDS Retrofit in Paderno Dugnano (Italy)
Marco Callerio, Head of Engineering Services Gruppo CAP

Sponge Cities and Water-Resilient Cities: The Sponge Measures Project and an International Comparison
Marino Cavallo, Città Metropolitana di Bologna
Mirco Bordin, Nuovo Circondario Imolese

From WEFE Nexus Knowledge to Practice: Scaling Water Resilience through Living Labs, Nature-Based Solutions and Innovative Business Models in the Mediterranean
Maria Giulia Pelosi and Juan Diego Restrepo, Etifor - Valuing Nature
Alessandra Santini, University of Padua

Water Resilience in the Mediterranean Area: The WISEMED Project (Mediterranean Joint Water Management and Conservation Sustainable Solutions)
Silvia Baralla, Maria Valentina Lasorella and Serena Marianna Ferrigno, CREA – Research Centre for Agricultural Policies and Bioeconomy
Serena De Angelis, Institute for University Cooperation

CARDIMED, CSS Boost and SYSTEMICO: Advancing Circular Cities, Regional Water Resilience and Water Reuse in the Mediterranean
Simos Malamis, George Arampatzis

12.15 **Panel 2 – *Scaling Circular Water Solutions: From Innovation to Climate Resilience***
Chair: Luca Lucentini, Ecomondo Scientific Technical Committee (STC) and Italian Institute of Health (ISS)

Focus: Water reuse, circular economy, digital transformation, decentralised systems, drinking water resilience and innovation uptake

SOLUCIR: Innovative Circular Water Solutions for Decentralised Water Management
Christos Makropoulos, Panagiotis Kossieris, Natalie Bianchi

BOOST-IN: Boosting Innovation for Circular Water Solutions Across European Regions
Stevo Lavrnić and Attilio Toscano, Alma Mater Studiorum - University of Bologna

Enhancing Drinking Water Treatment Performance under Climate Change: Experiences from Mozambique
Elisa Gregorio and Sabrina Sorlini, Atumane Ussene

Enabling the Adoption of On-Farm Water Innovations: Cross-Country Evidence from Regional Social Labs
Tommaso Pomponi, Marianna Ferrigno, Myriam Ruberto, Andrea Arzeni and Silvia Baralla, CREA – Research Centre for Agricultural Policies and Bioeconomy

Models without Borders: Digital Twins as Enablers of Water-Technology Transfer and Resilience across the Euro-Mediterranean Region
Jessica Ianes, Giacomo Bellandi, Roberta Muoio, Pieter Vlasschaert and Wim Audenaert, AM-Team, Ghent University

Smart Energy in Alta Quota: The TERRALTA Resilient Model
Maria Ferrara, Hydrodata S.p.A. – Water Resources Engineering Company

Closure by the Chairs

SELECTED E-POSTERS

1 – *European Sustainability Governance of Water-Related Impacts in Cotton-Based Textile Supply Chains*
Filippo Nepi

2 – *SEP – Siccità e Esondazion*
Gabriele Puccetti

3 – *WrackValue: An Industrial-Scale Circular Bioeconomy Model for Converting Beach-Cast Biomass and Sargassum into Certified, Market-Ready Bioproducts*
Pablo Martinez, ISAT
Leonardo Piccinetti, REDDIN
Gustavo Perez, Universitat Autònoma de Barcelona
Alexia Massa Gallucci, BlueEcotech
Rocco Lagioia, TheGreenTech

4 – *Environmental DNA as an Innovation and Decision-Support Tool for Water Resilience*
Nicola Tommasi, Emiliano Pioltelli, Lorenzo Guzzetti and Nemoris S.r.l. Società Benefit

5 – *UAV-SfM Multi-Temporal Monitoring and Sediment Transport Modelling for Sustainable River Basin Management: Preliminary Results from the Celone River Basin*
Leonardo Mita, Università degli Studi della Basilicata; Commissario di Governo per il contrasto del dissesto idrogeologico nella Regione Puglia
Andrea Doria, Commissario di Governo per il contrasto del dissesto idrogeologico nella Regione Puglia
Gennaro Ranieri, Politecnico di Bari; Commissario di Governo per il contrasto del dissesto idrogeologico nella Regione Puglia

6 – *OBLYSIS®: An Innovative Technology for Enhancing the Performance of Activated Sludge Wastewater Treatment Plants – The Caronno Pertusella WWTP Case Study*
OBLYSIS New Wastewater Era

7 – *Resilient Water Reuse Under Extreme Influent Variability: Performance of Pentair X-Flow Helix Tubular UF Membranes in a Side-Stream MBR Treating Tanker-Wash Wastewater*
Elias Van den Broeck, Pantarein Water – Technology Integrator and Operator
Karthi Pitchaikani, Pentair – Technology Provider

8 – *Real-Time Detection of Influent Toxicity through Activated Sludge Respirometry: Protecting Biological Treatment for Resilient Wastewater Management*
Roberta Lotito, Gruppo Orion

Tuesday 3 November
14:00 - 16:00

Diotallevi Room South Hall

Resource Efficiency and Circular Economy
Click here

Plastic circularity: new perspectives and critical issues

Organized by: Comitato Tecnico Scientifico di Ecomondo

Language: Italian

The plastics industry is one of the strategic supply chains of the Italian production system, which growing geopolitical tensions risk compromising by altering global value chains. The European Commission's recent measures — the Clean Industrial Deal and the Omnibus Package — represent important steps in recovering industrial competitiveness, and the upcoming Chemical Industry Package will be a key opportunity to rebalance these compromised ambitions. Added to this is the recent entry into force, in February 2025, of the Regulation on Packaging and Packaging Waste and the long-awaited Circular Economy Act, which aims to build a new action plan on the circular economy by strengthening measures to accelerate Europe's transition to a resource-efficient economy, including addressing the price gap between virgin and recycled materials, which represents one of the major obstacles to the allocation of recycled materials.
The day provides an opportunity for key industry players to discuss new regulatory provisions.

Session Chair

Valeria Frittelloni, Scientific Advisor to the ARERA Council
Program

Introduction by the Chair

Speeches by:
Maria Teresa Borzacchiello, Policy Officer, European Commission's Joint Research Centre - Towards Sustainable Plastics: Production, Use, Circularity and Innovation
Representative of European Environment Agency
Representative of Ministry of Environment and Energy Security
Andrea Massimiliano Lanz, ISPRA
Representative of CONAI (National Packaging Consortium)
Representative of ASSORIMAP
Representative of ANCI (National Association of Italian Municipalities)
Vincenzo Lumia, Federchimica-Plastics Europe
Massimo Centonze, Unionplast
Maria Cristina Poggesi, IPPR (Institute for the Promotion of Recycled Plastics)

Closure by the Chair

Tuesday 3 November
14:00 - 15:30

Innovation Arena - South Hall

Sustainable and Circular Textiles
Click here

ESPR and Digital Product Passport in textiles: traceability and transparency along the value chain

Organized by: Ecomondo STC & AISEC (Italian Association for the Development and the Promotion of the Circular Economy)

Language: English

The textile sector is entering a new regulatory and technological phase driven by the Digital Product Passport (DPP) under the EU Ecodesign for Sustainable Products Regulation (ESPR). This session will explore how digital systems, artificial intelligence and new technologies can enhance transparency, optimize sorting processes and improve the quality of secondary raw materials - key enablers for a truly circular fashion system. Particular attention will be given to the integration of DPP with product identification technologies, enabling efficient and reliable data exchange between producers, EPR schemes and end-of-life operators. By bringing together policy, industrial and technological perspectives, the session aims to deliver actionable insights to accelerate circularity across the textile value chain.

Session Chairs

Eleonora Rizzuto, AISEC President, Chief Sustainability & Due Diligence Officer Bulgari, Ecomondo STC
Chiara Catgiu, AISEC, Senior Manager Climate Change & Sustainability Services, KPMG
Anna Dimasi, AISEC, Business Strategy Consultant

Program

Introduction by the Chair
Eleonora Rizzuto, AISEC, Bulgari, Ecomondo Scientific Technical Committee

Opening Institutional Addresses
Giorgia Di Giovanni, Italian Ministry of Enterprises and Made in Italy
Mauro Scalia, EURATEX

Roundtable discussions
Session 1 – *DPP & ESPR: data, technologies, and traceability for circular fashion*
Moderated by: Chiara Catgiu, AISEC

Eleonora Foschi, ENEA (Italian National Agency for New Technologies, Energy and Sustainable Economic Development)
Attila Kiss, CEO Gruppo Florence
Speaker, representative luxury fashion brand (TBD)
Speaker, DPP provider (TBD)

Session 2 – *From data to value creation: how interoperability and AI enable DPP in textiles*
Moderated by: Anna Dimasi, AISEC

Rinaldo Rinaldi, Università degli Studi di Firenze
Speaker, representative luxury fashion brand (TBC)
Luca Campadello, Erion Textiles
Andreas Schneider, Global Textile Scheme
Guy Buyle, Centexbel

Closure by the Chairs
Eleonora Rizzuto, AISEC, Bulgari, Ecomondo Scientific Technical Committee

Tuesday 3 November
14:00 - 16:00

Ravezzi 2 South Hall

Circular and Healthy Cities
Click here

From Data to Decisions: National Infrastructure and Local Applications for a Data-Driven Public Administration

Organized by: Comitato Tecnico Scientifico di Ecomondo & Politecnico di Torino

Language: Italian

Governing with Data: Practical Tools for the Public Administration

The event, focused on the use of data as a concrete lever for transforming public administration, is intended for public administrators, executives, technical experts, researchers, and private-sector professionals, with the aim of presenting real-world case studies in which new data-driven approaches are improving decision-making, services, urban planning, environmental management, and public investment. Priority will be given to an approach aimed at building a platform for civic innovation by presenting tested models, replicable practices, and measurable impacts in order to maximize the participation of officials and administrators—both public and private—including through targeted incentives (professional development recognition, applied workshops, institutional networking opportunities, and the promotion of best practices), thereby fostering a national community centered on the theme of data-driven governance.
Thus, the event will focus on how public administrations can move beyond data collection toward structured decision intelligence. Key questions that will be addressed:
- *How can municipalities and regions use integrated data systems to simulate policy outcomes before implementation?*
- *How can georeferenced and real-time data improve transparency in public spending and urban transformation?*
- *How can predictive analytics support risk management (climate, infrastructure, demographics, social services)?*
- *What governance models ensure trust, accountability, and interoperability across institutions?*

The edition will feature concrete cases from Italian and European administrations that have shifted from reporting to forecasting, from static planning to dynamic governance.

Session Chair

Giovanni De Santi, Politecnico di Torino

Program

Institutional opening
Paolo Zangrillo, Minister for Public Administration
Stefano Lo Russo, Mayor of Torino e Vice President ANCI
Stefano Corgnati, Dean of Politecnico di Torino

Round table: *from national infratructures to local decisions*

Moderator:
Giovanni De Santi, Politecnico di Torino

Invited participants:
Gabriella Costa, ESA - *IRIDE Satellite constellation*
Francesco Longo, ASI - *IRIDE Satellite constellation*
Francesco Sofia, AGEA - *National Orthophotos and Agricultural Systems*
Silvano Pecora, MASE - *National LiDAR flight*
Francesco Ubertini, CINECA - *The Role of National Computing Infrastructure*
Emilio Misuriello, ESRI - *The Role of Spatial Data Platforms*
Piero Boccardo, Politecnico di Torino - *Urban Digital Twin*

Conclusion remarks
Stefano Corgnati, Rettore del Politecnico di Torino
Giovanni De Santi, Politecnico di Torino

Tuesday 3 November
14:00 - 16:00

Agorà Augusto - Bioeconomy Area Hall D1

Agrifood, Forestry, Bioenergy and Circular Bioeconomy
Click here

What science says on biodegradable and compostable plastics for soil protection

Organized by: Comitato Tecnico Scientifico di Ecomondo & Novamont, Coldiretti, Fondazione Re Soil, Biorepack

Language: Italian

The event will be focused on the analysis of the positive impacts that biodegradable and compostable bioplastics can provide to soil, both directly – thanks to the use of soil biodegradable applications for agricultural use – and indirectly via composting – thanks to the positive impact provided by the use of compostable items for specific applications in contact with organic content. During the event, different scientific papers and project outputs will be described, showing how biodegradable and compostable plastics avoid the accumulation of persistent microplastics in soil and in compost, to be used to restore and maintain soil fertility and incorporate carbon.

Session Chairs

Michele Falce, Novamont
Margherita Caggiano, Re Soil Foundation
Carmine Pagnozzi, Biorepack
Roberto Moncalvo, Coldiretti

Program

Introduction
Michele Falce, Novamont

Session 1: *Bioplastics for soil protection*
Chair: Margherita Caggiano, Re Soil Foundation

Long-term biodegradable mulch films application in agricultural fields: effects on soil functionality and microplastic generation
Carlos Edo, Natural History Museum of Denmark

The effect of soil biodegradable plastics on microorganisms
Pietro Buzzini, University of Perugia

Biodegradable and compostable applications in soil: the first outcomes of SOUL project
Sara Guerrini, Re Soil Foundation

Session 2: *Bioplastics and high-quality compost for soil fertility*
Chair: Carmine Pagnozzi, Biorepack

Compostable packaging and high-quality compost: an overview
Claudio Marzadori, University of Bologna

Compostable packaging and compost: the results of Agrobiopack project
Antonietta La Terza, University of Camerino

Compostable plastics for more sustainable packaging solutions: the results of Chairecopack project
Sandra Domenek, AgroParisTech

Discussion and closure
Roberto Moncalvo, Coldiretti

Tuesday 3 November
14:00 - 17:00

Agorà Blue Economy Hall D7

Water Cycle and Blue Economy
Click here

Adaptive regeneration of coastal areas and territory – what new opportunities from the european climate resilience framework?

Organized by: Comitato Tecnico Scientifico di Ecomondo & Ministero dell'Ambiente e della Sicurezza Energetica, ISPRA, Regione Emilia-Romagna, GNRAC, CPMR, Commissione Europea

Language: Italian
Instant translations:: English

Climate adaptation and water related risks resilience are strategic objectives of the European Union. Climate-Change-generated effects and extreme events are bringing unprecedented challenges in territories and coastal areas that are often already vulnerable due to their hydrogeological features. Just in the recent few years, numerous European territories, internal and maritime regions, have experienced severe flooding events and marine storms with devastating impacts on local communities and economies. As a result, Member States have requested contributions from the EU Solidarity Fund, with a total estimated damage exceeding €63 billion. It is estimated that by 2030, half of Europe's river basins and coasts will be affected by extreme weather and drought, and that damage costs will impact around 1.5% of total EU GDP by 2050.

Strengthening the resilience and adaptive capacity of territories and coastal areas is no longer optional. Adaptation should be systematically embedded in integrated planning and public policies, investment and territorial development strategies, aligned with environmental, economic and social objectives. A robust financial architecture at the European level, including the next Multiannual Financial Framework (MFF), is essential to fund these transformations. Key expectations focus on the Commission's new Integrated Framework for Climate Resilience, scheduled for adoption in Q4 2026.

One year after the launch of the "Manifesto – Shore up Climate Resilience of Maritime Regions" issued by the Conference on Coastal Regeneration held in Ecomondo '25, this year's event wants to take stock of Europe's actions to date. It will also focus on the new opportunities that the future European Climate Resilience Framework should provide to allow regional and local authorities in addressing climate-related challenges, designing appropriate responses and guiding the needed investment efforts to make their territories and communities more resilient and future-proof.

Session Chairs

Roberto Montanari, EQ Coordination of activities on Coastal protection sector for Plans and Programs, Emilia-Romagna Region
Giuseppe Sciacca, Director Maritime Affaires and Climate CPMR (Conference of Peripheral Maritime Regions)
Lorenzo Cappietti, President GNRAC (National Group for Coastal Environmental Research)

Program

Coordinator:
Roberto Montanari, Emilia-Romagna Region

14.00 *Institutional welcome*
Francesco Corvaro, Italian Government's Special Envoy for Climate Change
Manuela Rontini, Undersecretary to the Presidency of the Emilia-Romagna Region

Introduction by the Chairs, and Overview of the Manifesto and of the 2026 Declaration

14.20 **Round Table 1:** ***Perspectives, opportunities and high-level expectations from the new european climate resilience framework***
Moderator:
Giuseppe Sciacca, CPMR

Speakers:
Giuseppe Travia, Director DG Sustainable Use of Soil and Waters - Italian Ministry of Environment
Irene Bonvissuto, Team Leader of the Mission on Adaptation to climate change DG Clima European Commission
Philippe Tulkens, Head of Unit Climate & Planetary Boundaries (RTD.B.3) European Commission (TBC)
Daria Povh Skugor, Director of PAP/RAC, the UNEP-MAP Centre for Coastal Management
Giovanni Coppini, Principal Scientist and Director of the Strategic Program "Global Coasts as a New Frontier", CMCC Foundation – Euro-Mediterranean Center on Climate Change
Roberto Rando, Senior Climate Officer - European Investment Bank (TBC)

Q&A with the audience

BREAK and Family photo

15.50 **Round Table 2:** ***Meeting regional and local needs: expectations and practical implementation of the new eu climate resilience framework***

Moderator:
Lorenzo Cappietti, GNRAC

Speakers:
Representative of Occitanie Region
Carme Puig i Civera, Deputy Director for Geology and Geological Resources, Cartographic and Geological Institute of Catalonia (ICGC)
Representative of Flanders Region
Anna Montini, Councillor of Ecologic Transition, Environment, Sustainable Development, Blue Economy – Rimini Municipality
Luca Salvetti, Major of Livorno Municipality
Marco Frey, Full Professor of Economics and Business Management, Coordinator of the Interdisciplinary Center on Sustainability and Climate – Sant'Anna University School of Advanced Studies in Pisa
Andrea Martinez, Deputy Director General and Advisory Lead of Sinloc-Sistema iniziative locali SpA

Q&A with the audience

17.00 Conclusions by the Chairs

Tuesday 3 November
14:00 - 15:45

Area Forum CIB Hall D5

Agrifood, Forestry, Bioenergy and Circular Bioeconomy
Click here

The Farm of the Future: a biorefinery that generates collective value

Organized by: Ecomondo STC & CIB (Italian Biogas Consortium), EBA (European Biogas Association), European Commission

Language: Italian

Through the Biogas Done Right model, the agricultural enterprise ceases to be a simple production site and becomes a fully integrated biorefinery. A system in which biomethane production works in synergy with agriculture, returning nutrients to the soil through digestate and creating stable income streams for farmers. This event aims to explore how to accelerate this process by bringing together research, the bioeconomy, innovative investment models, and the voices of those who have already successfully taken this path.

Session Chair

Piero Gattoni, President of CIB – Italian Biogas Consortium

Session Chair

Piero Gattoni, President of CIB – Italian Biogas Consortium

Program

Introduction and Institutional Welcome
Fabio Fava, Chair of the Ecomondo Scientific and Technical Committee
Piero Gattoni, President of CIB – Italian Biogas Consortium
Catherine Geslain-Lanéelle, Director for Strategy and Policy Analysis at DG AGRI European Commission

The foundations of the agricultural biorefinery: research, data, and bioeconomy
The economics of innovation in the field
Danilo Ercolini, CNR Agritech

The role of data and Smart Agriculture
Presentation by the Smart AgriFood Observatory

Bioeconomy solutions for sustainable agriculture
Bruno Basso, Michigan State University

The need for systemic collaboration in the agricultural sector
Massimiliano Giansanti, Confagricoltura (TBC)
Ettore Prandini, Coldiretti (TBC)
Gianmichele Passarini, CIA (TBC)

Supporting change: new business models for agriculture
Moderated dialogue by:
Diana Lenzi, President of the Farming for Future Foundation

Participants:
Federica Basile, Coop. Fattoria della Piana
Paolo Bizzoni, Azienda Agricola Bizzoni

Q&A and Conclusions
Concluding summary by Piero Gattoni to outline the sector's priorities in view of upcoming political and economic milestones

Tuesday 3 November
14:00 - 15:00

Textile District - Workshop Area Hall D2

Sustainable and Circular Textiles
Click here

Textile End of Waste - state of the art of regulations and potential critical issues

Organized by: Ecomondo & Tecnotessile, Confindustria Toscana Nord, Centrocot

Language: English

The textile/fashion sector is at the centre of the most profound regulatory transformation in its recent history. The definition of European End of Waste (EoW) criteria for textiles represents the watershed between a linear economy and a truly circular model. However, the imminent introduction of these community rules is raising profound questions among industry professionals. The question that currently divides the sector is crucial: will the new regulation act as a driver of development, or will it become a multiplier of critical issues for European production districts?
The European textile manufacturing industry is not starting from scratch. For years, companies across the continent have been investing heavily in technologies, research and traceability, making extraordinary efforts to reduce the environmental impact of supply chains. Historic centres of excellence – led by districts such as the Italian Textile District of Prato – have demonstrated over the decades that sustainability and mechanical recycling are not merely future goals, but well-established industrial realities, capable of transforming waste into high-quality manufactured goods.
The concrete risk today is that a legislative framework imposed from above and overly rigid could bureaucratise or, worse, paralyse these already existing virtuous flows. For this reason, it is vital that legislators engage in a systematic and transparent dialogue with supply chain operators. Without carefully listening to those who experience and implement manufacturing on a daily basis, there is a risk of introducing regulations that are theoretically perfect but technically unworkable, capable of undermining the sector's competitiveness on global markets.
This seminar is designed to foster debate on this delicate balance between environmental ambition and industrial resilience. The conference will bring together European and national Policy maker with the most authoritative voices from industry and certification, to analyse the state of the art and chart the routes of a transition that is sustainable both for the planet and for businesses.

Program

Moderator:
Vittoria Moccagatta, economiacircolare.com

Mechanical recycling: how it works today and the lexical misunderstanding
Gabriele Innocenti, CTN

The Position of the European Textile Industry
Speaker (TBC)

Certifications as a tool to support policy
Paolo Foglia, Centrocot

The role of the national legislator
Speaker Ministry of the Environment and Energy Security (TBD)

Tuesday 3 November
15:00 - 17:45

Agorà Ariminum - Circular Economy Area Hall D1

Resource Efficiency and Circular Economy
Click here

Circular Economy in Action: e-waste and waste batteries best practices

Organized by: Comitato Tecnico Scientifico di Ecomondo & ERION

Language: Italian

In Italy, the treatment of WEEE and waste batteries (WB) is still largely focused on the primary stages of mechanical processing. To date, no national facility is capable of recycling Critical Raw Materials (CRM) on an industrial scale, with the exception of copper. At the same time, the recent Italian Decree on Critical Raw Materials (2024) does not appear to be fully aligned with the European Critical Raw Materials Regulation, which sets the objective of meeting at least 25% of each Member State's CRM demand through recycling. In this context, the conference aims to:
• provide an overview of the most advanced European experiences in CRM recycling;
• explore the industrial strategies of the European Union;
• analyse Italy's position and future prospects.

This event will offer a dialogue platform between institutions, industry operators and Stakeholder to assess whether and how WEEE and battery recycling can effectively contribute to reducing Europe's dependence on imports of critical raw materials.

Session Chair

Andrea Fluttero, President, Erion Compliance Organization

Program

Opening remarks
Andrea Fluttero, President, Erion Compliance Organization

European systems for the treatment of WEEE and waste batteries
Pascal Leroy, Director General, WEEE Forum
Eric Ruyters, Director General, Eucobat

Industrial experiences in Europe
Jan Tytgat, Director Government Affairs – Umicore
Representative of BASF (TBC)

European strategies and autonomy in Critical Raw Materials
Can WEEE and battery recycling reduce Europe's dependence on third countries? Is there a common industrial strategy, or do national approaches prevail?
Rana Pant, Policy Officer European Commission (TBC)

Article 26 of the CRM Act – the circularity potential of WEEE and other waste streams
Concetta Lodato, Policy Officer, European Commission’s Joint Research Centre

Italy's role: Opportunities and Challenges
What levers can support the development of CRM refining facilities in Italy? What is the current dialogue with the European Union?
Laura D'Aprile, Italian Ministry of the Environment and Energy Security (TBC)
Alessandro Danesi , Commercial Director – Seval Group
Stefania Timperi, Head of Market Intelligence and Opportunity Identification – ENI
Elisabetta Perrotta, Director ASSOAMBIENTE (National Association of Environmental Services and Circular Economy Companies)
Lucia Leonessi, Director General Confindustria Cisambiente

Closing remarks
Laura Castelli, Erion

Tuesday 3 November
15:30 - 17:45

Agorà Malatesta - Enviromental Monitoring Area Hall B8

Circular and Healthy Cities
Click here

Indoor air quality and health. Trends and changes to know for a national plan

Organized by: Comitato Tecnico Scientifico di Ecomondo & Istituto Superiore di Sanità

Language: Italian

The conference aims to take stock of the ongoing changes and trends on the topic of indoor air quality, ranging from climate-related issues to workplaces, from energy performance to monitoring, from fires to pandemic plans, from dedicated legislation to health needs related to an ageing population, with the objective of promoting and facilitating organic actions in line with European and WHO Plans.

Session Chairs

Gaetano Settimo, Istituto Superiore di Sanità
Gianluigi de Gennaro, Università di Bari

Program

Introduction by the Session Chairs

15.30 *National Prevention Plan (PNP) 2026–2030*
Francesca Ravaioli, Ministry of Health

15.45 *Indoor air quality: the commitment of the Ministry of the Environment and Energy Security*
Fabio Romeo, Ministry of the Environment and Energy Security

16.00 *New developments in indoor air quality*
Gaetano Settimo, Istituto Superiore di Sanità

Selected contributions from Call for Papers

16.15 *Towards sustainable and adaptive work environments: evidence, recommendations and Stakeholder perspectives from the SONATA project*
Agnese Chiucchiu(1,2), Veronica Martins Gnecco(1,3), Maria Giulia Proietti(3), Francesca Merli(3), Elisa Moretti(3), Benedetta Pioppi(2), Anna Laura Pisello(1,3) - (1) EAPLAB at CIRIAF, Centro Interuniversitario di Ricerca, Università degli Studi di Perugia, (2) EvalTech research & development, Gualdo Cattaneo (PG), Italia (3) Dipartimento di Ingegneria, Università degli Studi di Perugia

16.25 *International Benchmark of Indoor Air Quality Regulations in Buildings*
Claire-Sophie Coeudevez, Audrey Orcel, Manon Gervasi, MEDIECO Arteparc Campus Aix-En-Provence, Paolo Bruno, ISPIRA Arteparc Campus Aix-En-Provence

16.35 *Air quality monitoring in the Basilica of Saint Peter*
L. Pastore, A. Di Gilio, J. Palmisani, A. Marzocca, G. de Gennaro, Università degli Studi di Bari, E. Rio, E. Miti, W. Ganapini, A. Proietti, S. Fega, Fabbrica di San Pietro, Vatican City State

16.45 *CHALLENG'AIR project: feedback from a regional challenge for improving IAQ in classrooms by occupants*
Andrés LITVAK, Chef de Groupe Bâtiment Durable, Centre d'études et d'Expertise sur les Risques, l'Environnement, la Mobilité et l'Aménagement, Cerema, France

16.55 *Technologies for controlling the aero-dispersal of microorganisms from HVAC systems*
Daniela D'Alessandro, Besrat RT, Letizia Appolloni, Sapienza Università di Roma

17.05 *A National Green Building Assessment Framework for Sustainable Construction in Palestine: Development, Implementation and Early Outcomes*
Linda Alkhateeb, Architect

17.15 *From exposure to indoor pollutants to bronchial cellular response: first results of the OASIS project at Rome Fiumicino Airport*
Massimo Santoro, Laboratorio di Biotecnologie RED - ENEA Casaccia Roma

17.25 E-poster discussion

17.40 Discussion and conclusions by the Session Chairs

SELECTED E-POSTERS

1. *Indoor Air Quality Assessment in School Environments Using Low-Cost Sensors: Comparative Analysis of Particulate Matter and Microclimatic Parameters under Different Conditions*
Federica Napoli, Peppino Sapia, Università della Calabria, Dipartimento di Matematica e Informatica-DEMACS, Luigi Madeo, Università della Calabria, Dipartimento di Ingegneria Ambientale-DIAM.

2. *Digital twins and CFD modelling of air exchange in controlled contamination environments: from cleanrooms to indoor air quality*
Simon Duchi, Zohaib Rehman, Giacomo Bellandi, Usman Rehman, Wim Audenaert-AM-Team, Advanced Modelling for Process Optimisation, Sint-Pietersnieuwstraat 11, 9000 Ghent, Belgium

3. *Sustainable insulating solutions and digital twin for indoor comfort: experimental evaluation with sensor networks*
Patrizia Aversa1, Alessandra Mobili2, Francesca Tittarelli2, Rifat Referi3, Orazio Colaneri3, Gian Marco Revel2, Vincenza A.M. Luprano1 - 1 ENEA-SSPT-IMPACT-SPAC, 2 UNIVPM, Marche Polytechnic University, 3 LIS, Live Information System SRL

4. *Arcadia Center: innovative gas monitoring in hyperbaric work environments*
Elisa Casaletta, Ombretta Iaria, Matteo Marangi, Arcadia Srl, Tromello (PV)

5. *University Indoor Comfort 4.0: Perceive, Monitor, Model, Intervene*
Arianna Rossi, Barbara Fabbri, Vincenzo Guidi, Marco Magoni Dipartimento di Fisica e Scienze della Terra, Università degli Studi di Ferrara; Chiara Visentin e Matteo Pellegatti, Dipartimento di Ingegneria, Università degli Studi di Ferrara

6. *Advanced analytical approaches for fast investigation in indoor air. From VOCs to PFAS, metals and microplastics*
Daniele Morosini, Daniela Peroni - SRA Instruments SPA

7. *Radon: activities in the Campania Region*
Adriano Pistilli, Technical Manager for Waste Management - Independent Professional

8. *Reduction of airborne oil mists in production environments: the evolution from local systems to a centralised extraction and filtration system*
Nicola Doro

9. *Valorisation of citrus by-products for the biosynthesis of therapeutic essential oils: IoT 4.0 atomisation for air purification and sustainable biocontrol in transport and confined environments*
Cascone Marilena, Lombardi Beatrice, Lombardi Giordano - Seneca Biotech

Tuesday 3 November
15:30 - 16:30

Textile District - Workshop Area Hall D2

Sustainable and Circular Textiles
Click here

From Tradition to Innovation: The Cultural Heritage of Textiles between Craftsmanship and High-Tech

Organized by: Ecomondo & AISEC (Italian Association for the Development and the Promotion of the Circular Economy)

Language: English

International conference dedicated to exploring the dynamic interplay between the rich historical legacy of textiles and the groundbreaking advancements of modern technology. This event brings together leading academics, industry innovators, designers, cultural heritage experts, and policymakers to discuss, debate, and discover the future of textiles under this perspective.

The textile industry, deeply rooted in human history and cultural identity, is currently undergoing a profound transformation. This conference aims to bridge the gap between time-honored artisanal techniques and cutting-edge high-tech solutions. Our objectives include:
• Highlighting the intrinsic value of textile cultural heritage.
• Exploring innovative approaches to preserve, digitize, and re-interpret traditional textile practices.
• Showcasing how high-tech materials, smart textiles, and digital design are reshaping the industry.
• Fostering dialogue on sustainability, ethical production, and social responsibility in the textile sector by illustrating practical cases

Program

Moderator:
Cristina Tagliabue, Journalist

Speakers:
The textile art in the Arts
Aldo Premoli

A best practice in the Industry
Diletta Cancellato, cU Cancellato Uniform

Madelaine Thomas, WTiN

University representative

Creative Director action in culture

Tuesday 3 November
16:15 - 17:45

Agorà Ariminum - Circular Economy Area Hall D1

Sustainable and Circular Textiles
Click here

Reuse, repair and eco-design. The heroes of “magic” circles of Circular Economy in the textile sector

Organized by: Comitato Tecnico Scientifico di Ecomondo

Language: English

This is the third round of a conference aimed at showcasing the most "noble" approaches of circular economy: reuse, durability and repairability and, logically, eco-design.
This year we will focus on the textile sector. We will showcase real examples of companies that have successfully applied one or more of those approaches: “The heroes”. We want to demonstrate through real stories, that reusing and repairing not only contribute to a more sustainable economic development, but they can also be business opportunities. We hope those stories will be a source of inspiration for many others.
The event is organized in a talk-show format and audience will actively participate in the discussion.

Program

Introduction by Moderators:
Francesca Romana Rinaldi, Director Monitor for Circular Fashion SDA Bocconi
Angelo Salsi, former Head of Department CINEA – European Commission
Francesco Matteucci, former Program Manager at EISMEA – European Commission

How does the EU support reuse, repair and eco-design in the textile sector
Stefano Soro, Head of Unit – Net Zero Industries, Sustainable and Circular Products, European Commission DG GROW

Introducing an eco-design framework to extend product life
Francesca Romana Rinaldi, Director Monitor for Circular Fashion SDA Bocconi

Eco-design in sport equipment and garments: what happens to your ski boots, helmets and other sport equipment and garments once you do not use them anymore?
Martino Colonna, Associate Professor UNIBO

Panel Discussion with
Silvia Mazzanti, Sustainability Manager Save the Duck
Dario Casalini, CEO Maglificio Po Srl – Oscalito 1936
Marco Guazzoni, Sustainability Director Vibram
Alfio Fontana, CSR Manager and Corporate Partnership Humana People to People
Speaker Progetto Life PhoenixWeee (Dismeco) (tbc)
Speaker Centro del Riuso Regione Emilia-Romagna - Double Trouble (tbc)

Open debate with audience

Closing statements

Wednesday 4 November
10:00 - 13:00

Mimosa Room Hall B6

Resource Efficiency and Circular Economy
Click here

Industrial symbiosis, resource diagnosis and circular eco-districts in Italy through the implementation of a National Plan: opportunities and challenges

Organized by: Comitato Tecnico Scientifico di Ecomondo & ENEA, SUN Symbiosis Users Network

Language: Italian

The systematic adoption of industrial symbiosis solutions, resource diagnosis and the transition towards circular eco-district models, the Italian evolution of eco-industrial parks, is progressively establishing itself as operational practice in national production systems.
In line with the framework of the main European policies for the transition towards the circular economy (Circular Economy Action Plan, Green Deal, EU Industrial Strategy, Clean Industrial Act, Industrial Accelerator Act, ...), the adoption of a dedicated National Plan for such strategies can represent a significant added value for the country. This also through the introduction of appropriate instruments aimed at promoting the diffusion of standardised methodologies and interoperable digital tools. In this context, the X edition of the Conference of the Italian industrial symbiosis network - Symbiosis Users Network (SUN), aims to collect technical-scientific contributions from organisations that have implemented industrial symbiosis initiatives, resource diagnosis and sustainability and circularity solutions in industrial areas, contributing to the transition towards eco-industrial park models. Contributions relating to support tools, digital platforms, governance models and programming initiatives adopted at central and local level, aimed at promoting the implementation and dissemination of such practices, are also invited.
This edition of the conference is dedicated to the memory of Silvia Sbaffoni, an ENEA researcher who dedicated, with passion and competence, a large part of her scientific work to these topics.

Session Chairs

Tiziana Beltrani, ENEA – SUN Symbiosis Users Network
Laura Cutaia, ENEA – SUN Symbiosis Users Network
Marco La Monica, ENEA – SUN Symbiosis

Program

10.00 *Round table*
Moderated by:
Alessandra De Santis, economiacircolare.com
Tiziana Beltrani, ENEA – SUN Symbiosis Users Network

Speeches by:
Laura Cutaia, ENEA – SUN Symbiosis Users Network
Pietro Agrello, Ministry of the Environment and Energy Security
Roberto Tatò, Ministry of Enterprises and Made in Italy
Maria Teresa Monteduro, Ministry of Economy and Finance
Antonio Visconti, Italian Federation of Industrialisation Consortium Bodies – FICEI
Marco Ravazzolo, Confindustria (TBC)

11.10 ***Speeches selected from Call for Papers***
Moderated by:
Agata Matarazzo, University of Catania
Marco La Monica, ENEA – SUN Symbiosis Users Network

The VSME Model as a lever for industrial symbiosis in SMEs: shared sustainability reporting and financial dialogue for the circular economy
Serena Moscardelli

Mo.Re.No. – Molding, Recycling, Nobilitating
Fabrizio Quadrini1, Loredana Santo1, Denise Bellisario1, Nicola Bartucca2, Tamara Pellegrini3 - 1FERT Srl, 2APEA Regionale Cartoneco, 3Rinnovative Srl

A GIS-based multi-criteria tool for the prioritisation of brownfields in a circular eco-district perspective: the case of the Province of Brescia
Federico Pinzin1, Mentore Vaccari1, Laura Cutaia2, Emanuela De Marco2 - 1Department of Civil, Environmental and Territorial Engineering, Architecture and Mathematics, University of Brescia, 2 ENEA, Department of Sustainability, Circularity and Climate Change Adaptation of Production and Territorial Systems

Is Green always safe? Towards a Safe and Sustainable Industrial Symbiosis (SSIS) framework for eco-districts of the energy transition
Vitantonio Colucci1, Romualdo Marrazzo2; Antonio Trinca3 -1INAIL, 2ISPRA, 3ENEA

Local supply chains as drivers of territorial circularity: analysis of the circular metabolism of the Abruzzese wool supply chain
Raffaella Taddeo, Alberto Simboli, Valentino Tascione, Veronica Casolani

New models of circular economy and industrial symbiosis in the agri-food sector. Opportunities and challenges of the Packaging and Packaging Waste Regulation (Regulation (EU) 2025/40)
Luigi Servadei, CREA-Council for Agricultural Research and Analysis of Agricultural Economics

AlBIOrelle: an industrial symbiosis model between wastewater treatment and aquaculture for the conservation of Po Valley fish biodiversity
Simone Pigato1, Francesco Piccioli1, Daniele Cecconet1, Annalisa Berni1, Elena Ficara2, 3Katia Parati - 1Alfa Srl, 2Politecnico di Milano, Department of Civil and Environmental Engineering DICA, 3Italian Experimental Institute L. Spallanzani, Microalgae and Aquaculture Section

Rethinking wool pathways in Mediterranean cross-border regions: insights from the MARLAINE project
Sara Bortolu1, Francesca Camilli2, Enrico Vagnoni1, Stefano Arrizza1, Maria Leonarda Fadda1, Pierpaolo Duce1 - 1National Research Council, Institute of BioEconomy, 2National Research Council, Institute of BioEconomy

The Digital Twin as a decision support tool for industrial symbiosis and the transition towards circular eco-districts: the experience of the EcoeFISHent project
Mattia Costamagna, Massimo Perucca, Ahmad Aldaghi, Stefania Truffa, Elena Vioni - Project HUB360

The fashion and textile district of Carpi: circular economy and industrial symbiosis as a lever for development and competitiveness. From material recovery to the digital product passport, to raise quality
Gian Marco Malagoli1, Emilio Bonfiglioli2, Massimo Garuti3 - 1Garc Ambiente, 2Centro Qualità Tessile, 3Carpi Fashion Sistem

The social dimension of symbiosis in the eco-circular districts of the olive-oil supply chain: a systematic literature review for the selection of social performance indicators
Gabriella Arcese, Dario Barberini, Maria Giovina Pasca, Giulia Padovani - Università degli Studi Niccolò Cusano

12.55 Discussion and conclusions

SELECTED E-POSTERS
Moderated by:
Tiziana Beltrani, ENEA – SUN Symbiosis Users Network
Marco La Monica, ENEA – SUN Symbiosis Users Network

1. Minimum Environmental Criteria in Public Administration: implementation of a Sustainable Industrial Development model
Adriano Pistilli - Independent Professional

2. Circular eco-districts and new territorial industrial policy: industrial symbiosis, resource diagnosis and economic data governance
Andrea Saravalle - Alma Mater Studiorum University of Bologna, DICAM Department of Civil, Chemical, Environmental and Materials Engineering

3. A Practitioner-Oriented Framework for Supporting Decision-Making in Industrial Symbiosis
Alessia Boscarato1, Federica Acerbi1, Sergio Terzi1, Marco La Monica2 - 1Politecnico di Milano, 2ENEA, Department of Sustainability, Circularity and Climate Change Adaptation of Production and Territorial Systems

4. Industrial symbiosis in the water cycle: valorisation of sludge and liquid waste in the CAP model and the BioPlatform of Sesto San Giovanni
Jacopo Vignati, Davide Scaglione - Gruppo CAP

5. Democratizing Environmental Impact Measurement for SMEs: A Modular Framework for the Green Transition
Matías Gatti- Grinpact

6. Landfill biogas and industrial symbiosis: the strategic role of circular eco-districts in the ecological transition
Alessia Bertolotto

7. Digitalisation and total traceability in the end-of-life vehicle supply chain: the GEA-Caronte24 model as an enabler of industrial symbiosis and compliance with the new ELV Regulation
Luca Pomili, Alessio Fabrizi - Pomili Demolizioni Speciali Srl

8. From the definition of 'resource' to Resource Diagnosis 2.0: a technical-methodological approach to Industrial Symbiosis
Tiziana Beltrani, Emanuela De Marco, Marco La Monica, Erika Mancuso, Silvia Sbaffoni, Laura Cutaia - ENEA, Department of Sustainability, Circularity and Climate Change Adaptation of Production and Territorial Systems

9. Assessing the Conditions Enabling Industrial Symbiosis: A Context-Aware Framework with Case Studies from Brescia, Italy
Reza Vahidzadeh, Marta Domini, Giorgio Bertanza - Department of Civil, Environmental, Architectural Engineering and Mathematics (DICATAM), Università degli Studi di Brescia

10. A Science-Based Methodology for the Development of Integrated Carbon Capture and Utilisation Systems: From Thermodynamic Modelling and Laboratory Validation to Industrial Demonstration
Isidoro Giorgio Lesci1, Elisa Rambaldi2, Roberto Rosa3 -1IGL Innovation Foundry srl, 2ITALCER S.p.a. SB, 3Department of Science and Methods for Engineering, University of Modena and Reggio Emilia

11. From biomass characterisation to territorial valorisation: the ERICA model in inner areas
Silvia Mosca1, Flaminia Fois1,2, Patrizio Tratzi1, Antonella Macagnano1, Simone Serrecchia1,3, Marco Torre1, Ettore Guerriero1, Valerio Paolini1, Daniele Bianconi1 - 1National Research Council, Institute for the Atmospheric Pollution Research, 2Tuscia University, Department of Agriculture and Forest Sciences, 3University of Naples Federico II, Department of Chemical, Materials and Production Engineering (DICMaPI)

12. Overcoming Barriers to Knowledge Sharing in the Facilitation of Industrial Symbiosis. The Role of the Kalundborg Symbiosis in Advancing Sustainable Development
Marta Dal Farra

13. Intelligent management of hybrid systems in district heating networks as a model of district energy symbiosis: the solar plant of Racconigi and the DIGISOLAR digital platform
Carmine D'Alessandro1, Francesco Vitobello2, Roberto Russo3, Dimitrios Papageorgiou2 - 1Tresol, 2TVPSOLAR, 3CNR-ISASI

14. Industrial resilience as a lever for the circular economy: reducing resource losses through infrastructure protection
Marco Chiavarini

15. Enabling conditions for industrial symbiosis in eco-industrial parks
Maria Coscia, Alessandra De Chiara - University of Naples L'Orientale

16. Environmental assessment tools for raw earth plasters as a case of industrial symbiosis
Tiziana Cataldo1, Agata Matarazzo1, Rosa Caponetto2, Sonia Azzaro2 - 1University of Catania, Department of Economics and Business, 2University of Catania, Department of Civil Engineering and Architecture

17. Circularity indicators for new plant fibre-based building materials: a systematic review for an integrated assessment framework
Ottavio Spadaro, Agata Matarazzo, Carmelo Caggegi, Piero Guadagnino

18. Discontinuous threads, connected interfaces: governing the complexity of Industrial Symbiosis in the textile sector
Antonio Mastropasqua1, Rosa Maria Dangelico1, Luca Fraccascia2, Pierpaolo Pontrandolfo1 - 1Politecnico di Bari, 2Sapienza Università di Roma

19. Towards a national model of Circular Eco-District: development and validation of a rating system for Italian industrial areas
Emanuela De Marco, Marco La Monica, Laura Cutaia - ENEA, Department of Sustainability, Circularity and Climate Change Adaptation of Production and Territorial Systems

20. SYMBA Project - From Environmental to Social Pillars: A Multi-Dimensional Methodology for Assessing Industrial Symbiosis through Life Cycle Sustainability Assessment
A. Pizza1, M. de la Feld1, M. Busto1, H. Leiva2 - L. Ventura2 - 1ENCO srl, 2CIRCE

21. Green Public Procurement
Maria Anna Labarile

22. Industrial symbiosis and the construction sector: valorisation of agri-industrial waste for the production of bio-based building materials
Piero Guadagnino1, Alice Finocchiaro1, Agata Matarazzo2, Rosa Giuseppina Caponnetto1, Sabrina Failla3, Claudia Arcidiacono3 -1University of Catania, Department of Civil-Industrial Engineering and Architecture, 2University of Catania, Department of Economics and Business, 3University of Catania, Department of Agriculture, Food and Environment

23. Assessment of industrial symbiosis potential in Italy in the construction and demolition sector: preliminary evidence from an integrated analysis of resource flows at national scale
Alice Fileni1, Marco La Monica2, Luca Fraccascia1, Laura Cutaia2 - 1Sapienza University of Rome, Department of Computer, Control and Management Engineering 'Antonio Ruberti', 2ENEA, Department of Sustainability, Circularity and Climate Change Adaptation of Production and Territorial Systems (SSPT)

24. A benchmark analysis of Industrial symbiosis implementation in Mediterranean countries: insights from the Medwise project
Antonella Luciano1, Tiziana Beltrani1, Eleonora Foschi1, Marco La Monica1, Arianna Dominici1, Erika Mancuso1, Luigi Gurreri2, Giuseppe Mancini2 – 1ENEA, 2University of Catania

Wednesday 4 November
10:00 - 13:00

Neri 2 Room South Hall

Sustainable and Circular Textiles
Click here

Textile EPR in Italy and Europe: harmonization of systems and new challenges for the supply chain

Organized by: Ecomondo STC & ASSOAMBIENTE-UNIRAU

Language: Italian

The European Directive 2018/851, implemented in Italy by Legislative Decree 116, required to all Member States to implement separate collection of urban textile waste (EER 20.01.10 clothing, footwear, and accessories and 20.01.11 textile products such as sheets, curtains, towels, etc.) by 1 January 2025. This collection obligation, that in Italy in in force from 1 January 2022, triggered a profound change in the management of this type of waste, that come from a production sector characterized by a strong environmental impact. The recent European Directive 2025/1892 makes mandatory for all Member States to establish EPR (extended producer responsibility) schemes for this category of municipal waste by the first half of 2027.
In this event, we will address the issues of exports of used textile, competition between Italian and foreign sorters, the added value and role of Italy's historic textile districts and the characteristics of the emerging Italian EPR system compared with EPR systems operating in countries that have already implemented them. We will examine their characteristics, assess their positive effects, identify any potential critical issues, and, above all, verify the level of harmonization, an essential element for both companies placing textiles on the market and those operating in the management and valorization of municipal textile waste.

Session Chair

Elisabetta Perrotta, ASSOAMBIENTE (National Association of Environmental Services Companies and Circular Economy)

Program

Introduction by the Chair

Speakers:

The European manufacturing sector and opportunities for textile EPR
Mauro Scalia, EURATEX

Companies competitors in Italian sorting system
Joseph Valletti, ARIU

European reuse textiles in the “second hand” global market
Karina Bolin, UNIRAU

The Italian manufacturing system and the opportunities for textile EPR
Mauro Chezzi, Retex green

The different European EPR systems and their harmonization
Luca Campadello, General Director Erion Textiles

Q&A

Conclusions
Laura D’Aprile, Italian Ministry of Environment and Energy Security (TBC)

Wednesday 4 November
10:00 - 13:00

Ravezzi 1 Room South Hall

Agrifood, Forestry, Bioenergy and Circular Bioeconomy
Click here

Agrifood Next: start up, Artificial intelligence and new investment models in the Bioeconomy landscape

Organized by: Comitato Tecnico Scientifico di Ecomondo & Confagricoltura, Federalimentare, ENEA, Cluster CL.A.N.

Language: Italian

The agri-food system is currently at the center of a profound transformation, driven by the convergence of technological innovation, ecological transition, and new business models. In this context, key drivers such as artificial intelligence, innovative startups, and new investment models are emerging as crucial factors to accelerate the concrete adoption of the bioeconomy and make agri-food value chains more sustainable, resilient, and competitive.

The conference "Agrifood Next: Startups, Artificial Intelligence and New Investment Models for the Bioeconomy" aims to explore the opportunities offered by the innovation ecosystem applied to the agri-food sector, analysing the growing role of advanced digital technologies—particularly artificial intelligence—in natural resource management, production process optimisation, and the enhancement of agricultural and industrial value chains.
A specific focus will be placed on the contribution of agrifood startups, which act as experimental laboratories capable of introducing disruptive solutions in strategic areas such as precision agriculture, supply chain traceability, circular economy, and waste reduction. At the same time, the conference will address new financial instruments and investment models—from venture capital to impact funds, as well as public-private partnerships—needed to increase the added value of the entire agri-food sector and promote effective technology transfer to the production system.
Through dialogue among agricultural enterprises, the food industry, research centres, investors, and institutions, the event aims to outline strategies and development pathways for an innovation ecosystem capable of strengthening the Italian and European bioeconomy, while promoting environmental sustainability, economic competitiveness, and food security.

Session Chairs

Daniele Rossi, Vice President, National Agrifood Cluster
Donato Rotundo, Confagricoltura (General Confederation of Italian Agriculture)

Program

10.00 *Welcome remarks and moderation*
Daniele Rossi, Vice President, National Agrifood Cluster

10.10 **Session I – *Keynote presentations***
Maurizio Notarfonso, Sustainable Agri-Food Systems Division, ENEA (Italian National Agency for New Technologies, Energy and Sustainable Economic Development)
Peter Werheim/Sarah Mubareka – DG RTD - Bioeconomy monitoring

11.10 **Session II – *Companies and startups***

Introduction
Luigi Galimberti, To Seed

Case studies

12.10 **Session III – *Roundtable discussion***
Introduction and moderation by:
Fabio Iraldo, Sant'Anna School of Advanced Studies, Pisa

Speakers:
Massimiliano Giansanti, President, Confagricoltura (General Confederation of Italian Agriculture)
Paolo Mascarino, President, Federalimentare / National Agrifood Cluster
Francesca Mariotti, President, ENEA (TBC)
Francesco Buzzella, President, Federchimica

Wednesday 4 November
10:00 - 13:00

Agorà Luciano Morselli - Sites & Soil Restoration Area Hall C1

Sites and Soil Maintenance and Restoration
Click here

Innovative and sustainable technologies for rehabilitation and maintenance of concrete and embankment dams

Organized by: Comitato Tecnico Scientifico di Ecomondo & Associazione Geotecnica Italiana, Comitato Nazionale Italiano per le Grandi Dighe – ITCOLD

Language: Italian

There are over 500 large dams in Italy and they perform important functions for the storage of water for irrigation, drinking and industrial purposes. Other benefits have often been added to the original functions which have become increasingly more important also because the artificial basins have modified the physical and economic configuration of the host territories. As in the entire western world, they were mainly built in the last century and require careful surveillance to preserve their use and avoid risks for downstream populations. Technological innovations also borrowed from other sectors allow us to carry out the activity of possibly corrective maintenance of the defects that have emerged in an increasingly timely, effective and surgical manner. Presentations in this conference constitute a significant although not exhaustive overview of the most interesting interventions of recent years.

Session Chairs

Daniele Cazzuffi, CESI SpA, Milan and President of AGI-IGS
Nicola Moraci, Mediterranea University of Reggio Calabria and Vice President of AGI-IGS

Program

9.30 Registration

10.00 *Introduction*
Daniele Cazzuffi, CESI SpA, Milano & President AGI-IGS
Nicola Moraci, Università Mediterranea Reggio Calabria & Vice President AGI-IGS
Guido Mazzà, President ITCOLD (Comitato Nazionale Italiano per le Grandi Dighe)
Francesco Fornari, Enel Green Power Global Dam Safety & Vice President ITCOLD

10.15 *Dam's maintenance and rehabilitation: the activities of the ICOLD Technical Committee*
Francesco Fornari, Enel Green Power, Global Dam Safety & Vice President ITCOLD

10.35 *Rehabilitation of the bituminous liner of the Monte Cotugno – Sinni dam (Potenza)*
Enrico Tita, CEA Building SpA, Calderara di Reno (Bologna)

10.55 *Ceresole Reale dam (Torino) rehabilitation: behaviour more than 30 years later*
Nicola Brizzo, Iren Energia, Torino & Ezio Baldovin, Geotecna Progetti, Milano

11.15 *Use of geomembranes for the rehabilitation of concrete and embankment dams*
Daniele Cazzuffi, CESI SpA, Milano

11.35 *Rehabilitation of the upstream face of the Fragabolgia dam (Bergamo)*
Franco Maugliani, Lombardi Group

11.55 *Management of sediments in artificial basins and definition of the Sustainable Storage Capacity*
Manuel Hernandez, ITCOLD Gestione Sedimenti Working Group Coordinator and Volume Utile Sostenibile

12.15 Presentations by Ecomondo exhibitors

12.45 Concluding remarks and closing

Wednesday 4 November
10:00 - 17:00

Agorà Tiberio - Water Cycle Area Hall D8

Water Cycle and Blue Economy
Click here

Urban Water Services in Transition: from integrated assessment to applicable solutions for emerging contaminants, circular resources and climate-neutral utility

Organized by: Comitato Tecnico Scientifico di Ecomondo

Language: Italian

The integrated water service is entering an era of transformation, shaped by the urgent need for systemic water resilience and the strengthening of European and national mandates on micropollutants, resource recovery, and climate neutrality. This full-day conference addresses the dual challenge of ensuring the long-term safety of drinking water, wastewater, and sludge, while navigating the transition towards energy neutrality and net-zero emissions. To provide a comprehensive roadmap for this transition, the conference is structured around two complementary pillars:
Technological pathways and implementable solutions
An in-depth analysis of innovative processes, smart operations, and digitalisation in the drinking water, wastewater, and sludge sectors. This section places emphasis on the recovery of material and energy resources, the elimination of emerging contaminants, and the reduction of carbon footprints.
Holistic assessment and risk-based management: A holistic examination of the tools needed to ensure safety within a circular economy and a One Health perspective. This includes the enhancement of chemical and effect-based monitoring and the implementation of integrated decision-support tools. By linking advanced risk assessment with Water Safety Plans, this pillar ensures that the pursuit of circularity is underpinned by rigorous safeguards for public health and the environment.
By connecting technical innovation with holistic assessment, this conference defines the 'implementable solutions' needed to build a water-resilient society in the face of growing climatic and chemical pressures.

Session Chairs

Giorgio Bertanza, University of Brescia
Tania Tellini, Utilitalia
Camilla Braguglia, CNR-IRSA

Program

10.00 **Morning Session — *Technological pathways and implementable solutions***

10.00 *Opening by the Session Chairs*

10.15 *The challenges posed by the new directives and national laws on wastewater and sludge*
Angiolo Martinelli, Ministry of the Environment and Energy Security

10.30 *Implementation of the UWWTD: The chemical industry perspective*
Lorenzo Ferrando, Federchimica

10.45 *How the UWWTD will transform the Integrated Water Service*
Tania Tellini, Utilitalia

Selected contributions from Call for Papers

11.00 *Integrating Advanced Oxidation and Bioreactive Storage for Next-Generation Quaternary Wastewater Treatment and Water Reuse*
D. Santoro, Western University
S. Mancini and O. Santoro, AquaSoil

11.10 *Emerging Micropollutants in Wastewater Treatment Plants: Integrated Monitoring Approach and Experimental Evaluation of Quaternary Treatments in Compliance with Directive (EU) 2024/3019*
C. Ceci1, A. Paoletti1, Marco Lazzazzara2, A. Checa Fernandez2, V. Gioia2, S. Leoni2, G. Cecchini2; 1Acea Ato2 and 2Acea Infrastructure

11.20 *The Gruppo CAP case study in the PFAS challenge: treatment technologies and pilot-scale experimentation*
Maria Giovanna Guiso e Tommaso Amati, Gruppo CAP

11.30 *From Conventional Activated Sludge to Aerobic Granular Sludge for the treatment of municipal wastewater: a feasibility study*
Alessandro Alberti (1), Francesco Avolio (2), Paolo Gelli (2), Claudio Lubello (1), Tommaso Lotti (1); (1)Department of Civil and Environmental Engineering, University of Florence; (2)Hera SpA - Water Direction, Modena

11.40 *Experimentation of the Anammox metabolic process on a side stream of a municipal wastewater treatment plant and on a main stream of an industrial physico-chemical plant. The pilot with Anita™Mox technology.*
Francesco Avolio1, Matteo Venturi1, Giacomo Spallone1, Paolo Gelli1, Fabrizio Fanello2, Roberto Boschi2, Luca Quadri3, Francesca Cecchin3, Eva Tykesson3, Claudio Lubello4, Tommaso Lotti4 1Hera SpA. Direzione Acqua, Bologna, Italy 2HerAmbiente SpA.,Italy 3 AnoxKaldnes Veolia Water Tech,Lund Sweden 4Univerisity of Florence, DICEA, Italy

11.50 *Strategic Valorization of Septage from Decentralized Treatment: Applicable Strategies for Resource Recovery in Centralized Wastewater Treatment Plants*
Pesenti M., Hernandez Sanchez M.J., Cecconat D., Berni A., Facco O.**, Turolla A.* *
Politecnico di Milano, Dipartimento di Ingegneria Civile e Ambientale (DICA), Milano, **Alfa S.r.l., Gallarate (VA)

12.00 *Innovative metrics for the quantitative assessment of the carbon footprint of plants managed by Alfa Varese*
Daniele Cecconat1, Simone Pigato1, Francesco Piccioli1, Annalisa Berni1, Nicolò Ciuccoli2, Federica Simonetti2, Salman Nisar2, Alessia Cherubini2, Anna Laura Eusebi2, Francesco Fatone2. 1: Alfa Srl, Gallarate (VA). 2 Università Politecnica delle Marche, Dipartimento Scienze e Ingegneria della Materia, dell'Ambiente ed Urbanistica, Ancona

12.10 *From policy to practice: energy consumption and UWWTD implementation in ACEA wastewater treatment plants*
Giulia Sagnotti, Simone Leoni, Giancarlo Cecchini - Acea Infrastructure SpA, Unità Ricerca Applicata; Niccolò Ciuccoli, Francesco Fatone, Anna Laura Eusebi - Dipartimento Scienze ed Ingegneria della Materia, dell'Ambiente ed Urbanistica, Università Politecnica delle Marche; Massimo Spizzirri, Alessia delle Site, Luisa Merluzzi, Camilla Cassol - Acea Ato2 S.p.A.

12.20 *Development of a multi-scenario analysis tool to support circular economy pathways in municipal sewage sludge management*
Giulia Nardella (1), Silvia Di Fabio (2), Antonietta Cerbone (2), Massimiliano Fabbricino (1), Luigi Petta (2). (1) Università degli Studi di Napoli Federico II – Dipartimento di Ingegneria Civile, Edile e Ambientale (2) ENEA – Dipartimento Sostenibilità, circolarità e adattamento al cambiamento climatico dei Sistemi Produttivi e Territoriali

12.30 *Discussion and Round Table*

Lunch break

14.00 **Afternoon Session — *Holistic assessment and risk-based management***

14.00 *Opening by the Session Chairs*

14.15 *Precision monitoring of emerging contaminants in water and complex matrices*
Sara Castiglioni, Mario Negri Institute

14.30 *Challenges in holistic risk assessment to ensure equitable access to water and sanitation service*
Susanna Murtas, Istituto Superiore di Sanità

Selected contributions from Call for Papers

14.45 *Sampling and characterisation of microplastics in drinking water treatment plants: towards a standardised and regulatory-compliant approach*
Valentina Gioia1, Alicia Checa-Fernandez1, Mario Castellani1, Alessandro Frugis1, Simone Leoni1, Giancarlo Cecchini1, Ilaria Miozzo2, Alessia Delle Site2, Riccardo Chelli3, Stefano Batistini3. 1 Acea Infrastructure SpA; 2 Acea Ato 2 SpA; 3 Opus Automazione SpA

14.55 *From urban wastewater to safe irrigation reuse: the IRRISAFE risk-management model for circular and resilient water services*
Maria Concetta Bruzzoniti, Dipartimento di Chimica, Università di Torino

15.05 *Microplastics in urban water services: in situ monitoring of drinking water and wastewater systems in Friuli-Venezia Giulia*
Raffaele Bruschi (1,2), Lucia Gardossi (1), Monia Renzi (2,3), Samantha Scarfò (4), Massimo Battiston (4) (1) Dipartimento di Scienze Chimiche e Farmaceutiche, Università degli Studi di Trieste, Trieste (2) Dipartimento di Scienze della Vita, Università degli Studi di Trieste, Trieste (3) Bioscience Research Center, Grosseto (4) CAFC S.p.A., Udine

15.15 *From monitoring to risk-based decision support: integrating experimentation, modelling, and risk assessment in urban water systems in transition*
Manuela Antonelli, Beatrice Cantoni, Jessica Ianes, Luca Penserini, Sara Piraldi, Alberto Desca - Politecnico di Milano, Dipartimento di Ingegneria Civile e Ambientale (DICA)

15.25 *Integrated Effect-Based Assessment of Wastewater Treatment Plant Emissions for sustainable wastewater management*
Marta Domini, Roberta Pedrazzani, Donatella Feretti, Selena Sironi, Giorgio Bertanza, University of Brescia; Politecnico of Milano; 5 Mario Negri Institute for Pharmacological Research IRCCS, Milan;

15.35 *From energy dependence to self-production: the Pavia Acque model for widespread self-consumption and sustainable transition*
Alberto Lodroni, Pavia Acque

15.50 *Metallic impurities in iron-based coagulants: implications for sludge quality and the sustainability of wastewater treatment*
Andrea Gialdrone, ALTAIR Chemical Srl

16.00 Discussion and Round Table

SELECTED E-POSTER

1 - *Ferriti di calcio multifunzionali per la rimozione di contaminanti emergenti e il recupero circolare di nutrienti nelle acque reflue urbane*
Maurizio Vespignani, Istituto di Scienza, Tecnologia e Sostenibilità per lo Sviluppo dei Materiali Ceramici (CNR-ISSMC)

2 - *Preparation of Chitosan-Geopolymer Composites, Their Characterization and Application in Heavy Metals Adsorption from Mine Effluents*
Francesco Fatone, Tero Luukkonen, Mohammad Bhuyan, Abdallah Alrefaie, Marche Polytechnic University and University of Oulu

3 - *Monitoraggio in real-time della qualità delle acque mediante sensori spettroscopici*
Antonella Giuliana Luminare, ARCHA S.r.l.; Francesca Gambineri, ARCHA S.r.l.

4 - *A Concept Device for Microbial Monitoring in Industrial Water Streams*
Olga Morozova, Pasi Karjalainen, Ilkka Leinonen, Kyösti Karttunen, Irina Raykhel, Tiina Tolonen, Riitta Lotvonen, Jarmo Hietanen

5 - *Optimisation Study of an Industrial Wastewater Treatment Plant for Oil-Water Mixtures*
Felix Kiem, Thomas Senfter, Martin Pillei, MCI Innsbruck

6 - *Strategie sostenibili per l'abbattimento di fosforo e azoto in aree sensibili: modellazione e combinazione con cicli alternati nell'impianto di depurazione di Cuasso al Monte*
Daniele Cecconet, Luca Sessolo, Francesco Piccioli, Annalisa Berni, Alfa S.r.l.; Samuele Roma, Elisabetta Sieni, Università degli Studi dell'Insubria

7 - *Da impianto convenzionale a EcoHub circolare: il caso Caronno Pertusella come modello di transizione per il servizio idrico integrato*
Francesco Piccioli, Daniele Cecconet, Annalisa Berni, Alfa S.r.l.

8 - *From Source to Tap: The New European Framework for Drinking Water Safety*
Francesca Fasano, Chemsafe S.r.l.

9 - *Better Together than Apart: Degradation of Emerging Contaminants and PFAS in Concentrated Streams Using UV/Sulphite(/Iodide) and UV/Hydrogen Peroxide Treatment Trains*
Marco Minella, Iván Sciscenko, Department of Chemistry, University of Turin, Via Pietro Giuria 7, 10125 Turin, Italy

10 - *Controllo in continuo del fosforo per depuratori più efficienti e conformi alla nuova Direttiva europea*
Maria Serena Gironi, Sales Support & Application Excellence Manager

11 - *Sviluppo di un sistema di monitoraggio delle acque in reticolo idrico urbano*
Giuseppe Zanotti, Green Evolution S.r.l. SB

12 - *Tecnologie integrate su scala pilota per il potenziamento del trattamento di reflui conciari: il caso dell'impianto di Solofra*
Lucia Terracciano; Bruno Brancato; Raffaele Morello; Andrea Raimo

13 - *Digital-Twin-Ready CFD-DEM Simulation of Moving Bed Biofilm Reactors: A Predictive Tool for Resilient, Future-Proof Wastewater Infrastructure*
Efraim Riess-Gonzalez, Invent

14 - *AMRready4KARL – Establishment of a quality-assured molecular surveillance strategy for municipal wastewater to detect Gram-negative bacteria carrying antibiotic resistance*
Widera, Marek (Institute of Medical Virology at Goethe University Frankfurt am Main, Germany), Wilhelm, A. (Institute of Medical Virology at Goethe University Frankfurt am Main, Germany), Goettig, S. (Institute of Medical Microbiology and Hospital Hygiene at Goethe University Frankfurt am Main, Germany, Vredenburg, J. (Research Institute for Water Management and Climate Future at RWTH Aachen e.V. , Germany)

15 - *Quarry lakes and their self-decontamination ability by sunlight-induced photochemical reactions in a framework of water reuse*
Carena L.(1,5), Bonetta S.(2,5), Bonetta S.(4,5), Carraro E.(4,5), Cocca D.(3,5), De Luca D.A.(3,5), Egidio E.(3,5), Lasagna M.(3,5), Minella M.(1,5), Mittaridonna A.(1,5), Pignata C.(4,5), Pigozzi G.(1,3),5, Vione D.(1,5), Bianco Prevot A.(1,5)

16 - *Governare l'acqua creando valore attraverso l'Asset Management: integrare l'approccio One Health, la gestione dei rischi e la teoria dello Shared Value nel caso applicativo di Uniacque*
Daniele Angelo Bressan, Uniacque SpA - Giovanni Ruggeri, Università degli studi di Bergamo - Serena Brignoli, Uniacque SpA - Enrico Cagnoni, Università degli studi di Bergamo

17 - *What Water Managers Want to Know about the UWWTD?*
Ana Carolina Maganha de Almeida PhD, Regulatory Intelligence, Viterbo Italy, Founder & Senior Consultant

18 - *Verso il monitoraggio in linea delle microplastiche nelle acque potabili: dal campionamento multistadio all'analisi Raman in near-real-time*
Stefano Batistini - Opus Automazione Spa (Gruppo Orion)

19 - *WaterScan: Intelligenza Artificiale ed Edge Computing per la tutela ambientale*
Francesco Avolio1, Vittorio Crepaldi1, Simona Olivi1 Andrea Tagliaferri2 1Hera SpA. Direzione Acqua, Bologna, Italy 2Dabohn srl, Val Tidone (PC), Italy

20 - *Photocatalytic quaternary treatment for wastewater: performance evaluation under Directive (EU) 2024/3019 for microcontaminants and microplastics removal*
Juan F. Ferrer(1)+, Javier Ivañez(1), Alejandro Ramirez-Torres (1), Laura Díaz-Esplá(2), Clara Diaz-García(2), (1)AIMPLAS-Instituto Tecnológico del Plástico, Paterna, Spain. (2)LABAQUA, Alicante, Spain

21 - *Upcycling of textile waste into nanocellulose-based aerogels for sustainable water treatment*
L. Riva1, A. De Santis1, C. Gambarotti1, A. Truscello1, E. Baldini2, B. Cantoni3, M. Antonelli3, C. Punta1 - 1 Department of Chemistry, Materials and Industrial Chemistry "Giulio Natta", Politecnico di Milano, Italy - 2 Centro Tessile Serico Sostenibile SRL, Como, Italia - 3 Department of Civil and Environmental Engineering, Politecnico di Milano, Italy

22 - *Why PFAS Pilots Matter: Practical Considerations and Lessons Learned from the Field*
D. Awad – De Nora Water Technologies, USA E. Hossen – De Nora Water Technologies Americas, USA

Wednesday 4 November
10:00 - 13:00

Agorà Blue Economy Hall D7

International Cooperation and Partnerships with Mediterranean and Africa
Click here

From Source-to-Sea to Scale: Mediterranean Pathways for Water Resilience and the Ocean Pact

Organized by: Ecomondo STC & CNR (National Research Council), European Commission, UfM (TBC), CPMR (Conference of Peripheral Maritime Regions), SEACURE, Interreg MED actors, BlueMissionMed legacy network

Language: English

The adoption of the European Ocean Pact and the Water Resilience Strategy marks a new phase for the governance of aquatic ecosystems, calling for stronger integration between marine and freshwater policies and for a source-to-sea approach capable of linking innovation, territorial cooperation and investment. In this context, the Mediterranean basin represents a unique laboratory for translating European ambitions into concrete action.
Building on the experience of the EU Mission "Restore our Ocean and Waters by 2030", BlueMissionMed, Interreg programmes, the Union for the Mediterranean and other regional initiatives, this session will explore how policies, governance frameworks and innovation ecosystems can jointly support the transition from pilot actions to large-scale deployment. Particular attention will be devoted to the role of the Mediterranean as a living laboratory for integrated water management and to the contribution of regional cooperation mechanisms in developing resilient and inclusive pathways.
The discussion will focus on strengthening coordination across sectors and governance levels, accelerating the uptake of innovative solutions and enhancing the impact of investments through cooperation and participatory approaches. In doing so, the event will contribute to reinforcing synergies among European policies and initiatives while creating a bridge towards major international processes.
The session will conclude with a reflection on Living Labs as powerful instruments for co-creation, citizen engagement and collaborative governance.

Session Chair

Elisa Conti, CNR DSSTTA

Program

10.30 *Welcome and Introduction*
Chair: Elisa Conti, CNR DSSTTA

10.40 **Roundtable 1 -*Setting the framework: Policy and Governance for Water Resilience in the Mediterranean***
Moderator: Francesco Camonita, CPMR IMC

Invited speakers (TBC):
Florika Fink-Hooijer, Director-General, DG ENV, European Commission - Water Resilience Strategy
Charlina Vitcheva, Director-General, DG MARE, European Commission - From Ocean Pact to Ocean Act
Michael Karnitschnig, Acting Director-General, DG MENA, European Commission - Mediterranean Pact and action plan
Alessandra Sensi, Union for the Mediterranean - Water Ministerial Declaration
Maria Spena, President of the One Water Italian Committee - EuroMediterranean Water Forum
Samson Bellières, Plan-bleu
Regione Veneto (TBD)

11.25 **Roundtable 2 -*From Innovation to Deployment: Scaling Mediterranean Solutions***
Moderator: Elisa Conti, CNR DSSTTA

Invited speakers (TBC):
Wiebke Pankauke, Head of Unit B4, DG RTD, European Commission - EU Mission Restore our Ocean and Waters by 2030
Lorenzo Proia, UVIC - SEACURE
Vanessa Moschino, CNR ISMAR - INSPIRE
Stefania Campogianni, WWF Mediterranean
Claudiane de Corbiac, IFREMER - EPIC, Interreg Project
Stefano Valentini, ART-ER - BLUE ECOSYSTEM, Interreg Euro-MED

12.10 *Living Lab for Ocean and Waters in dialogue with MEDCONNECT*
Moderator: Elisabetta Balzi, DG RTD, European Commission

Invited speakers (TBC):
Fantina Madricardo, CNR ISMAR - Living Lab for Ocean and Waters (CNR) and Mediterranean Blue Living Lab Network
Gotelenne Piaton, CMMI - MEDCONNECT

12.30 Closure by the Chair

Wednesday 4 November
10:00 - 13:00

Agorà Malatesta - Enviromental Monitoring Area Hall B8

Policies and Regulatory Frameworks
Click here

Governance, regulation, investment, and bankability of the water service: from the lessons of MTI-4 (2026–2029) to the new challenges posed by climate change

Organized by: Comitato Tecnico Scientifico di Ecomondo & REF Ricerche

Language: Italian

Governance and regulation in the water service are closely interconnected and represent the pillars of the sector's industrial development.
In light of the initial results of the first update of MTI-4 for the 2026–2029 period—particularly with regard to tariff developments, investment plans, and technical quality performance—the event aims to stimulate reflection on several vital aspects of the sector: from the role of regulation in integrating infrastructure resilience with economic and financial sustainability, to financing mechanisms and the attractiveness of both public and private capital, as well as the possible and desirable evolutionary pathways of multilevel governance.
This workshop aims to provide useful insights for policymakers, local regulators, and qualified operators in defining integrated and responsible strategies capable of effectively responding to the many challenges facing the sector, linked both to EU policy objectives and to the risks associated with climate change.

Session Chair

Donato Berardi, Laboratorio REF

Program

10.00 *Welcome Greetings*
Gilberto Turati, Presidente REF
Barbara Marinali, Vicepresidente vicario di Utilitalia

10.10 *Tariffs and investments: a snapshot of the MTI-4 update for the 2026–2029 period*
Samir Traini, Laboratorio REF

10.20 *Technical quality and resilience of water services: lessons from the RQTI 2026 performance*
Alberto Bernardini, Laboratorio REF

10.30 *The bankability of water services: pathways and instruments to support investment*
Giovanni Caucci, Laboratorio REF

10.40 *Technical Quality Put to the Test – Focus on M0*
Gaia Rodriquez, Utilitalia

10.50 **Round table**
Moderators:
Donato Berardi, Laboratorio REF
Tania Tellini, Utilitalia

Speeches by:
Tullio Montagnoli, A2A Ciclo Idrico
Enrico Pezzoli, Acea Acqua
Daniele Barbone, Acqua Novara VCO
Raimondo Besson, Acqua Pubblica Sabina
Roberto Venneri, Acquedotto Pugliese
Paolo Saurgnani, Acque Bresciane (Water Alliance e leAcque)
Paolo Mazzucchelli, Alfa Varese (Water Alliance)
Massimo Battiston, CAFC
Paolo Peruzzi, GAIA
Alessandro Baroncini, Gruppo Hera
Alessandro Cecchi, Gruppo Iren
Vincenzo Lombardo, Lario Reti (Water Alliance e NET)
Gian Nicola Scarcella, Romagna Acque Società delle Fonti
Stefano Mereu, Siciliacque
Monica Manto, Viveracqua

12.45 *Discussion and closure*
Massimo Ricci, ARERA

Wednesday 4 November
10:30 - 12:30

Agorà Ariminum - Circular Economy Area Hall D1

Resource Efficiency and Circular Economy
Click here

Scaling the circular economy in built environment: the urban mining

Organized by: Comitato Tecnico Scientifico di Ecomondo & Green Building Council Italy, Università Politecnica della March

Language: Italian

The built environment uses almost 40% of the products of the various industrial supply chains, produces almost 50% of total national waste, but it is also the sector whose real estate assets have an average duration longer than consumer goods. The enormous potential for the application of circularity is therefore evident both in terms of the size of the impact and the diversification of strategies: from the reuse of buildings and their components to the recycling of building materials. However, the fragmentation of the construction supply chain makes the implementation of circular processes in the built environment more complex than in industrial manufacturing processes.
To promote greater circularity in the sector, it is necessary to implement: recovery processes that ensure the quality of the component and/or material for its reuse, regulations that allow the construction site to be treated as a production site and above all a planning capacity on a city scale in order to benefit from economies of scale related to size.
The "Urban Mining" approach, the city that becomes a mine, connects different actors and production processes, promoting circular synergies between different sectors and activating a symbiosis that is the basis of circularity.
During the meeting, the current regulatory context, opportunities and technologies to support the implementation of Urban Mining models will be analyzed.

Session chairs

Marco Caffi, Green Building Council Italy
Gianmarco Revel, Marche Polytechnic University

Program

10.30 Introduction by the Chairs

10.40 *The built environment in the Italian National Strategy for the Circular Economy*
Representative of Ministry of Environment and Energy Security

11.00 *The Circular Economy Strategy at City Level*
Michele Stefini, Head of the Environment and Ecology Department of the Municipality of Bergamo

11.20 *The Role of Urban Mining in the Supply of Critical Raw Materials*
Roberta De Carolis, Representative of ICESP (Italian Circular Economy Stakholder Platform)

11.40 *The Built Environment as a Material Mine for the Construction Industry – The End of Waste of Construction and Demolition Waste*
Dominik Campanella - CEO e Co-founder di Concular (TBC)

12.00 *Italian experience of Collection and Recycling of inert materials from Construction and Demolition*
Speaker, RIME 1 (TBD)

12.20 *Talk from Ecomondo Company*

12.30 *Closing*

Wednesday 4 November
10:30 - 12:30

Noce Room Hall A6

Resource Efficiency and Circular Economy
Click here

Eco-design of composite materials

Organized by: Comitato Tecnico Scientifico di Ecomondo & CETMA (Centro di Ricerca e Trasferimento Tecnologico)

Language: Italian

The workshop aims to present scientific and industrial advancements in the field of fibres and resins from renewable sources, recyclable thermosetting and thermoplastic systems, and their applications in high-tech sectors. The technical contributions will focus on:

• bio-based and recyclable formulations for advanced polymer matrices;
• high-performance natural and hybrid fibres;
• optimized processing techniques for the recovery and recycling of innovative composite materials;
• application cases.

Among the speakers are leading organizations from the national and European landscape, that will provide a comprehensive overview of emerging technological challenges, innovative industrial processes, and the opportunities offered by eco-design to accelerate the green transition.

Session Chairs

Alessandra Passaro, CETMA RESEARCH AND TECHNOLOGY ORGANIZATION

Program

10.30 Introduction and welcome by the Chair

10.40 *The European Circular Composites Alliance of EuCIA: a new initiative for establishing a circular economy for composites in Europe*
Roberto Frassine, EUCIA

10.55 *Composites without compromise: bio-based epoxy systems for a sustainable future*
Federico Bertani, ELANTAS Europe

11.10 *rComposite: designing fully recyclable composite products*
Alessandro Stagni, NORTHER LIGHT srl

11.25 Ecomondo company (TBD)

11.40 *GMC® a sustainable alternative to SMC/BMC*
Simone Pietta, RANGER COMPOSITI srl

11.55 *Eco-design of composite materials: the new frontiers of recyclable resins*
Alessandro Marseglia, CETMA

12.15 Discussion and closure by the Chairs

Wednesday 4 November
10:30 - 12:30

Tulipano Room Hall B6

Policies and Regulatory Frameworks
Click here

Towards the New Landfill BAT: Where do we stand?

Organized by: Ecomondo STC & ASSOAMBIENTE

Language: Italian

Directive (EU) 2024/1785 has also amended Directive 1999/31/EC on the landfill of waste, removing the provision that previously allowed the requirements set out in Directive 1999/31/EC to be recognised as sector-specific Best Available Techniques (BAT). The adoption of BAT conclusions for landfills under Directive 2010/75/EU is expected to address the main environmental issues related to landfill operations, including methane emissions.
In light of the launch of preparatory work at the European level for the definition of the new landfill BAT, this session will bring together key sector stakeholders to discuss the current state of play.

Session Chair

Elisabetta Perrotta, Director of ASSOAMBIENTE (National Association of Environmental Services Companies and Circular Economy)

Program

Speakers:
Paolo Campanella, Secretary General, FEAD
Andrea Lanz, ISPRA (Italian Institute for Environmental Protection and Research)
Federico Poli, La Filippa
Nicole Dogali, HERAmbiente
Riccardo Viselli, UTILITALIA (Italian federation of energy, water and environmental services)

Q&A

Conclusions
Riccardo Viselli, UTILITALIA

Wednesday 4 November
11:30 - 13:15

Circular & Healthy City District - Workshop Area Hall D3

Circular and Healthy Cities
Click here

Circular city-making

Organized by: Ecomondo STC & Materia Rinnovabile – Renewable Matter, FROM srl

Language: English

Cities are the world's metabolism. They absorb enormous flows of raw materials – metals, plastics, concrete, fibres, food, water, energy, critical minerals – and generate the largest share of waste, both urban and industrial. But they are also where the circular economy becomes real: urban density makes Product-as-a-Service viable, gives rise to new business models built on repair, second-hand and redesign, and turns one sector's waste into another's resource.
This session reframes the conversation: cities not as a problem to be managed, but as a strategic lever to accelerate circular transition. From next-generation waste collection to innovative circular districts, from citizen education to urban entrepreneurship, speakers will bring concrete, city-scale cases to bear on a question that remains unresolved: how do we unblock the bottlenecks holding back urban circularity — and who should lead the change: institutions, businesses, or citizens?
An open, evidence-based debate. With solutions that work, for PA professionals and businesses alike, ready to innovate and implement.

Session Chairs

Emanuele Bompan, Materia Rinnovabile – Renewable Matter
Davide Agazzi, Founder FROM Srl

Program

11.30 Introduction by the Chairs

11.35 *The role of circular cities*
Erica Locatelli, ICLEI - Local Governments for Sustainability

11.50 ***Round Table #1 - Real Circular Cities: entrepreneurship, new business model, repair shops, tool libraries, sharing and much more***

Moderator:
Davide Agazzi, Founder FROM Srl

Speakers:
Eleonora Cozzi, Head of the Economic Planning Unit – Youth, Employment and Sports Directorate – Municipality of Milan
Silvia Pericu, Councillor for the Environment, Waste Management, Sustainability and the Circular Economy at the City of Genoa
Susana Costa, Operations and Project Management Coordinator at the Landscape Laboratory (Laboratório da Paisagem) in Guimarães

12.20 ***Round Table #2 - Fluxes: water, waste and energy in the circular era***

Moderator:
Emanuele Bompan, Materia Rinnovabile – Renewable Matter

Representative of Ecomondo Companies (TBC)

12.45 *Closing Speech*
Alessandro Frigerio, AG&P greenscape

12.55 Discussion and closure by the Chairs

Wednesday 4 November
14:00 - 17:00

Agorà Augusto - Bioeconomy Area Hall D1

Agrifood, Forestry, Bioenergy and Circular Bioeconomy
Click here

Biowaste: XXVIII National Conference on composting and anaerobic digestion. Technical Session

Organized by: Comitato Tecnico Scientifico di Ecomondo & CIC

Language: Italian

The session will address topics related to organic matrices, their recycling methods and the valorisation of obtainable products, ranging from biomethane to various types of organic fertilisers (soil conditioners and fertilisers), useful for maintaining soil organic fertility, as well as compounds employable in a variety of industrial applications.

Session Chairs

Massimo Centemero, CIC
Alberto Confalonieri, CIC

Program

Introduction by the Session Chairs

Selected contributions from Call for Papers

Positive influence of the quality of collected organic waste in terms of efficiency, plant engineering and final compost quality
C. Lusi, Sumus Italia S.r.l. in collaboration with Provincia di Bolzano and A.C.S.R. S.p.A.

Monitoring of fugitive methane emissions in anaerobic digestion plants fed with OFMSW
S. Trotta1, I. Kostadinov2, E. Cozzani2, M. Garuti1 - 1Centro Ricerche Produzioni Animali - CRPA, 2PROAMBIENTE

Synergies and optimisations for resource recovery in an OFMSW treatment plant – the case of the Bioplatform
D. Scaglione, M. Grana, Gruppo CAP

Reducing nitrogen to increase soil carbon: Life Cycle Assessment of ammonia stripping as an enabling technology for carbon farming
A. Amato1, G. Merli1, A. Becci1, F. Beolchini1, G. Magrini2, M. Spada2, M. Benedetti2, E. Benedetti2, M. Borsatti2, A. Pelle2, M. Ballestriero2 - 1 Department of Life and Environmental Sciences, Università Politecnica delle Marche, 2Idro Group srl

The closed supply chain of the future: renewable energy, soil fertility and decarbonisation in the Marcopolo model
A. Bertolotto, Marcopolo Engineering SpA

Next-generation organic recycling plants for OFMSW: role and performance of compostable products EN 13432
M. Pognani1, N. Frasi2, F. Piccini2, P. Pelleschi3 - 1Novamont SpA, 2Plures, 3Dipartimento di Ingegneria Civile e Ambientale, Università di Firenze

Low-Temperature Imidazole Sorbent for Biogas Upgrading: Pilot Demonstration of a Reduced-Energy Carbon Capture Process
S. Di Giacomo1, M. De Marco1, S. Arca1, P. Di Profio2, F. Melfi2, M. Ciulla2, N. Barbacane2 - 1DG Impianti Industriali SpA, 2Università degli studi G. D'Annunzio

Circular economy strategies in agriculture: valorisation of compost as a soil conditioner on sunflower and agromechanical solutions for biodegradable mulching on lettuce
S. Bergonzoli1, L. Cozzolino1, J. Rios2 - 1Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria (CREA) - Centro di ricerca Ingegneria e Trasformazioni agroalimentari - Monterotondo (Roma), 2Departamento de Fisiologia Vegetal. Facultad de Ciencias. Universidad de Granada, Spain.

Experimental trials on biohydrogen production through Dark Fermentation of organic waste
M. Occhinegro, M. Minardi, E. Fersini, A. Basile, F. Todaro, M. Notarnicola - Dipartimento di Ingegneria Civile, Ambientale, del Territorio, Edile e di Chimica, Politecnico di Bari

Integration of HTC Process Water into Continuous Anaerobic Digestion: Effects on Methane Yield and Process Stability
M. Tenardi, S. Cavana, L. Zanetti, M. Pecchi, D. Basso - HBI s.r.l.

Discussion and conclusions by the Session Chairs

SELECTED E-POSTERS

***1**. Composting plants: the new Plan of the Campania Region*
A. Pistilli - Freelance professional

***2**. Community composters: the new Plan of the Campania Region*
A. Pistilli - Freelance professional

***3**. CompoStyle®: THE TECHNOLOGICAL STOMACH: controlled aerobic digestion of organic waste for the preventive reduction of odours, leachate and transport*
S. Primavera, S. Burgo, C. Nemeth - SAEC Group S.r.l., Ariccia (RM), Italia

***4**. AI-Driven Optimisation of Anaerobic Digestion: Enhancing Efficiency, Feedstock Strategy, and System Integration*
M. Short, B. Dekhici, R. Murali, A. Beesley - University of Surrey

***5**. Unlocking Biogas Recovery from Organic Waste at Low Temperature: Bacterial and Archaeal Pathways in Anaerobic Digestion*
Budianto[1], F. Zefki Okta[2], R. Ermiyanti Yasin[3] - [1] Chemical Engineering Dept., Institute Sains & Teknologi Al-Kamal, Jakarta, Indonesia [2] Universitas Negeri Yogyakarta, Yogyakarta, Indonesia [3] Chemical Engineering Dept., Muhammadiyah University of Jakarta, Jakarta, Indonesia

***6**. SymulX: The future of bioenergies driven by intelligent algorithms, capable of predicting yields and optimising processes through advanced predictive analytics with differential kinetics*
C. D'Onghia

***7**. Air quality and carbon farming: the contribution of research to the anaerobic digestion supply chain*
I. Falconi, CREA – Centro di ricerca Politiche e Bioeconomia c/o MASAF

***8**. Experimental study on the influence of gas-injection on particle separation in a hydrocyclone*
T. Senfter, D. Hohenwarter, M. Berger, C. Mayerl, T. Kofler, E. Leusmann, M. Pillei

***9**. Food-waste anaerobic digestates as circular fertilizers: nutrient availability, phosphorus dynamics and effects on soil quality*
L. Vignali, A. Shulga, M. Grigatti - Department of Agricultural and Food Sciences, Alma Mater Studiorum – University of Bologna, Bologna, Italy

***10**. Biogas Upgrading Cycle Options for Two-, Three-, and Four-Stage Systems*
K. Dewey, L. Nemetz - Air Products Membrane Solutions.

***11**. Proteins for Food, Algae for the Soil: Integrated Valorisation of Algal Biomass for Food and Agricultural Applications*
R. Rossi, C. Catelani Cardoso, D. Imperiale - Divisione Ambiente, Stazione Sperimentale per l'Industria delle Conserve Alimentari SSICA - Fondazione di Ricerca

***12**. Beyond microplastics: agricultural components in PHA designed to return to the biological carbon cycle*
E. Martini - Gruppo MAIP

***13**. Optimisation of methanogenesis processes in anaerobic digestion tanks through MicroVeba® Biomethane*
Paneco Ambiente S.r.l.

***14**. Technical due diligence for biomethane development: the role of technical consultancy between finance and sustainable innovation*
F. Dei, Luca Marafioti, M. Rosani, F. Parodi, V. Di Napoli, F. Gallizia - RINA consulting

***15**. Advanced Biomethane Production Technologies*
M. Burattini, M. Baldassarre, F. Gramigni, D. Cucchetti, L. Beltrame, E. Bini, V. Rodighiero, A. Poletto, R. Carbone, A. Bosetti, I. Rapone - Eni S.p.A. DE-R&D, Novara Laboratories (NOLAB)

***16**. Crustaceans against heavy metals: Chitosan as a natural filter for industrial water purification*
D. Cazzaniga, F. Grandinetti, G. Houston, A. Deluca, B. Dellagrossa - InVento Innovation Lab Impresa Sociale s.r.l.

***17.** Soil Phosphorus Dynamics Under Different Compost Application Strategies: Evidence From a Six-Year Field Experiment*
L. Vignali, A. Shulga, M. Grigatti, Department of Agricultural and Food Sciences, Alma Mater Studiorum – University of Bologna

Wednesday 4 November
14:00 - 16:00

Agorà Blue Economy Hall D7

Agrifood, Forestry, Bioenergy and Circular Bioeconomy
Click here

The algae potential: industrial and market challenges

Organized by: Ecomondo STC & AISAM (The Italian Association for the Study and Applications of Microalgae)

Language: English

The algae sector is emerging as a key pillar of the sustainable bioeconomy, combining high efficiency, low environmental impact, and wide application potential. It offers solutions across industries such as food, cosmetics, pharmaceuticals, biomaterials, and bioremediation. Algae enable the production of functional ingredients and high-value biobased materials while optimizing resource use. Despite recent growth, the sector still faces major challenges that limit scalability and competitiveness. Key barriers include high production costs, lack of process standardization, regulatory complexity, and limited access to finance. At the same time, market demand is increasing, driven by interest in sustainable products and alternative proteins. The roundtable will bring together experts and stakeholders to address these issues. It aims to identify practical strategies to overcome existing barriers. Special focus will be placed on future prospects and policy support for a resilient algae value chain.

Session Chairs

Antonio Marzocchella, AISAM & Università degli Studi di Napoli Federico II
Antonio Idà, AISAM & Algaria srl

Program

Introduction by the Chair

Unlocking the potential of microalgae in food and feed applications
Marianna Faraldi, Tecnoalimenti S.C.p.A

Irene Nuin, European Food Safety Authority

Representative of FAO (TBD)

Carlos Unamunzaga, EABA (European Algae Biomass Association)

The biomass report - European and global macroalge production and supply
Maria Teresa Borzacchiello, Policy Officer, European Commission's Joint Research Centre

Biotechnology applied to microalgae: an innovative approach to producing value-added cosmetic ingredients
Simone Stasi, Active Cells Biotechnology

Sustainable multi-strain, multi-method, multi-product microalgae biorefinery integrating industrial side streams for bio-based products development: the CBE JU MULTIPLY, MULTI-STR3AM and BIG-ALGAE projects
Elisabete Da Costa, Bluebio Alliance

AlgaUlisse oltre il concetto: la realtà produttiva e le sue sfide
Antonio Morritti, AlgaUlisse (I.T.A.C.A)

Biofertilizers and Biostimulants
Niccolò Bassi, Biosintex

Discussion and closure by the Chairs

Wednesday 4 November
14:00 - 16:00

Agorà Malatesta - Enviromental Monitoring Area Hall B8

International Cooperation and Partnerships with Mediterranean and Africa
Click here

Oil Pollution in the Mediterranean: Status and actions needed

Organized by: Ecomondo STC & CMCC, DG RTD EU Commission

Language: English
Instant translations:: French

The Mediterranean Sea is a critical global maritime corridor, handling a significant share of international oil transport. Its semi-enclosed nature and dense shipping traffic make it particularly vulnerable to petroleum pollution. While major oil spills are relatively infrequent, chronic pollution from routine shipping operations, illegal discharges, and port activities remains a persistent and widespread problem, especially along major routes and coastal zones. This ongoing pollution poses serious risks to marine ecosystems, coastal economies, and public health. Oil contamination affects biodiversity, damages fisheries, and undermines tourism—key economic sectors for Mediterranean countries. Due to limited water exchange, pollutants tend to accumulate, amplifying long-term environmental impacts. Addressing oil pollution is strategically important for environmental protection, economic stability, and regional cooperation. It also aligns with broader sustainability and zero-pollution goals at regional and international levels. A coordinated, preventive approach is essential. Reducing chronic pollution—alongside preparedness for major incidents—will be key to safeguarding the Mediterranean's environmental integrity and economic resilience.

The event is aiming at sharing ongoing initiatives in the area addressed to strengthening data sharing and monitoring and surveillance systems, including satellite-based detection, improving oil spill preparedness and rapid response capacity and promoting safer shipping practices and cleaner technologies.

Session Chairs

Antonio Navarra, CMCC
Elisabetta Balzi, EU Commission

Program

Introduction by the Chairs

State of the art of hydrocarbon pollution in the Mediterranean
Marilisa Lombardi, Corpo delle Capitanerie di porto– Guardia costiera (TBC)

Science-based solutions for oil spill hazard and risk mapping and support to disaster response
Giovanni Coppini, CMCC

Defense of the sea and committee for the safety of maritime operations: the case of Italy
Emanuela Spadoni, Ministry of Environment and Energy Security

Upstream pollution

Services for drilling and extraction (upstream)
Representative of Entreprise Nationale de Services aux Puits – ENSP (Sonatrach, Algeria) (TBC)

Marine spill management, ports and coastal environments

Prevention and response to marine pollution
Representative of Ad Mare Solutions (Portugal)

Innovation and sustainability in Mediterranean ports
Miquel de la Mano, Direttore técnico of BCN Port Innovation (Spain – Port of Barcelona)

Environmental remediation and pollution recovery

Tank cleaning, hazardous waste, oily water treatment
Representative of Hasna Petroleum Services (Tunisia)

Discussion and Conclusions by the Session Chairs

Wednesday 4 November
14:00 - 18:00

Agorà Ariminum - Circular Economy Area Hall D1

International Cooperation and Partnerships with Mediterranean and Africa
Click here

Beyond Plastic: The Mediterranean Bioeconomy for a New Generation of Sustainable Materials

Organized by: Ecomondo STC & Cluster SPRING (Italian Cluster of Circular Bioeconomy)

Language: English

The term 'plastic' (the ability of a material to be easily moulded, deformed or shaped) has become progressively and indelibly associated with synthetic plastic materials composed of fossil fuel-derived polymers and, conversely, with their negative environmental impact. According to the new EU Bioeconomy Strategy, renewable bio-based polymers and materials have the potential to mitigate or solve the problems associated with the production and misuse of conventional plastics. They have the potential to lower the carbon footprint, develop new applications for biodegradable materials, and reduce dependency on imports of key chemical feedstocks. At the same time, they support the creation of local biomass value chains. However, bio-based products often face competition from cheaper fossil-based alternatives, risks in the supply of feedstock, weak market demand and longer authorisation timelines.

This workshop will discuss innovations in bio-based polymers and materials in the context of Italy and the Mediterranean Basin, arising from new synergies between biotechnology, the bio-based industry and the primary production sectors (agri-food, forestry, and fisheries). Examples will be presented of products offering completely new functional properties that justify their market adoption beyond environmental credentials. These new bio-based polymers and materials are not merely 'plastic replacers', but a wholly novel generation of technological solutions. Therefore, certifications and standards are essential for demonstrating the value of bio-based polymers and materials, while providing transparent information on their sustainability.

Session Chairs

Lucia Gardossi, University of Trieste and Cluster SPRING
Mario Bonaccorso, Director at Cluster SPRING

Program

Introduction by the Chairs

Materials to create products of tomorrow
Chiara Rodriquez, Materially Srl Impresa Sociale, Milano, Italy

Sinergies with the agri-food sectors for the production of new materials at the service of agriculture
Sara Guerrini, Novamont, S.p.A, Novara, Italy

Bio-based materials from waste oils
Antonino Biundo, REWOW S.r.l., Italy

From fish processing waste to water soluble packaging
Giovanni Conti, Relicta Srl, Italy

Orange solutions for sustainable textile
Enrica Arena, Orange Fiber S.r.l., Catania, Italy

Rational eco-design of biodegradable polymers to solve the microplastics emergency
Raffaele Bruschi, Università di Trieste, BeUp EU project

Turning greenhouse gases into materials
Celmira Sousa, NatureWorks, LLC

The regional dimension of bioeconomy in the Mediterranean
Pierluigi Argoneto, Italian Circular Bioeconomy Cluster (SPRING), EU BioInSouth project
Luisa Mascia, project officer, Circular Bio-based Europe Joint Undertaking-CBE JU, Brussels

Indicators for implementing a sustainable Circular Bioeconomy
Marta Gomez San Juan, Office of Climate Change, Biodiversity and Environment, Food and Agriculture Organization of the United Nations, Rome (TBC)
Serenella Sala, Head of Sustainable Supply Chains and Bioeconomy Unit, European Commission, Joint Research Centre

Wednesday 4 November
14:00 - 16:00

Diotallevi 2 Room South Hall

Financing
Click here

Climate transition plans for ESG risk management: what role for companies and investors?

Organized by: Comitato Tecnico Scientifico di Ecomondo & Forum per la Finanza Sostenibile

Language: English

In a changing European regulatory environment, despite the recent easing of several obligations for companies, climate transition plans remain strategically important. Although no longer mandatory, they are still crucial tools for steering capital flows toward decarbonisation. For companies, they help align investment, industrial, financial, and governance choices within a long-term strategy. For investors, they provide a clear basis for capital allocation decisions.
European supervisory guidance requires financial intermediaries to integrate climate risks into credit, investment, and underwriting processes. As a result, the quality and credibility of companies' transition plans can influence financial assessments, capital allocation, and access to funding. Transition plans, therefore, remain central to the dialogue between financial institutions and businesses.

The conference will present the role of transition plans as a competitive advantage: tools to analyse, anticipate and manage ESG risks, enhance market credibility, and steer corporate strategy toward long-term sustainability.

Session Chair

Francesco Bicciato, Executive Director, Italian Sustainable Investment Forum (ItaSIF)

Program

Introduction by the Chair

The point of view of European investors
Beatrice Moro, Senior Policy Adviser, Eurosif

Scaling investment for the transition
Aldo Romani, European Investment Bank

Transition: a risk that can no longer be ignored
Isabel Reuss, Senior Climate and Social Advisor, ItaSIF

Implementing transition plans: challenges and opportunities
Ecomondo's companies

Discussion and closure by the Chair

Wednesday 4 November
14:00 - 15:30

Textile District - Workshop Area Hall D2

Sustainable and Circular Textiles
Click here

Safe and Innovative Textile Recycling: Chemical Safety, Microfibres, PFAS and Advanced Recycling Pathways

Organized by: Ecomondo & Tecnotessile, Confindustria Toscana Nord, Centrocot

Language: English

The transition towards a fully circular textile economy is based on the ability to reintroduce safe, high-quality secondary raw materials onto the market. While traditional mechanical recycling remains an indispensable industrial pillar, the scalability of circularity today requires rigorous control over the chemical safety of recovered materials. It is therefore essential to address crucial challenges such as the traceability of legacy chemicals, the detection and substitution of PFAS with eco-compatible finishes, and the mitigation of microfibre release.
At the same time, to manage complex or mixed textile fractions that are unsuitable for mechanical processing, the new frontiers of advanced recycling – in particular enzymatic and biorefining technologies – offer complementary and revolutionary solutions. This panel will explore the necessary synergy between advanced testing infrastructures, analytical control and deep-tech innovation, with the aim of ensuring a textile-to-textile cycle that is safe, efficient and fully aligned with the forthcoming European regulations.

Session Chair

Andrea Falchini, Next Technology Tecnotessile

Program

14:00 *Welcome & Introduction*
Andrea Falchini, Next Technology Tecnotessile

14:10 *Chemical safety of recycled natural fibres*
Francesco Marini, Confindustria Toscana Nord

14:20 *Analytical methods and testing data*
Enrico Fatarella, Laboratory Business Development Manager, TIL Test & Innovation Lab

14:30 *Innovative water-based sol-gel to substitute PFAS*
Guillaume Direur, IFTH, France

14:40 *Enzymatic textile recycling: from research to scale*
Loredano Pollegioni, University of Insubria

14:50 *Textile waste recycling via biorefining strategy*
Chenyu Du, University of Huddersfield, UK

15:00 *Company speech*

15:10 *Applied testing infrastructures for safe recycling*
Claudio Brugnoni, Centrocot

15:20 *Synthesis & Takeaways*

Wednesday 4 November
14:15 - 18:15

Neri 2 Room South Hall

Policies and Regulatory Frameworks
Click here

Technical Seminar: Waste Management and 2026 Regulatory Updates

Organized by: Comitato Tecnico Scientifico di Ecomondo & Reteambiente, "Rifiuti – Bollettino di informazione normativa"

Language: Italian

The Ecomondo Technical-Scientific Committee, along with the journal "Rifiuti-Bollettino di informazione normativa" and ReteAmbiente, present their customary overview of the most significant legislative and regulatory updates added to the complex operational landscape during 2026. This edition also includes in-depth analysis of long-standing issues that have reached a high level of application complexity over the years.

Session Chair

Paola Ficco, Lawyer – Environmental Jurist - Director of the journal "Rifiuti – Bollettino di informazione normativa"

Program

14.00 Registration of participants and Commencement of work

14.30 *The strategic potential of waste as an "urban mine" of critical raw materials*
Lucia Leonessi, General Director Confindustria Cisambiente

14.50 *New developments in corporate criminal liability for waste-related crimes*
Pasquale Fimiani, Advocate General at the Supreme Court of Cassation

15.10 *Organization of controls and the enforcement chain against environmental crime*
Simona Grasso, Captain CC – Commander, NIPAAF Rieti

15.30 *The AIA in the logic of PAUR: decision-making process and practical*
Ferdinando Leone, Head of the Regional Environment Directorate, Energy Transition and Waste Management, Lazio Region

15.50 *Greenwashing in waste generation and management: risks, signs, and verification tools*
Paola Ficco, Environmental Lawyer – Editor inC hief of "Waste - Regulatory Information Bulletin"

16.10 *EER code changes from December 9, 2026. New lights and new shadows*
Claudio Rispoli, Chemist, ADR Expert

16.30 *New perspectives on waste, new value: the role of certifications in change*
Claudia Gistri, Technical Director Certiquality

16.50 *PFAS and waste: the classification*
Loredana Musmeci, Chemist – Past Head of Environment and Primary Prevention Dept., ISS

17.10 *Rentri and sanctions: what discipline?*
Italia Pepe, General Director of the Office for the Metropolitan City of Milan

17.30 *Update on the Rentri's operations*
Daniele Bagon, Secretary of the Liguria Section, National Registry of Environmental Managers

17.50 *Rentri: An initial assessment following the introduction of XFir*
Daniele Gizzi, President of the National Registry of Environmental Managers

MANDATORY REGISTRATION REQUIRED

Wednesday 4 November
14:30 - 16:30

Circular & Healthy City District - Workshop Area Hall D3

Circular and Healthy Cities
Click here

Smart Circular Cities

Organized by: Ecomondo STC & University of Bologna

Language: English

The transition towards climate-neutral and resilient cities requires the integration of advanced digital technologies, sustainable infrastructures, and innovative governance models. This session explores how smart solutions – ranging from AI-driven analytics and digital twins to high-performance computing and IoT systems – can support circular economy strategies and urban resilience. Attention is given to the alignment with the EU Mission "Climate Neutral and Smart Cities" and the New European Bauhaus initiative. The roundtable will bring together academia, research centers, and industry stakeholders to discuss technological enablers, societal impacts, and scalable solutions for sustainable urban development.

Session Chairs

Carlo Alberto Nucci, DEI - University of Bologna & National Representative – Mission HE Climate Neutral and Smart Cities
Danila Longo, DA - University of Bologna

Program

14.30 *Introduction by the Chairs*

14.40 *Outlook on the strategic priorities implemented and identified by the Mission Climate-Neutral and Smart Cities of Horizon Europe*
Carlo Alberto Nucci, University of Bologna, & National Representative – Mission HE Climate Neutral and Smart Cities

14.55 *Outlook on the strategic priorities implemented and identified by the New European Bauhaus*
Francesca Rizzo, Politecnico di Milano, Member of the National Delegation to the Strategic Configuration of Horizon Europe programme

15.10 *Smart cities and sustainable development: ASVIS's contribution to the urban transition*
Luigi Di Marco, ASVIS

15.25 **Round Table #1: Digitally-assisted green transition of the cities**

Digitalization and AI for the Circular City: Intelligent Monitoring Against Illegal Waste Dumping with Evocity
Gabriella Scipione, CINECA
Marco Pistore, FBK
Mauro Di Giamberardino, Gruppo Maggioli

16.00 **Round Table #2: Connectivity infrastructure and networks for smart cities**

Data Driven Governance for Cities and Territories: From Smart Grids to Smart Urban Platforms
Speaker, A2A (TBD)
Speaker, Octave (TBD)

16.20 *Discussion and closure*
Anna Lisa Boni, Bologna Municipality and co-chair Danila Longo, DA – University of Bologna

Wednesday 4 November
15:30 - 17:00

Circular Lab Arena Hall B2

Research and Innovation, Start Ups and Scale Up
Click here

Scaling Impact: Cleantech's Path to Growth. Scaling Impact: Cleantech's Path to Growth. Unlocking opportunities for cleantech companies to scale, innovate, and transform industries

Organized by: Comitato Tecnico Scientifico di Ecomondo & European Innovation Council, Imperial College London, ART-ER

Language: English

The event will spotlight the technical, business, and financial opportunities enabling SMEs to scale their cleantech innovations from lab to pilot to market. Through expert insights, real-world success stories, and interactive dialogue, the session will discuss innovation journeys to growth—covering public-private funding strategies, such EIC smart money and industry-corporate partnerships. Following the short keynotes presentations on funding, policy, and proven scale-up journeys, the event will bring together a diverse panel—academia (Imperial College), regional innovation agencies (Emilia-Romagna), venture capital, corporate strategists, and SMEs that have successfully scaled—to analyze the practical challenges and solutions in cleantech growth.

Session Chairs

Evina Katsou, Imperial College London
Marina Silverii, Executive Director, ART-ER & National Expert, EIC Programme Committee
Francesco Matteucci, EIC Ambassador

Program

15.30 *Greetings and introduction by the Session Chairs*
Evina Katsou, Imperial College London
Marina Silverii, Executive Director, ART-ER & National Expert, EIC Programme Committee
Francesco Matteucci, EIC Ambassador

15.55 Presentations by companies that have successfully scaled up

16.15 *Round Table Discussion*
Moderator: Francesco Matteucci, EIC Ambassador

Panelists:
- Marina Silverii, Executive Director, ART-ER & National Expert, EIC Programme Committee
- Representative from a venture capital firm
- Representative from a leading international brand
- Representative from Imperial Enterprise (Technology Transfer Office)
- Two founders from successful cleantech scale-up companies

17.00 *Discussion and closure by the Chairs*

Wednesday 4 November
16:30 - 18:00

Agorà Malatesta - Enviromental Monitoring Area Hall B8

Circular and Healthy Cities
Click here

Air quality: challenges, scenarios and strategies

Organized by: Comitato Tecnico Scientifico di Ecomondo & Regione Emilia-Romagna, ART-ER

Language: Italian

Air quality is a priority for the regions of the Po Valley basin, and the measures put in place have led to an improvement trend; however, the orographic conformation and meteorological-climatic characteristics influence the presence of pollutants in the atmosphere and compliance with the limit values set by European legislation. To reduce pollution, the regions have approved air quality plans, while the Italian government has adopted the National Action Plan. The Po Valley regions have been collaborating for years in monitoring, in building scenarios, and in implementing common measures and tools. However, the targets set by the new EU Directive 2024/2881 represent an ambitious challenge and will require the activation of even more effective measures in every sector. Technological innovation and research are the levers that can support this process. Sustainable mobility, among the various areas in which action is needed, represents one of the most strategic challenges for promoting change.

Session Chair

Marco Ottolenghi, ART-ER

Program

16.30 *Introduction*

16.35 *Air quality in the Po Valley basin: from data to strategies*
Irene Priolo, Regional Councillor for Territorial Planning, Environment, Mobility and Transport, Infrastructure, Emilia-Romagna Region
Giorgio Maione, Regional Councillor for Environment and Climate, Lombardia Region
Matteo Marnati, Regional Councillor for Environment, Artificial Intelligence, Energy, Innovation, Research, Digital Services for Citizens and Businesses, Piemonte Region
Elisa Venturini, Regional Councillor for Environment, Climate, Parks and Civil Protection, Veneto Region

17.05 *The National Action Plan and implementing measures: an integrated approach towards the new European directive on air quality*
Stefania Crotta, Director General of Programs and Financial Incentives, Ministry of the Environment and Energy Security (TBC)
Fabio Romeo, Head of Atmospheric Pollution and Air Quality, Ministry of the Environment and Energy Security (TBC)

17.20 *New technologies and alternative energy carriers for sustainable mobility*
Alfredo Liverani, University of Bologna - Department of Industrial Engineering

17.30 *Transport and air quality: impacts, limits and decision-support tools*
Valentina Agresti, Energy Systems Research - RSE S.p.A.

17.40 *AI in support of assessments: VERA, the digital twin for air quality in Emilia-Romagna*
Giovanni Farneti, Head of the Big Data & IoT Area - Lepida ScpA

17.50 *Closing remarks*
Cleto Carlini, Director General for Territory and Environment Care, Emilia-Romagna Region

Thursday 5 November
09:30 - 17:30

Tiglio Room Hall A6

Resource Efficiency and Circular Economy
Click here

Innovative waste prevention systems and circular resource management

Organized by: Comitato Tecnico Scientifico di Ecomondo & Società Chimica Italiana – Divisione CABC

Language: Italian

Within the European Union's waste hierarchy, prevention occupies the highest priority, as it directly reduces the use of resources and avoids the need to treat complex waste streams. To be effective, prevention strategies must be complemented by end of life management approaches that keep materials circulating for as long as possible. This requires combining multiple recovery and reuse options, increasingly supported by digital technologies and artificial intelligence. Ensuring that environmental assessment procedures guide both corporate strategies and public policies remains essential, and this depends on selecting robust and meaningful sustainability indicators.
This seminar will showcase practical examples and case studies on waste prevention, the management of by products and production residues, and methods for assessing environmental performance aimed at improving recycling and recovery operations.

Session Chairs

Fabrizio Passarini, Scientific Technical Committee of Ecomondo and University of Bologna
Silvia Fiore, Politecnico di Torino
Danilo Bonato, Erion

Program

9.30 Introduction by the Session Chairs and brief poster presentations

Invited lectures

9.45 *'CO2NSTRUCT' project – A model to shift climate mitigation from linear to circular*
Davide Aloini, University of Pisa

10.00 *Critical issues and enabling factors in the permanent magnet recovery supply chain*
Laura Melandri, ERION

10.15 *'Bottle to bottle' as a model for analysis and food safety: the experience within the EPR system*
Representative CORIPET (TBC)

Selected contributions from Call for Papers

Topic: Territorial management

10.45 *RIDUCITI: a cross-border model to transform waste prevention into a permanent territorial strategy*
Giorgio Ghiringhelli, Silvia Colombo, Elisa Amodeo, Andrea Cappello

10.57 *Integrated municipal solid waste management in the Marche Region (Italy): LCA analysis of flows, logistics and infrastructure*
Giulia Barchiesi, Alessia Amato, Francesca Beolchini (Department of Life and Environmental Sciences, Università Politecnica delle Marche, Ancona), Samantha Paesani (Astea S.p.a., Osimo), Massimiliano Boccarossa (ARPAM, Pesaro), Lorenzo Magi Galluzzi (Asa S.R.L. Azienda Servizi Ambientali, Corinaldo)

11.09 *Nudging Recycling Quality through Behavioural Feedback: Field Evidence from Two Interventions in Latina, Italy*
Federica Stablum (University College London, UK & University of Trento, Italy), Luca Torresan, Leonardo Benuzzi (Sartori Ambiente, Italy), Barbara Treccani (University of Trento)

11.21 *The City of Turin's role in implementing a circular, city-based Living Lab through the public call for proposals 'Culture and entrepreneurship embedded in the circular economy and the urban context'*
Nadia Lambiase, Mercarto Circolare srl S.B.

Topic: Sustainability in textiles

11.33 *Efficient use of textile resources in our urban mines*
CORERTEX - Consorzio Riuso e Riciclo Tessile

11.45 *Preventing the unrecoverability of textile waste: consortia, traceability and circular post-consumption governance in the fashion system*
Elena Pucci, Margherita Tufarelli, Elisabetta Cianfanelli (University of Florence)

11.57 *Upcycling critical waste into circular, certified and high performing chemical products for the whole textile industry*
Heidrun Weiss (TCS), Roberto Ghioldi (TCS), Fabio Locatelli (ERCA TCS)

Topic: Packaging and polymers

12.09 *Beyond the myths of packaging: mechanical validation and plastic waste prevention through the use of corrugated cardboard mailers*
Anh Ngo (BOTTA EcoPackaging S.r.l.), Hang Bui, Laura Baron, Sanket Rawat (University of Canberra)

12.21 *Collaborative circular economy model for PET trays: a quantitative approach to food packaging waste management*
Matteo Morolli, Jessica Rossi (University of Bologna), Gabriele Galletti (Turtle Srl), Ivan Savini, Valentino Solfrini, Augusto Bianchini (University of Bologna)

12.33 *Life Cycle Assessment of bio-packaging production from chestnut burr residues*
Sofia Ghiro (Dept. of Biotechnology, Chemistry and Pharmacy, R2ES Lab, University of Siena), Annalisa Santucci (Dept. of Biotechnology, Chemistry and Pharmacy, University of Siena), Maria Laura Parisi, Adalgisa Sinicropi (Dept. of Biotechnology, Chemistry and Pharmacy, R2ES Lab, University of Siena; CSGI, Center for Colloids and Surface Science, Sesto Fiorentino; CNR-ICCOM, Sesto Fiorentino)

12.45 *Comparative technical assessment of gasification and pyrolysis pathways for hydrogen production from Mixed Plastic Waste*
Giorgia Lombardelli1, Davide Sogni1, Giulio Bortoluzzi1, Antonio Conversano2, Federico Viganò2, Daniele Di Bona1 - 1 LEAP-Laboratorio Energia ed Ambiente Piacenza; 2 Dipartimento di Energia, Politecnico di Milano, Milano

Lunch break

Topic: WEEE, metals and inorganic materials

14.00 *Recovery of critical raw materials from black mass of lithium-ion batteries*
Margherita Verrucchi (IREN Ambiente SpA), Elio Flammia (Valdarno Ambiente srl), Matteo Albiani (LEM srl), Silvia Fiore (Politecnico di Torino), Mattia Repossi (STAM srl.)

14.12 *Environmental assessment of an aqueous zinc-ion battery through Life Cycle Assessment: the role of experimental activities in the early stages of technological development*
Alessi Giacomo, Cespi Daniele, Sparascio Leonardo, Botta Ilario, Passarini Fabrizio (University of Bologna), Giorgetti Marco (University of Camerino)

14.24 *Development of sustainable geo-polymeric binders through alkaline activation of waste from photovoltaic panel recycling*
Milvia Elena Di Clemente, Sveva Orsini, Flavia Parisi, Andrea Petrella, Francesco Todaro, Michele Notarnicola (Department of Civil, Environmental, Land, Building Engineering and Chemistry, Politecnico di Bari)

14.36 *Closing the Loop in Construction: Integrated Upcycling of Mineral and Timber-Based CDW through Digital-Enabled Circular Value Chains*
Sotirios Grammatikos (NTNU), Adam Rudy (Holcim), Tom Svilans (OMTRE), Rocco Lagioia (TheGreenTech)

14.48 *From Reactive Inspection to Predictive Quality Control: An AI Assistant for Sustainable Metal Additive Manufacturing*
Sepideh Gholamzadeh, Matteo Vanazzi (f3nice, Piantedo, SO), Francesca Maria Moretti, Rudy Crappella (Log XY Srl, Como), Federica Mori (Confindustria Emilia-Romagna Ricerca S.c. a r.l., Bologna), Gianluca Acquistapace, Carlo Giacomo Mondora (Valland, Piantedo, SO)

Topic: Biowaste

15.00 *POLYMEER: valorisation of brewer's spent grain for the development of bio-based high-performance polymers, polymer blends and copolymers*
Assunta Marrocchi (Dept. of Chemistry, Biology and Biotechnology, University of Perugia), Ombretta Marconi (CERB – Centre of Excellence for Brewing Research, University of Perugia), Daniela Lanari (Dept. of Pharmaceutical Sciences, University of Perugia)

15.12 *From upcycling of organic waste to the production of medical grade biomaterials: development of PLA and biodegradable copolymers for advanced biomedical applications*
Fabio Sebastiano, Valerio Maialetti, Filippo Donato Carlomagno, Laura Mastronardi, Beatrice Magnifico, Antonio Lucio Valerio (RES SPA - Recupero Etico Sostenibile)

15.24 *Less waste, more resources: innovative circular management models for fishery by-products in the European H2020 project EcoeFISHent*
Federica Turrini1-2, Federica Grasso1, Aseel Swaidan1, Filippo Falco1, Raffaella Boggia1-3 (1 Department of Pharmacy, University of Genova; 2 National Center for the Development of New Technologies in Agriculture – Agritech, Napoli; 3 National Biodiversity Future Center – NBFC, Palermo)

15.36 *The footprint of food waste: the LCA approach applied to the Mediterranean Diet in the ECOFOODCYCLE project*
Michele Milan, Chiara Onofri, Tommaso Barcaro, Lucia Raffaelli (ECAMRICERT S.R.L.)

15.48 *Biotechnological approaches for low-emission and high-efficiency industrial composting: COMPOST+ and MICROFAGO projects*
Gadaleta, G.a; Moral-Herrero, R.b; García-Cano, J.c; Báez-Morillas, G.d; Felipe-Ruiz, A.e; Mozo-Toledo, M.a. (a Biodegradability & Compostability Laboratory, AIMPLAS - Plastics Technology Centre, Paterna – Valencia, Spain; b Centro de Investigación e Innovación Agroalimentaria y Agroambiental CIAGRO-UMH, Universidad Miguel Hernández, Alicante, Spain; c Calpech, Alicante, Spain; d Darwin Bioprospecting Excellence, S.L., Paterna – Valencia, Spain; e Evolving Therapeutics, Parc Científic UV, Paterna – Valencia, Spain)

16.00 *Proposal for collaboration initiative on biogas production for rural development & circular agriculture (Rural Development Initiative Circular Agriculture & Poverty Alleviation For Developing Countries)*
Akuma Susan (OWORA)

Topic: Waste from liquid matrices

16.12 *Rozzano: circular waste management and valorisation of organic matrices within a wastewater treatment plant – biorefinery*
Silvia Calatroni (CAP Evolution)

16.24 *Sustainability of sewage sludge treatment. LCA assessment of conventional and innovative solutions*
Cerbone A. (1), Nardella G. (2), Di Fabio S. (1), Fantin V. (1), Rinaldi C. (1), Petta L. (1) (1 ENEA – Department of Sustainability, Circularity and Climate Change Adaptation of Production and Territorial Systems; 2 University of Naples Federico II – Department of Civil, Building and Environmental Engineering)

16.36 *From leachate to resource: an innovative plant for the treatment of PFAS-contaminated leachate and assessment of process circularity*
Petra Scanferla, Giulia Meneghin, Giorgia Di Carlo (Fondazione Università Ca' Foscari, Venice), Roberto Pellay, Gianluca Saoner (Tev Group srl, Venice), Francesco Trevisan (Veneto Acque spa, Venice)

16.48 *Waste prevention and resource circularity: the Hach model for sustainable water analysis*
Stefano Malusardi (Senior Sales Development Manager Hach)

17.00 Discussion and conclusions by the Session Chairs

SELECTED E-POSTERS

1 – Plant Extracts as Eco-Friendly Inhibitors for Mild Steel Corrosion in Acidic Medium / Ionuț-Cristian Bălan-Balantof, Nicoleta Bogatu, Alina-Crina Mureșan, Daniela-Laura Buruiană (Interdisciplinary Research Centre in the Field of Eco-Nano Technology and Advance Materials CC-ITI, "Dunarea de Jos" University of Galati, Romania)

2 – Green Deal-Oriented Smart Sensor Technologies for Sustainable Asphalt Pavements Exposed to Freeze–Thaw Cycles / Andromeda Iacob, Daniela-Laura Buruiană, Viorica Ghisman, Gabriel-Bogdan Carp, Elena-Emanuela Herbei (Interdisciplinary Research Centre in the Field of Eco-Nano Technology and Advance Materials CC-ITI, "Dunarea de Jos" University of Galati, Galati, Romania)

3 – Advanced Materials and Thermal Management for Cryogenic Storage Systems
Marian-Cristian Staicu, Gabriel-Bogdan Carp, Nicoleta Bogatu, Viorica Ghisman, Daniela-Laura Buruiană (Interdisciplinary Research Centre in the Field of Eco-Nano Technology and Advance Materials CC-ITI, "Dunarea de Jos" University of Galati, Galati, Romania)

4 – Innovative systems for waste prevention and circular resources management
Daniela Laura Buruiana, Viorica Ghisman, Gabriel Bogdan Carp (Interdisciplinary Research Centre in the Field of Eco-Nano Technology and Advance Materials CC-ITI, "Dunarea de Jos" University of Galati, Romania)

5 – Digital Risk Mapping and Smart Marking of Danube River Wrecks for Waste Prevention and Circular Resource Management
Gabriel Bogdan Carp, Viorica Ghisman, Daniela Laura Buruiana (Interdisciplinary Research Centre in the Field of Eco-Nano Technology and Advance Materials CC-ITI, "Dunarea de Jos" University of Galati, Romania)

6 – L'impianto di gassificazione di Energos a Forus: dal 2002 produciamo energia dai rifiuti urbani residuali e commerciali / Stein Sørvig, Antonio Lago

7 – Realizzazione del CondominioEsg / Specchio Gian Nicola (AR2 Investment be change srl)

8 – Tecnologie digitali e indicatori IoT per l'ottimizzazione energetica e la rendicontazione CO2 nelle flotte EV / Francesco Signor (W.A.Y. S.r.l.)

9 – Centerwaste la piattaforma del futuro / Attilio Nicola Di Russo (Rewaste srls)

10 – Criteri Ambientali Minimi: una forma di prevenzione per incentivare le imprese / Adriano Pistilli

11 – From ESG Reporting to Systemic Supply Chain Resilience: A Shapley-Based Framework for Multi-Tier Risk Assessment in Circular Resource Management / Francesco Ventura, JR James (CROWN Group Inc.), Giuseppe Caristi, David Barilla (University of Messina), Daniela Barba (QBM S.r.l.)

12 – 30 Years of Optimum EPR: Building on Best Practices for Measurable Impact / Valeria Branca, Joachim Quoden, Monika Romenska (Extended Producer Responsibility Alliance) WM-P13 – CirMat – Circular Mattress Design and Waste Collection System / Birgit Christandl, Thomas Senfter, Maximilian Larch, Elisa Leusmann, Manuel Berger, Martin Pillei (MCI - The Entrepreneurial School), Roman Eberharter (Betten Eberharter GmbH), Matthias Zitterbart (DAKA Entsorgungsunternehmen GmbH)

14 – Before the First Brick: Pre-Construction Environmental Transparency Infrastructure for Infectious Medical Waste Facility Siting / Junya Yokomizo (Fukuoka Metal Enterprise Co., Ltd., Nogata City, Fukuoka, Japan)

15 – Digital Technology / Abdou Diaw (Horizon International Entrepreneurs Dakar, Senegal)

16 –The Last-Ton Problem: A Prevention-First Model for Reducing Residual Municipal Waste before Landfilling / Randa Mohamed (ECARU COMPANY)

17 – From Organic Residues to Local Value: Decentralised Insect Farming Units by REPLOID / Ronald Mitterndorfer

18 – Biochar da scarti agroalimentari per la purificazione del biogas: un approccio di economia circolare / Luca Tomasi - Fondazione Edmund Mach

19 – Recycling Watse from Bluefin Tuna Fattening / Sami Guetari (Oleo SL)

20 – Ossigreen: realizzazione di un processo di essiccazione dei fanghi di alluminio / Ossicolor in collaborazione con Università di Trento

21 – Sustainability, Innovation, and Competitiveness in the Critical Minerals and Electronics Chain: An Integrated ESG Analysis through Traceability and Circularity / Genilson Jacinto Pacheco (FIA)

22 – Prevenzione dei rifiuti e gestione circolare delle risorse: un modello operativo per imprese, territori e progetti di innovazione ambientale / Antonio Iuliano

23 – PAVECO, valorisation de déchet Minier / Madani Oumayma, Madani Zakaria

24 – FERT - Fiberglass Enhanced Recycling Technology / Nicola Bartucca, Denise Bellisario, Fabrizio Quadrini, Loredana Santo

25 – Drone based localisation of ghost-nets using passive acoustic reflectors the detpar system/ Bouadam Salah Eddine (independent engineer)

26 – Sumus Italia S.r.l. per la prevenzione dei rifiuti e la circolarità delle materie / (Sumus Italia S.r.l.)

27 – BIOSOLID Recovery INDEX per guidare la transizione climatica e l'economia verde della Lombardia / Elisa Casaletta (1), Martina Simonelli (2), Michela Allevi (3), Ombretta Iaria (1) e Matteo Marangi (1) (1 Gruppo Fratelli Visconti; 2 Alan Srl; 3 Allevi Srl)

28 – Developing Social and Economic Sustainability Indicators for Circular Bio-lubricants: A Framework-Based Approach / Annachiara Ceraso, Davide Don (Fraunhofer Italia Research S.C.A.R.L., Innovation Engineering Center (IEC), Bolzano, Italy)

29 – Promuovere la cultura della riparazione per una nuova visione partecipativa dell'economia circolare / Marino Cavallo (Città Metropolitana Bologna)

30 – L'intelligenza artificiale nei servizi ambientali: il caso dell'ecosistema digitale integrato di Gesenu SpA / Massimo Pera (Gesenu S.p.A.), Marco Bagnini, Valentina Piermatti (G.S.A. Gestione Servizi Aziendali S.r.l. - Gruppo Gesenu)

31 – Research Project Uncover Elastane – Mechanical recycling of post-consumer textiles containing elastane / Chiara Warmuth (Institute of Textile Technology Augsburg)

32 – Il biogas da discarica: una nuova visione della bonifica ambientale nell'economia circolare (Alessia Bertolotto)

33 – Toward Online Monitoring of Microplastics in Recycled Wood Fiber Process / Morozova Olga, Huttunen Harri, Rahkola Janne, Leinonen Ilkka, Karjalainen Pasi, Hietanen Jarmo

34 – La tariffa puntuale come leva strategica di prevenzione e circolarità: il modello operativo di Aemme Linea Ambiente / Stefano Migliorini (Aemme Linea Ambiente)

35 – Pricing Circularity: A model for Eco-modulated textile EPR fees in the European Union / Aline Amorim Bolis (student Università di Bologna)

36 – Sviluppo di una filiera circolare per il recupero dei rifiuti a base di gesso mediante tecnologia di separazione meccanica a secco con produzione di End of Waste caso per caso / Isabella Poiatti (Green Evolution SRL SB)

37 – Verso eventi a zero rifiuti: il modello di MINEV / Marino Cavallo, Claudia Vannini

38 – Tecnologie innovative per la gestione dei rifiuti e la circolarità delle risorse nei trattamenti galvanici: un approccio integrato per la filiera degli accessori metallici / Ester Falletta (Consorzio Physis Srl SB)

39 – From Waste to Resource: A Smart, Citizen-Centric Approach to Used Cooking Oil Management / Ana Raimundo, Paulo Leal, Vera Melo, Sandra Rebelo (Cascais Ambiente, Portugal)

40 – Valutazione degli impatti ambientali ed economici di soluzioni circolari applicabili ai rifiuti da costruzione e demolizione: una review della letteratura nell'ambito del progetto UP-CDW / Gabriele Carota1, Alessio Angelo Storbini2, Veronica Casolani1, Alberto Simboli1, Michelina Venditti2, Raffaella Taddeo1, Ioannis Arzoumanidis1, Ginaluca Iezzi3 (1 Dipartimento di Economia, Università degli Studi "G. d'Annunzio" di Chieti-Pescara, Pescara; 2 Dipartimento di Economia Aziendale, Università degli Studi "G. d'Annunzio" di Chieti-Pescara, Pescara; 3 Dipartimento di Ingegneria e Geologia, Università degli Studi "G. d'Annunzio" di Chieti-Pescara, Chieti)

41 – Dalla biomassa al biochar: un workflow integrato tra preparazione del campione, controllo della pirolisi e caratterizzazione avanzata / Sebastiano Tieuli, Anna Maria Fustolo, Gianmarco Gavazzi

42 – Integrazione di HTC e digestione anaerobica per la gestione circolare dei fanghi: riduzione dei volumi e recupero energetico / Daniele Cecconet, Luca Sessolo, Francesco Piccioli, Annalisa Berni (Alfa Srl, Gallarate), Daniele Pirini, Alisar Kiwan, Eleonora Torricelli (B-Plas sbrl, Lugo - RA)

43 – DA "SECCO NON RICICLABILE" A "RICICLABILE 100%" / Simone Canazza (CASIA Pannelli isolanti)

44 – Microplastiche marine - Identificazione, Recupero, Analisi, Gestione, trasformazionE (MIRAGE) / Nicola Bartucca, Matteo Venditti (RDC), Leonardo Mattiello, Matteo Bonomo (Sapienza), Sara Bobone, Alessio Papi (Esseodue)

45 – Monitoraggio IoT del percolato di discarica: dal vincolo normativo all'innovazione impiantistica / Luigi Bondi (Zerynth e Scapigliato)

46 – Materiali biobased e strategie di recupero per le carte di identità: un approccio Life Cycle Assessment a supporto dell'economia circolare / Marco Scatto (Polymer Scientist), Andrea Moretto, Chiara Maran, Liliangela Callea, (S.C.F. International srl), Michela Casini, Maura Cocco, Antonio Gentile (IPZS)

47 – From Interference to Insight: ICP-OES Solutions for Complex Pyrolysis Oil Matrices / Giorgio Constante (FKV), Julian Köhler, Sebastian Faßbender, Stefan Jezierski-Räcke, Jan Scholz, Simone Moos (Analytik Jena GmbH & Co KG)

48 – Tannin Extraction from Conifer Bark for Bio-Based Binder Production: Hot Water and Steam Explosion Approaches within the CircBuilt Framework / Davide Gallo1, Barbara La Licata1, Elisa Aimo Boot1, Ingo Mayer2, Thomas Walch2 (1 Environment Park s.p.a., 2 Architecture, Wood and Civil Engineering, Bern University of Applied Science, Biel, Switzerland)

49 – Determinazione di ammine aromatiche come supporto alla caratterizzazione dei sottoprodotti conciari / Lucia Pierro, Elisa Sprugnoli, Cristiano Baiocchi, Roberto Signorini (Agenzia Regionale per la protezione ambientale della Toscana)

50 – Analisi dei flussi delle terre e rocce da scavo in Lombardia / Stefania Ughini, Pietro Bazzicalupo, Debora Morano, Francesca Zanini, Cristina Pizzitola, Elisabetta Scotto di Marco, Madela Torretta (1 Direzione Tecnica Controlli e Prevenzione del Rischio Antropico, Agenzia Regionale per la Protezione dell'Ambiente della Lombardia, Milano).

51 – Valorizing Waste-Derived Glycerol for Bacterial Nanocellulose Production: A Life Cycle Assessment/ Matteo Ciapetti (1), Antonio Javier Caro Reina (1), Araceli García Núñez (2), Sophie Marie Martirani Von Abercron (3), Silvia Marqués (3), Jacopo Bacenetti (1) (1 Sustainability LCA Group, Department of Environmental Science and Policy, Università degli Studi di Milano, Italy; 2 Department of Organic Chemistry, Universidad de Cordoba, Córdoba, Spain; 3 Consejo Superior de Investigaciones Científicas, Granada, Spain)

52 – Beyond Technical Circularity: A Multidimensional Framework for Assessing Circular Economy/ Sofia Bettio (Independent Researcher)

53 – Recupero e valorizzazione di batterie Li-ion esauste mediante trattamento a microonde tramite la formazione di strutture Li/Al LDH e residui catalitici / Francesca Bianchi, Alberto Mannu, Elza Bontempi (INSTM and Chemistry for Technologies Laboratory, Department of Mechanical and Industrial Engineering, University of Brescia, Italy)

54 – Microwave-Assisted CaO Modification of Sewage Sludge Ash for Enhanced Phosphorus Recovery/ Yagmur Olgun1, Alessandra Zanoletti1,Elza Bontempi1, Bruno Valentim2 and Alexandra Guedes2 (1 INSTM and Chemistry for Technologies Laboratory, Department of Mechanical and Industrial Engineering, University of Brescia, Italy; 2 Department of Geosciences, Environment and Spatial Plannings, Faculty of Sciences, Earth Science Institute-Porto Pole, University of Porto, Portugal)

55 – Recupero di sostanze umiche da compost: caratterizzazione di processo e di prodotto/ Massimiliano Antonini, Simone Solaro, Freddy Liendo, Domiziana Giordano, Dario Siccardi, Roberto Ricci (Humix srl, Torino)

56 – Building Behavioral Infrastructure for Circular Living in Low-Resource Contexts: A Practice-Informed Human-Centered Circular Transition Framework / Buthaina Aburoza (Qutoof Professional Development)

57 – What Makes Consumers Pick Up Your Product? How Science Shapes Sustainable Packaging Design / Francesco Pinci

58 – Schema "PEC PLASECO Environmental Credits" / PLA.SE.CO S.rl. Società Benefit

59 – Recovery of end-of-life surgical masks through thermochemical conversion into a carbonaceous sorbent for phthalate analysis in water / Pantaleone Bruni[1], Francesco Nobili[2], Vincenzo Ferrone[1], Salvatore Genovese[1], Stefania Ferrari[1] ([1] Department of Pharmacy, University "G. d'Annunzio" Chieti-Pescara, Chieti, Italy [2] Chemistry Division, School of Science and Technology, University of Camerino, Camerino, Italy)

60 – Agri-E: spinning waste into liquid energy to fuel farms on-site / Ameya Pankaj Gupte 1,2, Lorenzo Favaro 1,2,3, Rosemary Anne Cripwell 1,3 (1-Agri-E s.r.l.; 2-DAFNAE, University of Padova, Legnaro, Padova; 3-Department of Microbiology, Stellenbosch University, Matieland, South Africa).

61 – Development and Characterization of High-Performance Sustainable Bio-Plasters Reinforced with Licorice Waste Fibers: Evaluation of Mechanical, Adhesion, and Biological Properties / Luigi Madeo (Dipartimento di Ingegneria Ambientale, Università della Calabria), Chiara Esposito (Dipartimento di Ingegneria Civile), Anastasia Macario (Dipartimento di Ingegneria Ambientale), Pierantonio De Luca (Dipartimento di Ingegneria Civile, pierantonio.deluca@unical.it)

62 – Tra sostenibilità e digitalizzazione: 30 strategie di circolarità per orientare il designer alla prevenzione dei rifiuti / Laura Badalucco, Giovanni Borga (Università Iuav di Venezia)

63 – SAI Smart AI Infrastructure: l'infrastruttura intelligente che trasforma il rifiuto in valore attraverso Intelligenza Artificiale ed economia circolare / SecondAI SpA (Roma)

64 – Textile EPR: Is it a regulatory framework capable of addressing waste prevention and the circular management of resources? / Nadia Lambiase (University of Turin, Mercarto Circolare srl S.B.), David Monciardini (University of Turin)

65 – Life Cycle Assessment for waste prevention through the valorisation of agro-industrial by-products within an industrial symbiosis framework / Luigi Madeo (Dipartimento di Ingegneria Ambientale, Università della Calabria)

66 – COSECO: nuovo impianto per la sterilizzazione dei rifiuti sanitari e la valorizzazione energetica in ottica di economia circolare / Matteo Bettoja, Partner HTR Bonifiche, Responsabile Progetto COSECO

67 – Sustainable Nonwoven Mats from Recycled Carbon Fibers: A Water-Based, Zero-Solvent Circular Process / C. Borriello, S. Portofino, R. Miscioscia, G. Pandolfi, P. Iovane, L. Tammaro, S. Galvagno (ENEA, SSPT-CMS, CR Portici)

68 – Pre-Sorting as a Lever for Efficiency in End-of-Life Textile Management? A Cost-Benefit Analysis of Citizen-Based Pre-Sorting in Germany / Svenja Jahn, Nicole Hühn, Sarah Hatfield, Mesut Cetin (ITA Augsburg, THA)

69 – Sistema automatico per il tracciamento di contenitori plastici usati per la raccolta di rifiuti sanitari / Filippo Carletti

70 – Valorisation of sewage sludge via fungal treatment: production of high value compounds and disposal costs minimization / Sara Carnelli, Martina Bellotti, Ilaria Matli, Adriana Bava, Federico Persico, Letizia Maestroni, Tomaso Amati, Carolina Elena Girometta, Solveig Tosi, Federica Barone, Fabrizio Beltrametti

71 – Un framework multidimensionale per l'analisi delle buone pratiche di economia circolare applicate alle materie prime critiche / Marco La Monica, Roberta De Carolis, Grazia Barberio (ENEA Dipartimento Sostenibilità, Circolarità e Adattamento al Cambiamento Climatico dei Sistemi Produttivi e Territoriali – SSPT, C.R. ENEA Casaccia Roma), Irene Pellucchi (Erion Compliance Organization scarl, Milano), Natalia Gil Lopez (CNA Nazionale, Roma, Italia)

72 – From Waste Indicators to Auditable Governance Signals: A Blockchain-Inspired Model Registry for Municipal Waste Management / Veronica Giuliani, Simone Marziali, Alessio Matacera, Chiara Oldani, Mariarita Tarantino, Francesco Vincenti, Enrico Maria Mosconi (Università degli Studi della Tuscia)

73 – Riciclo chimico: da Plastiche Miste a feedstock qualificato per nuove filiere di valorizzazione circolare / Andrea Bovelli (Acea Ambiente)

Thursday 5 November
10:00 - 13:00

Agorà Augusto - Bioeconomy Area Hall D1

Agrifood, Forestry, Bioenergy and Circular Bioeconomy
Click here

Sewage sludge fertilizers: production, quality and applications

Organized by: Comitato Tecnico Scientifico di Ecomondo & UTILITALIA, ASSOAMBIENTE, CIC

Language: Italian

Soil health and fertility are increasingly affected by anthropic activity that act on the quality of the environment, and in particular on climate change. In this context, it is of utter importance to preserve all possible sources of organic carbon and nutrients for soil and crops, including sewage sludge. The conference aims to provide an update on the production and applications of sludge-based fertilizers, on their characteristics and agronomic properties, as well as highlight the quality requirements necessary to guarantee their safe and environmentally friendly use.

Session Chair

Massimo Centemero, Managing Director CIC (Italian Composting and Biogas Association

Program

10.00 *Introduction by the Chair*

10.15 Alberto Confalonieri, Technical Committee CIC

10.30 Andrea Lanz, ISPRA

10.45 Technical-scientific presentation (TBC)

11.00 *Round Table*
Tiziana Vona, CIC, Cisambiente
Annamaria Barrile, General Director UTILITALIA (Italian Federation of Energy, Water and Environmental Services)
Elisabetta Perrotta, General Director ASSOAMBIENTE (National Association of Environmental Services Companies and Circular Economy)
Speaker, Assofertilizzanti-Federchimica (TBC)

11.40 *Speeches from the Call for Papers*

12.30 *Discussion and conclusions by the Chair*

Thursday 5 November
10:00 - 13:00

Agorà Luciano Morselli - Sites & Soil Restoration Area Hall C1

Sites and Soil Maintenance and Restoration
Click here

Remediation in Italy in the regulatory transition: between the revision of annexes and the new European Soil Directive

Organized by: Comitato Tecnico Scientifico di Ecomondo & Sapienza Università di Roma, UNEM, Legambiente

Language: Italian

Several invited keynote presentations are planned, primarily delivered by Public Administration bodies or Public Institutions, also in light of the expected regulatory developments at national level and the forthcoming transposition of the Soil Monitoring Directive. A roundtable discussion will follow, with opportunities for interaction with the audience.

Session Chairs

Donatella Giacopetti, UNEM
Marco Petrangeli Paini, Sapienza University of Rome
Giorgio Zampetti, Legambiente

Program

10.00 Opening remarks and introduction by the session chairs

10.15 *The 'Land of Fires': regeneration and community*
Giuseppe Vadalà, Extraordinary Commissioner for the remediation of landfills and contaminated sites

10.30 *Transposition of the Soil Directive into the national regulatory framework*
Luca Proietti, Ministry of the Environment and Energy Security

10.45 *Contaminated sites and soil monitoring in the new European framework*
Federico Araneo, ISPRA

11.00 *Health aspects of risk assessment: updates and differences with the new European directive*
Federica Scaini, National Institute of Health

11.15 *Soil monitoring directive: opportunities for the application of new technologies*
Marco Petrangeli Papini, Sapienza University of Rome

11.30 *Contaminated sites and territories: the importance of sharing decisions with the community*
Andrea Minutolo, Legambiente

11.45 *Soil Directive: challenges and opportunities for businesses*
Donatella Giacopetti, Unem

12.00 Roundtable discussion with stakeholders and closing remarks

Thursday 5 November
10:00 - 13:00

Ravezzi 2 South Hall

Sites and Soil Maintenance and Restoration
Click here

States general for soil health – V edition – Healthy soils for sustainable urban areas and agri-food systems

Organized by: Comitato Tecnico Scientifico di Ecomondo & Fondazione Re Soil Foundation

Language: Italian
Instant translations:: English

Now in its fifth edition, the conference highlights the interconnections between soil health, urban development, and resilient agri-food systems. Special attention will be given to the latest updates of Global, European and national policy frameworks for soil protection.
This year's conference focuses on soils sustainability in urban areas and agri-food systems by presenting best practice and case study toward more sustainable and integrated models for soil regeneration; in particular, the event will outline case studies of urban soil regeneration and urban agriculture.

Session Chairs

Debora Fino, Politecnico di Torino and Re Soil Foundation board
Roberto Moncalvo, Coldiretti and Re Soil Foundation board

Program

10.15 *Introduction by the Chairs*

Session 1 – *Policy framework*

10.30 *Caring for soils, empowering people*
Thorunn Wolfram Petursdottir, FAO-GSP (TBC)

10.40 *EU policy updates*
Panos Panagos, JRC (TBC)

10.50 *Biodiversity strategy 2030*
Speaker (TBD)

11.00 *International cooperation initiatives*
Stefano Lo Savio, Italian Ministry of Foreign Affairs and International Cooperation (TBC)

11.10 *Overview of key policies for soil health*
Francesco de Leonardis, Università degli Studi Roma Tre, Re Soil TSC (TBC)

Session 2 – *Urban soils and agri-food systems*

11.25 *National report on Soil Consumption*
Michele Munafò, ISPRA

11.35 *Copenhagen-Sponge city*
Representative of Copenhagen Municipality (TBD)

11.45 *Genoa case study*
Representative of Genova Municipality (TBD)

Session 3 – *EU Mission soil, Living labs and Lighthouse farms*

12.00 *State of the art of the EU Mission "A Soil Deal for Europe"*
Henri Delanghe, HoU DG AGRI – Research & Innovation (TBC)

12.10 *The SOILL project – Support Structure for Soil Living Labs*
Giulia Campodonico, ENOLL (TBC)

12.20 *Urban agriculture – the Agricoltura Nuova exprience*
Carlo Patacconi, Agricoltura Nuova (TBC)

12.30 *"Best practice for soil health" publication*
Sara Guerrini, Re Soil Foundation

12.40 Discussion and closure by the Chairs

Thursday 5 November
10:00 - 13:00

Agorà Malatesta - Enviromental Monitoring Area Hall B8

Water Cycle and Blue Economy
Click here

Restoring the Water Cycle through Basin Governance: Nature Based Solutions, Crisis Management, Pollution Prevention (WFD) and Biodiversity

Organized by: Comitato Tecnico Scientifico di Ecomondo & UTILITALIA, ARERA, Autorità di Distretto Idrografico, Università Politecnica delle Marche

Language: Italian

This workshop will explore the implementation of Objective 1 of the European Water Resilience Strategy (EWRS), with a strong focus on preparedness and adaptive capacity at river basin scale. Central to the discussion will be the implementation of the Water Framework Directive (WFD) as the cornerstone of EU water policy, including progress, gaps, and enforcement challenges across Member States.
Particular attention will be given to the role of River Basin Authorities in integrating WFD objectives with the Floods Directive, ensuring coherent and risk-based water management. The session will also address the transition towards sponge landscapes and sponge cities, promoting nature-based solutions to enhance retention capacity and climate resilience.
Key issues related to nutrient reduction under the Nitrates Directive will be discussed, alongside emerging priorities on PFAS and persistent pollutants, including remediation strategies and the application of the polluter pays principle. The workshop will further explore synergies with the Nature Restoration Regulation, linking ecosystem recovery with WFD targets.
Finally, a source-to-sea approach will be emphasized to ensure integrated implementation of the WFD across the entire water cycle, from inland waters to coastal and marine environments.

Session Chairs

Alessandro Delpiano, Po River Basin District Authority and International Network of Basin Organizations (INBO)
Representative of ECOMONDO Scientific Technical Committee (TBD)

Program

Introduction by the Chairs
Alessandro Bratti, ARERA, Implementation of the Memorandum of Understanding between ARERA and the River Basin District Authorities
Giuseppe Travia, General Director, Ministry of Environment and Energy Security (TBC)
Stefano Mariani, ISPRA (Italian Institute for Environmental Protection and Research) (TBC)
Gaia Rodriquez, UTILITALIA, Water utilities' contribution to basin resilience and monitoring (M0 indicator)

Panel: *District Basin Authorities representatives*
Alessandro Delpiano, Secretary General, Po River Basin District Authority
Gaia Checcucci, Secretary General, Northern Apennines River Basin District Authority
Marco Casini, Secretary General, Central Apennines River Basin District Authority
Vera Corbelli, Secretary General, Southern Apennines River Basin District Authority
Marina Colaizzi, Secretary General, Eastern Alps River Basin District Authority
Costantino Azzena, Secretary General, Sardegna River Basin District Authority (TBC)
Carmelo Frititta, Secretary General, Sicilia River Basin District Authority (TBC)

Panel discussion: *Building resilient river basins through integrated governance*

Discussion themes:
- Implementation of the Water Framework Directive
- Integration with the Floods Directive
- Nature-based Solutions and sponge landscapes
- Biodiversity restoration under the Nature Restoration Regulation
- PFAS and emerging contaminants
- Nutrient reduction and diffuse pollution
- Source-to-sea governance
- Strengthening cooperation between River Basin Authorities, regulators and water utilities

Discussion and closure by the Chairs

Thursday 5 November
10:00 - 13:30

Agorà Tiberio - Water Cycle Area Hall D8

Water Cycle and Blue Economy
Click here

Water Infrastructure of the Future: Smart Networks, Digitalisation and Security

Organized by: Comitato Tecnico Scientifico di Ecomondo & Università Politecnica delle Marche, Alma Mater Studiorum Università di Bologna

Language: Italian

This workshop will explore the role of digitalisation and strategic investments in strengthening water resilience and system performance. A key focus will be on scaling up smart metering for all, enabling data-driven management, improved efficiency, and greater transparency across water services.
The session will highlight the contribution of advanced EU initiatives such as the Digital Twin of the Ocean, Destination Earth, and the Copernicus Water Thematic Hub in supporting predictive modelling, monitoring, and decision-making. These tools are essential to enhance planning capacities and anticipate risks at multiple scales.
Particular attention will be given to leakage reduction through digital solutions, integrating real-time monitoring and asset management. The workshop will also address the growing importance of securing water infrastructure, in line with the CER Directive and NIS2, strengthening cybersecurity and resilience against emerging threats.
Finally, the role of early warning systems for droughts and floods will be discussed, showcasing how digital technologies can improve preparedness, risk management, and rapid response in the face of climate-related extremes.

Session Chairs

Francesco Fatone, Ecomondo Scientific Technical Committee and Marche Polytechnic University
Tania Tellini, Ecomondo Scientific Technical Committee and UTILITALIA

Program

10.00 *Introduction by the Chairs*

The WHO/UNECE Protocol on Water and Health: Opportunities and Challenges Following Italy's Ratification
Luca Lucentini, Italian National Institute of Health

Building Europe's Digital Water Future: Research and Innovation Priorities
Rolf-Jan Hoeve, Head of Sector - Mission and Partnerships, Ocean and Waters at DG Research & Innovation, European Commission (TBC)

Smart Water Infrastructure: National Priorities for Resilience, Security and Climate Adaptation
Representative of Italian Ministry of Infrastructure and Transportation (TBC)

Digital Water Utilities: Accelerating the Transition towards Smart and Resilient Water Services
Marco Salis, UTILITALIA
Andrea Di Piazza, UTILITALIA

***Speeches selected from the Call for Papers*(held in italian language)**

10.55 **Session 1 – *Digital Transformation Strategies for Water Utilities***

Digital Transformation of Water Infrastructure: A Delphi Study on Italian Water Utility Scenarios to 2035
Giuseppe Barberio, Gruppo CAP, Politecnico di Milano
Alberto Pavan, Claudio Mirarchi e Martina Signorini, Politecnico di Milano

Digitalizzazione e innovazione: l'approccio multi livello nella gestione efficiente delle reti
Silvia Giovannini, Simona Olivi, Giuditta Nicoli e Federico Donati, Hera S.p.A.

11.25 **Session 2 –** ***Smart Water Networks: Monitoring, Asset Management and Water Quality***

Analisi e ottimizzazione delle reti idriche tramite la valutazione dell'impatto degli impianti rispetto alla frequenza di rotture: caso studio del Comune di Brescia
Vincenzo Scarano e Giampaolo Crotti, A2A Ciclo Idrico

Digitalizzazione e monitoraggio permanente delle reti idriche per una gestione predittiva delle perdite: il caso studio del Comune di Laveno Mombello
Davide La Rosa, Alfa
Felice Nuzzolo, Pipecare – Gruppo Aquanexa

Monitoraggio integrato e trattamenti terziari di microfiltrazione per le microplastiche nelle acque reflue urbane
Francesco Simonetti et al., UNIVPM, Acea ATO2, Acea Infrastructure, Opus

I batteri come sentinelle: sorveglianza intelligente e continua degli sversamenti anomali nelle reti fognarie mediante biosensore e campionamento automatico
Mauro Massi, Pide S.r.l., Gruppo Orion

12.25 **Session 3 –** ***Artificial Intelligence, Smart Operations and Cyber Resilience***

Dai dati all'intelligenza operativa: un caso applicativo di Water Intelligence System nel Gruppo CAP
Francesca Mastromarino, CAP Holding
Davide Bartoletti, Hulo

Transizione digitale in condizioni di scarsità idrica: lo Smart Water Management System e la nuova Control Room di AMAP
Alessandro Bettin, Almaviva Bluebit
Ernesto Lastres, AMAP

Cyber Resilience delle Infrastrutture Idriche: simulazione integrata tra Cybersecurity, conformità NIS2 e monitoraggio operativo nei sistemi ICS/SCADA
Giovanni Giovannetti, Almaviva
Claudio Fiore, Tecnau

12.55 Discussion and closure by the Chairs

SELECTED E-POSTER

1 – *From Water to Data: Self-Powered Real-Time DMA Monitoring for Smarter Non-Revenue Water Reduction*
Rui Gomes and Mulundu Sichone, Miguel Linares Pydro GmbH

2 – *Verso il Gemello Digitale del Territorio: Integrazione Real-Time di Dati SCADA e Monitoraggio Idrometrico ad Alta Frequenza per la Gestione delle Piene*
Elisabetta Giusti, Consorzio di Bonifica 3 Medio Valdarno

3 – *Detection of Carbapenemase-Encoding Genes in Wastewater Samples by Real-Time PCR*
Katharina Helmke, Jessica Kuru, Ole Huesing and David Drissner, Albstadt-Sigmaringen University and Eurofins Institut Jäger GmbH (Germany)

4 – *Monitoring Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD) and Total Organic Carbon (TOC) for Effective Treatment Optimization*
Robert Menegotto, MANTECH

5 – *Dal trattamento al rubinetto: gemelli digitali che accoppiano modelli di impianto e di rete per la gestione predittiva della qualità dell'acqua*
Giacomo Bellandi, Pieter Vlasschaert and Wim Audenaert, AM-Team – Advanced Modelling for Process Optimisation (Belgium)

6 – *Caratterizzazione dei corpi idrici sotterranei sottesi all'area del Massiccio Campo dei Fiori: strumento decisionale avanzato per la tutela quali-quantitativa della risorsa idrica*
Marco Masetti, Dipartimento di Scienze della Terra "A. Desio" – Università degli Studi di Milano
Luciana Tixi, ALFA S.r.l.

7 – *Smart Water Infrastructure Development for Rajeb, Rwaiha and Abu Al-Zighan Areas in Jordan*
Hisham Al-Hijazin, Senior Civil Engineer, Nimer Al-Lozi Company, Jordan

8 – *L'evoluzione dei contatori idrici*
Pietro Cerami and Luigi Luprano, ACISM, federata ANIMA Confindustria

Thursday 5 November
10:00 - 12:00

Agorà Blue Economy Hall D7

International Cooperation and Partnerships with Mediterranean and Africa
Click here

Blue Economy Clusters and policy priorities: a strategic framework to drive innovation and industrialisation in blue economy in the Mediterranean

Organized by: Ecomondo STC & Cluster BIG Blue Italian Growth, Union for the Mediterranean

Language: English

This strategic session will frame the role of Mediterranean Blue Economy clusters within the broader Euro-Mediterranean policy and cooperation landscape, emphasising their function as industrial enablers and innovation multipliers supporting regional, national and European priorities. Particular attention will be given to their contribution to sustainable blue economy, climate resilience, pollution reduction, and the protection and restoration of marine and coastal ecosystems, highlighting how cluster-based ecosystems translate policy frameworks into scalable industrial and technological outcomes.
The discussion will also explore synergies with major EU and regional initiatives — including the Ocean Pact, the Pact for the Mediterranean, and Mission "Restore our Ocean and Waters" — positioning clusters as operational platforms that strengthen innovation capacity, cross-border value chains, and investment-ready solutions across the Mediterranean.
Institutional perspectives will feature contributions from key actors such as DG Mare and WestMED Initiative, while a multi-stakeholder roundtable with representatives from Mediterranean clusters and industry will examine how strategic frameworks can be converted into industrialisable projects, integrated value chains, and concrete deployment pathways.

Session Chair

Paolo Guglia, Cluster BIG

Program

10.00 *Opening speech*
Paolo Guglia, Cluster BIG

10.10 *EU Priorities for sustainable blue economy and innovation in the Mediterranean*
Luca Marangoni, DG MARE European Commission (TBC)

10.30 *Strategic vision and regional cooperation*
Alessandra Sensi, UfM

10.50 *Alliances to drive innovation in the Western Mediterranean*
Leonardo Manzari, WestMED Clusters Alliance

11.10 **Roundtable:** ***From strategy to actions: a perspective from Mediterranean blue economy clusters***
Moderator:
Gabriella Gagliardi, Cluster BIG
Laurence Martin, Federazione del Mare
Lorella Ciuti, Forum Oceano
Gregory Yovanof, Strategis
Colin Ruel, Pole Mere Mediterranee (TBC)
Emna Sohlobji, Tunisian Maritime Cluster
Ali Shagrune, Libyan Maritime Cluster

11.50 *Conclusions*
Paolo Guglia, Cluster BIG

Thursday 5 November
10:00 - 13:00

Neri 2 Room South Hall

Policies and Regulatory Frameworks
Click here

End-of-Waste: Permitting and Controls

Organized by: Comitato Tecnico Scientifico di Ecomondo

Language: Italian

The "End-of-Waste" framework is a key tool in the circular economy, as it significantly contributes to reducing the use of natural resources, decreasing landfill disposal, and limiting overall environmental impacts.
End-of-Waste permitting, however, presents significant complexities, especially in cases where there are no harmonized criteria defined at the European or national level and it is necessary to proceed with case-by-case assessments. In such situations, the competent authority is required to define specific conditions based on a thorough analysis of the production process, the characteristics of the incoming waste, the treatment technologies adopted, and the quality of the output material. This assessment must ensure that the resulting material is suitable for its intended use, compliant with technical and regulatory standards, and free from negative impacts on the environment and human health. In this context, a balance between regulatory rigor and operational flexibility emerges, allowing technological innovation to be supported without compromising environmental protection levels.
The day aims to begin with a state-of-the-art analysis and then address, with key industry players, the issues currently hindering the full development of circularity.

Session Chair

Valeria Frittelloni, Scientific Advisor to the ARERA Council

Program

Introduction by the Chair

Speakers:

Laura D'Aprile, Ministry of the Environment and Energy Security
Andrea M. Lanz, Head of the National Centre for Waste and Circular Economy, ISPRA
Federica Scaini, Environment Department Italian National Institute of Health
Paolo Garofoli, Director of the Department for Environment, Landscape and Urban Quality, Apulia Region
Donato Ramunno, Director General of ARPA Basilicata and Vice-President of SNPA
Anna Lutman, Director General of ARPA Friuli Venezia Giulia (TBC)

Conclusions

Thursday 5 November
10:30 - 13:00

Ravezzi 1 Room South Hall

Resource Efficiency and Circular Economy
Click here

Measuring circularity from a systemic perspective across the entire value chain

Organized by: Comitato Tecnico Scientifico di Ecomondo & Scuola Superiore Sant'Anna di Pisa, ENEA, UN Global Compact Network Italia

Language: Italian

The event will focus on the measurement of the circular economy, a topic that is gaining increasing relevance at multiple levels: system, sector, supply chain, company, and product. Following the success of the previous four editions in 2022, 2023, 2024, and 2025, this year's workshop will once again examine the evolution of circularity measurement, taking into account the development of national and international legislative standards, as well as the spread of new practices across different sectors.
In particular, this year the focus will be on methods and processes to ensure, for the market and stakeholders, the origin, quality, and environmental impact of materials and resources derived from recycling and reuse supply chains. This will be addressed through innovative tools based on third-party certification systems and scientifically robust calculation methodologies (such as LCA-based approaches).
The workshop aims to provide an overview of the different national and international approaches and to explore the usefulness of measurement methods together with companies and associations that have adopted these approaches and can contribute to improving the available tools.

Session Chairs

Marco Frey, Sant'Anna School of Advanced Studies
Claudia Brunori, ENEA – Department of Sustainability, Circularity and Climate Change Adaptation of Production and Territorial Systems

Program

10.30 Introduction
Marco Frey, Sant'Anna School of Advanced Studies

Session: ***The evolution of international initiatives on circular economy measurement***

10.45 *Technical standards for measuring circularity within national and international standardisation initiatives for the circular economy*
Laura Cutaia, ENEA – UNI/CT 057 Chair

11.00 *Measuring circularity and accelerating its implementation: challenges and opportunities*
Serenella Sala, JRC European Commission

11.15 *Traceability and certification in support of circularity*
Fabio Iraldo, Sant'Anna School of Advanced Studies

11.30 *Circular Life Cycle Sustainability Assessment: combining life cycle sustainability assessment and the concept of circularity*
Marzia Traverso, Institute of Sustainability in Civil Engineering, RWTH Aachen University

11.45 *Circularity in the fashion supply chain*
Enrico Cancila, ART-ER

12.00 *The REMADE label for recycled content in products*
Simona Faccioli, Director, REMADE Foundation

12.10 *The Itelyum experience*
Marco Codognola, Itelyum

12.20 *The COACH tool for measuring circularity in the chemical sector*
Enrico Brena, Federchimica

12.30 Discussion and closing remarks by the Session Chairs

Thursday 5 November
10:30 - 12:30

Diotallevi 2 Room South Hall

Resource Efficiency and Circular Economy
Click here

EU-Africa Strategic Corridors to a mutually beneficial cooperation for critical raw materials

Organized by: University of Turin, JRC, Ministry of Environment and Energy Security and Ministry of Enterprises and Made in Italy

Language: English

The global race is on to secure the raw materials necessary for the green & digital transition. On the one side, minerals-user countries are multiplying their efforts to promote secure and robust critical minerals supply chains. On the other side, local governments find themselves at the centre of this global rush on minerals. They must assess a growing number of requests for mineral exploration and mining projects, weighing the promise of economic development and job creation against risks to ecosystems and local communities. The EU-Africa Strategic Corridors in the context of the Global Gateway framework and more recently the Lobito Corridor , the latter strongly supported by the Italian government in the context of Piano Mattei , provide good examples of how to steer investment with mutal benefits. This session, organized by the ECOMONDO Scientific Committee, the University of Torino, the European Commission JRC, MASE and MIMIT brings together key players, including government representatives, the geological surveys, research bodies and industry to discuss what is mutually beneficial, for whom, why and how. Equally, the session aims to discuss the role of knowledge (and of knowledge-platforms like the EC's Raw Materials Information System) to steer strategic thinking and factual decision-making.

Session Chairs

Gian Andrea Blengini, University of Turin
Serenella Sala, European Commission Joint Research Centre
Representative of Ministry of Environment and Energy Security
Alberto Castronovo, Ministry of Enterprises and Made in Italy (TBC)

Program

10.30 Introduction by the Chairs

10.40 *The Global Gateway: a mutually beneficial EU-Africa cooperation on CRMs*
Isabelle Magne and Elisabetta Sartorel, DG-INTPA

10.55 *Major developments from Piano Mattei and Strategic projects under CRM Act*
TBC, Ministry of Environment and Energy Security

11.10 *CRM projects supported by the National Fund for Made in Italy*
Alberto Castronovo, MIMIT

11.25 *Glencore investments and partnerships in Africa*
Vincenzo Conforti, Glencore

11.35 *Innovation in CRM technologies and products*
Ivano Menso, Minerali Industriali

11.45 *Italy-Africa cooperation in CRM projects in support of aerospace and defense*
Umberto Tavolato, Fondazione MedOR and representative of Leonardo SpA (TBC)

11.55 *Strengthening the knowledge-base on EU-Africa cooperation for CRM data with the Raw Materials Information System (RMIS)*
Simone Manfredi, JRC

12.05 *EU-Africa-Italy cooperation for Geospatial data through the OECD Geospatial Lab*
Claudia Baranzelli, OECD

12.15 *EU Africa Cooperation Project PanAfGeo+ (2025–2029) (programme aimed at strengthening geoscientific capacities across Africa)*
Daniele Spizzichino or Fiorenzo Fumanti, ISPRA (Italian Institute for Environmental Protection and Research)

Discussion and closure by the Chairs

Thursday 5 November
10:30 - 12:30

Noce Room Hall A6

Policies and Regulatory Frameworks
Click here

Traceability in Cross-Border Waste Shipments – DIWASS

Organized by: Ecomondo STC & ASSOAMBIENTE

Language: Italian

Regulation (EU) 1157/2024 on waste shipments (Waste Shipment Regulation) has replaced the previous Regulation (EC) No. 1013/2006, in force since 2006, introducing a deeply renewed regulatory and operational framework. The new provisions will apply starting from 21 May 2026. In particular, Article 27 of the new regulation introduces innovative methods for the exchange of documents and information related to waste shipments: a centralised digital system for information exchange, DIWASS – Digital Waste Shipment System.

Session Chair

Elisabetta Perrotta, ASSOAMBIENTE (National Association of Environmental Services Companies and Circular Economy)

Program

Introduction
Benedetta Brachetti, Environment Consultant

Speakers:
Umberto Parravicini, Lombardia Region (TBC)
Pierfranco Ariano, Torino Municipality (TBC)
Paolo Campanella, FEAD
Diego Siragna, Settentrionale Trasporti

Q&A

Conclusions
Elisabetta Perrotta, ASSOAMBIENTE

Thursday 5 November
10:30 - 12:30

Agorà Ariminum - Circular Economy Area Hall D1

Sustainable and Circular Textiles
Click here

Ecodesign: challenges, tools and opportunities for textile sector enterprises

Organized by: Comitato Tecnico Scientifico di Ecomondo & JRC-Commissione Europea, ENEA

Language: Italian

In collaboration with EconomiaCircolare.com

The textile sector is undergoing crucial transformations, including those driven by the development of the Regulation on Ecodesign for Sustainable Products (ESPR). The program highlights how regulatory frameworks are evolving to impose higher standards in terms of durability, reparability, and circularity.
Innovation is a key factor for competitiveness, with leading companies pioneering the development of high-performance bio-based fibers and advanced materials. The event aims to provide an update on the current context in terms of challenges to be addressed, tools to be implemented, and institutional initiatives at both European and national levels. In particular, complex technical challenges will be explored, including material flow analysis (MFA) of textile streams, the promotion of reuse, and the latest research on reducing microfibre release. In addition, space will be dedicated to replicable best practices and initiatives by companies and associations operating in the textile sector, highlighting how the synergy between circular design and product and process innovation is laying the foundations for a resilient and low-carbon future for the European textile industry, and how innovation in this sector must follow safety and sustainability principles from the design stage of chemicals and materials.

Session Chairs

Serenella Sala, JRC Ispra - Head of Unit Sustainable Supply Chains and Bioeconomy
Claudia Brunori, ENEA

Program

10.30 **Session: Ecodesign: *Context and initiatives at Italian and European level***
Moderator: Raffaele Lupoli, EconomiaCircolare.com

10.30 *Context overview and support tools*
Daniela Claps, ENEA

10.45 *Preparatory studies for the European Regulation on Ecodesign for Sustainable Products (ESPR) and on textile flows in Europe – MFA analysis*
Serenella Sala, Head of Unit Sustainable Supply Chains and Bioeconomy - JRC Ispra

11.00 *The Italian Ministry for Enterprises and Made in Italy commitment to supporting businesses*
Roberto Tatò, Ministry of Enterprises and Made in Italy

11.15 *The Italian Ministry for Environment and Energy Security initiatives for Ecodesign*
Pietro Agrello, Ministry of Environment and Energy Security

11.30 **Session: *Best practices and experiences in Ecodesign in the textile sector***
Moderator: Claudia Brunori, ENEA

Distretto Prato
Alfio Fontana, Corporate Partnership & CSR Manager, Humana
Luca Campadello, DG, Erion Textiles
Natalia Gil Lopez, Resp. Politiche Ambientali, CNA
Graziano Meloni, CEO, MANTEIA
ICESP
EconomiaCircolare.com

12.30 *Closure*

Thursday 5 November
14:00 - 16:00

Agorà Augusto - Bioeconomy Area Hall D1

Resource Efficiency and Circular Economy
Click here

Tools to Accelerate the Development of the Circular Economy in the Construction and Infrastructure Sector

Organized by: Ecomondo STC & ANPAR / ASSOAMBIENTE

Language: Italian

The construction and infrastructure sector accounts for the largest share of waste generated in Europe and Italy, nearly 50% of the total produced each year. This waste is mostly non-hazardous and, thanks to investments in research and development by companies in the sector, it is recycled into products that meet the technical and environmental standards set by Europe and Italy. However, this significant supply of ecological materials, which serve as alternatives to those derived from extractive activities, does not always find sufficient demand in the market from public or private contracting authorities. This results in serious storage issues for recovered aggregates, with the consequent risk of market disruption, including limitations in waste acceptance at treatment facilities due to the exhaustion of available space.
This conference brings together key stakeholders in the sector—waste producers, recyclers, public and private contracting authorities, product and process certification bodies, and the Ministry of Environment and Energy Security, Directorate-General for Product and Consumption Sustainability.

Session Chair

Paolo Barberi, ANPAR (National Association of Recycled Aggregates Producers)

Program

Introduction
Stefano Maglia, TuttoAmbiente e Ekofuture
Giorgio Bressi, ANPAR
Fabio Marlia, Liugong italia
Giorgio Manara, MA-ESTRO

Roundtable
Paolo Grigioni, Ministry of Environment and Energy Security (TBC)
Andrea Lanz, ISPRA (TBC)
Valentina Mingo, ANCE (TBC)
Nicola D'Alessandro, RFI (TBC)
Renzo Maggiolo, UNIRIGOM
Carlo Colombino, ANPAR
Fulvio Soccodato, ANAS (TBC)
Massimiliano Pescosolido, ATECAP
Guido Castelli, Government Special Commissioner for Recovery and Reconstruction following the 2016 Earthquake (TBC)

Closure
Carlo Colombino, ANPAR

Thursday 5 November
14:00 - 16:00

Circular & Healthy City District - Workshop Area Hall D3

Circular and Healthy Cities
Click here

Healthy City Making in Action

Organized by: Comitato Tecnico Scientifico di Ecomondo & CNR, UNESCO Chair on Urban Health, ANCI

Language: Italian

Cities host the majority of the world's population and represent both an opportunity and a challenge for public health. Rapid urbanisation, environmental pressures, climate change and social inequalities are redefining the determinants of health in urban environments. Addressing these complex challenges requires innovative, data-driven and participatory approaches.
This event explores how urban regeneration and citizen science can support healthier and more resilient cities. By integrating advanced health datasets, real-time urban monitoring and community participation, cities can better understand health risks, simulate policy impacts and design more effective interventions. Bringing together researchers, Policy maker, urban planners and citizens, the event aims to foster dialogue on how digital innovation and participatory science can strengthen urban health governance and promote more inclusive, sustainable and healthy urban futures.

Session Chairs

Chiara Spinato, UNESCO Chair on Urban Health, Sapienza University of Rome
Giordana Castelli, Coordinator, Interdepartmental Centre for Urban Sciences (CISC), National Research Council (CNR)

Program

14.00 Introduction by the Session Chairs

14.10 *Opening address: Healthier and more resilient cities: Urban nature plans and the One Health approach*
Fausto Manes, Emeritus Professor of Ecology, Sapienza University of Rome

14.30 *Science for Cities*
Filomena Pietrapertosa, Senior Researcher at IMAA-Institute of Methodologies for Environmental Analysis, CNR

14.45 *Parks for Health*
Speaker, Studio Cucinella (TBC)

15.00 *A case study: the city of Taranto*
Vito Bruno, Director General Arpa Puglia
Piero Bitetti, Mayor of Taranto (TBC)

15.20 *The Tree Cities of the World Project*
Marco Marchetti and Silvia Piconcelli, Fondazione Alberitalia

15.40 *Case study*

16.00 Discussion and closing remarks by the Session Chairs

Thursday 5 November
14:00 - 18:00

Agorà Luciano Morselli - Sites & Soil Restoration Area Hall C1

Sites and Soil Maintenance and Restoration
Click here

New strategies for the remediation of contaminated sites: applied research between technological innovation and sustainability

Organized by: Comitato Tecnico Scientifico di Ecomondo & Sapienza Università di Roma, UNEM, ISPRA, Commissione Europea

Language: Italian

The conference will be specifically dedicated to remediation technologies and strategies, with case studies highlighting their actual scope and limitations. All contributions will be selected through the call for papers.

Session Chairs

Marco Petrangeli Paini, Sapienza Università di Roma
Donatella Giacopetti, UNEM
Fabio Pascarella, ISPRA

Program

14.00 Welcome and introduction by the Session Chairs

14.10 *New trends for sustainable removal of emerging pollutants: giving water a safe second life (from EU project Nymphe)*
Abraham Esteve Núñez, METfilter SL, IMDEA Water and University of Alcala, Spain

14.20 *La bonifica di acquiferi contaminati attraverso il biorisanamento: la sperimentazione Eni Rewind nell'ambito del progetto europeo NYMPHE (from EU project Nymphe)*
Mauro Barompriori, EniRewind, Italy

14.30 *From Pump-and-Treat to In Situ Metal(loid) Immobilisation: Field Evidence for Sustainable Remediation of Contaminated Sites (from EU project GREENER)*
Alfredo Pérez-de-Mora1, Herwig de Wilde2, Dirk Paulus3, Michael Dumas3, Fabio De Palma4 - 1Tauw GmbH, Munich, Germany; 2TAUW België nv, Lokeren, Belgium; 3TAUW België nv, Leuven, Belgium; 4TAUW Italia, Milano, Italy

14.40 *Speech TBD*

14.50 *Hydrodynamic Cavitation–Advanced Oxidation as a Destruction-Oriented Approach to Persistent Organic Contaminants and PFAS: Potential and Limits*
Tommaso A. Dragani, Matteo Dassatti, Valentina Innocenzi, Marina Prisciandaro - Aspidia srl, Milan. Department of Industrial and Information Engineering and Economics, University of L'Aquila, Monteluco di Roio, L'Aquila

15.05 *Sentinel Bee: experimentation of an integrated bio-technological network for environmental monitoring through bees as bioindicators and smart hives*
Jurji Filieri, Università degli Studi della Tuscia

15.20 *Contaminant mass flux at sites contaminated by cVOCs and PFAS for the construction of accurate conceptual models and the sizing of permeable reactive barriers*
Janis Patiño, REGENESIS

15.35 *Development of biochar–biopolymer composites for injectable permeable reactive barriers: from colloidal stabilisation to aquifer transport*
Naima Blal, Damiano Feriaud, Sara Cerra, Ilaria Fratoddi, Paolo Viotti, Marco Petrangeli Papini - Sapienza Università di Roma

15.50 *Compound-Specific Isotope Analysis (CSIA): principles, applications and prospects for the characterisation and remediation of contaminated sites*
Diego Tacchini (IT2E), Luca Alberti (Politecnico di Milano) and Marchesi Massimo (Sapienza-Università di Roma)

16.05 *Remediation study through reductive dehalogenation and biological mineralisation*
Fulvio Ferretti - Edison Regea, Marialuisa Cremonesi, Alessandro Fusari, Riccardo Mottalini - Jacobs

16.20 *From difficult cases to innovative solutions: rethinking the remediation of contaminated sites*
Federico Santoro, Eni Rewind

16.35 *Recovery of volumes through Landfill Mining intervention*
Giovanni Perillo, Università Parthenope, Napoli

16.50 *Permeable Reactive Barrier Applications of a Combined ISCR and ERD Technology for the treatment of an Aerobic Aquifer Impacted with Trichloroethylene in the Lazio Region, Italy*
Alberto Leombruni, Evonik Operations GmbH

17.05 *Beyond Pump & Treat: Aggressive in situ Remediation of a Historical Chlorinated Solvent Source Zone Using Groundwater Circulation Wells (GCWs) at Bussi sul Tirino, Italy*
Paolo Ciampi, Bruna Matturro, Simona Rossetti, Marco Petrangeli Papini – Trireme Srl, Ernst Bartsch, Eduard Alesi, Damiano Feriaud – IEG Technology GmbH, Andrea Del Frate, Giuseppe Giuva – Edison Regea

17.20 *The return of biodiversity as evidence of remediation effectiveness: the Edison Regea case at Dogaletto*
Daniele Valiante, Cristina Ruggeri. Biodiversity Strategist, 3Bee S.r.l. (XNatura), Trezzo sull'Adda (MI), Edison ReGeA S.r.l.

17.35 *CRITEST INNOVATION LAB (Research, Innovation, Technology Transfer and Sustainable Development Centre for the Ecological Transition): the full-scale infrastructure bringing applied research into the remediation, material recovery and urban regeneration industry*
Francesco Colangelo, Università Parthenope, Napoli

17.50 *PFAS risk management in landfills through innovative bottom barriers. Challenges and solutions with geosynthetics*
Alberto Simini, HUESKER Srl

SELECTED E-POSTERS

1. Remediation of the Lo Uttaro Vast Area: where do we stand? Adriano Pistilli, Technical Manager for Waste Management - Independent Professional

2. Remediation of the Maruzzella Vast Area: where do we stand? Adriano Pistilli, Technical Manager for Waste Management - Independent Professional

3. Innovative technologies and business collaboration opportunities for integrated remediation of oily sludge and petroleum contaminated soils in Algeria. Mr. AIT IDIR Abdelhalim / Algerian Petroleum Institute. 1st November Avenue, 35000 Boumerdes – Algeria

4. Modularisation: Waste-to-Energy Revolution. Benoit Englebert

5. 3D-Printed Bio-Based Supports for Microbial Immobilization and Bioremediation. Anna Grazia Scalone (ENEA) - Patrizia Paganin (ENEA)

6. Sustainability of PFAS remediation: comparison of the environmental impact of enhanced attenuation using colloidal activated carbon and Pump & Treat. Paola Goria (REGENESIS), Marcello Carboni (REGENESIS)

7. Advanced monitoring of complex contaminants in groundwater: TOC–AOX integration for real-time monitoring in remediation processes. Marco Zocchi, Sales Development Manager Hach

8. Remediation of contaminated sites in port areas: sustainable strategies in scenarios of sea-level rise and extreme meteo-marine events. Alessandra Fabri, Ivano Iavarone, Department of Environment and Health, Istituto Superiore di Sanità

9. Redeveloping Complex Environments: Challenges and Environmental Remediation Strategies. Daniele Vezzoli, Claudio Carnabuci of HPC Italia S.r.l., Via Francesco Ferrucci 17/A, Milano

10. Remediation of the S.I.N. Cogoleto-Stoppani: Challenges and Environmental Remediation Strategies. Cecilia Brescianini, Manuela Pertici, Marco Canepa, Vittorio Asplanato, Beatrice Avignolo - Extraordinary Commissioner pursuant to D.P.C.M. 13 May 2025

11. High-Resolution Characterisation of Contaminated Sites: Applications and Results of MIP-OMS Technology. Elena Di Carlo (Mares S.r.l.); Dario Leandri (Mares S.r.l.); Claudio Carusi (Mares S.r.l.)

12. Digitalisation of the inertisation process: the Inerteco case. Stefano Gelain/Andrea Arrigoni

13. New Sustainable Strategies for the Remediation of Polluted Sites in the Oil Industry in Algeria Economic Audit Study in Sonatrach. Amina tounssi, lecturer professor class A at the University of Algiers 3, Faculty of Economic and Commercial Sciences, Department of Financial and Accounting Sciences.

14. Integrated hydrogeological and hydrogeochemical approach for distinguishing between point-source contamination and natural background at a landfill site: the case of Loc. La Silva, Cassano allo Ionio (Southern Italy). Ing. Vincenzo De Matteis, Dott. Giulio Riga, Ing. Francesco Petrone

15. High-Resolution Environmental Characterisation in the Context of Environmental Emergency Response Interventions: Case Study Pontedera – Hydrocarbon Spill. F. Allegrini – V. Ercolani – S. Messina – M. Pianu – V. Raffaele - Eni Industrial Evolution S.p.A.; P. Angelini - M. De Caro – A. Francioli - M. Valagussa – HPC Italia S.r.l.; D. Casasanta – F. Giarri – D. Passerini – R. Riccio – Biochemie Lab S.r.l.; L. Dubbiosi – M. Uliano – Tecnoin S.r.l.4

16. National Interest Remediation Site of the Former Asbestos Mine of Balangero and Corio (L.426/98). Cristian Bosonin / Riccoboni Holding

Thursday 5 November
14:00 - 17:30

Agorà Malatesta - Enviromental Monitoring Area Hall B8

Water Cycle and Blue Economy
Click here

Water Efficiency First: Transforming Industry, Agriculture and Circular Water Use

Organized by: Comitato Tecnico Scientifico di Ecomondo & UTILITALIA, Università Politecnica delle Marche, Alma Mater Studiorum Università di Bologna

Language: Italian

This workshop will focus on advancing a water-smart economy, placing water efficiency at the core of policy and investment decisions. The "Water Efficiency First" principle will be explored as a guiding approach to optimize resource use across sectors, reducing pressure on water systems while supporting economic growth. The session will highlight the potential of water reuse, both within agriculture and across industrial and urban applications, as a key lever for resilience. Particular attention will be given to the role of industry under the Industrial Emissions Directive (IED) and the development of pilot clusters for water efficiency. A broad range of water-intensive sectors will be addressed, including traditional industries as well as emerging strategic sectors such as data centres, hydrogen, batteries, and microchips. Technological solutions such as dry cooling systems and sustainable desalination will be discussed as part of a diversified water supply portfolio. Finally, the workshop will examine the need for large-scale infrastructure for water supply in agriculture, particularly at irrigation district level, to ensure long-term sustainability and competitiveness in a context of increasing water scarcity.

Session Chairs

Attilio Toscano, Ecomondo STC and University of Bologna
Francesco Fatone, Ecomondo STC and Marche Polytechnic University
Susanna Murtas, Italian National Institute of Health

Program

14.00 Introduction by the Chairs

Opening High-Level Session
The opening high-level session will provide the European policy and strategic framework for implementing the Water Efficiency First principle across industry, agriculture and urban water services

Policy Update on Water Reuse: Advancing the European Agenda through the Common Implementation Strategy (CIS)
Delia Sanchez Tranco, Policy Officer – Water Reuse European Commission, DG Environment (TBC)

Modern Irrigation Infrastructure for Water Resilience and Agricultural Competitiveness
Massimo Gargano, Director General, ANBI – National Association of Land Reclamation and Irrigation

The Path Taken During Three Years of Extraordinary Administration and the Challenges Ahead for Water Reuse
Fabio Fatuzzo, Extraordinary Commissioner for Wastewater Treatment and Water Reuse

Water Utilities at the Core of the Water Efficiency First Transition
Annamaria Barrile, General Director UTILITALIA

The European Perspective on Water Reuse from the standpoint of Integrated Water Service Providers
Francesco Mascolo, Vicepresident Acqua Pubblica Europea

Speeches selected from the Call for Papers

15.00 **Session 1 –** ***Water Efficiency in Agriculture***

Investire in efficienza idrica e modernizzazione dei sistemi irrigui collettivi: risparmi, co-benefici ambientali e riuso circolare dell'acqua, oltre il principio di efficienza idrica
Marianna Ferrigno et al., CREA PB

Oltre la conformità: trattamento quaternario, efficienza energetica e riuso agricolo presso l'impianto di depurazione di Sant'Antonino Ticino
Annalisa Berni, Alfa S.r.l.

Digital Twin della rete irrigua e Water Efficiency First: il caso del Consorzio di Bonifica Litorale Nord nel Lazio
Paolo Ridella and Luca Salvucci, Almaviva

An Integrated Master Plan for Agricultural Water Reuse at Irrigation-Basin Scale: A Multi-Barrier Risk Management Approach
Pietro Drei and Attilio Toscano, Alma Mater Studiorum - University of Bologna

15.40 **Session 2 –** ***Water Efficiency in Industry***

Industrial Reuse as a Water Resilience Strategy in Italian Installations under the Industrial Emissions Directive (IED)
Geneve Farabegoli et al., ISPRA

Strategie di implementazione della ridondanza idrica nel mondo industriale: acqua trattata da scarto a risorsa
Andrea Capriati, WSP Italia S.r.l.

Uso e recupero virtuoso delle acque: soluzioni integrate per l'industria
Alessandro Semeria, Edison Next

Water Circularity in Construction Sites: From Operational Practices to a Scalable Water-Smart Approach
Daniela Quintero Castro and Marta Belfiore, MAIRE

16.20 **Session 3 – *Water Efficiency in Urban Water Systems***

Performance di impianti di depurazione che scaricano in canali ad uso irriguo: analisi dei rischi e processi di attenuazione naturale dell'inquinamento residuo
Giulia Dosso et al., Università di Ferrara; Hera S.p.A.

Benchmarking the Performance and Costs of Constructed Wetlands for Sustainable Wastewater Management
Marta Domini et al., University of Brescia

Il progetto Water Credit applicato al riutilizzo delle acque reflue in Gruppo CAP: l'esperienza del primo anno di gestione
Giovanni Vargiu, Gruppo CAP

Beyond Conventional Energy Recovery: A Novel Zero-Mixing Platform for High-TDS Industrial RO Enabling Sustainable Water Reuse, Intelligent Process Control, and Zero Liquid Discharge Systems Worldwide
Amogh Sharma, DANFOSS

17.00 Discussion and closure by the Chairs

SELECTED E-POSTERS

1 – *Integrated Electrochemical Treatment for Industrial Water Circularity: Full-Scale Applications Supporting Water Efficiency and Resource Recovery*
Isidoro Giorgio Lesci, IGL Innovation Foundry S.r.l.

2 – *Confronto tra sistemi di coltivazione in suolo e aeroponica: effetti su elementi minerali, composti antiossidanti e attività antiossidante totale in porzioni eduli di piante di interesse agrario*
Lucia Giorgetti, Eliana Lanfranca Tassi, Vincenzo Longo, Massimiliano Leoncini, Lorenza Bellani, CNR IBBA; CNR IRET; Azienda Agricola Biologica Podere Callaiola

3 – *Modeling Gas-Liquid Separation in Hydrocyclones: Advantages of GPU-Accelerated Lagrangian Methods*
Manuel Berger, Elisa Leusmann, Thomas Senfter, Martin Pillei

4 – *Closing the Urban Water Cycle: A Governance-Driven Water Reuse Model Enabling Local Prosperity in Cascais*
Ana Raimundo, Paulo Leal, Vera Melo, Joana Pires and Sandra Rebelo, Cascais Ambiente, Portugal

5 – *La Puglia tra resilienza idrica e accelerazione digitale*
Cataldo Colamartino

6 – *Sviluppi Normativi nel Metering Idrico*
Francesco Albasser, Osvaldo Paleari

7 – *From Invasive Blue Crab Biomass to Chitosan-Based Bioplastics: A Circular Approach Supporting Mediterranean Water Resilience*
Chadli Bendjedid, Department of Biology, Faculty of Natural and Life Sciences, El-Tarf University

8 – *A new PVDF ultrafiltration hollow fiber with durable performances for MBR and tertiary filtration*
Olivier Lorain, Jean Michel Espenan, Isabelle Duchemin

9 – *Valutazione delle prestazioni di un reattore biologico a biofilm rotante per la minimizzazione dei fanghi nel trattamento di reflui da tintoria tessile*
Roberto Renda, Alberta Di Cave, Arianna Cattaneo, Matteo Salina and Maurizio Bettiga, Italbiotec S.r.l. SB – Consorzio Italbiotec SB (Italy)

10 – *Water efficiency nel settore tessile-industriale: il modello di recupero idrico di servizi italia*
Luca Montermini

11 – *Dalla depurazione al Water Efficiency First: recupero di acqua e materie prime nei processi di tintura tessile*
Ali Toosi and Francesco Capoti, IRIDE Acque

12 – *AGROBOX: Innovative Membrane System – The Sustainable Solution for Washing Sprayers and Tractors*
Michele Guella, MeTe S.r.l. – Membrane Technology

13 – *Efficienza idrica e ottimizzazione basata su modelli dell'ossidazione avanzata (Peroxone e UV/H_2O_2) per acqua potabile da ricarica dunale*
Jessica Ianes, Roberta Muoio, Giacomo Bellandi and Wim Audenaert, AM-Team – Advanced Modelling for Process Optimisation, Ghent, Belgium

14 – *Efficienza che muove l'acqua: motori sommersi a magneti permanenti per sistemi idrici sostenibili*
Marco Volpato and Matteo Ettorre, Franklin Electric

15 – *Progettazione model-based per acque reflue industriali: ridurre reagenti e fanghi con virtual piloting e CFD al sito Bayer di Anversa*
Roberta Muoio, Giacomo Bellandi, Wim Audenaert and Bart Peeters, AM-Team (Belgium) – Bayer Agriculture BV (Belgium)

16 – *Analisi delle performance di processo di un impianto pilota a tele filtranti a pori variabili*
Andrea Ponzano, Lara Barbesino, Milena Montanari, Simona Olivi, Francesco Avolio, Sulzer Italia S.r.l. – Hera S.p.A.

17 – *Riqualificazione Esg degli Ippodromi*
Specchio Gian Nicola, AR2 Investment be Change Srò

Thursday 5 November
14:00 - 15:30

Textile District - Workshop Area Hall D2

Sustainable and Circular Textiles
Click here

Design and implementation of the textile EPR system in Italy: a dialogue between institutions and value chain stakeholders

Organized by: Ecomondo & Utilitalia, Retessile

Language: Italian

With the publication of Directive (EU) 2025/1892, Member States finally have a regulatory framework of reference for designing and implementing, at national level by 17 April 2028, extended producer responsibility for textiles. The ministerial regulation establishing textile EPR in Italy as well, after several institutional steps, is in the home stretch. The workshop will provide, in a first (institutional) session, the reference framework with respect to the regulatory context. Two round tables will follow: the first aimed at stimulating an open discussion between institutions and Stakeholder along the supply chain on the design and challenges of implementing textile EPR, while the second will explore the operational and organisational implications for the entire supply chain, also in light of the imminent (May 2027) European restrictions on the export of unsorted textile fractions. In particular, some industrial strategies needed to optimise the management of volumes and prevent system saturation will be presented, analysing possible synergies between major commercial players, collective systems and social cooperation networks.

Session Chair

Bernardo Piccioli Fioroni, CTS Ecomondo - Utilitalia

Program

Institutional session - The national regulation establishing the extended producer responsibility regime for the textile products supply chain
Laura D'Aprile, Head of the Department for Sustainable Development, Ministry of Environment and Energy Security (TBC)

Round Table - Design and implementation of textile EPR: discussion among supply chain Stakeholder
Francesco Iacotucci, ANCI expert
Luca Campedello, General Director ERION Textiles
Lorenzo Perra, Vice President Utilitalia
Giuseppe Finocchiaro, RETESSILE

Round Table - The transformation of the supply chain between industrial and organisational challenges
Mauro Chezzi, Deputy Director Confindustria Moda
Alessandro Canovai, Director of environmental business unit, Plures
Grazia Cerini, CentroCot
Alberto Pizzocchero, RETESSILE SERVIZI

Discussion and closure by the Chairs

Thursday 5 November
14:00 - 15:30

Ravezzi 2 South Hall

Policies and Regulatory Frameworks
Click here

Making public procurement work for the circular economy

Organized by: FEAD

Language: English

Public procurement is a powerful but underused lever for the circular economy: EU public authorities spend trillions of euros a year on goods and services, yet green criteria remain rare and competition in the waste management market has diminished over the past decade, limiting the investment capacity of private companies. These problems can be addressed through a) a pull for European recycled materials, and b) a guarantee of fair competition in the waste management market. With the Commission's new EU Public Procurement Regulation published in September 2026, this session brings together policymakers and practitioners to discuss what the reform means for competition, circularity and fair play in the waste and resource management sector.

Session Chair

Paolo Campanella, Secretary General, FEAD

Program

14.00 *Welcome*
Herwart Wilms, FEAD President

14.05 *Presentation on the new EU Public Procurement Regulation*
Representative DG GROW (TBC)

14.20 **Panel Discussion:** ***A new public procurement framework: competition and circularity***

- Representative from DG GROW (TBC)
- Representative from a public administration / contracting authority (TBC)
- Procurement law / competition specialist (TBC)
- FEAD Representative (TBC)

15.05 Q&A

15.25 *Closing remarks*

Thursday 5 November
14:30 - 16:30

Ravezzi 1 Room South Hall

Resource Efficiency and Circular Economy
Click here

Strategic planning and measurement in corporate decarbonisation pathways through innovative tools

Organized by: Comitato Tecnico Scientifico di Ecomondo & Scuola Superiore Sant'Anna di Pisa, ENEA, UN Global Compact Network Italia

Language: Italian

The ability to define and implement decarbonisation strategies and plans has become crucial to achieving net-zero targets. Within these pathways, the measurement of the carbon footprint has become increasingly important and has expanded from large corporations to SMEs, especially with the emergence of so-called "Scope 3" emissions, now considered essential to ensure credible corporate commitments to decarbonisation. This new strategic approach has extended across the entire supply chain and, in more advanced cases, the full value chain, in order to ensure that objectives, programs, and actions are supported by robust scientific evidence and methodologies. International initiatives such as the Science Based Targets require detailed emissions measurement, although they can be highly demanding. Among the various measurement tools, the life-cycle approach is emerging as the most robust, as it provides a comprehensive view of emissions, including those generated downstream of production. At the same time, regulations and voluntary standards—such as EU directives and the ISO High Level Structure—require the integration of decarbonisation into corporate strategies. The EU has also introduced stringent rules for communicating carbon neutrality in the market.
Following the previous editions in 2023, 2024, and 2025, this workshop aims to analyse the challenge of measuring CO_2eq emissions in support of defining strategies and improvement plans for decarbonisation.

Session Chairs

Marco Frey, Sant'Anna School of Advanced Studies
Claudia Brunori, ENEA – Department of Sustainability of Production and Territorial Systems

Program

Session: ***The evolution of national and international initiatives on carbon footprint measurement across supply chains and value chains***

14.30 *Introduction to the evolution of mandatory legislation and voluntary standards in corporate decarbonisation processes*
Marco Frey, Sant'Anna School of Advanced Studies

14.40 Speech by JRC, European Commission (TBD)

14.50 *The Global Compact commitment to the twin transition*
Laura Capolongo, UN Global Compact Network Italy

15.00 *Corporate transition and decarbonisation plans*
Fabio Iraldo, Sant'Anna School of Advanced Studies

15.10 *The Italian LCA database to measure the Carbon Footprint of products*
Caterina Rinaldi, ENEA

15.20 *TE3C: A tool to enhance the decarbonisation potential of secondary materials*
Laura Cutaia, ENEA

15.30 **Session: *Corporate experiences in managing and communicating carbon footprint***
Gianluca Gramegna, ERG
Fabiana Marchini, Nestlé Waters
Dilvia Damelas, J4Energy
Elena Gaggion, ICAM
Simone Targetti Ferri, L'Oréal

16.00 Discussion and closing remarks by the Session Chairs

Thursday 5 November
16:00 - 18:00

Diotallevi 2 Room South Hall

International Cooperation and Partnerships with Mediterranean and Africa
Click here

Strategic EU R&I Projects for the Green Transition in the Mediterranean and Africa

Organized by: Ecomondo STC & APRE (Agency for the Promotion of European Research)

Language: English

The workshop focuses on strategic EU funded research and innovation initiatives supporting the green transition in the Mediterranean and Africa. By bringing together European and African institutions, project representatives and key stakeholders, the event provides an overview of current cooperation frameworks and ongoing R&I actions addressing shared sustainability challenges in these regions. The session will showcase concrete experiences from EU funded projects, highlighting how research and innovation activities are contributing to environmental sustainability, resilience and green growth across the Mediterranean and African contexts. Alongside Horizon Europe collaborative projects, the workshop will also highlight the contribution of national public investments supporting European Partnerships, including co-funded actions and joint transnational initiatives, as key enabling instruments for strengthening scientific cooperation and innovation ecosystems between Europe and Africa. Particular attention will be given to practical insights emerging from project implementation, with the aim of fostering a shared understanding among stakeholders involved in EU–Africa cooperation. Relevant examples may include national funding experiences developed through Long-term Europe-Africa Partnership initiatives (LEAPs), as well as actions supported under the Italian National Recovery and Resilience Plan (PNRR), to be further valorised within European projects and cooperation frameworks. These experiences can contribute to strengthening capacity building, technology transfer, green transition and sustainable innovation in strategic sectors connected to the Mediterranean and African dimension. Building on the experience of the 2025 workshop, the current edition maintains continuity in format while refining its focus on cooperation dynamics in the Mediterranean and Africa. By reflecting on lessons learned and emerging priorities, the workshop offers a forward looking perspective on how existing initiatives can inform and strengthen future EU–Africa research and innovation collaboration. The workshop will furthermore provide an opportunity to reflect on possible synergies between European R&I cooperation frameworks and the strategic priorities promoted under the Italian Mattei Plan for Africa, including flagship projects aimed at fostering sustainable development, scientific cooperation, higher education, energy transition, water management and innovation-driven partnerships with African countries. In this context, the event aims to promote a more integrated vision between European programmes, national investments and international cooperation strategies, reinforcing the role of research and innovation as drivers for sustainable growth, resilience and long-term Euro-Mediterranean and Euro-African collaboration.

Session Chair

Serena Borgna, APRE

Program

16.00 *Welcome and Introduction*
Serena Borgna, APRE
Michele Mazzola, Ministry of University and Research

16.10 *Strategic priorities for EU–Africa cooperation in Research and Innovation*
- Overview of the main EU programmes supporting EU–Africa / EU–MED cooperation
- Framing of priorities for the green transition and sustainability in the Mediterranean and Africa
- Synergies between EU programmes and national investments supporting R&I internationalisation
- Opportunities connected to sustainability, resilience and green transition priorities in the Mediterranean and Africa

16.40 *Italian priorities and initiatives for Research and Innovation cooperation with Africa*
- Contributions from key institutions and stakeholders
- The role of institutional support and networks in strengthening EU–IT -Africa R&I cooperation
- Synergies with the Mattei Plan for Africa and flagship cooperation initiatives
- Role of ministries, agencies and stakeholder networks

17.10 *Strategic R&I projects in action: EU – IT- Africa experiences and perspectives*
Showcase of 3–4 funded projects/participations with focus on lessons learned and future opportunities for EU-IT-–Africa cooperation

17.55 *Conclusions and Closing*

Thursday 5 November
16:00 - 17:30

Agrifood, Forestry, Bioenergy and Circular Bioeconomy
Click here

Innovation for the Circular Bioeconomy

Organized by: Comitato Tecnico Scientifico di Ecomondo & JRC-Commissione Europea, ENEA, Economiacircolare.com

Language: Italian

The geopolitical instability of recent years has highlighted the vulnerability of the European industrial system, which relies on imported raw materials for more than 22% of its needs, rising to 47% in the case of Italy. The efficient use of resources and the closing of material cycles, in line with circular economy principles, have therefore become essential to ensure competitiveness and strategic autonomy. In this context, the Circular Bioeconomy offers a major opportunity, particularly through the development and application of biotechnology across multiple sectors, with the aim of enhancing the value of biological resources.

Session Chairs

Serenella Sala, JRC ISPRA
Claudia Brunori, ENEA (Italian National Agency for New Technologies, Energy and Sustainable Economic Development) – Department for Sustainability of Production and Territorial Systems
Raffaele Lupoli, EconomiaCircolare.com

Program

Session: *Setting the Context*
Moderator: Raffaele Lupoli, EconomiaCircolare.com

14.15 *Research and Innovation for the Bioeconomy and the Food System*
Rosalinda Scalia, DG RTD European Commission

14.30 *The Evolution of the Biotech Act II*
Representative of DG GROW European Commission (TBD)

14.45 *The Bioeconomy Knowledge Centre: Understanding the Present and Supporting the Transition of the Bioeconomy's Lead Markets – From Waste to Resource*
Representative of JRC Ispra (TBD)

15.00 *Ministry of Enterprises and Made in Italy Commitment to Supporting Businesses*
Representative of Ministry of Enterprises and Made in Italy (TBD)

15.15 *Approaches and opportunities in Circular Biotechnology*
Barbara Benassi, ENEA

15.30 **Session: *Best Practices in Circular Bioeconomy Innovation across Different Fields of Application***
Moderator: Raffaele Lupoli, EconomiaCircolare.com

Representatives from the following sectors:
Agri-food
Environment and Bioremediation
Textiles
Marine and Water Resources
Cultural Heritage
Health and Well-being

16.30 *Discussion and Closing Remarks by the Session Chairs*

Friday 6 November
10:00 - 13:30

Agorà Malatesta - Enviromental Monitoring Area Hall B8

Circular and Healthy Cities
Click here

Odour emissions: from abatement technologies to new control strategies

Organized by: Comitato Tecnico Scientifico di Ecomondo & ISPRA, Società Chimica Italiana -Divisione CABC Chimica dell'Ambiente e dei Beni Culturali

Language: Italian

The Ecomondo Odor Emissions conference (at its sixteenth edition) is a flagship event for the community of most important industry and academic players. Researchers, Industry, Public administration and Environmental Agencies exchange their different experiences on a topic that is becoming of great relevance in environmental planning. As usual, the workshop will be opened with an update on the work of national and international technical committees on odor regulations.
The following are planned: the interventions of the main public research bodies operating in this sector; the presentation of case studies and best practices by public administrations, control agencies and companies that develop technologies on the topic.

Session Chairs

Gianluigi de Gennaro, University of Bari Aldo Moro
Lucia Muto, ISPRA (Italian Institute for Environmental Protection and Research)
Gaetano Settimo, National Institute of Health

Program

10.00 Introduction
Gianluigi de Gennaro, Università degli Studi di Bari Aldo Moro

10.10 *Odour emissions: the perspective of the Unem sector*
Donatella Giacopetti, Unione Energie per la Mobilità Unem

10.19 *Odor emissions from a crude oil storage facility and bacterial activity: a case study*
Giovanna Gianelli, Raffaella Martini, Manuela Pertici, Sandro Maggiani, Nunzia Melchiorre, Paola Solari, Paola Bisi ARPAL – U.O. Controlli Ambientali, Settore Controlli Ambientali Ponente, ARPAL – Dipartimento Laboratorio Regionale, Settore Biologia Centro-Levante, ARPAL – Dipartimento Laboratorio Regionale, Analisi Fisiche Ambientali

10.28 *Integrated Management of Odour Emissions from Storage Tanks: state of application of Best Available Techniques (BAT) in Italian Refineries*
Nicoletta Lotrecchiano, Maria Cortese, Angelo Pecci, Nicola Zappimbulso, ISPRA ambiente

10.37 *Introduction of the Odour Fugitive Emission Potential (OFEP) parameter for the characterisation of fugitive odour emissions*
Luca Carrera, Marzio Invernizzi, Selena Sironi, Politecnico di Milano

10.46 *Odour emissions in foundries: case study and abatement results*
Damiano Gatto, Giovanna Urbanet, DESOTEC INTERNATIONAL NV, Fonderia Sa Bi S.P.A.

10.55 *Experimentation in the abatement of atmospheric pollutants and olfactory nuisance in the ceramic sector*
Davide Varini, Valeria Vecchi, Arpae Reggio Emilia

11.04 *Coupling Life Cycle Assessment and Dynamic Olfactometric Indicators for the Evaluation of Emission Mitigation Strategies in Intensive Livestock Production*
Alberto Cavallito, Barbara Marchetti, Daniele Aspesi, Samuele Sollini, Dipartimento di Scienze teoriche ed applicate (DISTA), Facoltà di Ingegneria, Università eCampus Novedrate, SOP Srl Società Benefit Varese, Dipartimento di Ingegneria Industriale e Scienze Matematiche (DIISM), Università Politecnica delle Marche

11.13 *Continuous monitoring of channelled odour emissions using IOMS systems: performance evaluation of abatement systems in real-scale applications*
Federico Cangialosi, Magda Brattoli, Antonio Fornaro, Enrico Valtancoli, TECNOLOGIA & AMBIENTE srl Putignano, LABSERVICE ANALYTICA S.r.l. Anzola Emilia

11.22 *GRETA Zero Emission: vent-free odorization monitoring for the control of odor emissions in gas networks*
Francesca Perolari, Gianmarco Peretti, Regas S.p.A. Treviglio, Università degli Studi di Milano

11.31 *Study on the evolution of the chemical fingerprint and olfactometric characterisation of diffuse emissions associated with a biofiltering system from the initial installation phase to steady-state operation*
Giulio De Prosperis, Giancarlo Cecchini, Alessandro Frugis, Corrado Corradi, Daniele Cecili, Stefano Ricci ACEA Infrastructure S.p.A., ACEA Ambiente S.p.A.

11.40 *New tools for the assessment of olfactory impact: the contribution of microscale modelling*
Pietro Citterio, Francesca Tagliaferri, Marzio Invernizzi, Selena Sironi, Politecnico di Milano

11.49 *Towards integrated management of odour emissions: from diagnosis to mitigation through data, modelling and monitoring*
Mariangela Maggi, Alessandro Nanni, SUEZ ARIANET S.r.l.

11.58 *Operational sensor-integrated high-resolution modelling platform for odour management at city scale*
Umberto Giuriato, Daniela Barbero, Alessandro Nanni, Anxo Rodriguez, SUEZ ARIANET S.r.l., SUEZ Air&Climate Spain

12.07 *Multi-year analysis of olfactory nuisance reports: evidence, sources and prospects for integrated management*
Roberto Primerano, Antonio Mazzone, Anita Funaro, Giancarlo Martelli, Vincenzo Campanaro, ARPA PUGLIA

12.16 *Dynamic olfactometry: comparison between the yes/no choice method and the forced-choice method. Preliminary results*
Lucrezia de Gennaro, Martino Amodio, Antonio Dipalma, Dario Colamaria, Mariagrazia Quacquarelli, Valerio Squeo, Valeria Strippoli, Lenviros S.r.l.

12.25 *Beyond odour percentage: a new modular IOMS for real-time monitoring of odours at landfill sites*
Carmen Bax, Calì Marco, Eleonora Catullo, Gabriele Paroli, Emanuele Zanni, Raffaele Dellacà, Laura Capelli, Politecnico di Milano

12.34 *Assessing IOMS performance via field tests according to UNI 11761:2023*
Christian Ratti, Carmen Bax, Laura Capelli, Politecnico di Milano

12.43 *The use of new monitoring technologies in the management of odour emissions from wastewater treatment plants*
Francesco Filippelli, CAP Evolution S.r.l.

12.52 *Continuous monitoring of odour emissions from wastewater treatment plants: from chemical composition to the estimation of olfactory impact*
Fulvio Mattaliano, Orion S.r.l.

13.01 *Continuous monitoring, dynamic data analysis and chemical characterisation: an integrated model for the study of odour phenomena at multi-source sites*
Antonio Mazzone, Giancarlo Martelli, Antonio Funaro, Antonio Fornaro, Michele Giannuzzi, Enrico Valtancoli, ARPA PUGLIA

13.10 *The challenge of monitoring trace sulphur compounds in odour emissions: experimental evaluation of a UV analyser*
Elisa Polvara, Francesca Broglia, Marzio Invernizzi, Selena Sironi, Politecnico di Milano

Conclusions

Friday 6 November
10:00 - 13:15

Agorà Augusto - Bioeconomy Area Hall D1

Agrifood, Forestry, Bioenergy and Circular Bioeconomy
Click here

Deforestation and international agreements, nature restoration and poplar cultivation, ecosystem services and carbon farming: let's give value to forest resources and woody crops

Organized by: Comitato Tecnico Scientifico di Ecomondo & Confagricoltura, Fondazione AlberItalia, Cluster Nazionale Foresta Legno

Language: Italian

The sustainable management of forest resources is crucial for biodiversity conservation and climate change mitigation. Forests and timber arboriculture play a fundamental environmental role, protecting soil, regulating the water cycle and sequestering carbon. Forest owners, custodians of forests and woodlands, are key players in maintaining these often complex balances between the European regulatory framework, such as the Nature Restoration Regulation (EU Reg. 2019/2115) and the Deforestation and Forest Degradation Regulation (EU Reg. 2023/1115), and the specificities of the national context. Nature restoration tools and sustainable management practices enhance woodland resources and help provide essential ecosystem services. International trade agreements, such as the one with Mercosur, require the alignment of local supply chains with global environmental standards, without penalising national forest management. Finally, carbon farming in the forestry sector makes it possible to quantify and incentivise carbon sequestration derived from poplar cultivation and reforestation.
The integration of European policies, local practices and the commitment of forest owners constitutes an effective model for combining sustainability, productivity and environmental conservation, and in this direction, with this in-depth session, we also intend to focus on the state of health of the forestry sector.

Session Chairs

Marco Marchetti, Fondazione AlberItalia
Silvia Piconcelli, Confagricoltura

Program

Welcome and moderation
Enrico Allasia, President FNP Risorse boschive Confagricoltura
Marco Marchetti, President Fondazione Alberitalia

Outlook on world forests
Maurizio Martina, Deputy Director-General FAO

EU observatory of deforestation and forest degradation
Frederic Achard, JRC-D

Climate change and carbon farming
Riccardo Valentini, University of Tuscia

Nature Restoration
Piero Genovesi, ISPRA

Round Table
Introduction and moderation:
Alessandra Stefani, President Cluster Italia Foresta Legno

Speakers:
Emilio Gatto, Director Difor
Claudio Feltrin, President Federlegno
Fabio Boccalari, President Associazione Pioppicoltori
Mario Fontana, Coordinator CTS Unione Italiana Olio di Palma Sostenibile
Raoul Romano, Director Centro Foreste e Legno (CREA)
Environmental associations TBD

Case studies and Call for papers

Assessment of environmental impacts related to land use change in the central Italian Apennines
Barbara Marchetti, DISTA, Università degli Studi eCampus
Guido Castelli, Extraordinary Commissioner, Struttura Commissariale Sisma 2016
Francesco Corvaro, Special Envoy on Climate Change, Università Politecnica delle Marche

Deforestation made in Italy: the responsibilities of Italian businesses and consumers in global deforestation
Mauro Masiero, Dept. TESAF/UNIPD and Etifor
Giovanni Bausano, Dept. TESAF/UNIPD
Nicola Andrighetto, Etifor
Davide Pettenella, Dept. TESAF/UNIPD and Etifor

From forest fragmentation to active and multifunctional forest management: innovative models for the enhancement of ecosystem services, carbon farming and climate resilience
Maria Giulia Pelosi and Giulia Cecchinato, Etifor|Valuing Nature
Saverio Maluccio, CREA PB
Ugo Chiavetta, CREA FL
Nicola Andrighetto, University of Padua

Conclusions
Davide Pettenella, University of Padua

SELECTED E-POSTER

1. Il carbon farming: sfida o opportunità per il settore? Analisi della metodologia di certificazione comunitaria
Ilaria Falconi, CREA – Centro di ricerca Politiche e Bioeconomia c/o MASAF

2. Dal telerilevamento alle decisioni di pianificazione territoriale: disaggregazione dei dati sul carbonio organico del suolo per la valutazione ambientale nell'ambiente costruito.
Luca Morganti1, Francesco Axel Pio Romio2, Laura Sacchetti1, Beatrice Magagnoli2, Caterina Rondina3, Lisa Mensi1 // 1 University of Ferrara, Department of Architecture, Laboratorio di Tecnologia LEM, Ferrara, IT / 2 University of Ferrara, Department of Architecture, Sealine Research Centre, Ferrara, IT

3. Oltre gli alberi: monitoraggio della biodiversità e gestione adattiva nel ripristino forestale
Alice Cavalli, Francesca Diana, Sara Sanetti Affilliation: RINA Consulting S.p.A.

4. Dalla compliance alla reintegration economy: le società benefit come strumento volontario di attuazione del Regolamento sul ripristino della natura
Marco Cristiano Petrassi, SZA Studio Legale

5. Corona Verde Chivasso: un modello integrato di riforestazione urbana e ripristino della biodiversità nel quadro normativo del Green Deal, della NRL e della Strategia per la Biodiversità 2030
Marina Vitale e Andrea Pittana

6. Pagamento dei servizi ecosistemici e Nature Restoration Law
Daniela Minetti, Regione Liguria Direzione Generale Agricoltura, Aree protette e Natura

7. Ripristino degli ecosistemi urbani, l'importanza degli spazi verdi e blu per il benessere della salute pubblica e il valore delle prescrizioni verdi e blu
A.Mancini1,2, M. Barra1,2, V. Pantano1, A. Nardin 3, O. Punzo 1 , L. Avellis1, M. Carere1, L. Mancini1 - 1 Istituto Superiore di Sanità, Roma, 2 Università La Sapienza Roma, 3 Department of Medical Management, Local Health Unit (ASL TO4)

8. Blue Carbon Farming nelle mangrovie del Camerun: un caso studio per la valutazione dell'allineamento con il quadro normativo Carbon Removals and Carbon Farming Regulation (CRCF)
Juliana Maestrelli (Ecamricert), Claudia Lubelli (Neutralia), Michele Milan (Ecamricert)

9. Monitoraggio integrato del ripristino della natura e dei servizi ecosistemici negli agroecosistemi: il modello delle Oasi della Biodiversità 3Bee e il caso Oasi 2.0
Veronica Riva[1], Martina Monaco[2] [1]Biodiversity Strategist, 3Bee S.r.l. (XNatura), Trezzo sull'Adda (MI) [2]Responsabile Innovazione e Progetti Scientifici, Fondazione LGH – Gruppo A2A

Friday 6 November
10:00 - 11:00

Textile District - Workshop Area Hall D2

Sustainable and Circular Textiles
Click here

Single market and optimizing resource use of post-consumer textiles in context of the global trade

Organized by: Ecomondo & UNIRAU (Union of used clothing collection, recycling and reuse companies)

Language: English

The concept of a single market plays a crucial role in streamlining the trade and management of post-consumer textiles, particularly in the context of global commerce. By removing barriers to trade within a unified market structure, there is an opportunity to optimize the recovery, reuse, and recycling of textiles on a larger scale. This approach not only facilitates the efficient flow of materials across borders but also encourages collaboration among countries and industries.

Defining and harmonizing standards within the EU and global trade are crucial factors in establishing a circular economy for textiles.

Today's panel will explore how this vision can be achieved while simultaneously addressing the need for transparency and correct handling respecting the environmental risk elements.

Program

Introduction by the Chair
Karina Bolin, UNIRAU

End of Waste and clear quality requirement for reuse item
Speaker, JRC

The Single Market, an important factor to create circularity for textile
Speaker, Recycling Europe

Global Trade of second-hand goods
Speaker, BIR

Speech by Sirma Zheleva, Head of the Sustainability Unit at TexCycle and Executive Director of Bulgarian Association Circular Textile (BACT)

Q&A, Discussion and Closing Remarks by the Chair

Friday 6 November
10:30 - 12:30

Agorà Luciano Morselli - Sites & Soil Restoration Area Hall C1

Sites and Soil Maintenance and Restoration
Click here

Remediation and background values for the management of contaminated sites

Organized by: Comitato Tecnico Scientifico di Ecomondo & ARPAE, Regione Emilia-Romagna

Language: Italian

The term natural background value (NBV) refers to the distribution of a substance in environmental matrices where the anthropogenic component is undetectable or negligible. The determination of background values in soils and groundwater is also of interest in the management of contaminated site remediation and diffuse pollution management plans. Legislation assigns to the territorially competent Arpa the definition of background values in cases of confirmed natural or diffuse anthropogenic phenomena. Indeed, Legislative Decree no. 152 of 2006 allows that, under certain natural geological conditions, some substances may present concentrations exceeding the contamination threshold values (CSC).
Background values are therefore a diagnostic tool that is integrated into the reconstruction of the preliminary conceptual model as a necessary knowledge process for defining potential contamination and for identifying the most appropriate remediation actions for contaminated sites, alongside other management practices for a contaminated site: their identification is in fact a prerequisite for temporary or permanent safety measures and for remediation itself, where necessary, for the correct management of contaminated sites.
How to define them and in which cases the background values provided for by Legislative Decree 152/2006 are applicable is of fundamental importance for the management of contaminated sites, to such an extent that it is a tool inextricably linked to the very definition of remediation of a contaminated site.

Session Chairs

Paolo Ferrecchi, General Director ARPAE
Cristina Govoni, Emilia-Romagna Region

Program

10.30 *Opening remarks*
Irene Priolo, Councillor for the Environment, Territorial Planning, Mobility and Transport, Infrastructure of Emilia-Romagna Region

10.40 *Introduction*
Paolo Ferrecchi, General Director ARPAE

10.50 *Regulatory framework: what background values are and how to manage them*
Federico Peres, Studio Butti e Peres of Verona

11.10 *The role of SNPA and synergies with the ministry and regions in managing background values*
Pietro Cucumile, Ministry of the Environment and Energy Security

11.30 *Background values, geological compatibility, and contaminant index: an exit strategy for the environmental review process*
Maurizio Guerra, ISPRA

11.50 *Focus on Abruzzo Region: how background values are managed*
Lucina Luchetti, Arpa Abruzzo

12.10 Round table with:
Ministry of the Environment and Energy Security
ISPRA
Emilia-Romagna Region
ARPAE

12.30 Conclusions