

# Ecomondo 2025

05 / 06 / 07 / 08 NOVEMBER

## Legend

-  Agroecology and Bioenergy
-  Circular and Healthy Cities
-  Circular and Regenerative Bioeconomy
-  Environmental Monitoring and Earth Observation
-  Exhibitors and partners events
-  Financing, education and communication
-  Opening event
-  Paper District
-  Policies and regulatory frameworks
-  Resource efficiency and Circular Economy
-  Sites and Soil Maintenance and Restoration
-  States General of the Green Economy
-  Textile District
-  Trenchless technologies
-  Water Cycle and Blue Economy

# TUESDAY 5 NOVEMBER

TUESDAY 5  
NOVEMBER

10:00 -  
13:00

Agorà Malatesta -  
Environmental  
Monitoring Area  
D8 pav.

**Environmental  
Monitoring and  
Earth  
Observation**  
*Onsite event*  
[Click here](#)

## Indoor air: the role in the environment and health relationship

DOWNLOAD THE  
CONFERENCE POSTERS

Language: Italian

**organized by Ecomondo STC & National Institute of Health**

with speeches and posters from the Call for Papers 2024

The purpose of this conference is to present initiatives, strategies and conceivable actions to follow on indoor air quality, to reduce the exposure of the population and workers. In particular, it should be highlighted that it is necessary to cover, in the transposition of the new European Directive on air quality, the inclusion of reference values for indoor air quality to be adopted by Italy.

### Session Chairs

Gaetano Settimo, Italian National Institute of Health  
Gianluigi de Gennaro, University of Bari

### Programme

10.00 Introduction by the Chairs

10.15-10.30 *Il GdS - Inquinamento Indoor dell'ISS: le attività e le indicazioni per lo sviluppo di una strategia Nazionale - The Indoor Pollution Study Group ISS: activities and directions for the development of a national strategy*  
Gaetano Settimo, Italian National Institute of Health

10.30-10.45 *Dall'esperienza locale a quella nazionale: il progetto necessARIA e la condivisione delle competenze*  
Clara Peretti, Luca Verdi, Gianmaria Fulci - Provincia autonoma di Bolzano  
Umberto Moscato, Università Cattolica Roma  
Costanzo Di Perna, Università Politecnica delle Marche

10.45-11.00 *Qualità dell'aria negli edifici scolastici e promozione di buone pratiche per l'aerazione naturale delle aule "Aria Pulita a Scuola"*  
Annalisa Grillo, Stefano Bassi - Igiene Pubblica e Nutrizione Zona Empolese, Azienda USL Toscana

11.00-11.15 *Applicazione della metodologia Inquiry Based Learning (IBL) al monitoraggio dei Composti Organici Volatili (VOC) e Formaldeide negli ambienti scolastici*  
Daniele Modonese, Brancaglion Giacomo, Bravo Veliz Mathias, Paoli Alessandro - Liceo scientifico E. Torricelli-Bolzano  
Massimo Donega, Werner Tirlir - Eco Research-Bolzano  
Giovanni Pernigotto, Libera Università di Bolzano

11.15-11.30 *Evidence Driven Indoor Air Quality Improvement (EDIAQI): un progetto Horizon per la Evidence Driven Indoor Air Quality Improvement (EDIAQI): a Horizon project to increase*

Ivan Notardonato, Department of Agriculture, Environment and Food, University of Molise

Alessandro Battaglia, Ivano Battaglia - LabService Analytica srl, Anzola Emilia

Piergiorgio Cipriano, Martina Forconi - Deda Next srl, Bologna

Pasquale Avino - Department of Agriculture, Environment and Food, University of Molise, Institute for Atmospheric Pollution (IIA), National Research Council (CNR), Montelibretti Research Area

Mario Lovric, The Lisbon Council, Brussels

11.30-11.45 *Leveraging open-source frameworks for advanced air quality monitoring: a user-centric design approach to enhancing environmental health outcomes*

Jelena Susic, Creative Systemic Research Platform Institute

Leonardo Moiso, Politecnico di Torino David Ing, Creative Systemic Research Platform Institute

11.45-12.00 *Sustainable sample concentration for indoor air monitoring*

Daniele Morosini, SRA Instruments Spa

Aaron Davies, Massimo Santoro, Caroline Widdowson - Markes International Ltd

12.00-12.15 *Efficienza energetica, Qualità dell'Ambiente Interno, Salute: criteri e modalità per una riforma virtuosa dell'edilizia pubblica e privata*

Lorenzo Di Francesco, Public Affairs Manager VELUX Italia

Mariangiola Fabbri, Head of Research at BPIE-Buildings Performance Energy Europe

12.15-12.30 *Factors influencing IAQ in residential and commercial spaces*

Natalia Daza, Senior Environmental Project Engineer UL Solutions

12.30-12.45 *Soluzioni sostenibili per il rispetto delle nuove misure e normative vigenti in materia di "Indoor Air Quality"*

Chiara Verderese, Fabio Galatioto, Giuseppe Spanto - team di Is CLEAN AIR S.r.l. - Società Benefit

12.45-13.00 *Radon indoor e interventi di efficientamento energetico nel settore residenziale: monitoraggio e analisi applicate ad un edificio residenziale multipiano*

Clara Peretti, Lucio Confessore, Alessandro Di Menno di Bucchianico, Arianna

Lepore, Silvia Brini - Istituto Superiore per la Protezione e la Ricerca Ambientale

Margherita Arpaia, Federico Massimi - Ministero dell'ambiente e della sicurezza energetica, Dipartimento Sviluppo Sostenibile

13.05-13.30 Discussion and closure

## **POSTER SESSION**

**1. Assessment of Indoor Air Quality: Comparative Analysis in a University Laboratory and a Control Room**

Fabiana Carriera, Cristina Di Fiore, Alessia Iannone, Pasquale Avino, Department of Agricultural, Environmental and Food Sciences (DiAAA), University of Molise, Via De Sanctis, Campobasso, Institute of Atmospheric Pollution Research, Division of Rome, c/o Ministry of Environment and Energy Security, Rome, Gaetano Settimo, Environment and Health Department, Italian National Institute of Health, Rome

**2. Sviluppi della comunicazione ambientale: il caso della qualità dell'aria indoor**  
Gabriele Beretta, Brugherio (MB)

**3. A Brief Introduction to Organic and Elemental Carbonaceous (OCEC) Aerosol Filter Based Measurements**

Dixon - Sunset Laboratory, Inc. Roberto Marino - Orion Srl

**4. Proposta di un Attestato di Salubrità Ambientale Indoor**

Damiano Sanelli, Tecnico Ambientale in Biosicurezza, Direttore Tecnico ATTA, Clara Peretti, Libera Professionista

**5. Monitoraggio della qualità dell'aria ambiente: rilevamento diretto di PFAS**

Daniela Peroni, SRA Instruments, Via alla Castellana 3, Cernusco sul Naviglio (MI), Maya Abou-Ghanem, Abigail Koss, Omar El Hajj, Spiro Jorga, Veronika Pospisilova, Towerk, Schorenstrasse 39, Thun, Switzerland

**6. Progetto europeo INQUIRE: primi risultati sulle campagne di monitoraggio dell'aria indoor e sui livelli di esposizione umana**

Gaetano Settimo, Gianfranco Brambilla, Silvia De Luca, Anna Laura Iamiceli, Giuseppe Ianiri, Marco Inglessis, Arnold Knijn, Valentina Marra, Riccardo De Santo, Noemi Milia and Anna Maria Ingelido, Italian National Institute of Health ISS, Rome.

**7. Monitoraggio indoor di H2S e CO2 sull'isola di Vulcano**

Anna Abita, Riccardo Antero, Lucia Basiricò, Gino Beringheli, Vitangelo Pampalone, Nicolò Tirone, Arpa Sicilia, Fabio Cerino, Befreest, Rosario Garozzo Fagor Consulting

TUESDAY 5  
NOVEMBER

10:00 -  
13:15

Agorà Fellini –  
Sites & Soil  
Restoration Area  
C3 pav.

**Sites and Soil  
Maintenance  
and Restoration**  
Onsite event  
[Click here](#)

## Early Warning Systems for Landslide Risk Mitigation



CONSIGLIO NAZIONALE  
DEI GEOLOGI

Language: Italian

**organized by Ecomondo STC & Italian Geotechnical Society - AGI-IGS Section**

Landslides pose significant threat to communities and infrastructure worldwide, necessitating the development of effective hazard and exposure reduction strategies to mitigate potential risks. Hazard reduction strategies, exposure reduction strategies and vulnerability reduction strategies can be adopted to reduce landslide risk.

This conference deals with the issue of early warning systems used for landslide risk mitigation. These systems, which identify and manage the paroxysmal phases of landslides by alerting and/or temporarily relocating the population, are increasingly applied all over the world also thanks to reduced management costs.

### Session Chairs

Daniele Cazzuffi, CESI SpA Milan and AGI-IGS President

Nicola Moraci, Mediterranean University of Reggio Calabria and AGI-IGS Vice President

## Programme

9.30-10.00 Participants' registration

10.00-10.15 Introduction

Daniele Cazzuffi, CESI SpA and AGI-IGS President

10.15-10.40 *Different strategies for Landslide Risk Mitigation*

Nicola Moraci, University Mediterranea, Reggio Calabria

10.40-11.05 *Early Warning strategies for Landslide Risk Mitigation*

Michele Calvello, University of Salerno

11.05-11.30 *Structural interventions and monitoring systems for Landslide Risk Mitigation in Brenner Motorway*

Carlo Costa, Brenner Motorway

11.30-11.55 *Monitoring systems and alert threshold assessment for the landslide of Idro (BS)*

Lamberto L. Griffini, Studio Griffini srl, Milano

11.55-12.20 *Early warning System for Landslide Risk Mitigation in Vallée d'Aoste*

Patrick Thuegaz, Region Vallée d'Aoste

12.20-12.45 *Learning Platform for Early Warning Systems: the importance of an effective communication and a comprehensive education*

Loredana Antronico, CNR IRPI – Rende (Cosenza)

12.45-13.00 *Digitalization to support environmental monitoring: what possible solutions?*

Mariateresa Piselli, Almaviva, Roma

13.00 Discussion and Conclusions

TUESDAY 5  
NOVEMBER

10:00 -  
15:30

Agorà Blue  
Economy B8 Pav.

**Water Cycle and  
Blue Economy**

*Onsite & live  
streaming event*

[Click here](#)

Coastal Resilience and Adaptation to Climate Change: a policy, technical-scientific and financial challenge for coastal safety and Blue Economy sustainable development



CONSIGLIO NAZIONALE  
DEI GEOLOGI

Language: Italian

Simultaneous translation: English

**organized by Ecomondo STC & Italian Ministry of Environment and Energy Security, ISPRA (Italian Institute for Environmental Protection and Research), GNRAC, CPMR**

Is the current EU and National climate action enable to address the challenges of adapting to the ongoing climate change? From the reduction of vulnerability to the strengthening of readiness of public policies in coastal territories? It is a question that institutions at different levels and the scientific community are called to answer for coastal territories and population safety and for the sustainable development of coastal-based Blue Economy sectors in a changing climate scenario.

Although the capacity to analyze and understand the impacts of climate change, the forecasting of future scenarios and, from a technical point of view, the ability to design and implement specific solutions, have progressed significantly in recent decades, much effort still needs to be made to improve access to available EU/national funds and to address the lack of specific programs and/or financial mechanisms to enable regional and local authorities in accelerating the delivery of important innovative adaptation solutions.

According to a recent study ([www.nature.com/articles/s41598-023-48136-y](https://www.nature.com/articles/s41598-023-48136-y)) by the European Institute for Economics and Environment - EIEE, the sea level rise due to climate change could cost Europe up to €872 billion by 2100, due to the potential economic impacts on 271 maritime regions, with particular emphasis in the Mediterranean where more than 40,000 km of coastline are at risk.

Maritime Regions are at the forefront regarding these impacts. Although they already have very ambitious and consolidated adaptation strategies, re-designing coastal areas and make them more resilient to climate change effects (sea level rise, floods, storm surges, marine ingression, coastal erosion, wildfires, droughts, etc.,) needs relevant investments and a considerable administrative effort. In addition, in order to implement large-scale intervention programs, the Regions have to face legislative barriers, high fragmentation of funding sources, diversification and complexity of procedures and eligibility criteria, which often discourage or cause significant delays in implementation.

In this regard, special attention must be paid to the new generation of National Adaptation Plans (NAPs), which should ensure an effective multilevel and multi actors governance and provide higher funding and administrative support for Regional and Local authorities (e.g. see recommendations delivered by the European Commission under its last assessment of the NAPs). An ambitious political response on funds should be provided as soon as possible, both at European and National level, to allow Regional and Local Authorities to successfully implement their adaptation strategies and plans.

The event in Ecomondo aims to take stock of the state of scientific knowledge regarding the effects of ongoing climate change on our coasts and the future scenarios to be addressed, as well as the adaptation policies and good practices put in place across Europe. It wants to continue its strategic mission of “key forum” to brainstorm on innovative solutions and deliver recommendations for policy change to make easier the access to funds for the adaptation of coasts and territories to the effects of climate change, hopefully as early as for the post-2027 programming period.

## Session Chairs

Enzo Pranzini, GNRAC (National Group for Research on Coastal Environment)  
 Lorenzo Cappietti, GNRAC (National Group for Research on Coastal Environment)  
 Giuseppe Sciacca, CPMR (Conference of Peripheral Maritime Regions of Europe)  
 Roberto Montanari, Emilia-Romagna Region

## Programme

10.00 Introduction by the Chairs

10.15 *Keynote speech: Increasing Coastal Resilience for coastal and ocean hazards. The Vision 2030 process.*

Nadia Pinardi, UN Decade Collaborative Center on Coastal Resilience (DCC-CR)

### **SESSION 1 – State of Play & Challenges**

10.30 *European Climate Risk Assessment (EUCRA) overall outcomes on climate risks, adaptation actions and policies, and focus on European marine-coastal ecosystems*  
 Hans-Martin Füssel, European Environment Agency (EEA) and EUCRA coordinator

10.45 *State of play of implementation of the Italian National Plan for CC Adaptation*  
 Fabiana Baffo, Ministry of Environment and Energy Safety (MASE)

11.00 *European adaptation policies implementation and perspectives for the future challenge*

Elina Bardram, Director for Adaptation and Resilience, Communication, and Civil Society Relations in DG CLIMA, European Commission and Mission Manager for the EU Mission on Adaptation to Climate Change

### **SESSION 2 – Finding solutions**

11.15 *Accessibility to funds for adaptation, financing for the EU ACC Strategy implementation*

Roberto Rando, Principal Advisor - Climate Office, Operational Management & Policy Support Operations Directorate, European Investment Bank

11.30 *Needs and perspectives of structural funds for climate change adaptation: use case in ERDF-RP 2021-2027 in Emilia-Romagna and first lessons learned*

Claudia Romano, Responsible of Area Energy and Green Economy, Emilia-Romagna Region, Managing Authority ERDF-PR

11.45 *The indicators of climate change impacts in coastal areas: data as guide for identifying actions*

Marco Picone, National Centre for Coastal Zone Protection and Characterization, Marine Climatology and for Operational Oceanography - ISPRA (Institute for Environmental Protection and Research)

12.00 *The EU's Blue Economy Report with emphasis on climate change impacts along the European coastline*

Michalis Vourdoukas, Joint Research Centre, Economics of Climate Change, Transport and Energy Unit - European Commission

12.15-14.15 Lunch break

### SESSION 3 – *Good Practices*

14.15 *Enablers and barriers to implementing Nature-based Solutions to build coastal resilience in Ireland*

Eugene Farrell, University of Galway (Ireland)

14.30 *State of implementation of the "Parco del Mare" intervention on Rimini waterfront, for mitigation of climate change impacts*

Anna Montini, Councilor of Ecologic Transition, Environment, Sustainable Development, Blue Economy Rimini Municipality

14.45 *Adaptation strategies taken by the Hauts-de-France region against coastal erosion and marine submersion*

Bertrand Coppin, Policy Officer - Region of Hauts-de-France

15.00 *Adaptation to climate change in low-lying and urbanized coasts, the case of Marina di Pisa*

Lorenzo Cappiotti, GNRAC - University of Florence

15.15 Conclusions by the Chairs

TUESDAY 5  
NOVEMBER

10:00 -  
17:30

Tiglio Room A6  
pav.

**Resource  
efficiency and  
Circular  
Economy**  
*Onsite event*  
[Click here](#)

## Technological solutions for resources recovery from end-of-life products and materials

DOWNLOAD THE  
CONFERENCE POSTERS

Language: English

Simultaneous translation: Italian

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

with speeches and posters from the Call for Papers 2024

The current circular material use rate in the EU is estimated below 12%, indicating a considerable difficulty in the valorisation of end-of-life goods. Thus, the increasing demand for natural resources still characterizes most economic value chains, hindering an effective implementation of the principles of circular economy. A stronger effort is clearly needed to reach the European target of recycling and recovery, with the fundamental contribution of technological innovations, which can trigger virtuous industrial experiences.

This seminar will propose examples of novel technical solutions which could have the potential to significantly improve the performance of waste valorisation in different economic sectors.

### Session Chairs

Fabrizio Passarini, Ecomondo STC and University of Bologna  
Paolo Massarini, ATIA – ISWA



## Programme

9.30 Introduction by the Chairs

Invited lectures

9.45-10.00 *"Waste2BioComp" project: waste as valuable feedstock for sustainable bio-based packaging*

Renato Mortera, Propagroup

10.00-10.15 *Life "New4Cartridges": a new circular paradigm for Reuse and Recycling of Ink Cartridges*

Federica Gerardi, Eco Store

10.15-10.30 *Horizon "Deep Purple": conversion of diluted mixed urban bio-wastes into sustainable materials and products in flexible purple photobiorefineries*

Daniele Turati, Novamont

10.30-10.45 *ISWA's Road to COP: The Global Climate Change Mitigation Opportunities in the Waste and Resources Sector*

Marc Tijhuis, ISWA Managing Director

### Speeches selected from the *Call for Papers*

#### **Topic: Treatment of inorganic materials**

10.45-11.00 *An innovative biotechnology for the recovery of strategic copper from printed circuit boards*

Becci Alessandro, Amato Alessia, D'Arcangelo Matteo, Beolchini Francesca - Department of Life and Environmental Sciences-DiSVA, Università Politecnica delle Marche

11.00-11.15 *Improving the current technology for spent Li-ion batteries valorisation*  
Alberto Mannu, Maria Enrica Di Pietro, Viviana Bosello, Andrea Mele - Department of Chemistry, Materials and Chemical Engineering "G. Natta", Politecnico di Milano

11.15-11.30 *Recovery of critical raw materials from end-of-life electronics through chemical and biotechnological methods*

Max Torrellas, Santiago Llopis, Javier Grau - AIMPLAS

11.30-11.45 *Steps Forward in the Recovery of End-Of-Life Commercial Refrigerators: The LIFE VICORPAN Project*

Simone Bechi, Cannon Afros S.p.A

11.45-12.00 *Use of ceramic wastes to develop low carbon cement for Made in Italy furniture industry*

Lucia Ferrari, Elisa Franzoni - Department of Civil, Chemical, Environmental, and Materials Engineering (DICAM) University of Bologna

12.00-12.15 *Rejuvenators & Warm Mix Asphalt: a vision for a sustainable future*

Loretta Venturini, Carlo Carpani - Iterchimica S.p.A

12.15-12.30 *Mild alkali activation: a sustainable method for valorization of glasses and volcanic inorganic residues*

Emanuele De Rienzo (1), Antonio D'Angelo (2), Veronica Viola (2), Michelina Catauro (2), Francesco Carollo (3), Enrico Bernardo (3), Luisa Barbieri (1), Cristina Leonelli (1), Isabella Lancellotti (1); (1): Department of Engineering "Enzo Ferrari", University of Modena and Reggio Emilia; (2): Department of Engineering, University of Campania "Luigi Vanvitelli"; (3): Department of Industrial Engineering, University of Padova

12.30-12.45 *Alkali activation as suitable environment solution: from scraps to building materials*

Giulia Tameni, Francesco Carollo and Enrico Bernardo - Department of Industrial Engineering, Università degli Studi di Padova

### **Topic: Treatment of polymeric materials**

12.45-13.00 *Innovative recovery techniques for Waste from Electrical and Electronic Equipment: triboelectrostatic separation for plastic recycling*

A. Fiorente (1), G. D'Agostino (1), M.E. Di Clemente (1), G. Mancarelli (2), C. Natuzzi (2), A. Petrella (1), G. Santomasi (1), F. Todaro (1), M. Notarnicola (1); 1. DICATECh - Polytechnic University of Bari, 2. Kyma Ambiente

13.00-14.00 Break

14.00-14.15 *The new EU regime for recycled plastic food contact material - A game changer?*

Herman Van Roost, Styrenics Circular Solutions (SCS) association

14.15-14.30 *Plastics Recycling from and for home appliances, toys and textile*

Tatjana Kosanovic, Christina Podara, Christos Tsirogiannis, Melpo Karamitrou, Costas Charitidis - Research Lab of Advanced, Composites, Nanomaterials and Nanotechnology (R-NanoLab), Materials Science and Engineering Department, School of Chemical Engineering, National Technical University of Athens

14.30-14.45 *BioFashionTech*

Fabiola Polli, Founder and CEO

14.45-15.00 *Renewable and residual sources for the preparation of styrene-free thermosetting materials*

Federica Zaccheria, Nicoletta Ravasio, Benedetta Palucci, Adriano Vignali, Fabio Bertini - CNR SCITEC

15.00-15.15 *REMEDIES: Co-creating strong uptake of remedies for the future of our oceans through deploying plastic litter valorization and prevention pathways*

Ilaria Canesi, Daniele Spinelli, Matteo Maccanti, Noemi Cei, Elena Merli, Tommaso Nieri, Carlotta D'Aleo - Next Technology Tecnotessile

### **Topic: Treatment of organic materials**

15.15-15.30 *Upcycling of Wastewater Sludge to PHA-rich biomass. The B-Plas process in the CROSS-Life EU project*

Alisar Kiwan, Daniele Pirini, Davide Collini - B-Plas Sbrl; Michele Zaghini, Giacomo Castagna - AqA Srl.; Massimo Facchini - Herambiente Spa; Chiara Samorì, Cristian Torri - University of Bologna, Dipartimento di Chimica "Giacomo Ciamician"

15.30-15.45 *Outstanding anaerobic conversion of food waste and sludge into marketable carboxylic acids and bioenergy for sustainable urban biorefineries*

Agata Gallipoli<sup>1</sup>, Barbara Tonanzi<sup>1</sup>, Alessandro Frugis<sup>2</sup>, Andrea Gianico<sup>1</sup>, Marco Lazzazzara<sup>2</sup>, Francesca Angelini<sup>1</sup>, Stefania Angelini<sup>1</sup>, Simona Crognale<sup>1</sup>, Michela Sbicego<sup>1</sup>, Giancarlo Cecchini<sup>2</sup>, Camilla M. Braguglia<sup>1</sup> - 1 Water Research Institute, CNR-IRSA, Area della Ricerca RM1, 2ACEA ELABORI S.p.A.

15.45-16.00 *Enzymatic and microbial conversion technologies to recycle and valorize single-use bioplastic items*

Marthinus Wessel Myburgh<sup>1,2,3</sup> Dominique Rocher<sup>1,2,3</sup>, Leonardo Faggian<sup>1</sup>, Daniele Vezzini<sup>1,3</sup>, Alessandro Calzavara<sup>4</sup>, Lara Facchini<sup>4</sup>, Alessandra Lorenzetti<sup>4</sup>, Marinda Viljoen-Bloom<sup>2,3</sup>, Lorenzo Favaro<sup>1,2,3</sup> - 1Waste to Bioproducts Lab, Department of Agronomy Food Natural resources Animals and Environment (DAFNAE), Padova University, Agripolis, Legnaro, 2 Urobo Biotech, Stellenbosch, South Africa, 3 Department of Microbiology, Stellenbosch University, Matieland, South Africa, 4 Department of Industrial Engineering, Padova University

16.00-16.15 *Industrial Applications of Biodegradable Biopolymer-Hemp Composites*

Lorenzo Gallina, Salah Chaji, Maela Manzoli and Giancarlo Cravotto - Department of Drug Science and Technology, Università di Torino

16.15-16.30 *The potential of calcifying marine microalgae within the circular economy: Perspectives on carbon sequestration and bioproducts*

Manuela Bordiga<sup>1</sup>, Claudia Lupi<sup>2</sup>, Eleonora Sforza<sup>3</sup>, Elisa Palandri<sup>1,3</sup>, Veronica Buson<sup>3</sup>, Elena Barbera<sup>3</sup>, Chiara Bonatelli<sup>2,4</sup>, Stefania Bianco<sup>2,4</sup>, Cinzia de Vittor<sup>1</sup>, Adriano Carrara<sup>5</sup>, Davide Alberti<sup>5</sup> - 1 National Institute of Oceanography and Applied Geophysics (OGS), 2 Department of Earth and Environmental Sciences, University of Pavia, 3 Department of Industrial Biotechnology, University of Padova, 4 University School for advanced Studies IUSS Pavia

### **Topic: Waste-to-Fuel/Energy treatment**

16.30-16.45 *Waste to Net Zero: Harnessing Waste-to-Energy with Carbon Capture to advance the Circular Economy*

Robert Doyle, ESWET - European Suppliers of Waste-to-Energy Technology

16.45-17.00 *H2-Synergy: Hydrogen and syngas for eco-green fuel production via high temperature electrolysis in synergy with gasification of residues*

F. Basile, E.Orfei, V.Saraceni, A.De Pascale, A. Contin, A.Paglianti, A.Gondolini, E.Mercadelli, A.Sanson, N.Marmioli, M.Marmioli, A.Malcevski, N.Baraldi, M.Errani, E.Bonaccorso, V.Galletti - CIRI Frame Università di Bologna, CNR-ISSMC, CIDEA Università di Parma, Iridenergy, Fondazione Flaminia

17.15 Discussion and closure by the Chairs

### **POSTER SESSION**

**1. The most modern recycling center in Europe**

Wiegong GmbH, Municipality of Ischgl, Austria

**2. Circular economy and sustainable agriculture: hydroxyapatite from biowastes as smart nanofertilizer – PRIN CLEOPATRA**

Luca Marchiol, Department of Agrifood, Environmental and Animal Sciences University of Udine (I)

- 3. Circular lighting project: Looome the infinite design**  
Matteo Seraceni, Giulia Sodano, Alessandro Battistini - Hera Luce
- 4. Glucose Production from Cellulosic Sludge: Innovating Wastewater Recovery**  
Federico Micolucci, Nicola Frison - Department of Biotechnology, Verona
- 5. Second Life Lithium Battery - A better way before recycling**  
Matteo Cavalletti, Francine Castro, Andrea Saletti
- 6. India Global Benchmark for Solar PV Panel End-of-life Management**  
Jaideep N. Malaviya, Malaviya Solar Energy Consultancy, INDIA
- 7. Impianto di recupero solidi derivanti dal dilavamento di cumuli di inerti**  
Stefano Puzzarini c.o. SAPIR Porto Intermodale S.p.A Ravenna
- 8. Economia Circolare e Nanotecnologie per la Protezione Sostenibile delle Piante**  
Muawiya M.A., Schiavi D., Francesconi S., Miccoli C., L. Felici, Cardacino A., L. Albanese, A. Marrucci, Balestra G.M. - Dipartimento di Scienze Agrarie e Forestali DAFNE, Università degli Studi della Toscana
- 9. A new process of treatment of polymeric residual waste with the production of secondary raw materials**  
Valter Maria Santoro, IGeS World srl
- 10. The Endless Loop of Plastic: Towards Complete Recycling**  
Paolo Rebai, Promeco s.p.a.
- 11. Boosting dark fermentation of cheese whey with Electrically Conductive Materials**  
Carolina Cruz Viggì<sup>1</sup>, Cecilia Petitta <sup>1,2</sup>, Matteo Tucci<sup>1</sup>, Matteo Daghio<sup>3</sup>, Chiara Capelli<sup>3</sup>, Carlo Viti<sup>3</sup>, Alessandra Adessi<sup>3</sup>, Luca di Palma<sup>2</sup>, Federico Aulenta<sup>1</sup>; <sup>1</sup> Water Research Institute (IRSA), National Research Council (CNR), Italy <sup>2</sup> Department of Chemical Engineering Materials Environment, Sapienza University of Rome Italy, <sup>3</sup> Department of Agriculture, Food, Environment and Forestry (DAGRI), University of Florence
- 12. Incorporating post consumer plastic waste in a high performance compound intended for automotive interiors applications: the case of "Aurora" project**  
Leonardo Forner, Sustainability Manager Sirmax Group
- 13. Crosspreg® the Circular Innovative Reactive Prepreg, solvents and fridge free, with Natural fibres for Composite Mass Production**  
Gianluigi Creonti, Crossfire Srl, Graphene Flagship affiliate
- 14. Technology Environment Care and ELT recycling**  
Luigi Piarulli
- 15. Enhanced Per and Polyfluoroalkyl Substances (PFAS) Removal in Landfill Leachate: A Comparative Study of Electrocoagulation, Adsorption, and Hybrid Treatment Methods**  
Ghulam Sarwar Soomro<sup>1,3</sup>, Enrico Boccaleri<sup>1</sup>, Valentina Gianotti<sup>1</sup>, Eleonora Longo<sup>2</sup>, Alice Zenone<sup>2</sup>; <sup>1</sup> Department of Sustainable Development and Ecological Transition (DiSSTE), University of Eastern Piedmont, <sup>2</sup> Research and Development department, Marazzato Soluzioni Ambientali s.r.l.

**16. Bio-hydrogen production from biomass oxy-steam gasification: an experimental and numerical activity**

Giacomo Flori<sup>1</sup>, Stefano Frigo<sup>1</sup>, Roberto Gabbriellini<sup>2</sup>, Federica Barontini<sup>2</sup>, Pietro Sica<sup>3</sup>, Enrica Bargiacchi<sup>4</sup>, Sergio Miele<sup>4</sup>; (1) Dipartimento di Ingegneria dell'Energia, dei Sistemi, del Territorio e delle Costruzioni (DESTEC), Università di Pisa, (2) Dipartimento di Ingegneria Civile e Industriale (DICI), Università di Pisa

**17. MADAM system - a dry solution for wet problems: Magaldi's commitment to a more sustainable waste management**

Johan Boni, Matteo Maiello, Paolo Magaldi

**18. InterWASTE project: A Second Life for Eyewear, Decor and Timber Industry Waste Products**

1Marco Calvi, 1Leano Viel, 2Katrin Fradler, 2Jocham Christoph, 3Federico Gallo, 3Silvia Fiasco; 1. Certottica Srl, 2. Kompetenzzentrum Holz GmbH, Area Wood & Paper Surface Technologies, Glan - Austria, 3. ELITE Ambiente s.r.l. Greenthesi Group

**19. Transizione 5.0 e DfR - Progettazione per la facilitazione del riuso e del riciclo per una effettiva Transizione 5.0**

Antonio Iuliano, Polo Tecnologico Alto Adriatico, EAL Srl

**20. CISUFLO: paving the way towards circular sustainable flooring**

Ine De Vilder, Guy Buyle - Centexbel-VKC

**21. Polyphenols and flavonoids extraction from citrus waste**

Giorgia Pellegrino (1-2), Paola Zitella(1); (1) Environment Park, Torino, Italy (2) Politecnico di Torino, Torino, Italy

**22. LCA and LCC assessment of promising hydrometallurgical routes utilized for metal recovery from waste Li-ion batteries**

Dilshan Sandaruwan Premathilake, DICATAM, University of Brescia, Brescia, Italy; Teklit Gebregiorgis Ambaye, DERE, Technical University of Denmark, Copenhagen, Denmark; Amilton Barbosa Botelho Junior, Department of Chemical Engineering, Stanford University, Stanford, CA, USA; Ana Teresa Macas Lima, DERE, Technical University of Denmark, Copenhagen, Denmark; Denise Croce Romano Espinosa, Department of Chemical Engineering, University of São Paulo, São Paulo, SP, Brazil; Mentore Vaccari, DICATAM, University of Brescia, Brescia, Italy

**23. Beyond Circular Economy: the role of stock, recycling and virgin material**

Roberto Chirone - Dipartimento di Ingegneria Chimica, dei Materiali e della Produzione Industriale, Università degli Studi di Napoli Federico II, and eLoop srl, Napoli, Italy; Roland Clift, Centre for Environment and Sustainability, University of Surrey, UK

**24. Nitrogen recovery from municipal sewage sludge**

Jakub Krajewski, BIORESTEC GmbH

**25. Management and Recovery of Composite Materials**

Alessandra Carboni, Riccardo Festante

**26. WASTEWATER TREATMENT PLANTS AS RESOURCE RECOVERY PLANTS: MILAN AREA CASE**

Alessio Cupaioli, Cap Evolution Davide Scaglione - Cap Evolution

- 27. Chemical recycling of flexible polyurethane foam from end of life mattresses**  
Antonio Valerio, Angelo Russo, Laura Mastronardi, Fabio Sebastiano - Recupero Etico Sostenibile Spa
- 28. MY: from plastic waste to resource for the textile sector**  
Antonio Valerio, Angelo Russo, Laura Mastronardi, Fabio Sebastiano - Recupero Etico Sostenibile Spa
- 29. From inner tube to a crampons**  
Decathlon Produzione Italia s.r.l. Oldrati Guarnizioni Industriali S.P.A. ESO Recycling Società Benefit a.r.l.
- 30. Upcycling of un-recyclable Opal glass waste through alkali activation**  
Francesco Carollo(1), Giulia Tameni(1) and Enrico Bernardo(1) - (1) Department of Industrial Engineering, Università degli Studi di Padova, Padova, Italy
- 31. From waste to worth and wealth: Circular Materials Development and the design of an Eco-Social Material Library**  
Sara Valassina, Romina Santi, Flavia Papile, Andrea Marinelli, Barbara Del Curto
- 32. REMODEL: A ciRcular composiTE Materials Design for a sustainabLe innovation of made in Italy**  
Romina Santi (1), Sara Valassina (1), Andrea Marinelli (1), Chiara Del Gesso (2), Carmen Rotondi (2), Carlo Martino (2), Barbara Del Curto (1), Sabrina Lucibello (2), Mariapia Pedeferra (1) - Department of Chemistry, Materials, and Chemistry Engineering, Politecnico di Milano, Italy, (2) Department of Planning, Design, Technology of Architecture, Sapienza Università di Roma, Italy
- 33. GREEN-LOOP: Sustainable Bio-based Materials and Circular Economy Solutions**  
Luis Enrique Acevedo Galicia, IDENER (ES); Adam Sparkes, National Composites Centre (UK); Jens Schmidt, Fraunhofer ISC (DE); Marco Scatto, Mixcycling (ITA)
- 34. Valorization of Spent Ground coffee as Renewable source to methylene blue removal.**  
Fella-Naouel Allouche<sup>1</sup>, H. Doudou, S. Hamideche<sup>2</sup>, A.Ghezloun<sup>1</sup> - <sup>1</sup> Centre de Développement des Energies Renouvelables (CDER), BP. 62, Algiers, ALGERIA. <sup>2</sup> Université Des Sciences et Technologie Houari Boumedienne, Algiers, ALGERIA.
- 35. Decentralized Solid Waste Treatment, in a Box!**  
Michail Maniadakis, Foundation for Research and Technology Hellas, Greece  
Abhimanyu Chakravorty - International Solid Waste Association, The Netherlands  
Myrto Pelopida, Axia Innovation, Germany
- 36. From biowaste to soil regeneration: the Bin2Bean approach**  
Sara Daniotti (Consorzio ITALBIOTEC), Juliette Soudon (EUROQUALITY), Giulio Poggiaroni (ETA Florence Renewable Energies)
- 37. Innovative recycling of lithium-ion batteries: ex-ante LCA of Tech4Lib technology**  
Federico Rossi\*, Marta Fundoni\*\*, Nicola Fabbri\*\*, Filippo Corsini\*, Monia Niero\*, Fabio Iraldo\*\* - \* Sant'Anna School of Advanced Studies, Interdisciplinary Center for Sustainability and Climate, Pisa, Italy \*\* Sant'Anna School of Advanced Studies, Institute of Management, Pisa, Italy

**38. Recovery and valorization of plastic**

Flavia Marzulli (1), Sogand Musivand (2), Benedetta De Caprariis (2), Paolo De Filippis (2), Giulia Simonetti (1), Carmela Riccardi (3), Marianna Villano (1) - (1) Department of Chemistry, Sapienza University of Rome, Rome, Italy; (2) Department of Chemical Engineering Materials Environment, Sapienza University of Rome, Rome, Italy; (3) INAIL-DIT Rome, Italy

**39. Innovation and circularity of waste recovery processes: between research and development of a circular ecosystem in the enterprise Vico s.r.l.**

Alessandro Barra (PhD student, Politecnico di Torino), Guido Callegari (Professor and PhD, Politecnico di Torino), Andrea Negro (Company owner, Vico s.r.l.), Davide Piroto (Asbestos technical manager, Vico s.r.l.)

**40. Study and elaboration of new strategies, techniques, methods and management for the large-scale remediation of offshore seabeds in Italian seas**

Federico Camilleri, freelance researcher - FISHING TECHNICAL COMPANY consultant

**41. Grape stalk: a first attempt to disentangle its fibres via electrostatic separation**

Umberto Cancelli (University of Modena and Reggio Emilia and University of Parma), Giuseppe Montevocchi (University of Modena and Reggio Emilia), Francesca Masino (University of Modena and Reggio Emilia), Claire Mayer-Laigle (UMR IATE - L'Unité Mixte de Recherche Ingénierie des Agropolymères et Technologies Emergentes, Montpellier), Xavier Rouau (French National Institute for Agriculture, Food, and Environment (INRAE) | INRAE · Department of Science and Process Engineering)

**42. Exhibition design and reuse of disused materials**

Elisa Mastrofrancesco, Minimolla Design

**43. Green engineering solutions: a new LIFE for sediments and shells: preliminary results**

P. Ydav (1), F. Dimunno (1), F. Furlani (2), R. Petti (1), A. Petrella (1), F. Todaro (1), G. Vitone (3), C. Vitone (1), M. Notarnicola (1) 1) DICATECh, Polytechnic University of Bari, (BA) 2) SIMEM S.p.a., Minerbe (VR) 3) Vitone Eco S.r.l, Bitonto (BA)

**44. Utilizzo e riciclo dei rifiuti a matrice organica nel settore agricolo**

Giulio Giannoli

**45. DC thermal plasma process for the production of AM powders**

P. Iovane<sup>1</sup>, C. Borriello<sup>1</sup>, S. Portofino<sup>1</sup>, N. Fedele<sup>2</sup>, A. Di Girolamo Del Mauro<sup>1</sup> and S. Galvagno<sup>1</sup> - 1 SSPT-PROMAS-NANO CR. ENEA "Portici", 2 Consorzio CALEF

**46. Recovery of carbon fibres from aircraft industry waste and product valorization for Additive Manufacturing applications**

Sabrina Portofino, Carmela Borriello, Sergio Galvagno, Pierpaolo Iovane, Loredana Tammaro - ENEA, Department for Sustainability, Sustainable Manufacturing Technologies and Materials Division, Components and Intelligent Systems for Sustainable Manufacturing Laboratory, Portici (Na), Italy

**47. Migliorare il riciclo dei pannelli fotovoltaici: il progetto PV lighthouse**

Pietro Giovanni Cerchier (1), Francesco Misericchi (1), Alberto Nalon (1), Valerio Verderio (2), Federico Malgarini (2), Francesco Nisato (3), Graziano Tassinato (3), Massimo Zanutto (3). - (1) 9-Tech srl, (2) Haiki+ srl, (3) Green Propulsion Laboratory, Veritas s.p.a.

- 48.** *Dall'elemento acqua, nuove tecnologie naturali per il riciclo e trasformazione dei rifiuti ittici in nuove forme di energia pulita per la generazione di idrogeno, biocombustibili da utilizzare in sistemi integrati scalabili, predisposti al monitoraggio ambientale nel settore della Blue Economy e dell'Offshore Energy*  
Mauro Panico - ITARIS Srls; Alessio Canalini - The Sea Opportunities Srl; Daniele Comella - Hydorghen Srl.
- 49.** *Unlocking the potential of End-of-Life composites: the DeremCo project*  
Marco Diani, Davide Delfrate, Marcello Colledani - Politecnico di Milano, Mechanical Department
- 50.** *Advancing biogas upgrading for a circular economy: biological carbon dioxide conversion to biofuels and bioplastics*  
Maria Silvia Morlino (1), Tatiana Spatola Rossi (1), Luca Francescato (1), Marco Demo (1), Bettina Mueller (2), Isabella Porqueddu (2), Stefano Campanaro (1), Laura Treu (1), Tomas Morosinotto (1) - Department of Biology, University of Padua, Padova, Italy, (2) BTS Biogas S.r.l., Affi (VR), Italy
- 51.** *Enabling plastic circularity through system change - Molecular recycling maximizing material to material plastic recycling*  
Inari Seppa, Circular Advocacy EMEA
- 52.** *The role of Producer Organisations in making certain agro-food processing practices innovative and sustainable*  
Silvia Baralla, Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria - Centro di ricerca Politiche e bioeconomia, Roma; Andrea Saba - Scuola Superiore Sant'Anna, Pisa
- 53.** *Enhancing sustainability in Central Europe's agri-food sector: analyzing value chains and biomass utilization*  
Notarfrancesco (1), Davide Don, Leonardo Venturoso - Fraunhofer Italia Research Scarl, Italy
- 54.** *Resource audit and industrial symbiosis: application to a high-performance bifacial photovoltaic modules GigaFactory*  
Antonella Luciano (ENEA), Marco La Monica (ENEA), Laura Cutaia (ENEA), Raimondo Spada (ENEL 3 SUN), Andrea Tecci (ENEL)
- 55.** *Evo Fusion: Direct processing of 100% recycling material in new blown film products*  
Sascha Skora, Christoph Lettowsky - Reifenhäuser Blown Film
- 56.** *Microwave assisted co-pyrolysis of plastic waste for up-cycling into valuable products*  
Tayyaba Gull (a), Mauro Marone (a), Paolo Marasco (a), Marcello Salvatori (b), Mario Fedele (b), Matteo Francavilla (a) - a) STAR\*Facility Centre, Department of Agriculture, Food, Natural Resources, and Engineering (DAFNE), University of Foggia, Foggia, Italy b) Sistemi Energetici S.p.A., Foggia, Italy
- 57.** *Recovery, recycling and reuse in the tanning sector: virtuous innovations and correct management of intellectual property*  
Barbara Politi, Addì Srl
- 58.** *Recycling processes by selective dissolution of multi-material products and textiles*  
Martino Colonna and Filippo Biagi, RE-SPORT srl and University of Bologna, Bologna



- 59. Complete recycling process of end-of-life leather shoes: the LIFE RE-SHOES project**  
Tiziano Giordano, Calzaturificio S.C.A.R.P.A. S.P.A. Asolo (TV) Italy; Martino Colonna - RE-SPORT srl and University of Bologna, Bologna, Italy
- 60. Blockchain and cryptocurrencies for the financial value of the circular economy: the challenge of exploiting the eco-design principles for a new value of the environment**  
Enrico Maria Mosconi, Università degli Studi della Tuscia
- 61. BIONEER: scaled-up production of next-generation carbohydrate-derived building blocks to enhance the competitiveness of a sustainable european chemicals industry**  
Patrizia Circelli, Simona Mincione - Ciaotech srl (PNO Group), Rome, Italy
- 62. MICROORC: Orchestrating Food System Microbiomes to Minimize Food Waste**  
Patrizia Circelli, Simona Mincione - Ciaotech srl (PNO Group), Rome, Italy
- 63. PYROCO2: Demonstrating sustainable value creation from industrial CO2 by its thermophilic microbial conversion into acetone**  
Anna Franciosini, Patrizia Circelli, Letizia Maestroni - Ciaotech srl (PNO Group), Rome, Italy
- 64. Value added recycled materials from construction and demolition waste**  
Corrado Gatti - Gruppo Gatti S.p.A., Lograto (BS), Italy Alan Piemonti, Giovanni Pizzari and Sabrina Sorlini - Department of Civil, Environmental, Architectural Engineering, and Mathematics (DICATAM), University of Brescia, Italy
- 65. Life cycle assessment of biostimulants production in a circular economy perspective**  
Zoli Michele, Ferraro Luca., Bacenetti Jacopo, Ferrante Antonio, Borin Sara - Università degli Studi di Milano

TUESDAY 5  
NOVEMBER  
10:15 -  
17:00

Agorà Tiberio –  
Water Cycle Area  
D8 pav.

**Water Cycle and  
Blue Economy**  
Onsite event  
[Click here](#)

Integrated solutions to adapt water systems to climate change: European and Mediterranean impacts, solutions and innovation actions

DOWNLOAD THE  
CONFERENCE POSTERS



Language: English  
Simultaneous translation: Italian

**organized by Ecomondo STC & Union for the Mediterranean, Water Europe, Marche Polytechnic University, University of Bologna, ANBI**

with speeches and posters from the Call for Papers 2024

Climate change is exacerbating both water scarcity and water-related hazards (such as floods and droughts), as rising temperatures disrupt precipitation patterns and the entire water cycle. The Mediterranean basin is a climate change hotspot and projected climate water-related risk from IPCC are serious. Water solutions include healthy aquatic ecosystems and improved water management can lower greenhouse gas emissions and provide protection against climate hazards, wetlands also serve as a buffer against extreme weather events, early warning systems for floods, droughts and other water-related hazards, water-resilient infrastructure planned and constructed following a systemic and nexus-based approach, climate smart agriculture.

This workshop will be divided in n.3 sessions addressing main challenges and solutions with contributions from international networks and consortia, water authorities, agencies and utilities as well as the innovators.

### **Session Chairs**

Giuseppe Bortone, ASSOARPA  
 Andrea Rubini, Ecomondo STC and Water Europe  
 Francesco Fatone, Ecomondo STC and Marche Polytechnic University

### **Programme**

10.00-11.30 **Session 1**

#### ***Climate change observed, monitored and projected impacts***

10.00 Introduction by chairs

10.10-10.22 *Water risk management and water resource efficiency: roadmap and solutions for the organization*

India Antonino, Manuela Gussoni, Katia Zavaglia - BUREAU VERITAS NEXTA  
 Alessia Carmignani, Marco Cataldi - BUREAU VERITAS ITALIA

10.22-10.34 *La gestione della risorsa idrica e il clima che cambia – La versione di Acquedotto Pugliese*

Luciano Venditti, Acquedotto Pugliese SpA

10.34-10.46 *The flood risks amplified by climate change: the management of NaTech events in Seveso sites*

Romualdo Marrazzo, ISPRA

10.46-10.58 *From source to tap: methods for optimizing water use in a changing climate*

Martin Duff, Business Development Director at Atmos International

10.58-11.10 *Sustainable water management in Italian oil refineries related to climate change*

Geneve Farabegoli, Federico Blesi, Maria Cortese, Paola Giorgioli, Chiara Giuliani, Simona Spuri - The Italian Institute for Environmental Protection and Research (ISPRA)

11.00-11.22 *The VeBS project - "The Proper Use of Green and Blue Spaces for the Promotion of Health and Well-being"*

Elena Maestri<sup>1</sup>, Nicolò Accornero<sup>2</sup>, Laura Mancini<sup>3</sup>, Giacinto Ciappetta<sup>4</sup>, Sisto Milito<sup>5</sup>, Annamaria Colacci<sup>6</sup>, Manuela De Sario<sup>7</sup>, Leonardo Villani<sup>8</sup>, Marco Domenicali<sup>9</sup>, Silvia Brini<sup>10</sup>, Massimo Giusti<sup>11</sup>, Chiara Acciavatti<sup>11</sup>, Luca Avellis<sup>3</sup>, Chiara Badaloni<sup>7</sup>, Anna Chiesura<sup>10</sup>, Alessandra Lasco<sup>10</sup>, Gaia Lombardi<sup>8</sup>, Aurora Mancini<sup>3</sup>, Angela Nardin<sup>3</sup>, Andrea Ranzi<sup>6</sup>, Walter Ricciardi<sup>8</sup>, Doris Zjalic<sup>8</sup>, Paola Michelozzi<sup>7</sup>, Gianpiero Di Francesco<sup>12</sup>, Pasqualino Rossi<sup>12</sup> and Nelson Marmioli<sup>1</sup>;  
 1-Conorzio Interuniversitario Nazionale per le Scienze Ambientali; 2-Università degli Studi di Parma; 3-Istituto Superiore di Sanità; 4-ARPA Calabria; 5-Regione Calabria; 6-ARPAE, Agenzia Regionale Prevenzione, Ambiente e Energia dell'Emilia-Romagna; 7-Dipartimento Epidemiologia del S.S.R. - ASL Roma1 Regione Lazio; 8-Università Cattolica del Sacro Cuore; 9-Università di Bologna; 10-Istituto Superiore per la Protezione e la Ricerca Ambientale; 11-ARTA Abruzzo, Italy; 12-Ministero della Salute

11.22-11.34 *Development of an integrated strategy for ecotoxicological assessment in urban aquatic ecosystems affected by climate changes*

M. Barra, M. Carere, I. Lacchetti, L. Mancini - ISS Italian National Institute of Health, Department of Environment and Health, EcoHealth Unit

11.34-11.46 *Reuse of treated groundwater for environmental purposes*

Loredana Vitale, Eni Rewind

11.46-11.58 *The use of modular geocellular drainage systems to restore the local hydrological cycle in new urbanizations: some meaningful experiences*

Zausa Marco, Graf Italia Srl

11.58-12.46 **Session 2**

***The full scale solutions from large water industries***

11.58-12.10 *Safe water reuse with Performic Acid disinfection*

Jordi Ruiz Franco, Kemira Ibérica S.A.

Jean-Christophe Ades, Kemira Chimie SASU

Outi Grönfors, Kemira Oyj

12.10-12.22 *Water polishing and reuse with UV-Advanced Oxidation Processes*

Eduardo Gracia, Trojan Technologies (Spain)

12.22-12.34 *Artificial Intelligence for an efficient, resilient and sustainable water industry*

Davide Ciano, SIEMENS SpA

12.34-12.46 Speech by a representative of Grundfos (TBD)

**AFTERNOON**

**Session Chairs**

Andrea Rubini, Ecomondo STC and Water Europe

Francesco Fatone, Ecomondo STC and Marche Polytechnic University

Camilla Braguglia, Ecomondo STC and CNR-IRSA

Luigi Patimo, Italy Country Manager Acciona

### 14.00-17.30 **Session 3**

#### ***Strategic and systemic EU-funded and international innovation actions and missions (HEU, PRIMA, grandi LIFE) focus Mediterraneo***

14.00 Introduction by the Chairs

14.10-14.22 *Water4All: updates after first period of implementation and alignment with national and local water-related programs*

Maria Chiara Sole, ISPRA

Vittoria Laterza, ISPRA

Francesco Fatone, Ecomondo STC and Marche Polytechnic University

14.22-14.34 *I progetti finanziati EU, inseriti all'interno di strategie degli enti di governo del territorio, possono diventare cruciali per mettere a terra e arricchire le politiche di sviluppo sostenibile: l'esperienza della città metropolitana di Milano*

Cinzia Davoli, Città metropolitana Milano Area Ambiente e Tutela del Territorio Responsabile Servizio Sviluppo Sostenibile e Sistemi di supporto alle decisioni

14.34-14.46 *The contribution of Horizon Europe to water innovation*

Giulio Pattanaro, Commissione Europea, Research Executive Agency

14.46-14.58 *Water-related focus in circular cities and regions within CSS Boost*

George Arampatzis, Technical University of Crete

14.58-15.10 *Boosting the uptake of innovative solutions in the context of water and circular economy*

Stevo Lavrnjic, University of Bologna

### 15.10-17.10 **Workshop on Urban Water Runoff Management**

Presentations from:

HORIZON EUROPE STOP-UP ([www.stopup.eu](http://www.stopup.eu))

Thomas Wintgens, *Protecting the aquatic environment from urban runoff pollution*

Vittorio Di Federico and Dario Frascari – *Italian case study*

Combined sewers overflows in coastal area

HORIZON EUROPE WATERUN ([www.waterun.eu](http://www.waterun.eu))

Luz Herrero, *Implementing Water-Sensitive Urban Design (WSUD) concept*

Lucia De Simoni and Massimiliano Sgroi – *Risk-based approach and tool to reuse stormwater: case studies*

PRACTICAL CASE STUDIES

Challenges and solutions for integrated urban water management and combined sewers overflows in coastal areas

Cristiana Bollettini, CIIP SpA

17.10-17.22 *Solutions for climate change mitigation: water reuse and nature based solutions in Gruppo CAP experience*

Michele Platé, CAP Evolution

17.22-17.34 *Environmental monitoring of an urban forest: A tool for Climate Change prevention and mitigation. The case study of Bosco di Meolo (Venice, Italy)*

Francesca Coccon, Pierpaolo Campostrini - CORILA Consorzio per il coordinamento delle ricerche inerenti al sistema lagunare di Venezia

Giorgio Serra, Carlo Pesce - Piave Servizi S.p.A.

17.34-17.46 *Life SandBoil: Environmentally friendly solution to mitigate flood risks*  
Laura Tonni, Università di Bologna e Officine Maccaferri Italia S.r.l.

17.46-17.58 *CARDIMED - Boosting Mediterranean climate resilience through widespread adoption of Nature-based Solutions (NBS) across regions and communities*  
Simos Malamis, project coordinator  
Fabio Masi and Lorenzo Tombolini, National Technical University of Athens, IRIDRA and Marche Polytechnic University

17.58-18.10 *SEACURE - Innovative solutions to prevent, reduce and remediate nutrient pollution along the land-river-sea system in the Mediterranean basin*  
Lorenzo Proia, project coordinator, BETA Technology Centre

## **POSTER SESSION**

**1.** *The ConSenso agri-tech project to support the coffee industry in addressing the impact of global warming*

Massimo Battaglia, Accademia del Caffè Espresso (La Marzocco S.r.l.) - Coffee Research Leader; Camilla Pandolfi, CEO Pnat; Angelo Fienga, Cisco - Director Sustainability Solutions EMEA Cisco

**2.** *The Alliance For Water Stewardship: a recognized, innovative, resilient solution to water risks and challenges*

Ilaria Troncia, HPC Italia S.r.l.; Beatrice Bizzaro, HPC Italia S.r.l.; Martina Mazzocchi, HPC Italia S.r.l.

**3.** *Solar-powered brackish water desalination: Genius Watter's sustainable solution to the water crisis*

Franco Traverso

**4.** *Mitigation of hydrogeological risk in Fosso Epitaffio, Pisticci (Italy)*

Alessandro Cavagni; Officine Maccaferri Italia S.r.l.

**5.** *Wind energy to power the Benisaf company's desalination plant*

N. CHARIF<sup>1</sup>, H. DAAOU<sup>2</sup>, M. CHAFFI<sup>3</sup>

1-Department of Fluid Mechanics and Energy, University of Science and Technology of Houari Boumediene; 2-Wind Energy Division, Renewable Energy Development Center; 3-Benisaf Water Company

**6.** *Urban social gardens as a solution for climate adaptation: social innovation for the co-design of water-resilient solutions. The case of Bologna*

Sara Rizzo (IUAV), Francesca Cappellaro (ENEA), Giulia Lucertini (IUAV), Simone Busi (ENEA), Marco Ferraris (ENEA)

**7.** *Integrazione di processi power-to-gas in un impianto di depurazione delle acque per l'upgrading sostenibile del biogas e la gestione circolare del digestato*

S. Rossi<sup>1</sup>, M. Nordio<sup>1</sup>, S. Lorenzini<sup>2</sup>, S. Galati<sup>2</sup>, L. Pedrazzi<sup>2</sup>, A. Rossetti<sup>1</sup>; <sup>1</sup>Ricerca Sistema Energetico, RSE S.p.A., <sup>2</sup>BrianzAcque s.r.l.

**8.** *Water leakages pre-localization in drinking water networks via the cosmic-ray neutron sensing technique*

L. Morselli, Finapp S.r.l.; M. Lunardon, Finapp S.r.l.; A. Basso, Mitotech; L. Stevanato, Finapp S.r.l.

**9. Circular wastewater filtration with biosolids biochar for PFAS and Pharmaceuticals elimination - feasibility study**

Kai Bester Aarhus University, Denmark Jiexi Zhong Aarhus University, Denmark Sara Letholm Skaarup, Odsherred Utility Company, Denmark Christian Wieth, AquaGreen ApS, Denmark

**10. Studio di fattibilità tecnico-economica per il recupero delle acque da processi di lavorazione dei metalli**

Tecnoimpianti Water Treatment S.r.l.

**11. Demonstration of a platform demonstrator for a laboratory pilot reactor for solar wastewater depollution: Testing and validation**

FELLA-NAOUEL ALLOUCHE\*, FAYCAL TLEMSANI Centre de Développement des Energies Renouvelables (CDER), BP. 62, ALGERIA

**12. Ottimizzazione della gestione dei fanghi di depurazione a fronte della Nuova Direttiva Acque Reflue e di un mercato che cambia: lo Sludge Management Plan di Alfa S.r.l.**

Paolo Provani, Daniele Ceconet, Oscar Facco, Annalisa Berni - Alfa S.r.l.

**13. Il contributo ed il potenziale dei depuratori delle acque reflue urbane per la gestione circolare delle risorse**

Davide Scaglione, Cap Evolution

**14. Urban Wastewater Treatment (UWWT) Plants (UWWTPs) screenings (SCs) valorization options**

Alessandro Frugis(1), Massimo Spizzirri (3), Giancarlo Cecchini(1), Giulia Sagnotti(1) Marianna Villano(2), Gaia Salvatori(2); (1) Acea Infrastructure S.p.A. (2) Dipartimento di chimica Università la Sapienza (3) Acea Ato 2 S.p.A

TUESDAY 5  
NOVEMBER

10:30 -  
11:15

Innovation Arena -  
South Hall

**Opening event**  
Onsite & live  
streaming event  
[Click here](#)

## Ecomondo 2024: Opening Ceremony

Language: Italian

Simultaneous translation: English

Inauguration event of the **27th edition of Ecomondo** - *International fair and the reference event in Europe for the ecological transition and the new models of circular and regenerative economy*

Moderator:

**Cesare Trevisani**, journalist

Speeches by:

**Maurizio Renzo Ermeti**, President of Italian Exhibition Group

**Anna Montini**, Councillor for Ecological Transition and Blue Economy, Rimini Municipality

**Irene Priolo**, Acting President of Emilia-Romagna Region

**Fabio Fava**, President of Ecomondo's Scientific Technical Committee

**Fabrizio Lobasso**, Deputy Director General for the Promotion of the Country System and Principal Director for Economic Internationalisation of the Italian Ministry of Foreign Affairs and International Cooperation

**Gilberto Pichetto Fratin**, Italian Minister of Environment and Energy Security

TUESDAY 5  
NOVEMBER

11:15 -  
13:00

Neri Room South  
Hall

Onsite & live  
streaming event

[Click here](#)

## Opening plenary session - ECONOMY OF TOMORROW: THE GREEN DEAL AT THE NEW EUROPEAN LEGISLATURE START

Language: Italian

Simultaneous translation: English

### organized by National Council of the Green economy

Like any far-reaching change, the Green Deal has challenged established interests and views, raising a wide debate.

To intervene in this debate, it is useful, first of all, to know, analyze and evaluate the main measures of the European Green Deal: a set of measures, directives and regulations, generally little known. It is also good, on the various topics, to try to identify the main issues that should be addressed in this new European legislature. With a premise: In the 9th, the European Green Deal helped fuel not only the recovery but also the start of a more sustainable European economy.

The energy and climate transition has, in fact, yielded significant results in reducing greenhouse gas emissions and changing the energy model; well underway is also the path to greater circularity in the economy, and, albeit with greater difficulty, improvements in the protection of Europe's natural capital are proceeding.

### Programme

Moderator:

**Celestina Dominelli**, Journalist Il Sole 24 ore

Welcome remarks from **Maurizio Renzo Ermeti**, President of IEG - Italian Exhibition Group

Opening remarks:

**Irene Priolo**, President ad interim, Regione Emilia-Romagna

*Ecological transition as a driver of economic development*

**Fabrizia Lapecorella**, Deputy Secretary General, OCSE

*Presentation of the State of the Green Economy Report 2024*

**Edo Ronchi**, President, Sustainable Development Foundation

Speakers:

**Chiara Braga**, Group leader Democratic Party, member Committee on Environment, Territory, Public Works, Chamber of Deputies

**Mauro Rotelli**, President Committee on Environment, Territory and Public Works, Chamber of Deputies

**Gilberto Pichetto Fratin**, Minister for the Environment and Energy Security

TUESDAY 5  
NOVEMBER

14:00 -  
15:30

Agorà Augusto –  
Bioeconomy Area  
D2 pav.

**Agroecology and  
Bioenergy**

*Onsite event*

[Click here](#)

## Organic agriculture in Italy between short value chain and foreign markets

Language: Italian

**organized by Ecomondo STC & Coldiretti, ColdirettiBIO**

Italian organic agriculture can perfectly embody the values of the Mediterranean diet, from field to table, with a comprehensive certification system that guarantees Italian agricultural producers and consumers. The purpose of the workshop is to define a strategic and market positioning for Italian organic products.

### Session Chairs

Stefano Masini, Coldiretti  
Maria Letizia Gardoni, ColdirettiBio

### Programme

14.00 Introduction by the Chairs

*The numbers of the sector*

Fabio del Bravo, ISMEA

*Organic farming in local markets: products in the markets of Campagna Amica*

Daniele Taffon, Fondazione Campagna Amica

*Biodynamic agriculture and international markets*

Enrico Amico, Demeter

*Services for the sector*

Gabriele Papa Pagliardini, Federbio servizi

15.00 Discussion and closure by the Chairs

TUESDAY 5  
NOVEMBER

14:00 -  
15:30

Area Forum CIB

**Agroecology and  
Bioenergy**

*Onsite event*

[Click here](#)

## Carbon credits and agriculture: the contribution of bioenergy to CO2 reduction

Language: Italian

**organized by Ecomondo STC & CIB-Consorzio Italiano Biogas**

Carbon market can play a key role for farmers and it is an important issue for the daily debate to achieve climate targets. There is no doubt that agriculture represents a particular scenario because it produces emissions (like all productive sectors) but it is also actively involved in order to absorb carbon and decrease the CO2 capacity in the atmosphere, also offering a significant contribution against climate change by improving soil quality and fertility. In this context, anaerobic digestion can be one of the technological solutions that have the potential to reduce emissions. The purpose of the conference is to offer an in-depth look at the topic of the carbon market and answer questions and requests from the sector, proposing virtuous behaviour and best practices.



## Session Chair

Fabio Fava, President of Ecomondo Scientific Technical Committee

## Programme

14.00 Introduction

Piero Gattoni, President of Consorzio Italiano Biogas (CIB)

14.15 *The carbon footprint of biogas/biomethane*

Lorella Rossi, CIB

14.30 *The European vision on carbon credits*

David Chiaramonti, Politecnico di Torino

14.45 *Carbon Farming: the European experience and the best practice in Italy*

Irene Criscuoli, CREA-PB

15.00 *The pathway to credit carbon recognition starts from farmers*

Dialogue between:

Cristiano Fini, President of CIA

Ettore Prandini, President of Coldiretti

Nicola Gherardi, member of Executive board of Confagricoltura

TUESDAY 5  
NOVEMBER

14:00 -  
16:00

Ravezzi 1 Room  
South Hall

**Environmental  
Monitoring and  
Earth  
Observation**

*Onsite event*

[Click here](#)

Earth Observation and Digital Twins to improve Urban Resilience.

Utilization of digital mapping, artificial intelligence and ICT, to support the development of modern (near real-time) urban management



CONSIGLIO NAZIONALE  
DEI GEOLOGI



Language: Italian

Simultaneous translation: English

**organized by Ecomondo STC & Polytechnic University of Turin**

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

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

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

### **Session Chair**

Giovanni Federigo De Santi, Polytechnic University of Turin  
Fabio Fava, Ecomondo Scientific Committee

### **Programme**

14.00 *Welcome address*

Giovanni Federigo De Santi, Polytechnic University of Turin  
Fabio Fava, Ecomondo Scientific Committee

14.15-15.00 **Keynote speeches**

*The Road to Carbon-Free Mobility*

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

*Monitoring Urban Landscapes: The Power of Data and Digital Twins*

Piero Boccoardo, Polytechnic University of Turin, ITHACA President

*Earth Observation Technologies to improve environmental management*

Silvano Pecora, Italian Ministry of Environment and Energy Security

15.00-16.00 **Round table "Advancing the future of urban resilience"**

Chaired by:

Stefano Corgnati, Polytechnic University of Turin, Rector  
Giovanni De Santi, Polytechnic University of Turin

Participants:

Francesco Tresso, City of Torino, Councillor  
Silvano Pecora, Italian Ministry of Environment and Energy Security  
Ivan Kulis, European Commission DG JRC, Head of Unit  
Veronica Manfredi, European Commission DG ENV Director  
Edoardo Valente, ANAS President  
Matteo Angelinelli, CINECA Data Engineer HPC  
Giuseppe Barberio, CAP Group

TUESDAY 5  
NOVEMBER

14:00 -  
16:00

Ravezzi 2 South  
Hall

**Financing,  
education and  
communication**

*Onsite event*

[Click here](#)

## Green bonds: a strategic tool for financing climate adaptation

Language: Italian

Simultaneous translation: English

**organized by Ecomondo STC & Forum per la Finanza Sostenibile (ItaSIF – Italian Sustainable Investment Forum)**

As the urgency of addressing climate change intensifies, green bonds stand out as a crucial financial tool for financing adaptation initiatives aimed at reducing environmental impacts. Indeed, green bonds can drive financial systems towards a resilient and adaptive future; however, there is a need for robust frameworks to counteract misalignments and prevent greenwashing in climate adaptation finance. The conference will examine the role of green bonds in climate adaptation, with a focus also on mini green bonds for SMEs adaptation projects.

### Session Chair

Francesco Bicciato, Executive Director, Forum per la Finanza Sostenibile - ItaSIF

### Programme

14.00 Introduction by the Chair

14.10-14.30 Linda Zeilina, Founder & CEO, International Sustainable Finance Centre

14.30-14.50 Fabrizio Palmucci, Founder, Impactivise and Senior Advisor, Climate Bonds Initiative

14.50-15.10 Isabel Reuss, Senior Climate and Social Advisor, Forum per la Finanza Sostenibile

15.10-15.40 Representatives of Ecomondo companies:  
Mirco Calzolari, Senior Relationship Manager, SACE  
Marina Sabinina, Sustainable Finance Manager, A2A S.p.A

15.40 Discussion and closure by the Chair

TUESDAY 5  
NOVEMBER

14:00 -  
16:45

Agorà Ariminum –  
Circular Economy  
Area D1 pav.

**Resource  
efficiency and  
Circular  
Economy**  
*Onsite event*  
[Click here](#)

## Circular economy best practice for WEEE, Waste Batteries and Packaging Waste: from policy development to industrial case studies

Language: Italian

**organized by Ecomondo STC & ERION (Multi-compliance non-profit System for the management of different types of waste)**

The current global and European context is pushing the electrical and electronic equipment sector towards adopting strategies based on the circular economy. The goal is to increase the amount of materials derived from waste, thus encouraging greater waste collection by both consumers and professional entities, such as offices and industries. Through the presentation of virtuous practices to optimize waste management, innovative solutions along the product value chain of high-tech products will be discussed, as well as the opportunities offered by regulatory developments, such as the packaging regulations, battery regulations, the CRM Act and the upcoming revision of the WEEE Directive. Initiatives involving three supply chains related to advanced technology products will be explored: electrical and electronic equipment (EEE), batteries and accumulators, and electronic product packaging.

### Session Chair

Luca Campadello, ERION

### Programme

14.00 Introduction

D'Cunha Karolina, Deputy Head of Unit From waste to resources, European Commission

14.15-15.00 *Regulations and circular economy models in the supply chains of WEEE, Waste Batteries and Packaging Waste*

Speakers:

Andrea Farì, Ambientalex

Fabrizio Longoni, CdCRAEE

Luca Tepsich, CdCNPA

Representative of CONAI (TBD)

Francesco Beneventi, Italian Ministry of Environment and Energy Security

Floriana La Marca, Health and Digital Executive Agency (HaDEA)

15.00-16.30 Solutions to improve the collection, preparation for reuse, and recycling of WEEE, Waste Batteries and Packaging Waste:

- *The supply chain for recovering Neodymium from WEEE and electric mobility*  
Francesco Gallo, Itelyum
- *The role of distribution in raising consumer awareness and waste management*  
Giuseppe Formaggia, Euronics
- *Circular economy initiatives of online marketplace*

Paolo Chini, Amazon

- *Supply chain solutions for lithium batteries*  
Alessandro Danesi, S.E.VAL.  
Gian Andrea Blengini, progetto METALLICO - University of Turin  
Angel Manuel Escamilla Perez, progetto BATRAW - Leitat Technological Center
- *New business models, pilot actions and strategic plans for WEEE circularity from CIRCOTRONIC project*  
A.Tiziana De Nittis, Emilia-Romagna Region

16.30 Discussion and closure by the Chairs

TUESDAY 5  
NOVEMBER

14:00 -  
17:30

Agorà Malatesta –  
Environmental  
Monitoring Area  
D8 pav.

**Environmental  
Monitoring and  
Earth  
Observation**  
*Onsite event*  
[Click here](#)

## Odor emissions: from abatement technologies to new control strategies

DOWNLOAD THE  
CONFERENCE POSTERS

Language: Italian

**organized by Ecomondo STC & ISPRA (Italian Institute for Protection and Environmental Research), Italian Chemical Society - Division of Environmental and Cultural Heritage Chemistry**

with speeches and posters from the Call for Papers 2024

The Ecomondo Odor Emissions conference (at its fourteenth 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  
Gaetano Settimo, National Institute of Health

### Programme

14.00 Introduction  
Gianluigi de Gennaro, University of Bari "Aldo Moro"

14.10-14.30 *One year of implementation of the Guidelines for the application of Article 272-bis of Legislative Decree 152/2006 on odorous emissions from plants and activities*

Magda Brattoli, ARPA Puglia

Fabio Romeo, Ministero dell'Ambiente e della Sicurezza Energetica

14.30-14.40 *Assofond's monograph on olfactory harassment: a useful tool for those working in the sector*

R. Lanzani, Assofond

14.40-14.50 *Odour emissions: Unem's point of view*

M.V. Coccia, Unem

14.50-15.00 *Calcium nitrate for H<sub>2</sub>S and odour prevention in waste water*

I. Borella, N. von Orelli, Acque e Chimici SA

15.00-15.10 *Criticalities and optimisations of the abatement system for volatile organic substances from municipal waste treatment plant*

K. De Angelis, L. Carloni, F. Proietti - ASM Terni

15.10-15.20 *Use of an innovative multi-stage equipment for chemical and odour abatement with guaranteed effectiveness against optimisation of management by controlling process parameters*

R. Snidar, Tecnoimpianti Water Treatment S.r.l.

15.20-15.30 *Integrated biotechnology for sustainable abatement of odour emissions in accordance with circular economy principles*

P. Giaquinto, L. Raso, M.R. Della Rocca, G. Oliva, V. Belgiorno, V. Naddeo, T. Zarra - Università degli Studi di Salerno

15.30-15.40 *Modelling odour dispersion: influence of the accuracy of topographical and spatial input data. A case study*

D. Barbero, A. Nanni, G. Tinarelli - ARIANET S.R.L., Politecnico di Milano

15.40-15.50 *Integrating Chemical Sensing and Analytical Techniques for Odor Emission Characterization and Management*

C. Franchina 1,2, A. M. Cefalì 1,2, M. Gianotti 1,2, A. Frugis 3, C. Corradi 3, G. De Prosperis 3, S. Dugheri 4, D. Vignola 5, D. Ronzio 1, L. Ferrero 2, E. Bolzacchini 2 and D. Cipriano 1; 1. RSE-Ricerca sul Sistema Energetico, 2. Department of Earth and Environmental Sciences, University of Milano-Bicocca, 3. ACEA Infrastructure S.p.A., Gruppo ACEA S.p.A., 4. Industrial Hygiene and Toxicology Laboratory, Careggi University Hospital, 5. Pollution Srl

15.50-16.00 *Evaluations and comparison of passive areal emission sampling for odorous surfaces*

L. Carrera, F. Tagliaferri, M. Invernizzi, S. Sironi - Politecnico di Milano

16.00-16.10 *Zerynth IoT & AI Technology for the Monitoring and Control of Odorigenic Emissions in ESSA's Waste Treatment Plants*  
*Zerynth IoT & AI Technology for the Monitoring and Control of Odorigenic Emissions in ESA's Waste Treatment Plants*

D. Mazzei, Zerynth

16.10-16.20 *SIZER project: methodological approach for estimating port area emissions, assessing impacts and managing inputs*

L. de Gennaro, M. Cortese, A. Dipalma, M. Amodio, D. Colamaria - Lenviros S.R.L.

16.20-16.30 *Integrated analytical approach (UNI EN 13725:2022, EPA TO-15) for the assessment of odour emissions from industrial plants*

A. Piazzalunga, A. Forgione - Indam Laboratori S.r.l., FKV S.r.l

16.30-16.40 *Development and application of an innovative methodology for characterising odour fingerprints and evaluating the olfactory impact of production activities*

Riccardo Gori, Nicola Mucci, Stefano Dugheri, Alexander Pittella - Università di Firenze

Chiara Vita, PIN srl

Elena Sturlini, Bindi SpA

Domenico Cipriano, Ricerca sul Sistema Energetico – RSE S.P.A.

Stefano Ravaoli, SITEB

Davide Vignola, Pollution s.r.l.

16.40-16.50 *The importance of diffuse and fugitive emissions in olfactory impact assessments: considerations and possible monitoring approaches*

M. Invernizzi, S. Sironi - Politecnico di Milano

16.50-17.00 *Using Optical Gas Imaging for the detection and quantification of fugitive emissions: applications for odour management plans*

Federico Cangialosi, Tecnologia e Ambiente srl

Antonio Fornaro, Labservice Analytica srl

17.00-17.10 *Odour emissions: chemical characterisation of sources and fenceline monitoring: first experience with continuous monitoring using SIFT-MS technology*

C. Corradi, G. Cecchini, A. Frugis, G. De Prosperis, D. Cecili, E. Tocci - ACEA

17.10-17.20 *Calibration transfer between IOMS to reduce costs related to real-time monitoring of odor emissions Calibration transfer between IOMS to reduce costs related to real-time monitoring of odor emissions*

B. J. Lotesoriere, C. Ratti, C. Bax, L. Capelli - Politecnico di Milano

17.20-17.25 **POSTER SESSION**

17.25 Conclusions

TUESDAY 5  
NOVEMBER

14:15 -  
17:45

Agorà Fellini –  
Sites & Soil  
Restoration Area  
C3 pav.

**Sites and Soil  
Maintenance  
and Restoration**

*Onsite event*

[Click here](#)

Flood control reservoirs: needs, potential, problems, case studies



CONSIGLIO NAZIONALE  
DEI GEOLOGI

Language: Italian

**organized by Ecomondo STC & ITCOLD – Comitato Nazionale Italiano per le Grandi Dighe, Italian Geotechnical Society - AGI-IGS Section**

The presence of a dam on a river, capable of creating a significant accumulation basin upstream (reservoir), can determine important changes in the hydrometric regime downstream compared to natural conditions. Flood lamination consists in the modification of the outgoing flood wave compared to its natural structure, with the most evident effect of reducing the flood peak. This ability to reduce the heights of flood waves is the basis for the use of reservoirs and lamination tanks as a resource for the hydraulic protection of territories located downstream. This conference addresses the topic of reservoirs for flood lamination and lamination tanks, providing a general framework and delving into the theoretical, applicative and regulatory aspects. Examples of flood lamination reservoirs and specific case studies are also presented.

## **Programme**

13.45-14.15 Participants registration

14.15-14.30 Introduction

Daniele Cazzuffi, CESI SpA & President AGI-IGS

Nicola Moraci, University Mediterranea Reggio Calabria & Vice President AGI-IGS

Rosella Caruana, Italian Dams Committee (ITCOLD)

Francesco Fornari, Enel GreenPower & Italian Dams Committee (ITCOLD)

Alberto Bonafé, Enel GreenPower & Italian Dams Committee (ITCOLD)

14.30-15.30 **Keynote lectures**

*General overview of the topic, potential and problems*

Armando Brath, University of Bologna, President of the Italian Hydrotechnics Association and Chairman of the ITCOLD Working Group on Flood Control Reservoirs

*Theoretical and practical aspects*

Alberto Bonafé, Enel GreenPower

*Regulatory aspects*

Giuseppe Parravano, Dam Authority

15.30-17.00 **Experiences – Case Studies**

*Flood control reservoirs: towards an integrated methodology to plan priorities in Emilia-Romagna*

Monica Guida, Settore Difesa del Territorio – Regione Emilia-Romagna

*The case study of flood control reservoir of the Parma river (Emilia-Romagna)*

Gianluca Zanichelli, Interregional Agency for the Po River

*Flood storage for the Corbara dam (Umbria region)*

Enrico Paganini, Enel Green Power

*The importance of communicating with the public and combating disinformation*

Tonino Bernabè, Romagna Acque

17.00-17.45 Discussion and Conclusions



TUESDAY 5  
NOVEMBER

15:00 -  
18:00

Neri 1 Room South  
Hall

Onsite & live  
streaming event

[Click here](#)

## Thematic session - RESTORATION ROAD: ITALY'S PATH TO A NATURE POSITIVE ECONOMY

Language: Italian

**organized by National Council of the Green economy, in collaboration with Nature Positive Network, AdBPo and Regenerative Society Foundation**

### Programme

Moderators:

**Giuseppe Dodaro**, Coordinator, Nature Positive Network

**Chiara Patitucci**, Secretary General, Regenerative Society Foundation

### INTRODUCTORY REMARKS

*Economy and nature: the role of italian enterprises*

**Giuseppe Dodaro**, Coordinator, Nature Positive Network

*Nation's commitment to biodiversity: what COP16 told us*

**Lorenzo Ciccarese**, Senior Research Director, ISPRA

*The Nature Restoration Law*

**Paola Migliorini**, Deputy Head, Unit Nature Conservation, Directorat Envi, European Commission

*Toward a Nature Positive economy: the benefits for businesses*

**Marco Frey**, Full Professor of Economics and Business Management, Sant'Anna School of Advanced Studies in Pisa

**Andrea Grillenzoni**, Director General, Garc Spa

*Finance's Focus on Nature*

**Giancarlo Fonseca**, Country Head Italy, Lombard Odier Investment Managers & Vicepresidente Regenerative Society Foundation

**Elena Jachia**, Environmental Sector Director, Cariplo Foundation

*Alien species in the Mediterranean: an economic problem or just an ecological one?*

**Stefano Liberti**, Author «Tropico Mediterraneo»

*Enterprises featured in Nature Restoration*

**Marco Santori**, Member Board of Directors, Alcenero

**Piergiorgio Capellino**, President, Capellino Foundation

*Halting biodiversity loss on a global scale: the Nature Positive Initiative*

**Marco Lambertini**, Convener & Secretariat Executive Chair, Nature Positive Initiative

**Italy's path to a nature positive economy****Edo Ronchi**, President, Sustainable Development Foundation**Alessandro Bratti**, Secretary General, Po River District Basin Authority**Francesco Tomas**, Director General, Biodiversity and Sea Protection, Ministry of Environment and Energy Security**Simone Mazzola**, Chief Operation Officer 3Bee & Vicepresident, Regenerative Society FoundationTUESDAY 5  
NOVEMBER15:00 -  
18:00Neri 2 Room  
South Hall  
Onsite & live  
streaming event  
[Click here](#)**Thematic session - AIR QUALITY: RISKS, CHALLENGES AND SOLUTIONS**

Language: Italian

**organized by National Council of the Green economy, in collaboration with Emilia-Romagna Region, ART-ER, Life PrepAIR, with the support of TPER and Ramboll****Programme**

Moderator:

**Michela Finizio**, Journalist, Il Sole 24 ore**INTRODUCTORY REMARKS:****Vannia Gava**, Viceministro, Ministero dell'Ambiente e della sicurezza energetica (TBC)**Stefania Crotta**, Director General Programs and Financial Incentives, Ministry of Environment and Energy Security**Giorgio Arduino**, General Direction Environment, European Commission**Francesca Racioppi**, World Health Organization**Raimondo Orsini**, Director, Sustainable Development Foundation**AIR QUALITY PRIORITY ACTION PILLARS***Introduction of each pillar by the Sustainable Development Foundation and PrepAI project***TRANSPORT****Emilia Romagna Region | Paolo Ferrecchi**, Direttore Generale cura territorio e ambiente**TPER | Paola Matino**, Corporate Social Responsibility and Sustainability*Presentation of 30 km/h zones and urban air quality study***Ramboll | Chiara Metallo**, Lead Consultant Air Quality**AGRICULTURE AND ZOOTECNICS****Piemonte Region | Angelo Robotto**, Director General for Environment, Energy and Territories**Up to farm | Simone Pelisetti**, CEO

## INDUSTRY

**Lombardia Region** | **Giorgio Maione**, Councilor of Environment  
**Raffmetal** | **Michele Bortolami**, Director HSE

## AIR QUALITY AND BIOMASS

**Veneto Region** | **Giampaolo Bottacin**, Councilor of Environment

## ENERGY EFFICIENCY

**Autonomous Province of Trento** | **Gabriele Tonidandel**, Director UO Air,  
 Provincial Environmental Protection Agency  
**Fire** | **Dario Di Santo**, Director

## TECHNICAL SOLUTIONS AND CITIZEN CONTRIBUTION - the role of communication

**Marco Ottolenghi**, Environment Unit Manager, ART-ER

## INNOVATION AND TECHNOLOGY IN THE SERVICE OF ENVIRONMENTAL MONITORING

**Emanuele Cardinale**, Head of Sustainability, INWIT

## CONCLUSIONS

**Paolo Ferrecchi**, Director General Land and Environment Care, Emilia Romagna Region  
**Raimondo Orsini**, Director, Sustainable Development Foundation

TUESDAY 5  
NOVEMBER

15:00 -  
18:00

Diotallevi 1 Room  
South Hall  
Onsite & live  
streaming event  
[Click here](#)

## Thematic session - THE PERFORMANCE OF MUNICIPAL AND PACKAGING WASTE MANAGEMENT IN CITIES

Language: Italian

**organized by National Council of the Green economy, in collaboration with Green City Network and Conai**

### Programme

Moderators:

**Alessandra Bailo Modesti e Anna Parasacchi**, Coordinators Green City Network

### OPENING REMARKS

**Fabio Costarella**, Deputy Director, CONAI  
**Edo Ronchi**, President, Sustainable Development Foundation

### PRESENTATION OF REPORTS ON REGULATORY CHANGES AND TRENDS IN THE MANAGEMENT OF MUNICIPAL AND PACKAGING WASTE

**Stefano Leoni**, Waste and Circular Economy Area Manager, Sustainable Development Foundation

Speakers:

**Laura D'Aprile**, Head of Department for Sustainable Development, Ministry of Environment and Energy Security

**Stefano Laporta**, President, ISPRA

**Carlo Salvemini**, Energy and Waste Delegate, ANCI

Discussants:

**Nicolò Valle**, Senior Economist, REF Ricerche

**Oriana Ruzzini**, Councillor, Municipality of Bergamo

**Simone Borsari**, Councillor, Municipality of Bologna

**Paola Galgani**, Deputy Mayor, Municipality of Florence

**Matteo Campora**, Councillor, Municipality of Genoa

**Gianluca Borghi**, Councillor, Municipality of Parma

**David Grohmann**, Councillor, Municipality of Perugia

**Anna Montini**, Councillor, Municipality of Rimini

TUESDAY 5  
NOVEMBER

16:30 -  
18:30

Ravezzi 2 South  
Hall

**Resource  
efficiency and  
Circular  
Economy**  
*Onsite event*  
[Click here](#)

## Plastic and the challenge of the circular economy

Language: Italian

**organized by Ecomondo STC & ISPRA (Italian Institute for Environmental Protection and Research), Ministry of Environment and Energy Security**

The European strategy for plastics in a circular economy lays the foundations for a new economy of this fraction, identifying specific objectives, including that of ensuring by 2030 the full recyclability of all packaging placed on the market as well as the recycling of more than half of plastic packaging waste.

At present, the most updated data, referring to 2022, show a plastic packaging recycling percentage of 48.9%. Alongside the recycling objectives, the European legislation also introduces targets of recycled material content in packaging put on the market, with reference for example to packaging for liquid foodstuffs for which targets of 25% are set by 2025 in the case of PET bottles with a capacity of up to three liters and of 30% by 2030 for all types of drink bottles.

The implementation of separate collection systems can improve the quality of the collected waste and can reduce the contamination of the different fractions, representing a structural element to guarantee the achievement of the new targets. Available data show that plastic, including all types of materials and not just packaging, still tends to be largely concentrated in mixed municipal waste with an overall recycling percentage of 20-25% compared to municipal plastic waste yearly generated.

Maximizing recycling also requires investments in new technologies, aimed at valorizing the currently non-recoverable fractions, alongside those already consolidated. The definition of the national strategy on plastics can guarantee to our country an effective path of technological innovation.

The day is an opportunity to take stock of the measures implemented and the technological possibilities available.

### Session Chair

Valeria Frittelloni, Head of Department of Environmental Assessment, Monitoring and Sustainability, ISPRA

## Programme

### Speakers:

Andrea Massimiliano Lanz, Head of the National Centre for Waste and Circular Economy of ISPRA

Pierluigi Barbaro, Institute of Chemistry of Organometallic Compounds of ICCOM-CNR (National Research Council)

Francesco Iacotucci, Consulente ANCI

Luca Mariotto, Environment Unit Director of Utilitalia

Marilena di Brino, Assorimap

Vincenzo Lumia, DG Plastic Europe Italia

Libero Cantarella, DG Unionplast

Cristina Poggessi, DG IPPR

### *Conclusions*

Laura D'Aprile, Head of the Sustainable Development Department of the Italian Ministry of the Environment and Energy Security

# WEDNESDAY 6 NOVEMBER

WEDNESDAY 6  
NOVEMBER

10:00 -  
13:00

Mimosa Room B6  
pav.

**Resource  
efficiency and  
Circular  
Economy**  
*Onsite event*  
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Supporting the transition of Italian industrial areas and brown-areas into eco-industrial parks and the implementation of Industrial Symbiosis as a management routine tool for companies

DOWNLOAD THE  
CONFERENCE POSTERS

Language: Italian

**organized by Ecomondo STC & ENEA (Italian National Agency for New Technologies, Energy and Sustainable Economic Development), SUN (Symbiosis Users Network)**

with speeches and posters from the Call for Papers 2024

Economic and non-economic tools and incentives play a crucial role in accompanying the transition from linear production and consumption models to sustainable and circular ones. The so called "Cronoprogramma" of the Italian National Strategy for Circular Economy, in this perspective, envisages the support of industrial symbiosis projects through the development of tools and/or incentive schemes and proposes, in addition, the use of business networks with circular purposes and the regeneration of brownfields into circular eco-districts (eco-industrial parks), including through industrial symbiosis. To this end, involvement and discussion with and among stakeholders such as businesses, public administrations, universities and research organizations, education/training systems, trade associations and the third sector is also essential. In this context, the 8th SUN Network Conference is an opportunity to focus attention on economic and non-economic tools and incentives for the promotion of industrial symbiosis and the transition of Italian industrial areas to the circular eco-district model.

## Session chairs

Alessandra De Santis, [economiecircolare.com](http://economiecircolare.com)

Laura Cutaia, ENEA – SSPT Department, SUN President

## Programme

10.00 Introduction by the Chairs

10.10-11.00 Invited speakers

Carlo Zaghi, Ministry of Environment and Energy Security

Roberto Tatò, Ministry of enterprises and made in Italy

Maria Teresa Monteduro, Ministry of economy and finance

Floriana La Marca, Health and Digital Executive Agency

Michele Posocco, Favini

Giovanni Caniglia, Pelligra Holding

Giancarlo Bellina, Confindustria Siracusa e Brown2Green Sicily

Silvia Sbaiffoni<sup>1</sup> e Eleonora Perotto<sup>2</sup>; 1ENEA , 2Polimi, SUN GdL4 Certificazione e standardizzazione della simbiosi industriale

11.00-12.20 **Speeches selected from the Call for Papers**

*Perché le imprese italiane (non) implementano la simbiosi industriale?*

Luca Fraccascia, Sapienza Università di Roma e University of Twente

Lorenza Fallone, Sapienza Università di Roma

*Analisi degli strumenti finanziari utili a favorire la riconversione delle aree produttive italiane in un quadro green e sostenibile*

Giovanni Moccia, Centro Studi Di Ricerche Economiche e Sociali Mondì Sostenibili

*From textile waste to resource: exploring industrial symbiosis opportunities between the textile and the furniture sectors*

Roberta Pellegrino<sup>1</sup>, Rosa Maria Dangelico<sup>1</sup>, Vito Albino<sup>1</sup>, Lorenzo Ardito<sup>1</sup>, Umberto

Panniello<sup>1</sup>, Ilaria Giannoccaro<sup>1</sup>, Pierpaolo Pontrandolfo<sup>1</sup>, Francesco Martellotta<sup>1</sup>,

Chiara Rubino<sup>1</sup>, Stefania Liuzzi<sup>1</sup>, Stefano Franco<sup>1</sup>, Giovanni Miccolis<sup>1</sup>, Giovanni

Perrone<sup>2</sup>, Paolo Roma<sup>2</sup>, Alessia Busacca<sup>2</sup>, Silvia Barbero<sup>3</sup>, Eliana

Ferrulli<sup>3</sup>; 1Politecnico di Bari, 2Università di Palermo, 3Politecnico di Torino

*SYMBA - Securing local supply chains via the development of new Methods to assess the circularity and symbiosis of the Bio-based industrial ecosystem enhancing the EU*

Antonietta Pizza<sup>1</sup>, Marco de la Feld<sup>1</sup>, Antonella De Fenza<sup>1</sup>, Tanja Meyer<sup>2</sup>; 1ENCO

s.r.l., 2BBEPP

*FacilitAmbiente, la facilitazione a supporto delle simbiosi industriali*

Elisabetta Mauri, Camera Di Commercio Di Milano Monza Brianza Lodi - Camera

Arbitrale Di Milano

*An Industrial symbiosis top-down approach to plan industrial districts based on the exploitation of waste heat from different production processes*

Giuseppe Mancini<sup>1</sup>, Antonella Luciano<sup>2</sup>, Debora Fino<sup>3</sup>; 1Università di Catania,

2ENEA, 3Politecnico di Torino

*Distretti energetici circolari: il modello concreto per trasformare i rifiuti in risorse*

Giovanni Baldassarre, Edison Next

*Trieste Net0: Strategie di decarbonizzazione dell'area industriale giuliana*

Augusto Peruzzi<sup>1</sup>, S. Primiceri<sup>2</sup>, A. Di Paolo<sup>1</sup>, F. Fileni<sup>1</sup>, M. Martignani<sup>3</sup>, G. Nenzioni<sup>3</sup>,

Daniela Filipaz<sup>4</sup>, Luigi Borgogno<sup>4</sup>; 1Capgemini, 2Coselag, 3Hera Servizi Energia,

4Justonearth

## 12.20-12.55 **Pitch – Case study**

Chair: Tiziana Beltrani, ENEA

*Sustainable Urban Ecosystems: Advancing Waste Management, Circular Economy Practices, and Symbiotic Solutions in Eastern Amman's Industrial Cities*

Haneen Hassouneh, SCDA - Non-Profit Organization

*La circolarità della Valutazione Ambientale Strategica per l'attuazione di scelte sostenibili di pianificazione e sviluppo economico del territorio della Regione Basilicata*

Maria Carmela Bruno, Fiorella Messina – Regione Basilicata

*Circolarità per il rinverdimento dei composti - Circularity for greening composti*

Maria Savina Pianesi, Delta s.r.l.

*Enhancing industrial symbiosis as a business model in POREM's value chain: assessing its potential economic impact in Italy*

Francesca Ceruti<sup>1</sup>, Marco La Monica<sup>2</sup>, Alice Dall'Ara<sup>3</sup>, Alessandra Strafella<sup>2</sup>;

<sup>1</sup>Università di Brescia, <sup>2</sup>ENEA, <sup>3</sup>ADA S.R.L.S

*Governing the Industrial parks: different Governance models to sustainable and circular Industrial parks*

Massimo Di Domenico, Antonio Ballarin Denti, Mita Lapi – Fondazione Lombardia per l'Ambiente (FLA)

*Sportello circolarità*

Paolo Maffè<sup>1</sup>, Marina Stroppa<sup>1</sup>, Giovanni Rossitti<sup>1</sup>, Enrico Boccaleri<sup>2</sup>; <sup>1</sup>Confindustria Novara Vercelli Valsesia, <sup>2</sup>Università del Piemonte Orientale

*Use of Biochar in Metallurgical Sector: Potentials for Industrial Symbiosis and Transition to Circular Eco-Districts in Lombardy*

Reza Vahidzadeh, Marta Domini, Giorgio Bertanza – Università degli Studi di Brescia

12.55 Conclusion

## **POSTER SESSION**

Chair: Marco La Monica, ENEA

**1. Promoting Industrial Symbiosis and Sustainable Agricultural Practices Using Algae**  
Inese Skapste, Latvia University of Life Sciences and Technologies, Latvia

**2. Per un Ecosistema dei Centri di Preparazione per il Riutilizzo in Italia**  
Luca Pomili, Pomili Demolizioni Speciali Srl



- 3. WaStudy: la 4° edizione dell'osservatorio italiano del mercato dei rifiuti speciali**  
Alberto Marazzato, Marazzato Soluzioni Ambientali Srl
- 4. Trasformazione del paesaggio industriale: revisione della letteratura sulle NBS in Europa e Italia**  
Maria Elena Bini, Sara Pennellini, Alessandra Fiorucci, Alessandra Bonoli - Università di Bologna
- 5. Decarbonization of the Taranto steelmaking area: reduction of environmental and climate impacts**  
Francesco Cardellicchio, CNR
- 6. Mapping the Horizon projects concerning the development of incentives for industrial symbiosis**  
Mariarita Paciolla<sup>1</sup>, Anna Rita Ceddia<sup>2</sup>, Marco La Monica<sup>2</sup>; <sup>1</sup>CDCA - Centro di Documentazione sui Conflitti Ambientali, <sup>2</sup>ENEA
- 7. Towards a standardized approach: UNI PdR for Biodiversity Credits**  
Simone Mazzola<sup>1</sup>, Salvatore Faugno<sup>2</sup>, Simona Alberti<sup>1,3</sup>, Francesca Barbero<sup>3</sup>, Luca Pietro Casacci<sup>3</sup>, Marino Quaranta<sup>4</sup>, Monica Riva<sup>5</sup>, Daria Maso<sup>5</sup>, Pietro Spataro<sup>6</sup>, Giorgio Pelassa<sup>7</sup>, AA.VV<sup>8</sup>; <sup>1</sup>3Bee srl, <sup>2</sup>Università Federico II di Napoli, <sup>3</sup>Università di Torino, <sup>4</sup>Crea di Bologna, <sup>5</sup>Bureau Veritas, <sup>6</sup>Climate Standard, <sup>7</sup>Regione Piemonte, <sup>8</sup>UNI - Ente Italiano di Normazione
- 8. SE.LI.F. - Second Life Furniture**  
Michela Reale, RINNOVATIVE S.r.l.  
Nicola Bartucca, Vice Presidente APEA REGIONALE ARTONECO RETE DI IMPRESE SOGGETTO
- 9. Approcci e strumenti per l'analisi e la modellizzazione di scenari circolari nelle filiere locali: il Progetto "MAX SHEEP"**  
Raffaella Taddeo<sup>1</sup>, Enrico Vagnoni<sup>2</sup>, Rosa Di Capua<sup>3</sup>, Veronica Casolani<sup>1</sup>, Alberto Simboli<sup>2</sup>, Andrea Raggi<sup>2</sup>, Valentino Tascione<sup>1</sup>, Alessandra Piga<sup>2</sup>, Sara Bortolu<sup>2</sup>, Bruno Notarnicola<sup>3</sup>, Pietro Alexander Renzulli<sup>3</sup>; <sup>1</sup>Università degli Studi "G. d'Annunzio" di Chieti-Pescara, <sup>2</sup>CNR, <sup>3</sup>Università degli Studi di Bari Aldo Moro
- 10. Strumenti e incentivi per la promozione della riconversione delle aree produttive Italiane in parchi eco-industriali e per la diffusione della Simbiosi Industriale**  
Giolitti Gianfranco, Edison Regea S.r.l.
- 11. Application of multi-criteria decision analysis approach for evaluating the sustainability of landfills waste in Sicily**  
Agata Matarazzo, Salvatore Ingenito, Massimo Riccardo Costanzo, Antonio Zerbo - Università Di Catania
- 12. Linking agri-food good practices of circular economy with technology readiness levels**  
Agata Matarazzo, Salvatore Ingenito, Massimo Riccardo Costanzo, Carla Serrano - Università Di Catania

**13. Environmental performance and economic feasibility assessment of a Sicilian composting process as an example of transition from linear to circular production models**

Salvatore Ingenito<sup>1</sup>, Massimo Riccardo Costanzo<sup>1</sup>, Giuseppe Guagliardi<sup>2</sup>, Angelo Lapiana<sup>2</sup>, Agata Matarazzo<sup>1</sup>; <sup>1</sup>Università di Catania, <sup>2</sup>Progitec S.r.l.

**14. Il lavoro del futuro nella città del futuro**

Armillotta G., Berardi M., Gnudi M., Lettieri F., Romano F. - Randstad Research

**15. Generatori ad idrogeno: una soluzione di backup a impatto zero per i data center**

Abdessamad Saidi, Innio Jenbacher GmbH & CO OG - Jenbach - Austria; Andrea Pivatello, Jenbacher srl - Verona, Italy

**16. Generazione di energia basata sull'idrogeno. Una soluzione di backup a impatto zero per gli hub di Ammoniac Verde**

Abdessamad Saidi, Innio Jenbacher GmbH & CO OG - Jenbach - Austria; Andrea Pivatello, Jenbacher srl - Verona, Italy

**17. Slow Fiber**

Dario Casalini, President and Founder of Slow Fiber network

**18. Il festival art for earth per una smart e green community**

Marinella Montanari, affiliata con Jobel APS e Jobel North America

**19. BeeGreen: Innovazione e sostenibilità per le aziende di produzione**

Giosef Perricci, UPNOVA GROUP SRL

WEDNESDAY 6  
NOVEMBER

10:00 -  
13:00

Ravezzi 2 South  
Hall

**Resource  
efficiency and  
Circular  
Economy**

*Onsite event*

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## Next Generation EU and Circular Economy

Language: Italian

### **organized by Ecomondo STC & ISPRA (Italian Institute for Environmental Protection and Research), Italian Ministry of Environment and Energy Security**

The National Recovery and Resilience Program (PNRR) dedicates 2.1 billion euros to improving the efficient and sustainable management of waste and for the development of innovative technologies to boost the circular economy on a national scale, with the aim of bridging the structural gaps that, especially in the centre-south, are the real obstacle to the development of integrated management. The PNRR is first and foremost a plan by objectives, and in this sense the approved reforms (National Strategy for the Circular Economy and National Waste Management Programme) are fundamental programmatic tools for public and private operators. Italy has been able to respond with a large number of projects submitted by both the public and the tried and tested sector. 2024 is a key year in the implementation of the investments and reforms of the PNRR.

This conference will be an opportunity to analyze the progress made and any critical issues that have emerged through discussions between institutions and operators.

### **Session Chair**

Valeria Frittelloni, Head of Department of Environmental Assessment, Monitoring and Sustainability, ISPRA

## Programme

Welcome and introduction

Speakers:

Laura D'Aprile, Head of the Sustainable Development Department of the Italian Ministry of the Environment and Energy Security

Maria Siclari, General Director of ISPRA

Filippo Brandolini, President of Utilitalia

Representative of Italian Regions (TBD)

Marco Ravazzolo, Environment, Energy and Mobility Policy Director of Confindustria

Carlo Salvemini, ANCI (National Association of Italian Municipalities) Energy and Waste delegate

Ignazio Capuano, President of CONAI

Danilo Bonato, Director of Business Development and Institutional Relations Erion Compliance Organisation

Claudio Perissinotti Bioni, Technical Project Manager Innovation and Development, UNI

WEDNESDAY 6  
NOVEMBER

10:00 -  
13:00

Agorà Augusto -  
Bioeconomy Area  
D2 pav.

**Circular and  
Regenerative  
Bioeconomy**  
Onsite event  
[Click here](#)

## Biowaste: XXVI Conference on Composting and Anaerobic Digestion. Plenary session

Language: Italian

**organized by Ecomondo STC & CIC (Italian Composting Consortium), ISPRA (Italian Institute for Environmental Protection and Research)**

The plenary session will address the state of the art and prospects of organic waste collection and recycling in Europe and Italy. Specific focus will be on the evolution of recycling plants in Italy between material recycling and energy production in the light of the sectoral policies in place and, above all, on the issue of the quality of organic waste streams collected in urban areas, with the presentation of updated data on the product analyses that the CIC carries out every year throughout the country.

## Programme

10.00 Opening remarks

Lella Miccolis, President CIC

10.15-10.45 *State of the art of the Italian Biowaste sector compared to the European scenario*

Andrea Lanz, ISPRA

10.45-11.15 *The bioeconomy of organic waste in Italy between material recycling and energy recovery*

Massimo Centemero, DG CIC

11.15-12.30 *Round table on organic waste quality*

Invited participants:

CIC, ANCI, ISPRA, MASE, ARERA, BIOREPACK, CONAI, UTILITALIA, ASSOAMBIENTE

12.30-12.45 *Compost quality awards*

12.45-13.00 *Conclusions*WEDNESDAY 6  
NOVEMBER10:00 -  
13:00Neri 2 Room  
South Hall**Textile District**  
*Onsite event*  
[Click here](#)

## Municipal textile waste: collection, reuse and recycling. Where do we stand?

Language: Italian

**organized by Ecomondo STC & UNIRAU (Union of used clothing collection, recycling and reuse companies)**

The EU Strategy for Sustainable and Circular Textiles, published in March 2022, addresses the issues of textile production, consumption and post-consumption in the context of the Circular Economy Action Plan and the European Industrial Strategy.

Textile products are very present in daily life and urgent action is needed as their impact on the environment continues to grow and represents the fourth highest impact on the environment and climate change, with high consumption of water, soil, primary raw materials and greenhouse gas emissions.

The Commission's 2030 vision for the textile sector is based on durable, repairable and recyclable textiles, with recycled fibre content, free of hazardous substances, produced in compliance with social and environmental rights and certified by the introduction of the 'digital passport'.

The European Institution are also working on harmonized rules for EPR schemes to be implemented in all Member States to improve separate collection and incentivise circular business models that facilitate reuse, repair and recycling.

### Session Chair

Andrea Fluttero, Unirau Assoambiente

### Programme

*Municipalities and collection cooperatives**Comparison of different types of collection (on the road, door-to-door, selective)*

Franco Bonesso, ANCI - National Association of Italian Municipalities

Bernardo Piccioli Fioroni, Utilitalia

Karina Bolin, Humana people to people

*Selection companies**Human Competence, Technology and Markets. Strengths and weaknesses of the Campania district*

Joseph Valletti, ARIU - Used Garment Recoverers Association

Carmine Esposito, UNIRAU - Union of used clothing collection, recycling and reuse companies

*The selection companies in Tunisia*

A virtuous history of commercial relationships for the valorization of municipal textile waste

Hamdi Kannou, CONNECT Tunisie

*African Second Hand Markets*

Fernando Hin Junior, ACB - Associação Comercial da Beira (Mozambique)

*Recycling technologies*

*Technological burdens and REACH compliance issues for fiber-to-fiber textile recycling*

Andrea Falchini and Marco Ruzzante, Next Technology Prato

*Updates to the regulatory framework*

Luca Proietti, General Director of Italian Ministry of Environment and Energy Security

Conclusions

WEDNESDAY 6

NOVEMBER

10:00 -

13:00

Ravezzi 1 Room  
South Hall

**Circular and  
Regenerative  
Bioeconomy**

*Onsite event*

[Click here](#)

## Drivers for a stronger and more competitive agrifood supply chain: tradition, innovation, circularity and energy transition

Language: Italian

**organized by Ecomondo STC & Confagricoltura (General Confederation of Italian Agriculture), Federalimentare (The Italian Food & Drink Industry Federation), ENEA (Italian National Agency for New Technologies, Energy and Sustainable Economic Development)**

The current political and economic context is changing swiftly, having an impact on the economic, social, and environmental dimensions of sustainability. In fact, the expenses food & beverage companies have to cover are rising as a result of global tensions, despite the fact that the marketplaces in which they compete and the regulations that should be followed are getting stricter. It is also essential to take into account the various obstacles that farmers face due to the effects of climate change, such as rising temperatures, drained soils, and limited water supplies, as well as the need to ensure higher production in light of the projected 10 billion people on the planet by the year 2050.

Supporting the ecological transition of the agrifood supply chain and enhancing the commitment and investments of companies is becoming a priority. In order to do this, a discussion about the levers required to maintain competitiveness in the altered geopolitical and economic environments in which the supply chain has to function must be held in conjunction with the 'green' topic. A debate in which the various useful tools that can be used by companies will be analysed, but also the regulatory criticalities that should be overcome as well as existing good practices to be disseminated and replicated, innovations and new technological opportunities.

In this scenario, today, thanks to the development of technology, the agri-food chain can have drivers (genetic engineering - conventional breeding and biotechnology - agriculture 5.0 - sensors and drones -, digitisation, circular supply chains, photovoltaics, agri-voltaics and biogas, ecc.) that allow companies to be competitive on the market.

The event will be an important opportunity to evaluate the possible scenarios that may occur and the future policies, in order to understand if these will be able to adequately support the actors of the agro-food chain. The debate will involve major players from European institutions, national bodies, representatives of the agri-food chain, research and academia.

## Session Chair

Massimo Iannetta, ENEA

## Programme

9.30 Participants' registration

### 10.00-10.20 **Session I**

*Introduction: Focus on drivers and upcoming scenarios*

Maurizio Notarfonso, ENEA

### 10.20-11.30 **Session II**

*European policies for the competitiveness of the agrifood supply chain*

Serenella Sala, Joint Research Centre European Commission

*The value of the circular economy for farms*

Paolo Sckokai e Silvia Coderoni - Cattolica University of Piacenza and University of Teramo

*Sustainable supply chains*

Emanuele Blasi, University of Tuscia - Mediterranea

*Genetic improvement*

Luigi Cattivelli, CREA

*The digital evolution*

Chiara Corbo, Osservatorio Smart Agrifood

### 11.30-12.30 **Session III**

*Case studies: agricultural and agrifood companies*

Federico Magnani, Fungar

Elena Denicolò, Menz & Gasser

### 12.30-13.00 **Round Table**

Speakers:

Pierre Bascou, European Commission - General Direction of Agriculture and Rural Development

Massimiliano Giansanti, Confagricoltura

Giangiacomo Pierini, Federalimentare

Elena Sgaravatti, Assobiotec

Antonio Feola, Unione Italiana Food

WEDNESDAY 6  
NOVEMBER

10:00 -  
13:00

Agorà Ariminum –  
Circular Economy  
Area D1 pav.

**Resource  
efficiency and  
Circular  
Economy**  
*Onsite event*  
[Click here](#)

## Advanced experiences on circular economy in the construction sector

Language: Italian

### organized by Ecomondo STC & Green Building Council Italy

Circular economy is in general defined as the ability to recycle the material from which movable and immovable goods are made in order to produce new ones. In reality, the circular economy is a model of production and consumption that involves sharing, lending, reusing, repairing, reconditioning and recycling existing materials and products with the aim of extending their useful life as long as possible. The synergy between all these areas and skills is essential to achieve the goal of truly circular construction. In a mature Circular Economy model, the materials with which a good is made are reintroduced, where possible, into the economic cycle only after the good or its functional parts have finished their function.

The meeting will open a window on these issues in the construction industry by addressing with examples the different levels of circularity applied at the building and urban scale. Innovative and multidisciplinary projects will be presented. The final round table will stimulate the debate on the perspectives and roles of the different categories of stakeholders.

### Session Chairs

Marco Caffi, Green Building Council Italia  
Gian Marco Revel, Università Politecnica delle Marche

### Programme

10.00 Introduction by the Chairs

10.10-10.30 *Level(S) and circularity in construction*  
Josefina Lingdom, DGENV EU Commission (TBC)

10.30-10.50 *The new PPP on Advanced Materials (I'M4EU) and the impact on Circular Economy in Constructions*  
Jerome Gavillet, EMIRI (Energy Materials Industrial Research Initiative)

10.50-11.10 CAM in the construction sector - a tool for circularity  
Sergio Saporetti, DG-ECD MASE (Directorate General for Circular Economy of the Ministry of the Environment and Energy Security)

11.10-11.25 *Circular real estate development*  
Andrea Vecci, REDO

11.25-11.40 *Circular design of the built environment*  
Paolo Cresci, ARUP

11.40-11.50 *Circularity in construction products*  
Alessia Iscaro, Saint Gobain (TBC)

11.50-12.00 *Bio-based materials for circularity in construction*  
Tiziana Monterisi, Rice House

12.00-12.10 *The Horizon Europe Project "Reconstruct - Developing circular, eco-friendly, and innovative solutions to reduce emissions from the construction industry"*

Gloria Cosoli, assistant Università Politecnica delle Marche

12.10-12.20 *JRC research and policy support for the circular economy in construction sector*

Davide Tonini, Joint Research Centre - European Commission

Marco Lamperti Tornaghi, Joint Research Centre - European Commission

12.20-12.50 Round Table

Speakers:

Fabrizio Capaccioli, GBC Italia

Laura Cutaia, ICESP

Francesca Federzoni, OICE

12.50 Discussion and closure by the Chairs

WEDNESDAY 6  
NOVEMBER

10:00 -  
13:00

Tulipano Room B6  
pav.

**Environmental  
Monitoring and  
Earth**

**Observation**

*Onsite event*

[Click here](#)

## National HIA Guidelines: application experiences of proposers and evaluators

DOWNLOAD THE  
CONFERENCE POSTERS

Language: Italian

**organized by Ecomondo STC & National Institute of Health, ISPRA (Italian Institute for Environmental Protection and Research)**

with speeches and posters from the Call for Papers 2024

The workshop aims to illustrate the application experiences of the National VIS LGs developed by ISS in the context of the EIA procedure of works under state jurisdiction, in particular large combustion plants. This day in particular aims to describe the development and analysis of the HIA study from the point of view of the Proponent and the Evaluator for certain works such as regasification plans, biorefineries and thermal power plants. Discussions between Proponents and Evaluators allow the identification of the most suitable development solutions to safeguard the health of the populations of the territories concerned.

### Session Chairs

Eleonora Beccaloni, National Institute of Health

Gianluigi de Gennaro, University of Bari

### Programme

10.00 Introduction by the chairs

10.20-10.40 *Experience in applying National HIA LGs*

E. Beccaloni, Istituto Superiore di Sanità



10.40-11.00 *Eni's experience in applying National hIA LGs to the Livorno Biorefinery Project*

Pietro Chèrié Lignièrè, Responsabile Raffineria Eni di Livorno

Massimo Broi, Responsabile Salute e Igiene del Lavoro - Direzione Generale Energy Evolution - Eni

11.00-11.20 *Health Impact Assessment in Snam's new LNG terminal projects using FSRU vessels*

Gabriele Lanza, Snam Rete Gas

11.20-11.40 *Guidelines ISS: strengths and weaknesses in the light of application experience*

Valentina Cavanna, Università degli Studi di Torino; ADVANT Nctm

11.40-12.00 *Health risk assessment: analysis of toxic and carcinogenic risk quantification guidelines*

Mariachiara Zanetti, Politecnico di Torino

12.00-12.30 Discussion and closure

## POSTER SESSION

**1.** The role of ecotoxicology and public health benefits.

Aurora Mancini, Mario Carere, Ines Lacchetti, Laura Mancini, Reparto Ecosistemi e salute, Dipartimento Ambiente e salute, Istituto Superiore di Sanità

**2.** *Drosophila melanogaster*, a new ecotoxicological method for air pollutants.

Giulia Tesoriere, Department of Biology and Biotechnology "Charles Darwin", University La Sapienza Ines Lacchetti, Laura Mancini, Ecosystem and Health Unit, Environmental and Health Department, Italian National Institute of Health, Fiammetta Verni, Department of Biology and Biotechnology "Charles Darwin", University La Sapienza.

WEDNESDAY 6  
NOVEMBER

10:00 -  
13:00

Neri 1 Room South  
Hall

Onsite & live  
streaming event

[Click here](#)

## International plenary session - THE CLIMATE CHALLENGE OF BUSINESS AND GOVERNMENT

Language: Italian

Simultaneous translation: English

**organized by National Council of the Green economy, in collaboration with Italy for Climate**

### Programme

Moderators:

**Chiara Giallonardo**, RAI journalist

**Raimondo Orsini**, Director Sustainable Development Foundation

Welcoming remarks

**Corrado Peraboni**, Chief Executive Officer, IEG - Italian Exhibition Group

**Laura D'Aprile**, Head of Department for Sustainable Development, Ministry of Environment and Energy Security

Opening remarks

**Adolfo Urso**, Minister of enterprises and made in Italy

**Antonella Sberna**, Vice – President, European Parliament (video-intervention)

**Antonio Decaro**, President of Committee on the Environment, Public Health and Food Safety. European Parliament (video-intervention)

**Simona Bonafè**, Member Parliamentary Committee on Simplification, Chamber of Deputies

## **CLIMATE AND GEOPOLITICAL SCENARIOS: A WINDOW ON THE WORLD TOWARDS COP29**

*The state of the global climate: signals for Baku*

**Roberta Boscolo**, Climate and Energy Lead, World Meteorological Organization

*Energy transition between false myths and reality*

**Andrea Barbabella**, Coordinator, Italy for Climate

*China: emissions peak reached?*

**Alessia Amighini**, Co-Head Asia Centre, ISPI

*India: The economy at the crossroads of climate*

**Marco Masciagna**, Correspondent New Delhi, Il Sole 24 ore

**Breaking news da New York: live Presidential Election updates**

**Paolo Mastrolilli**, North America Bureau Chief, La Repubblica

## **EUROPE'S CLEAN INDUSTRIAL DEAL AND THE OPPORTUNITIES FOR OUR BUSINESSES**

*Maintaining Italian leadership in circularity also for the next few years*

**Luca Dal Fabbro**, President, Iren Group

**Armando Mariano**, R&D Material & Product Director, Seda International Packaging Group

**Marco Codognola**, CEO, Itelyum

*Energy and water: new network and distribution models*

**Nicola Lanzetta**, Italy Director, Enel Group

**Francesco Buresti**, Director Water Business Unit, Acea

*Sustainability as a driver of enterprises development*

**Giovanna Gregori**, Executive Director, Italian Family Business (AIDAF)

**Irene Pipola**, Sustainability Consulting Leader, EY Italia

WEDNESDAY 6  
NOVEMBER

10:00 -  
13:00

Agorà Malatesta –  
Enviromental  
Monitoring Area  
D8 pav.

**Sites and Soil  
Maintenance  
and Restoration**

*Onsite event*

[Click here](#)

## A new planning approach in Emilia Romagna Region after the flood event

Language: Italian

**organized by Ecomondo STC & Emilia-Romagna Region, Po River Basin Authority**

The workshop will focus on reconstruction plan after the fooding event in Emilia-Romagna Region in 2023. A new approach has been planned to obtain more secure and resilient territories. Different studies show the possibility to diminish the risk. In the workshop we will discuss how to make a territory more resilient and improve the security of citizenship.

### Session Chairs

Alessandro Bratti, Po River Basin Authority  
Irene Priolo, Vice President of Emilia-Romagna Region

### Programme

10.00-10.30 *Introduction*

Francesco Paolo Figliuolo, Commissioner  
Paolo Ferrecchi, Emilia-Romagna Region

10.30-10.45 *Results of the Scientific Technical Commission on the Post-Flood Event*  
Armando Brath, University of Bologna

10.45-11.10 *The Special Plan for Reconstruction*  
Andrea Colombo, Po River Basin Authority

11.10-11.25 *The landslides on the slopes of the flood area*  
Matteo Berti, University of Bologna  
Alessandro Corsini, University of Modena and Reggio Emilia

11.25-12.50 **Round table**  
Coordinated by: Andrea Gavazzoli

Monica Guida, Emilia-Romagna Region  
Rita Nicolini, Regional Civil Protection Agency  
Francesco Vincenzi, ANBI  
Luca Gherardi, Hydrogeo  
Filippo Marchi, Enser  
Marco Andreoli and Ivo Fresia, ART Ambiente, Risorse e Territorio  
Stefano Croci, Etatec  
Giorgio Zampetti, Legambiente

12.50 Discussion and closure

WEDNESDAY 6  
NOVEMBER

10:00 -  
17:00

Agorà Tiberio –  
Water Cycle Area  
D8 pav.

**Water Cycle and  
Blue Economy**

*Onsite event*

[Click here](#)

Plans, strategies and solutions to implement the new Urban Waste Water Directive and address the challenges of the new Sludge Directive: European and Italian case studies

DOWNLOAD THE  
CONFERENCE POSTERS

Language: Italian

**organized by Ecomondo STC & Water Research Institute (IRSA-CNR National Research Council), University of Brescia, UTILITALIA (Italian federation of energy, water and environmental services), Marche Polytechnic University**

with speeches and posters from the Call for Papers 2024

The new Urban Wastewater Treatment Directive paves the way towards a smart, green, and circular wastewater management taking into account new sources of urban pollution, becoming more and more prevalent (such as smaller cities, decentralised facilities or storm waters), as well as new emerging pollutants including microplastics and micropollutants. In addition, it will drive the wastewater sector towards energy and climate neutrality, contributing to circular economy by improving the quality of sludge and treated wastewater, allowing for more reuse in agriculture and ensuring that valuable resources are not lost. When doing so, the Member States are expected to comply also with the Sewage Sludge Directive, waiting for an imminent revision. The conference intends to give a contribution in shaping the picture of what is already under way in these areas and with what perspectives and technical solutions. The shift to circularity and zero pollution requires a complex combination of appropriate regulatory framework, new technologies, and effective coordination between different sectors and stakeholders, here represented.

### Session Chairs

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

### Programme

#### **10.00-13.45 Morning session**

10.00-10.10 Introduction of the morning session by the Chairs

10.10-10.30 *The Italian roadmap for UWWTD transposition*

Angiolo Martinelli, Representative of Italian Ministry of Environment and Energy Security

10.30-10.50 *Solutions for micropollutants removal solution and wastewater treatment plants upgrade - the Swiss experience*

Urs Van Gunten, EAWAG

10.50-11.10 *Risks and opportunities for operators and stakeholders along this transformation journey*

Giovanni Piccoli, Membro Consiglio Direttivo Settore Acqua UTILITALIA

11.10-11.30 *Reuse and/or discharge: case studies in the new European framework*  
 Francesco Fatone, Anna Laura Eusebi, Massimiliano Sgroi (UNIVPM), Po River Basin Authority

**11.40-13.45 Speeches selected from the Call for Papers on urban wastewater (treatment, monitoring, case studies, WWTP upgrade)**

11.40-11.50 *Case Study: Pilot-Scale Removal of Emerging Microcontaminants from Wastewater using Ozone and AOP*

Eleonora Pasinetti, SIAD

11.50-12.00 *INtegrated TECHnologies for pollutants in (waste)water services (INTECH4WATER)*

Simonetta Pancaldi, Terra&Acqua Tech, Università di Ferrara

12.00-12.10 *Designing a full-scale ozonation plant for maximum micropollutant removal and minimal bromate formation*

Roberta Muoio, AM-Team

12.10-12.20 *Aquaponics from WAstewater REclamation, the AWARE Project*

Roberta M. Rana, Autorità Idrica Pugliese

12.20-12.30 *Stima del potenziale di riutilizzo irriguo dei reflui urbani affinati per la pianificazione di investimenti pubblici in applicazione del Reg. 741/2020: un approccio qualitativo basato sui dati di reporting della UWWTD*

Marianna Ferrigno, CREA Centro Politiche e Bioeconomia

12.30-12.40 *How to upgrade a conventional WWTP to achieve treated water reuse: Besozzo as a case study*

Paolo Bernini, Alfavarese

12.40-12.50 *Alternate aeration strategies for sewage sludge minimization*

Marta Domini, Università di Brescia

12.50-13.00 *Ottimizzazione del trattamento di acque reflue civili con biomassa granulare aerobica: un'esperienza pilota presso l'impianto di Monza*

S. Rocco, Sara Lorenzini - Brianzacque

13.00-13.10 *Advanced processes for PFAS removal in landfill leachate treatment*

Claudio Di Iaconi, IRSA-CNR

13.10-13.45 Round Table and Discussion with the speakers

13.45-14.45 Lunch break

**14.45- 17.30 Afternoon session**

14.45-15.00 Introduction of the afternoon session by the Chairs

15.00-15.20 *Unlock the potential of the sewage sludge directive*

Giulio Ricciuto, ACCIONA AGUA

15.20-15.40 *Sludge recovery in agriculture: environment and health protection*  
Giorgio Bertanza, University of Brescia

15.40-16.00 *Sludge management and integration with the cycle of waste - the Lombardy region experience*  
Elisabetta Scotto, ARPA Lombardia

16.00-17.30 **Speeches selected from the Call for Papers on sludge treatment and circular management (innovation, emerging pollutants, thermal treatments, monitoring, case studies, recovery in agriculture, bio-energy)**

16.00-16.10 *Extraction and Analytical Methods for Microplastics Monitoring in Wastewater Treatment Plant*  
Juan Francisco Ferrer Crespo, AIMPLAS

16.10-16.20 *Occorrenza e destino di alcuni prodotti farmaceutici nella linea fanghi di un impianto di depurazione di reflui urbani*  
Simone Leoni, Acea Infrastructure SpA

16.20-16.30 *Strategie e soluzioni nella gestione dei fanghi di depurazione, l'esperienza AQP su riduzione dei rifiuti*  
Maria Luisa D'Aluiso, Acquedotto Pugliese

16.30-16.40 *Valorization of pyrolysis gas derived from municipal sewage sludge towards a circular economy approach*  
Vincenzo Pelagalli, Università di Cassino

16.40-16.50 *Energy Factory West at Sleenwijk WWTP: An in-depth case study in increasing anaerobic digestion performance and efficiency*  
Cristina Cominelli, Royal Haskoning DHV

16.50-17.00 *SLG® innovative WWTPs sludge conditioning system moving to Energy Neutrality: case studies in Italian WWTPs*  
Daniele Renzi, Bioreal

17.00-17.30 Round Table and discussion with speakers

## **Sessione Poster**

**1.** *La fattibilità dei laghetti collinari per il riuso delle acque reflue urbane*  
Giuseppe Frega e Ernesto Infusino (Dipartimento Ingegneria dell'Ambiente Università della Calabria)

**2.** *Identificazione e correzione automatica degli offset delle sonde di NH4 negli impianti di trattamento delle acque reflue*  
Francesca Bellamoli e Marco Vian (ETC Sustainable Solutions Srl)

**3.** *Strategie Innovative e Soluzioni Ecologiche per la Direttiva sulle Acque Reflue Urbane: Casi di Studio Europei e Italiani*  
Andrea Laguzzi, Product Manager Sistemi di Trattamento (ACO S.p.A.)

**4.** *Lo smart metering nell'idrico vola sulle ali della tecnologia e della Regolazione*  
Francesco Albasser

- 5. Una soluzione Innovativa per la Contaminazione da PFAS: La Tecnologia EMER per il Trattamento delle Acque Reflue Industriali**  
Francesco Capoti, Massimiliano Dall'Argine (IRIDEACQUE)
- 6. Caso studio: Zero Liquid Discharge (ZLD)**  
Ivana Sanvito, Aniello Franzese (ETC-ENG)
- 7. LA LINEA FANGHI DI UN IMPIANTO DI DEPURAZIONE: COME SI PUO' CONTROLLARE ED AUTOMATIZZARE GRAZIE ALL'IMPIEGO DI CONTROLLORI DI PROCESSO**  
Maria Serena Gironi (Hach)
- 8. Sustainability quantum leap in sequencing batch reactor technology - Unleashing the Full Potential**  
Marcus Hoefken, Megan House, Peter Huber, and Walter Steidl (INVENT Germany)
- 9. Designing WWTPs for both minimal N2O emissions and best effluent quality**  
Giacomo Bellandi et al (AM\_team)
- 10. Process control and improvement combined with enhanced Turbo Blowers efficiency to reduce energy consumption in waste water treatment plants**  
Marco Fustinoni, Mario Fustinoni (INVENT Aeration Services)
- 12. Life Cascade Project: Removal of Microplastics and Other Pollutants from Textile Wastewater**  
Brusa (Centro Tessile Serico Sostenibile)
- 13. ASIA: UNA TECNOLOGIA INNOVATIVA NEL QUADRO DELLA DIRETTIVA UE SUL TRATTAMENTO DELLE ACQUE REFLUE URBANE**  
Mauro Zoglia e Sandra Zoglia (ASIA)
- 14. Future proof sludge management - eliminating micropollutants in a climate and energy positive pyrolysis process**  
Christian Wieth (AquaGreen ApS)
- 15. Recupero di materia nel Servizio Idrico Integrato: il soil washing delle sabbie dal processo di depurazione delle acque reflue**  
Massimo Spizzirri, Luisa Merluzzi, Alessia Delle Site, Camilla Cassol (Acea Ato 2)
- 16. Trattamento multifunzionale delle acque reflue urbane, agricole ed industriali**  
Giulio Giannoli (Reimex Group)
- 17. La nuova direttiva sulle acque reflue urbane: la strategia del Gruppo CAP su innovazione, efficienza ed economia circolare**  
Giovanni Vargiu (CAP Evolution)

WEDNESDAY 6  
NOVEMBER

10:00 -  
17:30

Agorà Fellini –  
Sites & Soil  
Restoration Area  
C3 pav.

**Sites and Soil  
Maintenance  
and Restoration**

*Onsite event*

[Click here](#)

## Geotechnical aspects connected to the management of marine dredging sludges and to the contaminated sites remediation



CONSIGLIO NAZIONALE  
DEI GEOLOGI

Language: Italian

**organized by Ecomondo STC & Italian Geotechnical Society - AGI-IGS Section**

Geotechnical engineering plays a crucial role also in the management of marine dredging sludges and in contaminated sites remediation, with special reference to the characterization, design, operation and control phases. The conference will particularly highlight the design aspects and the most recent innovative methodologies and technologies connected to the management of marine dredging sludges and to the contaminated sites remediation issues.

### Session Chairs

Daniele Cazzuffi, CESI SpA, Milano & President AGI-IGS

Nicola Moraci, University Mediterranea Reggio Calabria & Vice President AGI-IGS

### Programme

9.30-10.00 Registration

10.00-10.15 Introduction

Daniele Cazzuffi, CESI SpA, Milano & President AGI-IGS

Nicola Moraci, University Mediterranea Reggio Calabria & Vice President AGI-IGS

### **SESSION 1: Geotechnical aspects connected to the management of marine dredging sludges**

10.15-10.45 *Geotechnical design of land reclamation*

Quintilio Napoleoni, Università di Roma La Sapienza

10.45-11.10 *Mass stabilization for consolidating marine dredged material in land reclamation*

Enzo Rizzi, ICOP SpA, Basiliano (UD)

11.10-11.35 *Gravel columns for improvement of dredging materials*

Marco Zambenardi, Sales SpA, Roma

Paolo Turrini, Sales SpA, Roma

11.35-12.00 *Prefabricated vertical drains for land reclamation*

Carlo Alberto Marconi, Sidra – DEME Group

12.00-12.25 *Geotextile tubes for sludge dewatering and treatment*

Matteo Mollo, Geosintex, Sandrigo (VI)

12.25-13.00 Discussion



## SESSION 2: Geotechnical aspects of the contaminated sites remediation

14.15-14.45 *Reactive barriers for the remediation of contaminated groundwater: from research to applications*

Stefania Bilardi, Università Mediterranea di Reggio Calabria

14.45-15.15 *New challenges in the control of PFAS-contaminated groundwater*

Nicolò Guarena, Politecnico di Torino

15.15-15.45 *Hydraulic performance of cut-off walls in sea water and in sulphate solutions*

Jonathan Domizi, Università Politecnica delle Marche, Ancona

15.45-16.10 *Passive barriers construction by use of GFRP prestressed precasted sheet piles*

Lucio Pedrocco, SigmaC SpA, Padova

16.10-16.35 *Remediation of contaminated sites by means of active capping with geosynthetics*

Alberto Simini, Huesker, Trieste

16.35-17.00 *Case study: Designing a geomembrane barrier for safe containment of wastes*

Mauro Quintero Rodriguez, Sotrafa, Almeria (Spain)

17.00-17.30 Discussion and final remarks

Daniele Cazzuffi, CESI SpA, Milano

Nicola Moraci, University Mediterranea Reggio Calabria

WEDNESDAY 6  
NOVEMBER

12:00 -  
13:15

Innovation Arena -  
South Hall

**Financing,  
education and  
communication**  
*Onsite & live  
streaming event*  
[Click here](#)

## EU funding for green & blue projects – a world of possibilities

Language: English

Simultaneous translation: Italian

### organized by Ecomondo Scientific Technical Committee & European Commission

In the workshop, European Commission representatives will present the European Innovation Council (EIC), the European Health and Digital Executive Agency (HADEA), the European Research Executive Agency (REA) and the European Climate, Infrastructure and Environment Executive Agency (CINEA) as well as their 2024 and 2025 Work Programmes and thematic funding calls.

### Session Speakers

EISMEA/EIC:

**Johannes Bünz**, Project Officer at European Innovation Council and SMEs Executive Agency (EISMEA)

HaDEA:

**Natascia Lai**, Deputy Head of Unit, Unit Industry at European Health and Digital Executive Agency (HaDEA)

REA:

**Giulio Pattanaro**, Research Programme Manager, Unit Biodiversity, Circular Economy and Environment at European Research Executive Agency (REA)

CINEA:

**Aneta Willems**, Head of Department for natural resources, climate, sustainable blue economy and clean energy at European Climate, Infrastructure and Environment Executive Agency (CINEA)

## Programme

12.00 Introduction by one of the Representatives of the EU Agencies

12.05 Welcome by Fabio Fava, Chair of the Ecomondo's Scientific Technical Committee

12.10 **EISMEA/EIC**: Johannes Bünz, Project Officer at European Innovation Council and SMEs Executive Agency (EISMEA)

12.25 **HaDEA**: Natascia Lai, Deputy Head of Unit, Unit Industry at European Health and Digital Executive Agency (HaDEA)

12.40 **REA**: Giulio Pattanaro, Research Programme Manager, Unit Biodiversity, Circular Economy and Environment, at European Research Executive Agency (REA)

12.55 **CINEA**: Aneta Willems, Head of Department for natural resources, climate, sustainable blue economy and clean energy at European Climate, Infrastructure and Environment Executive Agency (CINEA)

13.10 Conclusions

## Short description of EU Agencies

### *The European Innovation Council*

The European Innovation Council (EIC) is Europe's flagship innovation programme. It aims at identifying, developing and scaling up breakthrough technologies and game changing innovations with the potential to scale up internationally and become market leaders. The EIC supports all stages of innovation, from research and development on the scientific underpinnings of breakthrough technologies, to validation and demonstration of breakthrough technologies and innovations to meet real world needs, to the development and scaling up of start-ups and small and medium-sized enterprises (SMEs) applying a hands-on content wise approach. The EIC provides funding through both open and challenge-based calls. In the 2025 EIC Work Programme, the calls cover, among others, topics such as waste-to-value devices, biotech for climate resilient crops & reduction of the environmental footprint of transportation.

## ***European Health and Digital Executive Agency (HADEA) and Horizon Europe Cluster 4, Industry***

The European Health and Digital Executive Agency (HADEA) was created on 1 April 2021, with the commitment to boost Europe by building, from earth to space, a healthy society, a competitive industry and a digital economy. HaDEA's mission is to implement actions in the domains of health, food safety, digital technologies and networks, industrial capacities and space. HaDEA manages the following EU programmes: Horizon Europe Cluster 4: Digital, Industry and Space; Horizon Europe Cluster 1: Health; Connecting Europe Facility: Digital; Digital Europe Programme; EU4Health programme; Single Market Programme; Food safety.

HaDEA's presentation will focus on Horizon Europe Cluster 4 (Digital, Industry, and Space), specifically on the Industry part and HaDEA's role in managing scientific projects, that aim to accelerate the green and digital transitions and to increase the EU's autonomy in key strategic value chains for a resilient industry.

## **The European Research Executive Agency (REA) and Horizon Europe's Cluster 6**

Mandated by the European Commission to support the EU Research and Innovation policy, the European Research Executive Agency (REA) funds high-quality research and innovation projects that generate knowledge for the benefit of society. REA's mission is to help build a greener Europe with prosperous, inclusive societies and economies that take full advantage of the digital age. REA manages the following EU programmes (or parts thereof): Horizon Europe, Horizon 2020, Research Fund for Coal and Steel and Promotion of Agricultural Products. REA's presentation will focus on the funding opportunities in the area of eco-innovation and circular economy under Cluster 6 "Food, Bioeconomy, Natural Resources, Agriculture and Environment" of the Horizon Europe programme.

## **The European Climate, Infrastructure and Environment Executive Agency (CINEA) and its EU funding programmes for transport, energy, climate action, environment, sustainable blue economy and maritime fisheries and aquaculture**

The European Climate, Infrastructure and Environment Executive Agency (CINEA) has been established by the European Commission to implement EU funding programmes (or parts thereof) for transport, energy, climate action, environment and maritime fisheries and aquaculture. CINEA support its stakeholders in delivering the European Green Deal through high quality programme and project management that helps to implement projects contributing to competitiveness, decarbonisation, and sustainable growth. The Agency manages 7 EU Programmes: Connecting Europe Facility (CEF), Horizon Europe, LIFE programme, European Maritime, Fisheries and Aquaculture Fund (EMFAF), Innovation Fund, EU Renewable Energy Financing Mechanism and Public Sector Loan Facility under the Just Transition Mechanism. CINEA's presentation will focus on providing information on its programmes and funding opportunities.

WEDNESDAY 6  
NOVEMBER

14:00 -  
15:30

Innovation Arena -  
South Hall

**Textile District**  
*Onsite & live  
streaming event*  
[Click here](#)

## Textile: Sustainable Production & Ecodesign: challenges and opportunities

Language: Italian

**organized by Ecomondo STC & AISEC Associazione Italiana per lo Sviluppo dell'Economia Circolare**

Strategies and solutions for the digitization of products information, placed on the market to ensure reparability, recyclability and to fight greenwashing. Cases and best practices of primary groups and companies; best in class local solutions of the Italian territory for the textile industry. Made in Italy as an asset also on Sustainability; Italy being not only the first exporter of textile products in Europe and third in the world after India and China, but also where the textile industry feeds social innovation and technology, in strongly demarcated districts where synergies can be facilitated in a global context of continuous change and complexity. Contamination between territorial and sectoral (textile) policies, tactical urbanism and consumption transformation.

### Session Chair

Eleonora Rizzuto, Chief Sustainability Officer, President AISEC - Associazione Italiana per lo Sviluppo dell'Economia Circolare

### Programme

Agenda and introduction to speakers

Institutional welcome by MIMIT (remotely)

*Sistema Moda Italia*

Andrea Crespi

*State of regulation green UE on product reparability: Implications for companies and consumers*

Guido Bellitti, Studio Chiomenti

*The Ecodesign Regulation and next steps for its implementation*

Alberto Parenti, Team Leader Circular Economy and Sustainable Product Initiative, DG GROW – European Commission

*The Italian textile district: PRATO*

*Concrete resources for the ecological and circular transition*

Valerio Barberis, Urban Agenda for Europe: Italian contact point for partnerships on EC, Prato Council Member on Circular Economy 2019-2024

*Circular Bio-Based Europe (CBE-JU)*

Simone Maccaferri, Project Officer Circular Bio-Based Europe Joint Undertaking

**DISCUSSION WITH COMPANIES:**

Moderator:

Chiara Catgiu, Climate Change &amp; Sustainability KPMG advisor, member of AISEC CdA

Speakers:

Maurizio Giani, HeraAmbiente / Fabrizia Turchi, Archa

Andrea Mantellassi, Manteco

Veronica Bovo, Gruppo Hind

Andrea Baldesi, Bulgari

*Textile and social innovation*

Alfio Fontana, Humana

Anna Fiscale, Progetto QUID

DEBATE and Conclusions

WEDNESDAY 6  
NOVEMBER14:00 -  
15:45Ravezzi 1 Room  
South Hall**Financing,  
education and  
communication***Onsite event*[Click here](#)**ESG CEO SUMMIT - Sustainable future between compliance and competitiveness**

Language: Italian

Simultaneous translation: English

**organized by Ecomondo**

Five years after the introduction of the Green Deal, the recent European elections have reignited the debate on the “European recipe” for a sustainable and just transition. The choice of the von der Leyen-led Commission to adopt a regulatory approach seems to have, on the one hand, contributed to the introduction of higher standards but, on the other hand, did not foster the competitiveness of European companies in global markets.

More generally, raising the bar of compliance without targeted investment risks putting the weaker sections of both companies and citizens at a disadvantage. This is especially the case in the field of green technologies, where the US and China are consolidating their leadership through market approaches focused more on incentives than regulation. These challenges affect the entire European production fabric, from large to small companies, the former being known to be more ready and equipped to face this change.

The aim of the meeting is to investigate the conditions for a just transition that can support European competitiveness in the next five years, especially after the results of the US elections.

**Programme**

13.30-14.00 Participant registration and welcome coffee

Moderator:

**Luigi Monfredi**, editor-in-chief at RaiNews, former editor-in-chief and anchorman of TG1 Economia

14.00-14.05 *Institutional greetings*

**Martina Malorni**, Treasury, Investor Relations & Sustainability Manager Italian Exhibition Group

14.05-14.30 *Baseline scenario*

**Carlo Cici**, Partner & Head of Sustainability practice The European House-Ambrosetti

14.30-15.30 *Panel discussion*

**Stefano Alini**, CEO Innovation & Research Director Radici Innova

**Stefano Saviola**, CEO Saviola Group

**Camilla Colucci**, Co-Founder & CEO di Circularity

**Yuri Santagostino**, President of CAP Group

15.30-15.40 *Considerations following the panel discussion*

**Carlo Cici**, Partner & Head of Sustainability practice The European House-Ambrosetti

15.40-15.45 Closing remarks

WEDNESDAY 6  
NOVEMBER

14:00 -  
16:30

Agorà Blue  
Economy B8 Pav.

**Water Cycle and  
Blue Economy**

*Onsite & live  
streaming event*

[Click here](#)

Boosting technology, business models and societal engagement for the implementation of the EU Mission Restore our Ocean and Waters in the Mediterranean

Language: English

Simultaneous translation: Italian

**organized by Ecomondo STC & BlueMissionMed CSA, European Commission, BlueMed GSOs, CNR, BusinessMed, Ecorys, FVA, CPMR-IMC, Prep4 Blue, RHE-MEDiation**

After one year from the launch in Rimini of the Italian HUB, BlueMissionMed CSA brings back all the Mediterranean stakeholders engaged with the EU Mission Restore our Ocean and Waters by 2030 to the Ecomondo Exhibition.

BlueMissionMed, with all the co-organizers, embraces this opportunity to shorten the gap between innovative solutions and the business community, and, moreover, to enhance the business capacities to deploy innovative solutions. Demonstration activities for the innovative solutions, targeting different industrial sectors and covering the geographical variability of the Mediterranean, will be organized with the cooperation of the BlueMissionMed HUBs.

Transformative changes require profound societal engagement to be implemented. During the event, the winners of the Society4Med award will be presented to the whole stakeholder community to inspire similar activities across and beyond the Mediterranean basin. This award highlights the essential role of citizens and society in achieving the mission's goals, emphasizing the collective effort needed to restore our ocean and waters. By involving the public, fostering community initiatives, and promoting educational outreach, we aim to create a collaborative environment where every individual can contribute to the sustainability and health of our Mediterranean waters.

Additionally, after the workshop from 17:00 to 18:00, a matchmaking session will take place at the Pavillon B8 to connect solutions and interested parties to business experts and investors. The networking also allows participants to connect with the winners of the Society4Med award, aiming to inspire and encourage participation in future actions, fostering a collaborative environment for ongoing societal and environmental impact.

### **Session Chairs**

Francesco Camonita, CPMR-IMC - BlueMissionMed CSA  
Susanna Albertini, FVA - BlueMissionMed CSA

### **Programme**

14.00 Introduction  
Francesco Petracchini, CNR DSSTTA Director

14.05-14.15 *Keynote speech from the EU Mission Restore our Ocean and Waters by 2030*  
Elisabetta Balzi, DG RTD, EC

14.15-14.45 ***Demonstration of innovative solutions for the Mediterranean community of actors for the Mission***

Moderator:  
Francesco Camonita

Pitch from selected solutions identified in cooperation with the 7 BlueMissionMed National Hubs (North-South Med):  
RHE-MEDIation  
INSPIRE (Po River case study for the Mission Ocean and Waters)  
REMEDIES  
UPSTREAM (TBC)

14.45-15.15 ***Dialogue with Policy Makers on Solution Implementation***

Moderator:  
Francesco Camonita

Roundtable of opinions and contributions with selected policymakers:  
Hisham Badr, Coordinatore Iniziativa Green del Ministero della Pianificazione, Sviluppo Economico e Cooperazione internazionale  
Regione Emilia Romagna (TBC)  
Regione Lazio (TBC)

### 15.15-15.45 **Society4Med**

Award to celebrate the best initiatives involving citizens in transformative actions implementing solutions to reduce and prevent pollution from ocean and waters.

Moderator:

Susanna Albertini

*3 Inspirational case studies (WWF Med, Prep4Blue)*

*"Society4Med" awarding ceremony*

*"Society4Med" winners pitching sessions*

15.45-15.55 *Final remarks from the EU Mission Restore our Ocean and Waters by 2030*  
Andreea Strachinescu, DG MARE, EC

15.55-16.00 Conclusions by the organizers

17.00-18.00 Networking session Pavillon B8 (information will follow soon)

WEDNESDAY 6  
NOVEMBER

14:00 -  
16:30

Diotallevi 2 Room  
South Hall

**Resource  
efficiency and  
Circular  
Economy**  
*Onsite event*  
[Click here](#)

## Implementing EU legislation: How to increase circularity in the construction sector

Language: English

Simultaneous translation: Italian

### **organized by Ecomondo STC & EURIC, ANPAR/ASSOAMBIENTE**

The construction sector in the EU generates the largest volumes of waste and represents around 12% of EU GHG emissions at the same time. Nonetheless, it lags behind in the development of a circular economy, which in some Member States is struggling to take off due to the difficulty for recycled aggregates to find a market. In this context, European legislation can be a key driver for increasing circularity in the European construction sector. The revision of the EU Construction Products Regulation entailed new approaches on environmental requirements construction products that still need to be defined. Green Public procurement provisions can be a very useful leverage for increasing recycling of construction and demolition waste (C&D waste). Can specific targets for recycling of C&D waste under the Waste Framework Directive also increase circularity of materials in the EU? This seminar will look into different legislative tools for driving circularity in the construction sector, involving the whole value chain.

### **Session Chair**

Pär Larshans, President of EURIC's Construction & Demolition Branch (ECDB)

### **Programme**

14.00 Opening & welcoming

Pär Larshans, President of EURIC's Construction & Demolition Branch (ECDB)



14.05-14.20 *Keynote speech*

Mattia Pellegrini, Head of Unit, From Waste to Resources, European Commission (DG ENV.B.3)

14.20-15.20 ***Panel discussion I***

***Selective demolition and the new recovery targets for the different C&D waste streams***

Moderated by:

Antoine Stilo, EU Policy Advisor, European Recycling Industries' Confederation (EuRIC)

Participants:

Mattia Pellegrini, Head of Unit, From Waste to Resources, European Commission (DG ENV.B.3)

Philip Van Nieuwenhuizen, President of the European Builders Association

Carol Barcella, European Demolition Association

Francesco Onori, CEO Cavart SpA

Giorgio Bressi, Technical Director, ANPAR and Vice-President of EuRIC's Construction & Demolition Branch (ECDB)

15.20-16.20 ***Panel discussion II***

***EU tools to increase circularity in the construction sector***

Moderated by:

Antoine Stilo, EU Policy Advisor, EuRIC

Participants:

Marco Borroni, President, Concrete Europe

Dirk Fincke, Secretary General UEPG/Aggregates Europe

Silvia Ricci, Vice-President, ANCE

Pär Larshans, President of EuRIC's Construction & Demolition Branch (ECDB), Chief Sustainability Officer at RagnSells

16.20 Conclusions by the Session Chair

WEDNESDAY 6  
NOVEMBER

14:00 -  
17:00

Agorà Augusto –  
Bioeconomy Area  
D2 pav.

**Circular and  
Regenerative  
Bioeconomy**

*Onsite event*

[Click here](#)

Biowaste: XXVI Conference on Composting and Anaerobic Digestion. Technical session

DOWNLOAD THE  
CONFERENCE POSTERS

Language: Italian

**organized by Ecomondo STC & CIC (Italian Composting Consortium)**

with speeches and posters from the Call for Papers 2024

The session will give space to projects and experiences relating to the recycling of organic waste, ranging from the input materials, their recycling processes and the valorisation of the obtainable products: organic fertilizers (soil improvers and fertilizers) useful for maintaining the organic fertility of the soil, biogas and its exploitation, and green chemical products that can be used in several industrial applications.

### Session chairs

Massimo Centemero, CIC  
Alberto Confalonieri, CIC Technical Committee

### Programme

#### Speeches selected from the Call for Papers

*L'analisi LCA per prodotti e processi di un impianto di compostaggio rifiuti*

G.A. Carallo, L. Merello, P. Vitale - RINA Consulting SpA  
S. Pelagalli, M.C. Briganti - HERACLE Srl

*Il progetto di ricerca EOM4SOIL: la filiera della digestione anaerobica e del biochar in Italia*

I. Falconi, I. Criscuoli, M.V. Lasorella - Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria (CREA), Centro di ricerca Politiche e Bioeconomia

*Horizon Europe's FER-PLAY- LCSA of seven value chains from waste streams to circular fertilisers*

H. Iglesias, A.I. Parades Ortiz, J. Albaladejo Rodilla, A. Lara Guillén - Cetenma  
J. Campagnol, A. Pigoli - Consorzio Italiano Compostatori

*Tecnologie e metodi per il monitoraggio delle emissioni fuggitive di biometano da impianti di digestione anaerobica*

S. Trotta, M. Soldano, M. Garuti - Centro Ricerche Produzioni Animali (CRPA)  
I. Kostadinov, E. Cozzani - Proambiente

*Processi biologici per la simbiosi industriale: digestione anaerobica e trattamento innovativo dei surnatanti*

M. Grana - CAP Evolution

*Il futuro del digestato: innovazioni di processo per migliorare la digestione anaerobica attraverso la gassificazione*

D. Mainero, Edison Next spa  
C. Russomando, Edison spa

*Static hydrodynamic cavitation as gas mass transfer system for ex situ biological hydrogen methanation*

B. Notari, M. Audi, A. Giuliano, L. Petta - SSPT-USER-T4W, ENEA Research Center

*METHAREN - ottimizzazione della produzione di biometano nei siti di gestione della FORSU attraverso la valorizzazione della CO2 e dei residui di scarto di sallow e digestati*

P. Zitella, Environment Park  
G. Pellegrino, Environment Park, Politecnico di Torino

*"SMS-Green" project: from apple pomace to soil amendments*

S. Bertolini, D. Bona, L. Grandi, A. Cristoforetti, L. Tomasi, R. Morelli, R. Zanzotti, D. Bertoldi, S. Silvestri - Fondazione Edmund Mach

*L'uso del compost influisce la biodiversità nella comunità batterica della rizosfera di piante di pomodoro e conferisce resistenza a stress idrici*

R. Cipriani, N. De Biasio, G. Ghirardello, B. Baldan, S. Nigris - Università di Padova, Dipartimento di Biologia  
T. Bonato, W. Zanardi - S.E.S.A. SpA

*Esiti della campagna di analisi su coltivazioni biologiche che usano l'ammendante compostato misto "Amelia"*

M. Roselli, Aisa Impianti SpA

*Valorisation of waste from the production of advanced first range leeks to produce bioactive compost*

B. Scaglia, M. Esposito, A. Passera, F. Tambone, L. Beregnan, P. Casati - Dipartimento di Scienze Agrarie e Ambientali - Produzione, Territorio, Agroenergia, Università degli Studi di Milano

## **POSTER SESSION**

**1. Composting different agri-industrial wastes with biochar: optimized lab-scale trials assessing ammonia emission and mass balance**

R. Altieri<sup>1</sup>, V. Stanzone<sup>1</sup>, M. Cucina<sup>1</sup>, P. Ciccioli<sup>1</sup>, A. Esposito<sup>1</sup> - <sup>1</sup>Consiglio Nazionale delle Ricerche (CNR), Istituto per i Sistemi Agricoli e Forestali del Mediterraneo (ISAFOM)

**2. Analisi del ciclo di vita della valorizzazione di scarti agricoli e zootecnici mediante digestione anaerobica e vermicompostaggio**

F. Arfelli<sup>1</sup>, D. Cespi<sup>1 2</sup>, L. Ciacci<sup>1 2</sup>, D. Calcaterra<sup>3</sup>, L. Bertolotto<sup>3</sup>, F. Passarini<sup>1 2</sup> - <sup>1</sup>Dipartimento di Chimica Industriale "Toso Montanari", <sup>2</sup>CIRI Frame, Università di Bologna, <sup>3</sup>Paneco Ambiente S.r.l.

**3. Compost enriched with ammonium sulfate for the production of pelleted organo-mineral fertilizers**

D. Assandri<sup>1</sup>, G. Giacomello<sup>1 2</sup>, N. Pampuro<sup>1</sup> - <sup>1</sup>Institute of Sciences and Technologies for Sustainable Energy and Mobility (STEMS), <sup>2</sup>Research Institute on Terrestrial Ecosystems (IRET).

**4. Sewage sludge and Biomass Oxygen-steam gasification – Life Augia Project First results.**

P. Avino<sup>1 2</sup>, M. Baggiani<sup>3</sup>, F. Bardi<sup>1</sup>, L. Bressan<sup>4</sup>, V. De Felice<sup>1</sup>, G. Fiori<sup>5</sup>, N. Fratianni<sup>1</sup>, S. Frigo<sup>5</sup>, R. Gabbrielli<sup>5</sup>, A. Gioiosa<sup>1</sup>, R. Manoni<sup>6</sup>, M. Morrone<sup>7</sup>, G. Pelle<sup>3</sup>, G.M. Piacentino<sup>1</sup>, P. Sica<sup>4</sup>. - <sup>1</sup>Università del Molise, <sup>2</sup>IIA – CNR, Montelibretti, Roma, <sup>3</sup>SIME S.r.l., <sup>4</sup>Byosin S.r.l., <sup>5</sup>Università di Pisa, <sup>6</sup>STREGA S.r.l., <sup>7</sup>COSIB.

**5. Biogas da Forsu: aspetti critici della tecnologia e delle performance ambientali sulla base di esperienze in Italia**

P.P. Cella Mazzariol<sup>1</sup>, G.F. Galanzino<sup>1</sup> - <sup>1</sup>Entsorgafin SpA

- 6. Volatile Organic Compounds (VOCs) emitted during the composting phase of different agricultural wastes** P. Ciccioli<sup>1</sup>, R. Altieri<sup>1</sup>, V. Stanzone<sup>1</sup>, M. Cucina<sup>1</sup>, A. Esposito<sup>1</sup>, W. Stefanoni<sup>2</sup>, P. Ciccioli<sup>2</sup>, E. Pallozzi<sup>3</sup> 1Consiglio Nazionale delle Ricerche (CNR), Istituto per i Sistemi Agricoli e Forestali del Mediterraneo (ISAFoM), 2Consiglio Nazionale delle Ricerche (CNR), Istituto di Ricerca sugli Ecosistemi Terrestri (IRET), 3NBFC, National Biodiversity Future Center.
- 7. Proprietà migliorate del compost dopo la desolfurazione degli impianti biogas con idrossidi di ferro**  
J. Contamina<sup>1</sup> - 1Nalón Minerals
- 8. Controllo qualità statistico nella produzione di N-Bio B10: la soluzione più efficiente e redditizia per l'abbattimento negli impianti biogas**  
J. Contamina<sup>1</sup> - 1Nalón Minerals
- 9. Esperienza di gestione di impianti di biostabilizzazione del sottovaglio da Trattamento Meccanico di RSU**  
A. Eleuteri<sup>1</sup>, F. Lombardi<sup>2</sup>, A. Lutazi<sup>3</sup>, M. Pera<sup>3</sup>, D. Riccioni<sup>1</sup>, L. Tassini<sup>1</sup> - 1Secit Impianti Srl, 2 Università degli Studi di Roma Tor Vergata, Dipartimento di Ingegneria Civile e Informatica, 3Gesenu SpA.
- 10. Evaluation of the biodegradability in compost of biopolymers enriched with fibrous plant by-products**  
A. Esposito<sup>1</sup>, R. Altieri<sup>1</sup> - 1Consiglio Nazionale delle Ricerche (CNR), Istituto per i Sistemi Agricoli e Forestali del Mediterraneo (ISAFOM).
- 11. Effects of plastic on environmental performance of anaerobic digestion plant of organic fraction of Municipal Solid Waste**  
E. Fersini<sup>1</sup>, L. Piscichio<sup>1</sup>, A. Antonicelli<sup>2</sup>, M. Occhionegro<sup>1</sup>, M. Piscitelli<sup>2</sup>, F. Todaro<sup>1</sup>, M. Notarnicola<sup>1</sup> - 1Politecnico di Bari, DICATEch, 2AMIU Puglia SpA
- 12. Smart Waste Analysis during garbage collection**  
U. Helfmeier<sup>1</sup> - 1Scantec GmbH.
- 13. Massimizzare l'efficienza e il risparmio energetico nel trattamento e upgrading di Biogas**  
R. Hilfiker<sup>1</sup> - 1Pneumofore.
- 14. ELLIPSE: Efficient and Novel Waste Streams Co-Processing to Obtain Bio-Based Solutions for Packaging and Agricultural Sectors**  
R. Jiménez<sup>1</sup>, P. Ferrero<sup>1</sup>, S. Nolan<sup>2</sup>, N. Frison<sup>3</sup>, C. Bastianelli<sup>3</sup>, M. de la Feld<sup>4</sup>, A. Pizza<sup>4</sup>, M. Calò<sup>4</sup>, A.L. Carolas<sup>5</sup>, B. Sommer Ferreira<sup>5</sup>, P. Salice<sup>6</sup>, S. Guerrini<sup>6</sup>, N. Badillo<sup>7</sup>, K. van der Heul<sup>7</sup>, B. Drosch<sup>8</sup>, L. Bauer<sup>8</sup>, R. Pummer<sup>8</sup>, L. Garrote<sup>9</sup>, D. Hidalgo<sup>9</sup> - 1AIMPLAS, 2Green Generation, 3Università di Verona, 4ENCO srl, 5Biotrend, 6Novamont, 7Helian Polymers, 8BEST Research, 9CARTIF.
- 15. Biometano da potature: Risultati del progetto LIFE STEAM a scala industriale**  
S. Longo<sup>1</sup>, D. Nascetti<sup>1</sup>, E. Piraccini<sup>1</sup> - 1Gruppo Hera.
- 16. Bio Waste Carbon3 Capture System**  
D. Meitner<sup>1</sup>, A. Hackl<sup>1</sup>, S. Gernot<sup>2</sup> - 1Next Generation Elements GmbH, 2CH4plus GmbH.
- 17. Trattamento innovativo di rifiuti e sottoprodotti per la produzione di biometano con sequestro completo della CO<sub>2</sub>.**  
F. Marini

**18. Bioenergy and circular bioeconomy perspective to biomass use**

D. Mignogna<sup>1</sup>, G. Corazzi<sup>2</sup>, E. Panzini<sup>2</sup>, P. Ceci<sup>2</sup>, P. Avino<sup>1</sup> 2 - 1Department of Agricultural, Environmental and Food Sciences, Università del Molise, 2Institute of Atmospheric Pollution Research, Division of Rome, c/o Ministry of Environment and Energy Security.

**19. Anaerobic digesters mixing performance simulations, considering solids to understand long-term performances**

R. Muoio<sup>1</sup>, G. Bellandi<sup>1</sup>, L. Pedrazzi<sup>2</sup>, S. Lorenzini<sup>2</sup>, U. Rehman<sup>1</sup>, W. Audenaert<sup>1</sup> - 1AM-Team, Advanced Modelling for Process Optimisation, 2BriazAcque s.r.l.

**20. WWTP in-house valorization of the organic content of decentralized treatment sludge**

M. Pesenti<sup>1</sup>, L. Sessolo<sup>2</sup>, D. Ceconet<sup>2</sup>, O. Facco<sup>2</sup>, A. Berni<sup>2</sup>, A. Turolla<sup>1</sup> - 1Politecnico di Milano, Dipartimento di Ingegneria Civile e Ambientale (DICA), 2Alfa S.r.l.

**21. Metanogenesi idrogenotrofa per l'upgrading di biogas e syngas - ampliamento delle facilities sperimentali di RSE**

S. Rossi<sup>1</sup>, M. Mastroleo<sup>1</sup>, F. Rainone<sup>1</sup>, S. Carboni<sup>1</sup>, M. Nordio<sup>1</sup>, A. Rossetti<sup>1</sup> - 1Ricerca sul Sistema Energetico, RSE S.p.A.

**22. Studio della variabilità stagionale, geografica e chimico-fisica del rifiuto organico in Italia per la produzione di biometano**

M. Soldano<sup>1</sup>, C. Noto<sup>1</sup>, M. Garuti<sup>1</sup> - 1CRPA - Centro Ricerche Produzioni Animali

**23. Smart Containerized Solutions for Biological Treatment of Organic Waste**

C. van Boggelen<sup>1</sup>, L. Eichenberg<sup>1</sup> - 1Waste Treatment Technologies Netherlands BV

**24. MEAT-ICO: un approccio di economia circolare per valorizzare i residui del prosciutto crudo in Emilia-Romagna**

D. Voccia<sup>1</sup>, L. Lamastra<sup>1</sup> - 1Università Cattolica del Sacro Cuore, Department for Sustainable Food Process

WEDNESDAY 6  
NOVEMBER

14:00 -  
17:00

Noce Room A6  
Pav.

**Policies and  
regulatory  
frameworks**  
Onsite event  
[Click here](#)

## The european regulation on transboundary movement of waste - the new operational changes

Language: Italian

### **organized by Ecomondo STC & ASSOAMBIENTE (National Association of Environmental Services Companies and Circular Economy)**

Last April, the new Waste Shipment Regulation (EU) 2024/1157 was published, replacing the old Waste shipment Regulation. The aim of the new Regulation, the main provisions of which will enter into force from May 2026, is to reduce waste shipments to countries outside the EU, to update shipment procedures to make them consistent with the objectives of the circular economy and climate neutrality, to simplify intra-EU shipment by, among other things, using electronic transmission and exchange of information, and to combat illegal shipments.

The measures contained in the regulation, despite the transitional period, will have a significant impact on the operations of companies that, until now, have been able to rely on a global market for the management of materials/waste resulting from waste treatment. The conference aims to bring together decision-makers, who will be involved in the definition of all the legislative acts required by the new Regulation, and business representatives in order to provide an opportunity to hear their respective points of view.

### Session Chair

Elisabetta Perrotta, Director of ASSOAMBIENTE

### Programme

Speakers:

Karolina D’Cunha, Deputy Head of Unit ad European Commission

Paolo Campanella, Director FEAD - European Waste Management Association

Tiziana Satta, Customs Directorate Officer

Giuseppe Piardi, STENA Recycling

Diego Siragna, Settentrionale Trasporti

Discussion and closure by the Chairs

WEDNESDAY 6

NOVEMBER

14:00 -

17:30

Agorà Ariminum –  
Circular Economy  
Area D1 pav.

**Resource  
efficiency and  
Circular**

**Economy**

*Onsite event*

[Click here](#)

The sustainability of the Italian mechanical recycling industry of metal, plastic and paper waste in front of new protectionisms and the challenges of international markets

Language: Italian

**organized by Ecomondo STC & UNIRIMA (National Union of Pulp Recovery and Recycling Enterprises), ASSORIMAP (Association of Recyclers and Regenerators of Plastic Materials), ASSOFERMET (National association of recycling of ferrous and non-ferrous metals)**

ASSOFERMET, ASSORIMAP and UNIRIMA are the three national Associations of recycling of ferrous and non-ferrous metals, plastic and paper, each one representative of a specific and functional sector of material recovery. Their member companies, keeping increasingly specialized activity, actualize the principles of circular economy, essential for the achievement of the ambitious objectives set at EU level.

Despite the strategic role for the promotion of environmental sustainability, these recovery facilities are now facing more and more complex challenges, set up by an environmental policy based on new generation protectionist measures, which prohibit or make the export of non-hazardous waste, already subjected to treatments within the EU, difficult and articulated.

Only a strategy of self-sustainability, realized in such a way as to fully replace raw materials in industrial processes with materials from recovery, will give full recognition to “urban mining”. This can only be achieved if the European industrial production system shall be technologically modernized in order to use massively materials from recovery instead of raw materials.

Forcing a market, severely limiting its autonomy based on the balance between supply and demand, discouraging exports, will create strong imbalances and a weakening of the recovery sector, in which Italy is a leading country.

The recovery sector, on the other hand, needs tools that allow the recovered material to be fully placed in internal industrial processes: in this way, the market will autonomously redefine the export dynamics

### **Session Chair**

Silvia Serranti, Full Professor at the Department of Chemical Engineering, Materials & Environment, Faculty of Civil and Industrial Engineering, University of Rome “La Sapienza”

### **Programme**

14.00 Introduction by the Chair

#### *Institutional greetings*

Senator Silvia Fregolent, Member of the 8th Senate Committee (Environment, Ecological Transition, Energy, Public Works, Communications, Technological Innovation)

Panelists:

#### *UNIRIMA*

Brief introduction by Francesco Sicilia (General Manager)  
Fabio Primiani, AVR Spa

#### *ASSOFERMET*

Brief introduction by Giovanni Tapetto (Environmental jurist)  
Vincenzo Formisano, Formisano Ferro srl

#### *ASSORIMAP*

Brief introduction by Walter Regis (President)  
Paolo Glerean, Aliplast Spa

17.00 Conclusions

WEDNESDAY 6  
NOVEMBER

14:00 -  
17:30

Tulipano Room B6  
pav.

**Circular and  
Regenerative  
Bioeconomy**  
Onsite event  
[Click here](#)

## An innovative approach for the transition towards sustainability in a changing "climate" for a more resilient agri-food system

Language: Italian

**organized by Ecomondo STC & National Agrifood Cluster CL.A.N.**

Cluster CL.A.N., in collaboration with the Technical-Scientific Committee (TSC) of Ecomondo, organises an event dedicated to the innovations adopted by the Italian agrifood system to face the sustainable transition, considering various aspects related to change of climate and new global scenarios.

The agrifood system is completely aware of the importance of a holistic approach (involving several actors and stakeholders) to set up innovative and tailored tools able to use agricultural resources in all their utility components, and, in compliance with health and environmental protection regulations, it creates a virtuous circle functional to the implementation of the circular economy concept that is the focus of current European policies and regulations. The event will provide an opportunity for Cluster Members and stakeholders to discuss the critical issues related to the current historical phase, highlighting the development strategies adopted by companies in the sector and the potential of the country's research excellence.

### Session Chair

Daniele Rossi, Vicepresident of CL.A.N.

### Programme

14.00 Welcome and introduction

Daniele Rossi, Vicepresident of CL.A.N. and V.Chair Copa-Cogeca WP R&I

14.15-14.30 *Key note speech - How new global scenarios influence the food sector*  
Jacques Trienekens, Wageningen University

14.30-14.45 *Key note speech - How climate change impacts the food sector*  
Monia Santini, Director of the Institute for Climate Resilience at CMCC Foundation

14.45-15.00 *The Cluster agrifood Roadmap to 2027 and the sustainability challenges*  
Massimo Iannetta, Board CL.A.N., ENEA Head of Department

### 15.00-16.30 **Roundtable sessions**

Moderator:

Daniele Rossi, Vicepresident of CL.A.N.

Innovation, sustainability and circular bioeconomy in the climate agenda of agrifood companies: case histories

Giovanni Gioia, Az. Agr. Kibbò, Chair Young Entrepr. Confagricoltura - ANGA

Andrea Minisci, Quality manager Valle Fiorita S.r.l.



*R&I in biotechnology as a tool to counteract climate change and support the transition to more sustainable processes*

Silvio Salvi, University of Bologna, SIGA

Mario Pezzotti, University of Verona

*Regional policies and innovation actions to respond to climate change and to new global scenarios*

Claudio Filipuzzi, Past President Fondazione Agrifood & Bioeconomy Friuli Venezia Giulia

Francesco Cellini, Director of Basilicata Agency for Development and Innovation in Agriculture

16.30 Discussion and closure by the Chair

WEDNESDAY 6  
NOVEMBER

14:00 -  
18:00

Neri 2 Room  
South Hall

**Policies and  
regulatory  
frameworks**

*Onsite event*

[Click here](#)

## Technical seminar: Waste management and new regulatory changes 2024

Language: Italian

**organized by Ecomondo STC & RETEAMBIENTE, Magazine "Rifiuti - Bollettino di informazione normativa"**

**\*EVENT IS SOLD OUT\***

Once again, this year, the Technical-Scientific Committee of Ecomondo, along with the magazine "Rifiuti-Bollettino di informazione normativa" and ReteAmbiente, offers the usual and eagerly awaited overview of the most important legislative and regulatory updates that in 2024 have emerged in the complex operational scenario.

The presentation of new developments, however, also during this edition of Ecomondo, does not preclude an in-depth examination of topics that, although not recent, have reached a significant degree of applicative complexity over the years.

### Session Chairs

Paola Ficco, Lawyer - Jurist in Environmental Law – Editor in Chief of the Magazine "Rifiuti - Bollettino di informazione normativa"

### Programme

14.00 Participants' Accreditation and Opening remarks

14.30 *The management of waste from the perspective of the circular economy and the in itinere activities of the Ministry of the Environment, with reference to the End of Waste*

Luca Proietti, Directorate General Circular Economy of the Ministry of Environment and Energy Security

14.50 *The controls on waste management*

Enrico Risottino, Commander of the Carabinieri Group for Environmental Protection and Energy Security in Venice

15.10 *End of waste of construction and demolition waste and the new Dm 127/2024*  
Paolo Barberi, President of ANPAR

15.30 *The new technical standards for measuring circularity, also supporting ESG*  
Andrea Sconocchia, Arpa Umbria

15.50 *Purchase of a contaminated plot: what are the responsibilities?*  
Emanuele Quadraccia, Judge of the Military Court of Rome

16.10 *ISPRA's new notebook No. 8/2024 on eco-toxicity: did it answer all the questions about "biotests"?*  
Loredana Musmeci, Chemist

16.30 *Pruning and clippings: taking stock*  
Paola Ficco, Lawyer - Jurist in Environmental Law – Editor in Chief of the Magazine "Rifiuti - Bollettino di informazione normativa"

16.50 *Rentri, where are we at*  
Daniele Gizzi, President of the National Register of Environmental Operators

17.10 *The Rentri and the forthcoming registration process*  
Daniele Bagon, Secretary of the Liguria Regional Section of the National Register of Environmental Operators

17.30 *Conclusions*  
Pasquale Fimiani, Advocate General at the Supreme Court of Cassation

WEDNESDAY 6  
NOVEMBER

14:00 -  
18:00

Mimosa Room B6  
pav.

**Circular and  
Regenerative  
Bioeconomy**  
Onsite event  
[Click here](#)

## Bio-based industry as a boost for sustainable primary production in rural regions: a journey across the Mediterranean basin

Language: English

**organized by Ecomondo STC & Italian Circular Bioeconomy Cluster SPRING**

Scientific research and breakthrough biotechnological innovations offer solutions that create new synergies between the bio-based industry and the agri-food sector. These alliances go beyond the consolidated paradigm of expanding the use of agricultural, forest and marine biomass, which often raises concerns about possible competition between food security and industrial productivity. Rather, the bio-based industry can provide solutions to reduce the environmental impact of outdated and polluting agricultural practices, improve the safety of work activities, enable the production of healthier food, and promote the regeneration of degraded soils. At the same time, the biodiversity of land and sea can be preserved. The wider area encompassing southern Europe and the Mediterranean basin can greatly benefit from the innovations of the bio-based industry, which can mitigate the obvious consequences of overpopulation and climate change. Moreover, the experience gained in the implementation of the bioeconomy and the bio-based industry in the Mediterranean basin can be a model for solving similar urgencies in other geographical areas of the world.

## Programme

14.00-15.45 **Session 1**

### ***Bioeconomy in the global scenario: the opportunities offered by sustainable bio-based economy transition***

Chair:

Lucia Gardossi, University of Trieste, board SPRING

*Sustainable and circular bioeconomy for food systems transformation*

Marta Gomez San Juan, Office of Climate Change, Biodiversity and Environment.  
Food and Agriculture Organization of the United Nations, Rome

*Safe, circular, bio based and sustainable by design chemicals and materials*

Serenella Sala, Head of the Land Resources and Supply Chain Assessments Unit,  
European Commission, Joint Research Centre

*Bio-based industries: a key enabler for a sustainable and competitive Europe*

Samuele Ambrosetti, Innovation and Programming manager, Bio-based Industries  
Consortium (BIC), Brussels

*Contribution of the Canadian forestry system and industry to the growth of the  
bioeconomy and to the future of Canadian rural communities*

Derek Nighbor, President and Chief Executive Officer at Forest Products Association  
of Canada

*Enabling the Circular Bioeconomy through the implementation of the European Green  
Deal*

Tomasz Calikowski, Directorate-General for Research and Innovation, European  
Commission

*Sustainable bioeconomy implementation: the global landscape*

Jim Philp, Member of ECOMONDO International Advisory board

Discussion

15.45-17.45 **Session 2**

### ***Multi-actor implementation of Bioeconomy in the Mediterranean basin and beyond***

Chair:

Mario Bonaccorso, Director Cluster SPRING

*The Bioeconomy initiative in the Brazilian G20 presidency*

Fabio Fava, Alma Mater Studiorum-Università di Bologna, Focal point of the Italian  
Presidency of Council of Ministers in the frame of the 2024 G20 Bioeconomy  
initiative

*The contribution of CBE JU*

Virginia Puzzolo, CBE Joint Undertaking

*The Biomodel4Regions – Innovative governance model for regional bioeconomy*

Patrizia Circelli, Senior Innovation Management Consultant & PNO cross board  
sector team leader bioeconomy and agri-food, CIAOTECH, Italy

*The BioInSouth EU project*

Pierluigi Argoneto, SPRING consultant and BioInSouth project coordinator

*Biobased innovation for sustainable agriculture and soil regeneration*  
Sara Guerrini, Novamont & Re Soil Foundation

*The Horizon Europe Forest4EU project within the Network of European Regions for Innovation in Agriculture, Food and Forestry (ERIAFF) - Experiences on forestry management.*

Samuele Pii, Tuscany Region

17.45 Closure by the Chairs

WEDNESDAY 6  
NOVEMBER

14:30 -  
17:00

Ravezzi 2 South  
Hall

**Resource  
efficiency and  
Circular  
Economy**  
*Onsite event*  
[Click here](#)

## The market design of the municipal waste integrated cycle between public service and competition

Language: Italian

**organized by Ecomondo STC & UTILITALIA (Italian federation of energy, water and environmental services)**

The evolution in municipal waste management is marked by diverging forces. On the one hand, as a local public service of general interest, its organization must guarantee the protection of health and the environment, universality of access, efficiency, effectiveness and sustainability (environmental and economic) along the entire supply chain. On the other hand, as an economically relevant sector and first link of industrial supply chains producing secondary raw materials and energy, its organization is called upon to respect (often to the detriment of the fragmentation of the cycle) the principles and logic of free competition. However, the difficult and necessary balancing of interests between public and private (local authorities, EPR organisations, public and private waste management operators) cannot hinder the achievement of circular economy targets. The conference aims to call public authorities and industrial players at European and national level to an open discussion on the challenges, risks and opportunities of the evolution of the "market design" of municipal waste integrated cycle.

### Session Chair

Alberto Ferro, Executive Board of Utilitalia

### Programme

14.30 Introduction and coordination by the Chairman  
Alberto Ferro, Executive Board of Utilitalia

14.40 *Introductory speech*  
Antonio Massarutto, Udine University

### 15.00 **European session**

Federico Foschini, President of Municipal Waste Europe (European association of public responsibility for waste)

Claudia Mensi, President of FEAD (European Waste Management Association)

15.30 **National session**

Laura D'Aprile, Head of Department of Sustainable Development, Italian Ministry of Environment

Vittoria Tesei, Competition Department II, Transport, Energy and Environment Directorate, AGCM

Lorenzo Bardelli, Director of Environment Division of Italian Regulatory Authority for Energy, Networks and Environment

Simona Fontana, Head of CONAI (National Packaging Consortium)

Lorenzo Perra, President of Alia S.p.A., Vice President of Utilitalia

16.45 Conclusions

Filippo Brandolini, President of Utilitalia

WEDNESDAY 6  
NOVEMBER

15:00 -  
17:00

Ocean Arena East  
Hall  
Onsite & live  
streaming event  
[Click here](#)

## Thematic session - THE FUTURE OF WATER: GOVERNANCE AND INNOVATION. ITALY AND THE NETHERLANDS TEAMING UP

Language: English

**organized by National Council of the Green economy, in collaboration with the Embassy and the Consulate General of the Netherlands in Italy**

### Programme

Chair:

**Raimondo Orsini**, Director, Sustainable Development Foundation

OPENING REMARKS

**Willem van Ee**, Ambassador of the Kingdom of the Netherlands in Italy

### **POLICIES THAT WORK: ITALIAN AND DUTCH INSTITUTIONS TO PROTECT THE 'BLUE GOLD'**

**Meike van Ginneken**, Water Envoy for the Kingdom of the Netherlands (video talk)

**Steven van Rossum**, Program Manager, WTEX10, Ministry of Economic Affairs and Ministry of Infrastructure and Water, the Netherlands

**Alessandro Bratti**, Secretary General, Po River District Authority, Italy

## TECHNOLOGIES THAT WORK? THE BUSINESS SECTOR SHARING BEST PRACTICES

***Water data: innovation to increase efficiency to reduce losses***

**Spatial Insight** | **Ignaz Worm**, Co-owner

**Gruppo Cap** | **Michele Falcone**, Director General

***State-of-the-art solutions driving climate resilience***

**Royal Haskoning DHV** | **Danny Traksel**, Director Bioresources

**Acquedotto Pugliese** | **Francesca Portincasa**, Direttore General

***Water management & recycling in industry and manufacturing sector: best available technologies***

**Jotem** | **Bert Jansenm**, Sales Manager

**Step Tech Park** | **Loredana Reniero**, Co-founder

CLOSING REMARKS

**Raimondo Orsini**, Director, Sustainable Development Foundation

WEDNESDAY 6  
NOVEMBER

15:00 -  
17:00

Agorà Malatesta –  
Environmental  
Monitoring Area  
D8 pav.

**Water Cycle and  
Blue Economy**

*Onsite event*

[Click here](#)

## Mediterranean sea level rise, the phantom menace?

Language: English

**organized by Ecomondo STC & Union for the Mediterranean, The European House Ambrosetti**

Climate change is a global challenge, but its impacts are not the same all over. The Mediterranean region is more exposed, both for climatic and socio-economic reasons, and if we don't strike now the right choices, it can collapse. The area is the second fastest warming globally, and the waters of this shared sea are the fastest warming and therefore fastest rising globally. Ensuing dramatic climate and environment disruptions are foreseen in a tale not only of severe impacts but also of fragilizing unevenness around the Mediterranean that could amplify instability, large population movements, or even conflicts. Of the many forecasted impacts sea level rise is of unprecedented magnitude as it could jeopardize the regional food security through salinization of fertile plains, together with many other severe consequences – coastal erosion, threats to heritage. But of all threats it is the most neglected, almost exorcised in its magnitude: the event aims to launch necessary call for planning and action.

### Session Chair

Ambassador Grammenos Mastrojeni, Senior Deputy Secretary General of the Union for the Mediterranean

### Programme

Moderator:

Michele Governatori, Power and gas Lead ECCO Think Tank

**Scene Setting**

*Climate, the Mediterranean Hotspot*

Grammenos Mastrojeni, Senior Deputy Secretary General of the Union for the Mediterranean (UfM)

*A pragmatic overlook on the years to come*

Benedetta Brioschi, Food, Retail and Sustainability Practice Director at the European House Ambrosetti (TEHA)

**The Science, the Facts**

*An overview of the Mediterranean, and sea level rise and storm surges flooding Venice: past, present and future*

Dario Camuffo on behalf of MeDECC, National Research Council of Italy, Institute of Atmospheric Sciences and Climate

*Climate monitoring in the Mediterranean: the role of Copernicus Climate Change Service*

Delphine Deryng, Partnership & User Engagement specialist at Copernicus European Centre for Medium-Range Weather Forecasts (ECMWF)

**The Economics of Sea Level Rise in the Mediterranean**

*Sea level rise and implications for overall development goals*

Rym Ayadi, President and Founder of the Euro Mediterranean Euro-Mediterranean Economists Association (EMEA)

**Not only the sea is changing**

*Another side of the equation: mountains and glaciers crisis*

Federico Mattei, Sustainable Food Systems Economist at FAO- Mountain Partnership Secretariat

**Erosion and salinization, solutions in agriculture and nature**

*Sea level rise and soil salinization: impact on the planet, the region, and on human activities*

Biagio di Terlizzi, Deputy Director at the International Center for Advanced Agronomic Studies in the Mediterranean (CIHEAM), Bari

**The deltas "soft-spots": comparing experiences between the Nile and the Po basins**

*Impacts of sea level rise along the Nile Delta*

Amr Hamouda, President of the Marina Hazard and Mitigation Center, Ministry of Higher Education and Scientific Research, Egypt

*The Pò, a perspective from the largest river delta in Italy*

Alessandro Bratti, Secretary General of the Pò Basin Authority

**A threat to our roots and identity: sea level rise and historical heritage**

*Greece in the frontline, the threats to a common heritage for mankind*

George Kremlis, Ambassador of the EPLO to Bulgaria | Chair of the UNECE Espoo Convention & the SEA Protocol, and former Principal Advisor to the Greek Prime Minister on energy, climate, environment and circular economy

***Mediterranean Rise and Environmental Security Perspectives****Is Sea level rise a problem for security in the Mediterranean Region?*

Elisabeth Sellwood, Senior Programme Manager, Environmental Security, United Nations Environment Programme (UNEP)

***The most Exposed: Ocean Islands and Small Island Developing States****Teachings of a long lasting battle*

Jabal Hassanali, Strategy Manager at Global Island Partnership (GLISPA)

***Conclusions****From Awareness to Action*

Elisabetta Balzi, Head of Oceans, Seas and Water Unit, DG Research and Innovation, European Commission

WEDNESDAY 6

NOVEMBER

15:00 -

18:00

Neri 1 Room South  
Hall*Onsite & live  
streaming event*[Click here](#)Thematic session - European news: measuring wellto  
improve the circularity of enterprises

Language: Italian

**organized by National Council of the Green economy, in collaboration with  
Circular Economy Network****Programme**

Moderator:

**Antonio Cianciullo**, Journalist Huffington Post**INTRODUCTORY PRESENTATION: THE EUROPEAN REGULATORY FRAMEWORK****Stefano Leoni**, Coordinator, Circular Economy Network**THE NEW ERA OF CORPORATE SUSTAINABILITY***Measuring and reporting on corporate circularity: the European ESRS standards***Marcello Bianchi**, Member, Sustainability Reporting Board EFRAG e Deputy General  
Director Assonime*The new ISO standards on circular economy***Laura Cutaia**, Circular Economy Division, Sustainability and Circularity Department,  
ENEA*Circularity and Clean Industrial Deal***Monica Frassoni**, President European Alliance to save Energy



**COMPARING EXPERIENCES****Valerio Forti**, HSE Director, Burgo Group**Camilla Colucci**, Co-Founder & CEO, Circularity**Giuseppe Nisi**, Study center - prevention area - data analysis, Conai**Riccardo Piunti**, President, Conou**Alessandro Lazzari**, Product Manager, DNA Ambiente**Giuseppina Carnimeo**, General Director, Ecopneus**Alessandro Semeria**, Environmental Operation Director, Edison Next**Luca Campadello**, Strategic Development & Innovation Manager, Erion**Paolo Zelano**, Vicepresident, Federbeton**Michele Priori**, General Affairs&Compliance manager, Haiki Cobat**Martina Malorni**, Treasury, Investor Relations & Sustainability Manager, IEG - Italian Exhibition Group**Roberto Sancinelli**, President, Montello**Marco Versari**, Global Public Affairs, Novamont**Nicoletta Antonias**, Sustainability and Sustainable Infrastructure Manager, RFI**CONCLUSIONS****Edo Ronchi**, President, Sustainable Development FoundationWEDNESDAY 6  
NOVEMBER16:00 -  
17:45Ravezzi 1 Room  
South Hall**Financing,  
education and  
communication***Onsite event*[Click here](#)**Green, climate, biodiversity finance**

Language: Italian

Simultaneous translation: English

**organized by Ecomondo  
in collaboration with Materia Rinnovabile**

Paris Agreement, Montreal-Kunming Agreement, 14th Five-Year Plan, Inflation Reduction Act, Green Deal. The direction of international politics and economics, despite some slowdowns, seems to be increasingly geared towards mobilizing the necessary capital to deal with the environmental polycrisis and its impacts on economic and social stability at planetary level.

According to industry participants, at least USD 15 trillion will have to be mobilised globally by 2030, a huge figure but still less when compared to the amount of capital managed by sovereign wealth funds or asset managers, which is around USD 31 trillion. Climate finance, green bonds, climate loans, ESG, sustainability-linked bonds, are some of the instruments to be put in place to finance the transition to a future-proof economy, aligned with the major goals of the UN agreements, concerning climate, biodiversity, desertification, protection of the high seas, plastic pollution and environmental migration.

The meeting is of relevant interest to companies looking for green financing instruments, finance professionals, private investors and environmental associations.

## **Program**

Moderator:

**Emanuele Bompan**, Materia Rinnovabile

*Panel discussion*

**Sara Lovisolo**, Amundi

**Cristina Colombo**, Etica SGR

**Isabel Reuss**, Italian Sustainable Investment Forum

**Beatrice Moro**, Senior Policy Advisor for Sustainable Finance at ECCo think tank

**Mariangela Siciliano**, Head of Education & Connect Solutions, SACE

**Vincenzo Galileo**, *Responsabile Corporate Banking*, Cherry Bank

*Keynotes*

**Ambroise Fayolle**, Vicepresident European Investment Bank (video-recorded speech)

*Reforming the International Financial System to better finance climate mitigation and adaptation*

**Avinash Persaud**, Special Advisor to the President of the Inter-American Development Bank on Climate Change and architect of the Bridgetown Initiative 1.0 on International Financial Reform

# THURSDAY 7 NOVEMBER

THURSDAY 7  
NOVEMBER

10:00 -  
12:00

Noce Room A6  
Pav.

**Resource  
efficiency and  
Circular  
Economy**  
*Onsite event*  
[Click here](#)

## The new opportunities for polyurethane recycling

Language: Italian

### **organized by Ecomondo STC & CETMA Research and Technology organisation**

Polyurethane, especially in rigid or flexible foam form, is widely used in various sectors (construction, electronics, furniture packaging, industry). Critical issues related to its disposal may call into question its widespread use in future years. The conference aims to promote a virtuous comparison between the players in the supply chain, providing useful information to promote alternative solutions to landfilling.

In particular, an effective mechanical recycling process will be presented, among others.

### **Session Chair**

Alessandro Marseglia, CETMA Research and Technology organisation

### **Programme**

10.00-10.15 Saluti e Introduzione a cura del Presidente di sessione

10.15-10.30 *Stato dell'arte industriale nel recupero in pellet del poliuretano da rifiuti elettronici*

Luca Gentilini, HAIKI COBAT

Luana Bolletta, HAIKI Electrics

10.30-10.45 *Oltre i metalli: il ruolo dei sistemi EPR nella valorizzazione delle frazioni critiche*

Niccolò Nocentini, ERION

10.45-11.00 *La gestione del rifiuto da materassi: problema o opportunità?*

Serena Ceccarelli, Gruppo HERA

11.00-11.15 *CORALIGHT® 600: Economia circolare tramite upcycling di sfridi poliuretanici*

Massimiliano Motta, DUNA CORRADINI

11.15-11.30 *Processo innovativo per la produzione di PU riciclato ad alto valore aggiunto*

Antonella Tarzia, CETMA / Luca Querci, CORMATEX

11.30-11.45 *Riciclo meccanico del PU rigido: trasformare scarti aziendali in nuovi prodotti - performance e principali caratteristiche.*

Rocco Traini, ISOPAN

11.45 Conclusioni

THURSDAY 7  
NOVEMBER

10:00 -  
13:00

Diotallevi 1 Room  
South Hall

**Resource  
efficiency and  
Circular  
Economy**

*Onsite event*

[Click here](#)

## Measurement and Communication of carbon footprint and carbon neutrality of business

Language: Italian

**organized by Ecomondo STC & Sant'Anna School of Advanced Studies, ENEA (Italian National Agency for New Technologies, Energy and Sustainable Economic Development), Global Compact Network Italia**

The topic of carbon footprint measurement has become increasingly important and has spread from the largest to the smallest companies, especially with the emergence of the so-called "scope 3" approach, which is considered increasingly necessary to ensure a credible commitment to decarbonization by companies, involving the supply chain and, in more advanced versions ("scope 4"), the entire value chains, to cover the entire life cycle of products and services that the organization offers in the market, including their end-of-life. The most recognized international initiatives, such as the Science Based Target, require companies to report thoroughly and comprehensively on the emissions of their supply chains. The tools for measurement are diverse, although, for obvious reasons, the life-cycle approach is emerging as the most robust, especially from the perspective extended to value chains even downstream of the production and marketing of goods and delivery of services. At the same time, mandatory legislation and voluntary standards are increasingly requesting to fully integrate the carbonisation in all management strategies. Example of this are the requirements of decarbonisation plan in different EU Directive proposal and the inclusion of decarbonisation as a key element of the ISO High Level Structure for management systems. Moreover very strong emphasis has been put by the European Union on the way in which carbon neutrality claims can be communicated on the market following strict rules.

The workshop, following the previous edition in 2023 aims to analyse the challenge of measuring CO<sub>2</sub>eq emissions in its various dimensions, placing itself primarily from the perspective of businesses.

### Session Chairs

Marco Frey, Sant'Anna School of Advanced Studies and President of Global Compact Network Italia

Claudia Brunori, ENEA (Italian National Agency for New Technologies, Energy and Sustainable Economic Development) - Department of Productive and Territorial Systems Sustainability

### Programme

10.00-10.20 *Introduction to the evolution of mandatory legislation and voluntary standards towards an increasing role of decarbonisation*

Marco Frey, Sant'Anna School of Advanced Studies

10.20-10.40 Loredana Napolano, JRC European Commission

10.40-11.40 **Session on**

***The evolution of national and international initiatives related to carbon footprint measurement in the perspective extended to supply chains and value chains***

10.40-11.00 *The survey and the initiatives put in place by the UN Global Compact*  
Laura Capolongo, UNGCIN

11.00-11.20 *Climate Related Claims in the new European Commission Legislative initiatives*  
Fabio Iraldo, Sant'Anna School of Advanced Studies

11.20-11.35 *The Italian LCA Database ARCADIA*  
Caterina Rinaldi, ENEA

11.40-12.50 **Session on**  
***Experiences of carbon management and communication by companies***

Andrea Gombach, RICOH Europe  
Gianluca Gramegna, Erg  
Valentina Perissinotto, Nestlé Waters  
David Brussa, Illy  
Mirko Repetto, GS1  
Stefano Sibilio, UNI

12.50 Discussion and closure by the Chairs

THURSDAY 7  
NOVEMBER

10:00 -  
13:00

Agorà Fellini –  
Sites & Soil  
Restoration Area  
C3 pav.

**Resource  
efficiency and  
Circular  
Economy**

*Onsite event*  
[Click here](#)

## The new End-of-Waste regulation on C&D waste

Language: Italian

**organized by Ecomondo STC & ASSOAMBIENTE-ANPAR (National Association of Recycled Aggregates Producers)**

The new revision of the End of Waste Regulation for inert waste from construction and demolition activities and other inert waste of mineral origin, which repeals and replaces the current DM 152/22 and will effectively enter into force in 2025, will introduce important novelties in the C&D waste recovery sector. Operators have been waiting for a long time for the resolution of at least some of the operational issues (the way recycled materials are stored, the management of small quantities of asbestos cement fragments in aggregates) that they have to face on a daily basis and which they hoped would find an answer in the End of Waste Regulation published in 2022 and corrected this year, but this has not been the case. Against some significant improvements (e.g. the limits on eluate for sulphates and chlorides and the introduction of the technical standards of compliance and suitability), environmental tests were also introduced on the solid aggregate matrix, which could create barriers to the recovery of C&D waste and/or limit its uses and market. Now the operators are relying on the monitoring period to improve the situation that has arisen and that needs to continue the fruitful discussion with the Ministry for the Environment and Energy Security and its technical bodies, which started when the first changes were needed.

The seminar is intended to encourage discussion between the authorities and the entire recovery chain in order to accelerate the application of the circular economy in the construction sector.

## Session Chair

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

## Programme

10.30-10.40 *Seminar presentation*

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

10.40-11.00 *The revision of European standards pertaining to the C&D waste recovery sector*

Karolina D'Cunha, DG Env Commissione Europea - B3 "Waste management and secondary material"

11.00-11.20 *Existing End of Waste Regulations in some Member States*

Matteo Bovio, Technical Secretary ANPAR

11.20-11.40 *The Italian End of Waste Regulations: need for corrections and interpretive doubts*

Giorgio Bressi, Technical Director ANPAR - National Association of Recycled Aggregates Producers

11.40-12.45 **Round table**

Moderator:

Elisabetta Perrotta, Assoambiente Director

Participants:

Vannia Gava, Vice Minister Ministry of the Environment and Energy Security (TBC)

Valeria Frittelloni, Italian Institute for Environmental Protection and Research (TBC)

Federica Scaini, Italian National Institute of Health

Paolo Barberi, National Association of Recycled Aggregates Producers

Carol Barcella, NADECO

Silvia Ricci, ANCE

Nicoletta Antonias, RFI

Laura Brambilla, Legambiente

12.45 Conclusions

THURSDAY 7  
NOVEMBER

10:00 -  
13:00

Neri 2 Room  
South Hall

**Policies and  
regulatory  
frameworks**

*Onsite event*

[Click here](#)

## By-products and end-of-waste, circular economy paths

Language: Italian

**organized by Ecomondo STC & ISPRA (Italian Institute for Environmental Protection and Research)**

The purpose of the meeting is to address the main issues relating to the application of articles 184 bis and ter of Legislative Decree No. 152/2006 by analyzing the critical issues of the four conditions provided for by the legislation. The evaluation of the four conditions relating to the end of waste, both in the definition of national decrees and in the case-by-case procedure, represents an extremely complex step from a technical and legal point of view.

The judiciary has often intervened on the application of by-product notion and on the interpretation of the four requirements referred to in the art. 184-bis. The day will encourage discussion between institutions, jurists, operators and bodies responsible for monitoring and controlling the correct management of these materials.

### **Session Chair**

Valeria Frittelloni, Head of Department of Environmental Assessment, Monitoring and Sustainability, ISPRA

### **Programme**

#### *The background and current regulatory updates*

Luca Proietti, General Director Circular Economy and Remediation, Ministry of Environment and Energy Security (MASE)

#### *ISPRA activities*

Andrea M. Lanz, Head of National Center for Waste and Circular Economy ISPRA

Anna Lutman, Vice President SNPA and General Director ARPA Friuli Venezia Giulia

#### *The assessment of health aspects in the conditions for termination of waste status and by-product status*

Federica Scaini, ISS

#### *Focus on the construction and demolition waste chain*

Daniele Carissimi, End of Waste expert for MASE

#### *Peer review: methodology from case study to end-of-waste opinion on a case-by-case basis*

Adele Lomonaco, ARPAE

Bruno Barbera, ARPA Lombardia

#### *Operators' point of view*

Marco Ravazzolo, Confindustria

Luca Mariotto, Utilitalia

#### *The approach followed by the national AIA (Autorizzazione Integrata Ambientali)*

David Roettgen, IPPC Commission

#### **Conclusions**

Jacopo Morrone, President of Parliamentary Commission of Inquiry into illegal activities related to the waste cycle and other environmental and agribusiness offenses

THURSDAY 7  
NOVEMBER

10:00 -  
13:00

Agorà Flaminia –  
Sites & Soil  
Restoration Area  
C1 pav.

**Sites and Soil  
Maintenance  
and Restoration**  
*Onsite event*  
[Click here](#)

## Remediation of contaminated sites: where we are? Evolution of environmental regulation and technological innovation

Language: Italian

**organized by Ecomondo STC & Sapienza University of Rome, Unem  
(Energies for Mobility Union), Legambiente (Italian environmental  
association)**

Some introductory reports will be provided by invitation, by the Administration or Public Institutions considering the community guidelines for the transition to the circular economy. A round table will follow with the possibility of interaction with the public.

### Session Chairs

Marco Petrangeli Papini, Sapienza University of Rome  
Donatella Giacometti, Unem  
Giorgio Zampetti, Legambiente

### Programme

10.00 Greetings and introduction by the Session Chairs

10.15-10.30 Institutional greetings

Giuseppe Vadalà, Commissario Unico per la bonifica delle discariche e dei siti contaminati

10.30-10.45 *State of the art of remediation legislation*

Giuseppe Le Pera, Italian Ministry of Environment and Energy Security

10.45-11.00 *Why is the remediation of a contaminated aquifer never completed In Italy?*

Marco Petrangeli Papini, "Sapienza" University of Rome

11.00-11.15 *Urban planning and contaminated sites: opportunities and limitations*

Alessandra Pellegrini, Federchimica

Ernesto Sorghi, Federchimica

Fabrizio Magnani, Comune di Ferrara

11.15-11.30 *Challenges in the reconversion of man-made areas*

Donatella Giacometti, Unem

11.30-11.45 *Transparency and sharing with local communities in environmental remediation operations*

Andrea Minutolo, Legambiente

11.45-12.45 **Round table**

Speakers:

Gianfranco Gilotti, Edison ReGea

Carlo Montella, Eni Rewind

Renato Baciocchi, Università Tor Vergata

Fabio Pascarella, ISPRA



THURSDAY 7  
NOVEMBER

10:00 -  
13:00

Agorà Augusto –  
Bioeconomy Area  
D2 pav.

**Circular and  
Regenerative  
Bioeconomy**  
Onsite event  
[Click here](#)

## Fertilizers from sewage sludge: production, quality and applications

Language: Italian

**organized by Ecomondo STC & UTILITALIA (Italian federation of energy, water and environmental services), ASSOAMBIENTE (National Association of Environmental Services Companies and Circular Economy), CIC (Italian Composting Consortium)**

Climate change and anthropic factors are risk factors that are increasingly affecting soil health and fertility. Fertilizers produced from sewage sludge are a significant source of organic carbon and nutrients for soil and crops. 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

### Programma

10.00 Introduction of Session Chair

10.15-10.30 *Overview on the management of sewage sludge in the national and European context*

Andrea Lanz, ISPRA

10.30-10.45 *The quality of sewage sludge*

Tania Tellini, UTILITALIA

Michele Falcone, Gruppo CAP

10.45-11.15 *Market and long-term benefits of sewage sludge-based fertilizers*

Alberto Confalonieri, Technical Committee CIC

M. Allevi, ASSOAMBIENTE

11.15-12.30 *Fertilizers from sewage sludge: the state of the art and new evidence from the world of research*

*Assessment of emerging micropollutants in sewage sludge*

Fabrizio Adani, Università degli Studi di Milano - DISAA

Claudio Minero, Dipartimento di Chimica - Università di Torino

Angelo Berri, consulente ambientale

*The project SLURP SLudge Recovery in agriculture: environment and health Protection*

Giorgio Bertanza, Università degli Studi di Brescia - DICATAM

## Speeches selected from the Call for Papers

*Anaerobic digesters mixing performance simulations, considering solids to understand long-term performances*

R. Muoio, G. Bellandi, U. Rehman, W. Audenaert - AM-Team  
L. Pedrazzi, S. Lorenzini - BrianzAcque Srl

*Biomethane Production Increase through Ozonolysis: From Laboratory Scale to Real Scale*

D. Soderino, M. Peroni, E. Pasinetti, D. Preda - SIAD S.P. A  
A. Catenacci, E. Ficara, F. Malpei - Politecnico di Milano - Dipartimento di Ingegneria Civile e Ambientale

12.30 *Discussion and conclusions*

Filippo Brandolini President of UTILITALIA  
Elisabetta Perrotta, Director of Assoambiente  
Lella Miccolis, President CIC

THURSDAY 7  
NOVEMBER

10:00 -  
13:00

Mimosa Room B6  
pav.

**Circular and  
Regenerative  
Bioeconomy**

*Onsite event*

[Click here](#)

## Innovating the Mediterranean: Youth-Driven Green and Blue Transitions! Award Innovation for a Mediterranean Food Transition

Language: English

**organized by Ecomondo STC & CIHEAM, UfM, Uni-Med & BusinessMed**

In a rapidly changing global economy influenced by environmental and societal shifts, the job market must adapt and develop new professional profiles to meet emerging needs. Innovation managers, technology transfer officers, and specialised trainers are becoming increasingly essential. Innovative educational programs designed with a learning-by-doing approach and solution-oriented challenges which unlock hidden talents, nurture the aspirations of young Mediterranean people, and develop soft skills towards the green transition, impacting the creation of start-ups and the change of businesses by encouraging more competitive innovation processes.

The CIHEAM supports the quintuple helix model, integrating academia, industry, government, civil society, and the environment, fosters entrepreneurship in promising economic sectors, provides meaningful opportunities and creates the conditions for a prosperous future. The event, organised by the International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM), the Union for the Mediterranean (UfM), the Mediterranean Universities Union (UniMed), and the Mediterranean Confederation of Enterprises (BusinessMed) revitalises the Mediterranean Innovation Partnership (MIP), embodies a comprehensive multi-stakeholder approach and stimulates a comprehensive debate on these critical issues: How can innovation and technology transfer be effectively harnessed to support sustainable development in the Mediterranean region? What role can young entrepreneurs play in driving the green and blue economy transitions? How can the quintuple helix model be implemented to foster collaboration among academia, industry, government, civil society, and the environment?

## Programme

10.00 Opening remarks

M. Teodoro Miano, Secretary General of the CIHEAM

10.05-11.15 Panel discussion

### ***Scenarios and Evolutions of Food Systems and Green/Blue Transition in the Mediterranean and Africa***

Moderator:

Yasmine Seghirate, CIHEAM

Panelists:

Elisabetta Balzi, Head of the Ocean, Seas and Waters Unit and Deputy Director of Healthy Planet, EU Research and Innovation Directorate General

Angelo Riccaboni, Co-Chair of PRIMA Foundation

Sandra Castaner, Policy Officer, DG MARE, EU

Nesrine Ziad, Partner, Leancubator

Sebastien Abis, Director of the Club Demeter

11.15-11.30 Questions & Answers

### ***Building Up the Innovation Ecosystem: MIP (Mediterranean Innovation Partnership Network)***

Damiano Petruzzella, Annarita Antonelli, Giordano Dichter - CIHEAM Bari

*Overview of the MIP Report 2024: Emphasizing the theme "Future is young! Changing mindset to deal with change"*

*Introduction of new MIP network strategies and tools that support young innovators*

### ***CIHEAM Youth Innovation Award***

Presentation on the importance of the Innovation Prize then the members of the jury present the context of the prize for the 2024 edition, the methodology and the projects of the 9 finalists.

Members of the Jury:

Giuseppe Provenzano, Union for Mediterranean

Raniero Chelli, Unimed

Mahdi Khomsi, BusinessMed

Damiano Petruzzella, CIHEAM Bari

Giordano Dichter, Economist, Local Development expert

Announcement of the winners by the members of the jury and speeches by the 3 finalists

*Interactive Q&A Sessions*

Encourage audience participation through interactive Q&A sessions after each major segment.

THURSDAY 7  
NOVEMBER

10:00 -  
13:00

Ravezzi 2 South  
Hall

**Circular and  
Regenerative  
Bioeconomy**

*Onsite event*

[Click here](#)

## States general for soil health – III edition: opportunities for soil regeneration and climate neutrality: carbon farming and nature-based solutions. International session

Language: English

Simultaneous translation: Italian

**organized by Ecomondo STC & European Mission A Soil Deal for Europe, Re Soil Foundation, Coldiretti (Federation of Italian Farmers), National Bioeconomy Coordination Board (NBCB)**

According to the European Soil Observatory, about 60 to 70% of soils in the EU are currently likely to be affected by one or more soil degradation processes, among all by soil sealing.

Agricultural soils annually lose 7.4 million tons of CO<sub>2</sub> due to the too-rapid mineralization that occurs, almost unnoticed, under agricultural crops, the same soil where seventy-eight percent of soil consumption occurs. Ecosystems in the Mediterranean area are particularly vulnerable and the region itself is warming 20% faster than the global average (source: UNEP).

Unhealthy soil generates side effects and is unable to provide essential ecosystem services, such as: producing safe nutrition and food, providing biodiversity, purifying and regulating water and its cycle, ensuring adequate nutrient cycling, storing CO<sub>2</sub> contributing to carbon and mitigating climate, and ultimately supporting human activities as a whole.

Lately, the debate about the urgent need for soil conservation has increased at all levels in Europe, partially due to the efforts of the European Mission "A Soil Deal for Europe". And the publication of the Soil Strategy in November 2022 launched the process to adopt a Directive on Soil Monitoring and Resilience.

The third edition of the "States General for Soil Health – opportunities for soil regeneration and climate neutrality: carbon positive actions and nature-based solutions" will take place on 7th November 2024. In the morning session, the latest European policy updates and an overview of the key elements needed to protect soil health, such as carbon farming and nature-based solutions, as well as best practices for soil regeneration on different types of soil's use will be explored and discussed. The afternoon session will offer an overview of the Italian scenario, with a focus on regenerative agriculture and on best practice of soil regeneration in the local communities.

### Morning Session

#### Session Chairs

Serenella Sala, HOU JRC

David Chiaramonti, Turin Polytechnic & Member of Re Soil Foundation Scientific Technical Committee

#### Programme

10.00 *Welcome*

Massimiliano Conti, MASE

10.30-10.40 Introduction by the Chairs

10.40-11.30 **European policy framework update**

10.40-10.55 *Status of EU Soil legislation on soil, carbon farming, nature-based solutions*

Serenella Sala, HOU JRC

10.55-11.10 *Status of Carbon Removal and Carbon Farming in EU*

Valeria Forlin, DG CLIMA (remotely)

11.10-11.25 *Status of the EU mission "A Soil Deal for Europe"*

Kerstin Rosenow, HOU DG AGRI (remotely)

11.30-12.05 **Best practice for soil regeneration**

11.30-11.40 *Agricultural soil*

Speaker, LILAS4SOILS - Fostering Carbon Farming Practices through Living LABs in the Mediterranean and Southern EU for the healthy future of European SOILS

Nicola Bergonzi and Andrea Fiorini, Università Cattolica del Sacro Cuore

11.40-11.50 *Urban/peri-urban soil*

Restoration of urban soils

Michele Munafò, ISPRA (TBC)

11.50-12.00 *Forests*

Antonio Brunori, PEFC Italy General Secretary

12.05-12.40 **Panel**

**Nature-based solutions: case studies**

Moderated by:

Virginia Puzzolo, CBEJU Head of programme unit

12.15-12.25 *FIBSUN project*

Francesco Balducci, Manifattura srl

12.25-12.35 *BeonNAT - Innovative value chains from tree & shrub species grown in marginal lands as a source of biomass for bio-based industries*

Luis Saúl Esteban Pascual, CEDER-CIEMAT – project coordinator

12.40 Q&A and Conclusions

THURSDAY 7  
NOVEMBER

10:00 -  
13:00

Ravezzi 1 Room  
South Hall

**Policies and  
regulatory  
frameworks**

*Onsite event*  
[Click here](#)

## Service contracts: the process of adapting to the ARERA standard model

Language: Italian

**organized by Ecomondo STC & UTILITALIA (Italian federation of energy, water and environmental services)**

During 2024, waste management operators and contracting bodies had to adapt their waste sector service contracts to the ARERA standard model referred to in resolution 385/2023/R/rif. The Authority's provision responded to the need to define a uniform contractual framework overcoming existing divergences. This aim was pursued by regulating the relationships between contracting bodies and waste management operators, orienting and promoting convergence towards a more efficient organizational structures characterized by a better quality of service. Coordination between regulatory and contractual discipline represents an essential element to guarantee the industrial development of the sector from both point of view: the quality of the service provided to users, and the economic-financial balance of management (and, therefore, of market competition). The conference aims to bring together different stakeholders to analyse, from an institutional and an industrial perspective, the critical issues faced in the process of implementing the ARERA standard model.

### Session Chair

Alessandro Cecchi, Director of Regulatory Affairs Iren SpA

### Programma

10.30 Introduction and coordination by the Chairman  
Alessandro Cecchi, Director of Regulatory Affairs Iren SpA

10.45-11.00 *Governance, management, regulation: snapshots of the national situation*  
Francesca Mazzarella, Director of Utilitatis

11.00-11.45 *Evaluations on the implementation process of the ARERA standard model*  
Samanta Meli, Regulation Area of Utilitalia

Luca Tosto, Assoambiente

Francesco Iacotucci, IFEL Foundation consultant for regulation on waste

Leonardo Raito, President of ANEA (National Association of Area Government Bodies for Water and Waste)

Vito Belladonna, Coordinator of technical committee for municipal waste integrated cycle, ANEA (National Association of Area Government Bodies for Water and Waste)

## 11.45-12.45 **Panel discussion**

*Stakeholders' point of view on the adaptation of existing contracts to the new regulatory framework*

Moderated by:

Luca Mariotto, Director of Environment Office of Utilitalia

Speakers:

Bruno Manzi, President of AMA Roma

Paolo Carta, Director of Regulatory and Legal Affairs Alia S.p.A

Domenico Ruggiero, Sole Director ASIA Napoli

Mariagrazia Interdonato, President of MessinaServizi Bene Comune

12.45 Conclusions

Lorenzo Bardelli, Director of Environment Division of Italian Regulatory Authority for Energy, Networks and Environment

THURSDAY 7  
NOVEMBER

10:00 -  
13:15

Agorà Malatesta –  
Environmental  
Monitoring Area  
D8 pav.

**Water Cycle and  
Blue Economy**

*Onsite event*

[Click here](#)

DOWNLOAD THE  
CONFERENCE POSTERS

What waters tell you about... health: risk assessment methodologies, monitoring, sustainable finance, business opportunities and treatment upgrading

Language: Italian

**organized by Ecomondo STC & National Health Institute, EC/JRC, UTILITALIA (Italian federation of energy, water and environmental services), Marche Polytechnic University, ASSOARPA (National Association of Regional Environmental Protection Agencies)**

with speeches and posters from the Call for Papers 2024

The water and health nexus has been upgraded from the issues related mainly to pro contaminated water and poor sanitation to several opportunities that span from innovative technologies, investments and business, support for advanced monitoring to prevent possible pandemics. This workshop will highlight how risk-based approach is now mainstreaming the new EU directives and regulations, so as to pave the way for a paradigm shift. In addition, results from interfaces between water and health experts will allow the definition of the current state of the art and perspective for joint industrial development of the sectors.

### **Session Chairs**

Roberta Maffettone, Joint Research Centre, European Commission

Luca Lucentini, Ecomondo STC and Italian National Health Institute

Francesco Fatone, Ecomondo STC and Marche Polytechnic University

### **Programme**

10.00 Introduction by the Chairs

10.10-10.25 *EU-wide studies for water and health nexus*

Bernd Gawlik, EC JRC, portfolio leader water quality

Roberta Maffettone, EC JRC, portfolio leader water quality

10.25-10.40 *Methodologies for risk-based approaches*

Luca Lucentini, Istituto Superiore di Sanità

Susanna Murtas, Istituto Superiore di Sanità

10.40-10.55 *Water Safety Plan: tools and strategies for its implementation in a large aqueduct*

Serena Triggiani, Councillor for the Environment, Waste Cycle and Remediation, Environmental Supervision, Parks, Industrial Risk, Industrial Crisis and Policies of the Apulia Region

Pier Paolo Abis, Acquedotto Pugliese SpA

10.55-11.10 *Risk management and water reuse: case studies*

Francesco Fatone, Marche Polytechnic University

Attilio Toscano, University of Bologna

Susanna Murtas, Istituto Superiore di Sanità

11.10-11.25 *Enhancement of biodiversity in large-scale sewage treatment plants of ACEA ATO2*

Luisa Merluzzi, Massimo Spizzirri, Alessia Delle Site, Carmine Iuliano - Acea Ato2 SpA

Corrado Corradi, Alessandro Frugis - Acea Infrastructure S.p.A

Fulvio Cerfolli, Dip. di Scienze Ecologiche e Biologiche - Università della Tuscia

11.25-11.40 *Diffusion of microplastics in water for human consumption: from the water resource to the tap*

Clara Sette<sup>1</sup>, Eleonora Brancaleone<sup>1</sup>, Daniela Mattei<sup>1</sup>, Valentina Fuscoletti<sup>1</sup>, Serena Silvestri<sup>1</sup>, Luca Lucentini<sup>1</sup>, Sandra Mallone<sup>2</sup>, Gabriele Favero<sup>3</sup>, Roberta Risoluti<sup>4</sup>, Giancarlo Cecchini<sup>5</sup>, Alessandro Frugis<sup>5</sup>, Valentina Gioia<sup>5</sup>, Marco Lazzazzara<sup>5</sup>; 1 Centro Nazionale per la Sicurezza delle Acque, Istituto Superiore di Sanità (ISS), 2 Centro Nazionale per la prevenzione delle malattie e promozione della salute, Istituto Superiore di Sanità (ISS), 3 Dipartimento di Biologia Ambientale ed Evoluzionistica, Università di Roma "Sapienza", 4 Dipartimento di Chimica, Università di Roma "Sapienza", 5 Acea Infrastructure SpA

11.40-11.55 *Antimicrobial resistance in Urban Waste Water Treatment plants: research toward the definition of a suitable indicator*

Alessandro Frugis, Claudio Ottaviano, Giancarlo Cecchini, Giulia Sagnotti, Maria Concetta Arizzi - Acea Infrastructure S.p.A.

Massimo Spizzirri, Acea Ato2 S.p.A.



11.55-12.10 *Assessing the quality of WWTP effluents (water and sludge): integrated chemical-ecotoxicological approach*

SLURP project team – 3DWWTPTOX project team

Giorgio Bertanza 1 2, Alessandro Abbà 1, Carlotta Alias 3, Achille Amatucci 1, Andrea Binelli 4, Sara Castiglioni 5, Marco Fossati 5, Catarina Cruzeiro 6, Camilla Della Torre 4, Marta Domini 1, Donatella Feretti 3 2, Gianni Gilioli 1, Stefano Magni 4, Nicola Massimi 9; Giovanna Mazzoleni 7 2, Michele Menghini 8, Roberta Pedrazzani 8 2, Peter Schroeder 6, Anna Simonetto 1, Selena Sironi 9; Nathalie Steimberg 7, Vera Ventura 1, Simona Vezzoli 1, Ilaria Zerbini 3; 1.Dipartimento di Ingegneria Civile, Architettura, Territorio e Ambiente e di Matematica, Università degli Studi di Brescia, 2.MISTRAL, Centro Interuniversitario di Ricerca, Milano Bicocca e Verona "Modelli Integrati di Studio per la Tutela della Salute e la Prevenzione negli Ambienti di Vita e di Lavoro", Università di Brescia, 3.Dipartimento di Specialità Medico-Chirurgiche, Scienze Radiologiche e Sanità Pubblica, Università degli Studi di Brescia, 4.Dipartimento di Bioscienze, Università degli Studi di Milano, 5.Dipartimento Ambiente e Salute, Istituto di Ricerche Farmacologiche Mario Negri, IRCCS, 6.Helmholtz Zentrum München - Deutsches Forschungszentrum für Gesundheit und Umwelt (GmbH), 7.Dipartimento di Scienze Cliniche e Sperimentali, Università degli Studi di Brescia, 8.Dipartimento di Ingegneria Meccanica e Industriale, Università degli Studi di Brescia, 9.Dipartimento di Chimica, Materiali e Ingegneria Chimica "Giulio Natta", Politecnico di Milano

12.10-12.25 *Contamination of drinking water by asbestos fibres: technological solutions*

Sergio Clarelli, Assoamianto

12.25-12.40 *The digitization of the network has allowed water to talk about... health*

Luca Sudati, Product Specialist, B. M. Tecnologie Industriali SpA SB - Gruppo Almagiva

12.40-12.55 *Risk analysis in the service of direct reuse*

Alessandro Reginato, Direttore Servizio Idrico di Gruppo CAP

12.55-13.10 *Designing a full-scale ozonation plant for maximum micropollutant removal and minimal bromate formation, using Computational Fluid Dynamics*

R. Muoio, G. Bellandi, U. Rehman, Wim Audenaert - AM-Team, Advanced Modelling for Process Optimisation

R. Schemen, P. van Horne - Waterschap De Dommel

T.P.M. Spit, C.Y. de Jong, E. Buunk - Witteveen+Bos

R. de Lepper, R.J. van der Vleugel - Nijhuis Water Technology B.V.

## POSTER SESSION

**1. Farmaci nelle acque reflue: l'EPR potrebbe danneggiare le aziende?**

Adriano Pistilli, Responsabile Tecnico Gestione Rifiuti - Libero professionista

**2. PFAS nelle acque: carboni attivi e plasmaferesi per contrastarli**

Adriano Pistilli, Responsabile Tecnico Gestione Rifiuti - Libero professionista

**3. Droni e digitalizzazione degli scarichi fluviali: il caso di studio di BrianzaStream**

ILARIA BOCUS - BrianzaAcque S.r.l. KIVILCIM CORNELIA DI FINIZIO - CQuadro Consulting MARCO BARBERINI - Italdron Air Service S.r.l.

#### 4. AMOZONE kinetic model for design and optimization of AOPs for drinking water production

R. Muoio\*, G. Bellandi\*, J. Garnier\*\*, U. Rehman\*, C. Davenel\*\*, L. Moulin\*\*, A. Martin\*\*, B. Pieterse\*\*\*, W. Audenaert\* \*AM-Team, Advanced Modelling for Process Optimisation, 9000 Ghent, Belgium

#### 5. Stima dinamica del numero di abitanti serviti da impianti di depurazione per studi di Wastewater Based Epidemiology

Giorgio Bertanza (1), Marta Domini (1) (1) Dipartimento di Ingegneria Civile, Architettura, Territorio, Ambiente e di Matematica (DICATAM), Università degli Studi di Brescia, via Branze, 43 - 25123 Brescia

THURSDAY 7  
NOVEMBER

10:00 -  
17:00

Agorà Blue  
Economy B8 Pav.

**Water Cycle and  
Blue Economy**

*Onsite & live  
streaming event*

[Click here](#)

## Accelerating Blue Interregional Cooperation in the Mediterranean Basin. Sharing a common strategic vision, creating transferrable collaboration models

Language: English

Simultaneous translation: Italian

### **organized by Ecomondo STC & Cluster BIG Blue Italian Growth, Italian Ministry of Foreign Affairs and International Cooperation**

The Mediterranean Sea basin is an area with a huge potential, given its 46.000km of coastline extension, its unique marine and fish resources and emerging opportunities in several blue economy sectors. Given the existing initiatives, opportunities and priorities to ensure a sustainable blue economy it's crucial the cooperation among Mediterranean countries to boost sustainability and digitalization, in particular with the involvement of blue economy clusters.

Throughout the morning session we will hear about the emerging clusters initiatives in the southern shore countries and look at the various cooperation models and learn about direct experiences of clusters coming from northern and southern shore countries. In the afternoon actions towards digitalization in the blue economy will be discussed, analyzing best practice in Italy and in other European and non-European countries.

### **Programme**

10.00-10.30 Registration

#### **Session 1**

#### ***Internationalisation in the Mediterranean seabasin***

10.30-10.50 *Welcome address*

Adriana Salazar Olivan, Ufm

Paolo Guglia, Cluster BIG

10.50-11.10 *Internationalization in the Mediterranean: cooperation models in northern and southern shores towards sustainable blue economy*

Leonardo Manzari, WestMED

11.10-11.40 *Mapping cluster initiatives in the southern shore countries*

Roberto Cimino, Cluster BIG

Laurence Martin, FdM

11.40-12.10 *Piloting activities in the Southern shore: strengthening emerging maritime clusters ecosystem*

Nesrine Rekia Ziad, LEANCUBATOR Algeria (TBC)

Hamadi Baba Hamadi, Cluster Maritime Mauritanien

Lidia Rossi, ForMare

12.10-12.30 Coffee break

12.30-12.40 *EU funding opportunities for smart specialisation, interregional cooperation in the blue economy – the EMFAF Call for Proposals on Flagship/Smart specialisation strategies*

Luca Marangoni, Deputy Head of Unit Sustainable Blue Economy, CINEA – European Commission

12.40-13.10 *Policy makers engagement*

A. Tiziana De Nittis, MASBBE Partnership Regione Emilia-Romagna

Ezzedine Kacem, Cluster Maritime Tunisien-CMT

Grazia Maria Iadarola, Lazio Innova

13.10-13.40 *Panel discussion: blue economy priorities in northern and southern shore*

Moderator: Roberto Cimino, Cluster BIG

Participants:

Luca Marangoni, deputy Head of Unit Sustainable Blue Economy, CINEA – European Commission

Leonardo Manzari, WestMed

All clusters representatives

13.40-14.00 Wrap-up & Conclusions

14.00-15.00 Lunch break

## **Session 2**

### ***Italian Ecosystem towards digitalisation in the blue economy: best practice sharing***

15.00-15.20 *Introduction by the Chair*

15.20-15.40 *iNEST - Interconnected Nord-Est Innovation Ecosystem*

Research and technological transfer activities in the sector of maritime, marine and inland water technologies. Development of a Digital Ocean of the North Adriatic area, integrating AI, ecosystem models and observed data.

Stefano Querin, OGS & Research topic manager on Inest's North Adriatic Digital Twin

Vittorio Bucci, University of Trieste & Research topic manager on Inest's Sustainable waterway mobility (TBC)

15.40-16.00 *RAISE - Robotics and AI for Socio-economic Empowerment*  
 Improve the strategy and methodologies of environmental monitoring and protection for the sea in the Ligurian territory. Innovative robotic systems managed by AI for marine monitoring, with increased mission range and better data quality (widespread, integrated and dynamic-adaptive monitoring).

*On constructing an intelligent digital environment for ports and maritime transport*  
 Davide Giglio, University of Genova & RAISE

*Citizen science actions to empower ocean digitalization*  
 Marco Faimali, CNR & RAISE  
 Manlio Martellucci, ETT spa & RAISE (TBC)

16.00-16.20 *MOST - National Center for Sustainable Mobility*  
 Making the mobility system "greener" as a whole and more "digital" in its management. Electric and hydrogen propulsion solutions and systems. Digital systems and autonomous driving to reduce accidents; more effective solutions for public transport and port logistics; a new model of mobility, as a service, accessible and inclusive.

Daniele Filippone, Fincantieri  
 Alessandro lafrati, Director of INM-CNR & Spoke Coordinator

16.20-16.50 Panel discussion – *Interaction with southern shore representatives on the topic*

Moderator: Emilio Campana, Cluster BIG (TBC)

Participants:  
 All north-south clusters and Italian ecosystems' representatives, Leonardo Manzari, (Raffaele Liberali)

16.50 Wrap-up and Conclusions

THURSDAY 7  
 NOVEMBER

10:00 -  
 18:00

Tiglio Room A6  
 pav.

**Resource  
 efficiency and  
 Circular  
 Economy**  
*Onsite event*  
[Click here](#)

## Innovative solutions for waste prevention and circular resources management

DOWNLOAD THE  
 CONFERENCE POSTERS

Language: Italian

**organized by Ecomondo STC & Italian Chemical Society – Division  
 Environmental and Cultural Heritage Chemistry, Italian LCA Network – WG  
 Waste Management and Treatment**

with speeches and posters from the Call for Papers 2024

At a European level, most EU Countries have carried out waste prevention initiatives, even though different targets and indicators are used, which make the comparison quite difficult. A fundamental contribution to this virtuous process can derive also from the initiatives of single organisations. Together with prevention practices, to pursue a greater overall sustainability, actions of circular management of end-of-life management actions are decisive. To this end, suitable assessment tools that could highlight the environmental benefits coming from the proposed solutions must be adopted.

In this seminar, new approaches, good practices and case studies will be presented, which can show remarkable advancements in the achievement of more sustainable procedures of prevention and management of residues, discards, by-products, both from industrial and municipal sources.

### **Session Chairs**

Fabrizio Passarini, Ecomondo STC, University of Bologna

Silvia Fiore, Polytechnic University of Turin

Danilo Bonato, Director of Business Development and Institutional Relations Erion Compliance Organization

### **Programme**

9.30 Introduction by the Chairs and brief presentation of posters

9.45-10.30 *Invited lectures*

9.45-10.00 *Horizon Project "Chorizo": Changing practices and Habits through Open, Responsible, and social Innovation towards ZerO food waste*

Matteo Vittuari, University of Bologna

10.00-10.15 *Opportunities for Circular Management of Neodymium from WEEE and End-of-Life Vehicles (ELV)*

Laura Mascheretti, ERION

10.15 Speech by Natascia Lai, Deputy Head of Unit - B3 "Industry" HaDEA (European Health and Digital Executive Agency), European Commission

### **Speeches selected from Call for Papers**

*Theme: policy / local authorities / management*

10.30-10.45 *NOW - Not Only Waste*

Francesca Gambone, WeSEPO Waste Management LTD (in collaboration with Italian Embassy in Lusaka, Zambia)

10.45-11.00 *Regione Piemonte-Gruppo di Lavoro sui Sottoprodotti*

Paola Molina, Adele Celauro, Annamaria Nemo, Lucia Venturi Casadei, Paolo Penna - Regione Piemonte Direzione Ambiente, Energia e Territorio Settore Servizi Ambientali

11.00-11.15 *Da rifiuto a risorsa: esperienze e proposte da ARPAC ed ARPA Lombardia*

Marco Ciccarelli, Luigi Cossentino, Giovanni Paribello, Agostino Migliaccio - ARPA Campania

Elisabetta Scotto di Marco, Nadia Fibbiani, Elena Crippa - ARPA Lombardia

11.15-11.30 *Economia circolare: la prospettiva della riparazione*

Valeria Stacchini, Progetto REPPER e UGRAA - Dipartimento Territorio e Ambiente della Repubblica di San Marino

11.30-11.45 *Nuovi modelli di economia circolare nel settore agroalimentare*

*attraverso la valorizzazione e il riciclo dei rifiuti. Le opportunità e le attività sviluppate dal Centro Nazionale di Ricerca per le Tecnologie dell'Agricoltura (AGRITECH)*  
Luigi Servadei, Innovation Manager

11.45-12.00 *Impianto di riciclo delle Cortine*

Alfredo Rosini, Sienambiente

12.00-12.15 *Raccolta capillare degli oli vegetali esausti di uso domestico nella Città di Torino*

Chiara Foglietta, Assessora alla Transizione Ecologica e Digitale della Città di Torino

12.15-12.30 *RECAP (REcuperiamo insieme le CAPsule di plastica)*

Marta Schiraldi, Vittorio Grazzani, Giulia Picerno - Nestlé Italiana  
David Brussa, Massimo Pulcini - Illycaffè

Theme: technologies / processes

12.30-12.45 *A conceptual framework of matchmaking system development for feedstock adaptation in industry*

Vasiliki Tzelepi, Lucyna Lekawska-Andrinopoulou, Kostas Chatziioanou, Georgios Tsimiklis, Angelos Amditis - Institute of Communication & Computer Systems (ICCS), Athens

12.45-13.00 *Economia circolare e obiettivo rifiuti zero: riciclo chimico*

Antonio Valerio, Giuseppe Pucci, Fabio Sebastiano - Recupero Etico Sostenibile Spa Pettoranello del Molise (IS)

13.00-14.00 Break

14.00-14.15 *Soluzioni circolari e sostenibili per il trattamento e la gestione dei rifiuti: il decommissioning ISAF di Gela (CL)*

Manlio Rossini, Eni Rewind S.p.A.

14.15-14.30 *New approaches to recovery critical Metals from spent Lithium-ion batteries (AMELIE)*

Elza Bontempi<sup>1</sup>, Alessandra Zanoletti<sup>1</sup>, Antonella Cornelio<sup>1</sup>, Matteo Scaglia<sup>1</sup>, Alessandro Bonometti<sup>1</sup>, Silvia Fiore<sup>2</sup>, Martina Bruno<sup>2</sup>, Andrea Mele<sup>3</sup>, Alberto Mannu<sup>3</sup>, Fabrizio Dughiero<sup>4</sup>, Giulio Poggiana<sup>4</sup>, Riccardo Torchio<sup>4</sup>, Carlo Mapelli<sup>5</sup>, Davide Mombelli<sup>5</sup>, Luca Settineri<sup>6</sup>, Alessandro Simeone<sup>6</sup>, Arianna Alfieri<sup>6</sup>, Claudio Castiglione<sup>6</sup>, Erica Pastore<sup>6</sup>, Ezio Spessa<sup>7</sup>, Vito Modesto Manghisi<sup>8</sup>, Vito De Giglio<sup>8</sup>, Paolo Tronville<sup>9</sup>, Mauro Carraro<sup>10</sup>, Giovanni Fausto Andreotti<sup>11</sup>; <sup>1</sup> INSTM and Chemistry for Technologies Laboratory, Department of Mechanical and Industrial Engineering, University of Brescia, <sup>2</sup> DIATI, Department of Environment, Land, and Infrastructure Engineering, Politecnico di Torino, <sup>3</sup> Department of Chemistry, Materials and Chemical Engineering "G. Natta", Politecnico di Milano, <sup>4</sup> Department of Industrial Engineering, University of Padova, <sup>5</sup> Dipartimento di Meccanica, Politecnico di Milano, <sup>6</sup> Department of Management and Production Engineering, Politecnico di Torino, <sup>7</sup> Department of Energy, Interdepartmental Center for Automotive Research and Sustainable Mobility —CARS@POLITO, Politecnico di Torino, <sup>8</sup> Department of Mechanics, Mathematics and Management, Polytechnic University of Bari, <sup>9</sup> Department of Energy, Politecnico di Torino, <sup>10</sup> Department of Chemical Sciences, University of Padova, <sup>11</sup> Italtel, spa

14.30-14.45 *HAIKI+ IGERS: innovative technologies for textile recycle*  
Gianluca Miceli e Federico Malgarini - Haiki+

14.45-15.00 *Bioplastics and the sea: evaluating their biodegradability, disintegration and ecotoxicity in marine environment*

Gadaleta, G.; Andrade-Chapal, J.C.; Mozo-Toledo, M. & Navarro-Calderón, A. - Biodegradability & Compostability Laboratory, AIMPLAS - Plastics Technology Centre, Paterna (Valencia), Spain

15.00-15.15 *Resource efficiency and circular economy in the creation of new residues-based fertilizing geomaterials*

Giulio Galamini, Gianluca Malavasi, Daniele Malferrari - Department of Chemical and Geological Sciences, University of Modena and Reggio Emilia  
Martina Napolitano, Fabiana Altimari, Luisa Barbieri - Department of Engineering "Enzo Ferrari", University of Modena and Reggio Emilia

15.15-15.30 *FURIOUS: ecodesign, processing and end of life opportunities for 2,5-FDCA based polymers*

Nadia Lotti, Department of Civil, Chemical, Environmental, and Materials Engineering, University of Bologna  
Debora Puglia, Civil and Environmental Eng. Dept., University of Perugia

*Theme: Life Cycle / Ecodesign approach*

15.30-15.45 *Urban Circularity Framework: Measuring impacts from practice level to the urban level*

Francesca Boni<sup>1</sup>, Giorgio Burini<sup>2</sup>, Fhimeh Khatami<sup>1</sup>, Margherita Pero<sup>2</sup>, Francesca Romana Rinaldi<sup>1</sup>, Nicola Ruggiu<sup>1</sup>, Elena Scoccianti<sup>1</sup>; <sup>1</sup> Università Bocconi, <sup>2</sup> Politecnico di Milano

15.45-16.00 *Optimizing Crop Residue Management for Bioenergy and Soil Carbon Sequestration in Italy*

Diego Voccia, Lucrezia Lamastra - Università Cattolica del Sacro Cuore, Department for Sustainable Food Process, Piacenza

16.00-16.15 *Leather Tanning: An Ancient Practice Driving Modern Circularity*

Elisabetta Scaglia, Marta Montanari - UNIC Italian Tanneries

16.15-16.30 *Il progetto TRICK e il metodo PEF a supporto di sostenibilità e circolarità delle risorse nel settore tessile*

Valentina Fantin, Sara Cortesi, Laura Cutaia - ENEA, Dipartimento Sostenibilità, circolarità e adattamento al cambiamento climatico dei Sistemi Produttivi e Territoriali

16.30-16.45 *La ricostruzione degli pneumatici per l'economia circolare e la mobilità sostenibile*

Guido Gambassi, AIRP - Associazione Italiana Ricostruttori Pneumatici

16.45-17.00 *Innovazione nelle Stoviglie Monouso: Transizione da Compostabile a Edibile*

Paola Di Giambattista, Food & Hospitality Specialist Ambassador, Bonfitaly Srl  
Tomasz Gawrylczyk, Innovatore Tecnologico, BOC Produkcja sp.z o.o. Polonia, Bonfitaly Srl Italia  
Alessandro Circiello, Responsabile Istituzionale FIC e Cuoco RAI

17.00 Discussion and closure by the Chairs

## POSTER SESSION

1. Sinergie istituzionali per la diffusione di pratiche virtuose di riduzione e riuso degli imballaggi. Il Progetto Spesa Sballata, dalla provincia di Varese al contesto nazionale / Colombo S. - ARS ambiente srl, Giavini M., Ghiringhelli G., Amodeo E., Favoino E., Bianchi M.A., Cernuschi M., Pirocca M.G., Landini P., Gallina L.
2. The sustainable development of innovative solutions for PCB recycling, in the perspective of circular economy / Amato Alessia, Becci Alessandro, Merli Giulia, Beolchini Francesca - Università Politecnica delle Marche
3. Scatola A Guanti (SAG) per la cementazione di piccoli volumi di rifiuti radioattivi alfa contaminati / F. Pancotti, P. Negrini, M. Guerra - Sogin SpA
4. DEVALIA- un approccio scientifico all'economia circolare / Dalia Benefatto e Valter Celato
5. Rassegna cinematografica e animazione territoriale sull'ecologia integrale / Gianluca Bortolotti - Circolo Laudato Si' "Sala Teatro San Giorgio" - San Giorgio in Bosco (PD)
6. Mais: le nuove frontiere sostenibili. / Carlo Maria Recchia - MartinoRossi Spa
7. Individuazione degli indicatori di performance per il recupero di efficienza nella gestione integrata dei rifiuti urbani di Roma Capitale / Parente Carmen, Geranzani Marta Giovanna, Frattini Luisa - Dipartimento Ciclo dei Rifiuti, Prevenzione e Risanamento dagli Inquinamenti di Roma Capitale
8. Mas Plus: controllo di gestione per la filiera del rifiuto / Luca Realdon - Mas Plus



- 9.** Le best practices innovative per rendere l'olio esausto un rifiuto prezioso / Paolo Petronio - Nuova C. Plastica s.r.l.
- 10.** Green Dialysis: un approccio olistico verso sostenibilità e riduzione dell'impatto ambientale / Roberto Stocco, Guido Giordana - Fresenius Medical Care Italia S.p.A.
- 11.** A study case of promotion opportunities of invasive marine resources: Development of fishing and commercialisation of blue swimming crab in North Tunisian waters (Central Mediterranean) / Sami Mili - National Institute of Marine Sciences and Technologies (INSTM), Tunisia; Rym Ennouri - National Institute of Marine Sciences of Bizerte (ISSMB), Tunisia; Simone Libralato - National Institute of Oceanography and Applied Geophysics (OGS), Italy
- 12.** Biometano dagli scarti agroalimentari della Provincia di Trento: stima del potenziale / Luca Tomasi, Daniela Bona, Luca Grandi, Andrea Cristoforetti, Silvia Silvestri - Fondazione Edmund Mach
- 13.** U.P.S.Y. Textile Waste Recycling And Young Innovators / Francesca Passeri U.P.S.Y. Project Partners: Aziende Distretto Moda Confartigianato Imprese Parma, Scuole Di Parma, Università degli studi di Parma
- 14.** I Benefici Ambientali di una Filiera Regionale per il Vetro: Il Caso 100% Sicilia / Lucrezia Lamstra - Università Cattolica del Sacro Cuore & Coordinatore del comitato tecnico scientifico della Fondazione SOSTain Sicilia; Leonardo Spera - Anci Sicilia; Chiara Ponti & Ernesto Ghigna - O-I Italy S.p.A.; Marco Catalano - Sarco S.r.l.
- 15.** Esosport: un progetto virtuoso di economia circolare / Nicolas Meletiou, ESO RECYCLING società benefit a rl
- 16.** Biodegradation: role and function explained within waste management theory / Harry Vanheule - Normec OWS
- 17.** HAIKI+ LODI – Impianto per il trattamento del Cartongesso / Flavio Raimondo, Nicola Colucci - Haiki+
- 18.** SITOLUB - Simulation Tools for the Design of Safe and Sustainable Lubricants / Davide Don1, Sarah Notarfrancesco1, Lucia Pizarova2, Salvador Moncho3, Jonas Hoffmann4, Xavier Borrás5, and Francesco Pagano6 - 1 Fraunhofer Italia, Bolzano, Italy, 2. AC2T research GmbH, Wiener Neustadt, Austria, 3.ProtoQSAR SL, CEEI Valencia, Paterna, Valencia, Spain, 4.GreenDelta GmbH, Berlin, Germany, 5 i-TRIBOMAT GmbH, Wiener Neustadt, Austria, 6 Fundacio Tekniker, Eibar, Spain
- 19.** Abbattere l'impronta idrica dei processi industriali e migliorare il rating ESG Applicazione del metodo WASM al caso Scheider Electric / Angelo Ferranti - Contec Industry
- 20.** Analisi del comportamento dei cittadini nei processi di raccolta differenziata / Mangiagli Sebastiano - Istituto Tecnico Industriale "E. Fermi", Siracusa
- 21.** Metodologia per la minimizzazione della produzione di scarti e per la valorizzazione circolare degli stessi: l'analisi dei nostri case study. / Gaia Liberatori, Alessandro Scuro e Valerio Castellani. Mail di riferimento - GM Ambiente & Energia s.r.l.
- 22.** I nostri passi per un mondo sostenibile / Giulia Finazzi & Crescenzo Di Fratta - TUV Austria Italia Spa

- 23.** ACUMEN / Giulio Ancilli, Prometeo srl, Chiara Mocenni, Department of Information Engineering and Mathematics (DIISM) of the University of Siena, Vittoria Socci.
- 24.** "Esauriti for the planet" - nuova vita alla cancelleria finita / LEGAMI S.p.A Società Benefit in collaborazione con il Comune di Bergamo, Aprica Spa e Montello Spa
- 25.** Optimization processes for anaerobic fermentation of nitrogen-rich substrates / Paul Stopp, Jakub Krajewski - BIORESTEC GmbH
- 26.** Enhancing Traceability and Faithfulness of Sustainability Data in the Textile and Clothing Supply Chain through Blockchain and a Standard Based Enriched Event Model / Gessica Ciaccio (1), Carla Fité Galan (2), Piero De Sabbata (1), Arianna Brutti (1) - (1) Italian National Agency for New Technology, Energy and Sustainable Economic Development, ENEA, TERIN-SEN-CROSS Laboratory, Bologna, Italy. (2) Polytechnic University of Catalonia (UPC), Systems and Processes lab of the Textile Research Institute of Terrassa (INTEXTER), Terrassa, Spain
- 27.** Un buon esempio di demolizione selettiva di un edificio industriale e gestione sostenibile dei materiali. / Claudia Bitetto, Maurizio Piazzardi - INLOCO Srl, Eleonora Fabrizio - TECHBAU SpA
- 28.** Enhancing Food Waste Redistribution: Advancing Circular Economy Goals / Ludovica Principato - Department of Business Studies, University of Roma Tre, Rome (Italy), Luca Secondi - Department of Economics, Engineering, Society and Business Organization (DEIM), University of Tuscia, Viterbo (Italy), Camilla Comis, Clara Cicatiello - Department for Innovation in Biological, Agro-Food and Forest Systems (DIBAF), University of Tuscia, Viterbo (Italy), Marco Formentini - Department of Information Engineering and Computer Science, University of Trento, Povo (Italy), Mengting Yu - Department of Economics, Engineering, Society and Business Organization (DEIM), University of Tuscia, Viterbo (Italy), Paolo Rellini - Recuperiamo s.r.l., Perugia, (Italy)
- 29.** Human Centric Acoustic Lighting / Luca Benedetti - Università degli Studi di Trento, University of Southern Denmark, University of Cologne; Francesco Brocca Università Iuav di Venezia, Startup all'interno di Trentino Sviluppo Spa
- 30.** Production of functionalized biomaterials for the horticultural sector with agri-food waste derived pectin and cellulose embedded with biostimulants / Daniele Carullo(1), Lorenzo Vergani (1), Nicolò De Pizzol (2), Michele Pallucchini (1), Giulia Franzoni (2), Francesca Mapelli (1), Antonio Ferrante (2), Stefano Farris (1), Sara Borin (1) - (1) Università degli Studi di Milano, Dipartimento di Scienze per gli Alimenti, la Nutrizione e l'Ambiente (DeFENS), Milano, Italia; (2) Università degli Studi di Milano, Dipartimento di Scienze Agrarie e Ambientali (DISAA), Milano, Italia
- 31.** Cloruro Ferrico: da problema a soluzione ambientale / Giulia Giannoni, Annalisa Montagnani, Davide Crippa - TAIR CHEMICAL srl Saline di Volterra (PI) Italia

- 32.** Biological valorization of fruit processing by-products in a circular economy perspective: the ALBAVITA Project / S. Demaria<sup>1</sup>, N. Raddadi<sup>2\*</sup>, A.P. Sobolev<sup>3\*</sup>, G. Scioli<sup>3</sup>, E. Becattini<sup>2</sup>, K. Bajo<sup>2</sup>, L. Ardondi<sup>1</sup>, K. Diprodi<sup>4</sup>, C. Baldisserotto<sup>1\*</sup>; <sup>1</sup>Department of Environmental and Prevention Science - DISAP, University of Ferrara; <sup>2</sup>Department of Civil, Chemical, Environmental and Materials Engineering – DICAM, University of Bologna; <sup>3</sup>Institute for Biological Systems - ISB, CNR; <sup>4</sup>Laboratorio centrale analisi Conserve Italia - \* Research Unit Responsible
- 33.** Production of bioplastics from hardwood leftovers for high value compostable biobased products / Carolina Peñalva Lapuente - Foundation AIT IIP; Daniele Turati, Federico Faiella - Novamont SpA; Cesare Vannini - CCM
- 34.** Distacco dal servizio pubblico di raccolta rifiuti: un nuovo modello integrato per un'azienda in economia circolare / Marco Fosco - ECOF Italia srl, Emiliano Limiti, Robert Brideson
- 35.** Innovative tools to enhance sustainable and circular use of waste excavation materials from the new Lyon-Turin Railway line / Manuela Rocca, Marzia Giacoia, Francesca Tatulli - TELT; Alessandro Fantilli - Politecnico di Torino
- 36.** Gestione circolare dello scarto di legno: indagine di mercato / Caterina Barbiero - Università degli Studi di Padova, Dipartimento di Ingegneria Industriale, Padova; Beatrice Gualdo, Anna Mazzi - Università degli Studi di Padova, Dipartimento di Ingegneria Civile, Edile ed Ambientale, Padova
- 37.** Waste management with a focus on environmental claim validation procedure and diversion rate calculation / Maria José Monteagudo Arrebola - UL Solutions
- 38.** Study for the first application of CO<sub>2</sub> removal in a WtE Italian plant / Laura A. Pellegrini (1), Stefania Moioli (1), Davide Alberti (2), Adriano Carrara (2), Elena Redolfi Riva (3) - GASP - Group on Advanced Separation Processes & GAS Processing, Dipartimento di Chimica, Materiali e Ingegneria Chimica "Giulio Natta", Politecnico di Milano, Milano, Italy; (2) a2a S.p.A, Brescia, Italy; (3) Acinque Ambiente Srl – Waste to Energy Plant, Como, Italy
- 39.** Organic waste biorefineries: looking towards implementation of combined treatments to enhance anaerobic digestion / A. Giuliano (1), M. Occhinegro (1), E. Fersini (1), B. Lleshi (1), F. Todaro (1), A. Violante (2), M. Notarnicola (1) – (1) DICATECh, Polytechnic University of Bari, Bari, Italy; (2) ASECO SpA, Bari, Italy
- 40.** Direttiva Corporate Sustainability Due Diligence come volano della gestione circolare delle risorse / Luca Cavagnaro, Francesco Follieri - ADVANT Nctm
- 41.** The contribution of farmers' training to the reduction and valorization of agricultural waste / Pietro PICUNO - University of Basilicata
- 42.** Sviluppo tecnologico e aspetti normativi: prospettive e sfide nella realizzazione dell'economia circolare / Valentina Cavanna - Università degli Studi di Torino, ADVANT Nctm
- 43.** Recover The Future: internalizzare il riciclo dei rifiuti metallici derivanti da demolizioni selettive. / Giacomo Ticchi - Responsabile di Impatto Eco Demolizioni Srl Società Benefit

- 44.** Nexus of Renewable Energy, Agriculture, and Forestry: Synergies and Challenges for a Sustainable Energy Transition. / Lamiaa Chab, Giacomo Branca - Università degli Studi della Tuscia; Mattia Pellegrini - European Commission
- 45.** Racoon (AI business predictive layer) / Francesco Pasetto - BARON GH5 SRL
- 46.** Impiego del compost tea in coltivazione idroponica NFT: aspetti produttivi e qualitativi in lattuga / Giordano Uberti\*, Silvia Locatelli\*, Tiziano Bonato\*\*, Werner Zanardi\*\*, Carlo Nicoletto\* - \*Dipartimento di Agronomia Animali Alimenti Risorse naturali e Ambiente (DAFNAE), Università degli Studi di Padova; \*\*S.E.S.A. spa
- 47.** Indagine sulla conoscenza delle strategie di Circular Design in Italia / Laura Badalucco - Università luav di Venezia, Paola Fortuna - Studio +Fortuna, Leonardo Salzedo
- 48.** Bilancio di sostenibilità: contaminazione tra profit e no profit per una rendicontazione trasparente / Lucia Raffaelli, Maddalena Sartori - Ecamricert Srl
- 49.** Innovazione circolare nel settore food: l'implementazione delle norme ISO 59000 / Lucia Raffaelli, Maddalena Sartori - Ecamricert Srl
- 50.** Transformative supply chains for circular and resilient transition of furniture sector / Ilaria Giannoccaro (1), Lorenzo Ardito (1), Umberto Panniello (1), Roberta Pellegrino (1), Giovanni Francesco Massari (1), Stefano Franco (1), Giovanni Miccolis (1), Roberto Pinto (2), Alexandra Lagorio (2), Giovanni Perrone (3), Paolo Roma (3), Giuseppe Bruno (4), Carmela Piccolo (4), Liberatina Carmela Santillo (4), Valentina Della Corte (4), Nadia Di Paola (4), Carlo Rafele (5), Giulio Mangano (5), Giovanni Zenezini (5), Ricchiuti Domenico (6), Natale Quarato (6), Giuseppe Musci (6) - (1) Department of Mechanics, Mathematics, and Management, Polytechnic University of Bari; (2) Dipartimento di Ingegneria Gestionale, dell'Informazione e della Produzione, University of Bergamo; (3) Dipartimento di Ingegneria Chimica, Gestionale, Informatica e Meccanica (DICGIM), University of Palermo; (4) Dipartimento di Ingegneria Industriale, University of Napoli; (5) Dipartimento di Ingegneria Gestionale e della Produzione (DIGEP), Politecnico di Torino; (6) Natuzzi spa
- 51.** Valutazione del Ciclo di Vita di un processo di riciclo di poliolefine plastiche - Caso di studio dell'impianto Revet (Toscana, Italia) / Ilaria Minardi, Elisa Baldanzi - Ecol Studio SpA; Alessia Scappini, Andrea Pini - Revet Spa
- 52.** Adozione del sistema IA nel servizio di igiene urbana - Il modello Flegrea Lavoro / Valentina Sanfelice di Bagnoli - Flegrea Lavoro S.p.a.
- 53.** Evaluating Sustainable Earthquake Waste Management with a regenerative framework / Silvia Zanazzi (1), Lorenzo Mangone (2), Irene Lo Vecchio (1), Alessia Albani (3), Flaminia Squitieri (3), Raimondo Orsini (3), Paolo Vineis (2) and Paolo Di Cesare (1) - (1) NATIVA Srl Società Benefit, Rome, Italy; (2) Regenerative Society Foundation, Parma, Italy; (3) Fondazione per lo Sviluppo Sostenibile, Roma, Italy.
- 54.** Environmentally and economically sustainable solutions for the valorization of volcanic ash / Antonella Luciano - ENEA, Dalila Bonanno, Luigi Gurreri - Università di Catania, Mauro Coltelli - INGV Giuseppe Benina - Siram, Giuseppe Mancini - Università di Catania

- 55.** Maximizing circular resource use through a well-planned Industrial symbiosis for waste heat exchange / Antonella Luciano - ENEA, Giuseppe Mancini - Università di Catania, Debora Fino - Politecnico di Torino
- 56.** Valorizzazione del sottovaglio da TMB attraverso il trattamento con Carbonizzazione idrotermica / Riccardo Gori, Firenze Cecilia Caretti - Università di Firenze, Monica Puccini - Università di Pisa, Veronica Moretti, Matteo Giovannetti - Scapigliato srl, Massimo Manobianco, Massimo Aiello - Green carbon SpA
- 57.** Enhancing Safety in Green Jobs: The SOHS Project for Effective Safety Training in Waste Management Plants / Matteo Gremo(1), Barbara Rita Barricelli(2), Roya Biabani Reshtehroudi(3), Raffaele Cioffi(4), Giuseppe De Palma(5), Daniela Fogli(2), Niccolò Leonardi(6), Margherita Micheletti Cremasco(4), Niccolò Pampuro(6), Emma Sala(7), Mentore Vaccari(3), Federica Caffaro(1) - (1) Department of Education, University of Roma Tre, Rome, Italy; (2) Department of Information Engineering, University of Brescia, Brescia, Italy; (3) Department of Civil Engineering, Architecture, Territory, Environment and Mathematics, University of Brescia, Brescia, Italy; (4) Department of Life Sciences and Systems Biology, University of Torino, Turin, Italy; (5) Department of Medical and Surgical Specialties, Radiological Sciences and Public Health, University of Brescia, Italy; (6) Institute of Sciences and Technologies for Sustainable Energy and Mobility (STEMS) of the National Research Council (CNR) of Italy, Turin, Italy; (7) Unit of Occupational Medicine, Hygiene, Toxicology and Occupational Prevention, ASST Spedali Civili di Brescia, Brescia, Italy
- 58.** Economic evaluation Strategies for Ship Recycling: A Matrix Analysis and Material Price Trends. / Francesco Tola, Enrico Maria Mosconi, Mattia Gianvincenzi, Mariarita Tarantino, Alessio Matarazzo, Anna Maria Delussu - Università degli Studi della Toscana
- 59.** Forecasting Material Outputs from Ship Demolition: Environmental and Economic Impacts / Francesco Tola, Enrico Maria Mosconi, Mattia Gianvincenzi, Mariarita Tarantino, Alessio Matarazzo, Anna Maria Delussu - Università degli Studi della Toscana
- 60.** Produzione di biopolimeri ed economia circolare del caffè: la simbiosi industriale di Coffeefrom / Laura Gallo - Coffeefrom s.r.l.
- 61.** Denim eco-circolare, filiera urbana innovativa eco-sostenibile e circolare del denim / Parente Carmen, Sterpa Alessandro, Mosconi Enrico Maria, Tarantino Mariarita - Università degli Studi della Toscana
- 62.** Measuring sustainability risk of various form of hydrogen production processes using a multi-criteria decision aid / Agata Matarazzo, Salvatore Ingenito, Massimo Riccardo Costanzo, Carla Serrano - Department of Economics and Business, University of Catania, Italy
- 63.** Circular economy indicators applied to a waste management techniques within a Sicilian company. the case study TRITOR L.T.D. / Agata Matarazzo, Salvatore Ingenito, Massimo Riccardo Costanzo, Giuseppe Caudo - Department of Economics and Business, University of Catania, Italy
- 64.** Sustainable Digital product Passport / Milo Bedini, Filippo Beretta - Capgemini Engineering

- 65.** Lo sviluppo produttivo sostenibile delle materie prime: gli effetti e gli obiettivi del Critical Raw Materials Act / Rossana Bellopede - Politecnico di Torino, Dipartimento di Ingegneria dell'Ambiente, del Territorio e delle Infrastrutture; Domenico Savoca - Associazione Nazionale Ingegneri Minerari
- 66.** Valorisation of European Citrus Waste: From Citrus Waste to Essential Oils and Bacterial Cellulose-Based Textile Fibres / Philipp Scheurich – University of Hohenheim; Ermon Muarem – Alma Mater Studiorum - University of Bologna; Oscar Andrade – Université Paris-Saclay, Agroparistech; Kingdavid Ozobodo – Wageningen University and Research; Abigail Osadiaye – University of Natural Resources and Life Sciences Vienna
- 67.** BIOMODEL4REGIONS - Supporting the establishment of the innovative governance models to achieve better-informed decision-making processes, social engagement and innovation in the bio-based economy / Patrizia Circelli - Ciaotech srl (PNO Group)
- 68.** C4B: Circular Bio-Based Business models to create high-value Bio-based products in integrated value chains / Anna Franciosini, Patrizia Circelli, Letizia Maestroni - Ciaotech srl (PNO Group)
- 69.** Analisi dello stato dell'arte delle buone pratiche di economia circolare per le apparecchiature elettriche ed elettroniche in Europa / Mariarita Paciolla 1, Marco La Monica 2, Francesca Ceruti 3, Francesca Ferrero 1, Giacomo Seravalli 1, Tiziana Beltrani 2 - 1. CDCA - Centro di Documentazione sui Conflitti Ambientali, Roma, Italia; 2 Dipartimento Sostenibilità, Circolarità e Adattamento al Cambiamento Climatico dei Sistemi Produttivi e Territoriali (SSPT), ENEA, Roma, Italia; 3 Dipartimento Economia e Management (DEM), Università degli Studi di Brescia, Brescia, Italia
- 70.** Bio Waste Carbon3 Capture System / Meitner Daniela, Hackl Andreas - Next Generation Elements GmbH, Austria; Gernot Stangl - CH4plus GmbH, Sale, Austria
- 71.** Recupero di ammoniaca e fosforo come risorse materiali e fonte energetica da percolato di discarica / Giorgio Bertanza (1), Reza Vahidzadeh, Marta Domini, Nancy Artioli, Daniele La Corte - Department of Civil, Environmental, Architectural Engineering and Mathematics (DICATAM), University of Brescia, Brescia, Italy
- 72.** EU Directive 2013/34/EU E5 and By-product Management / Davide Vallero, Damla Toprak - MBP Solutions
- 73.** An Engineered Production Formula for Enhanced Artificial Stone. Utilizing Stone Cutting Slurry and a Superplasticizer / Arine A. Nassereldine
- 74.** Metodologie di Business Continuity nell'EPR: un caso di studio / Francesco Ventura & JR James - CROWN Group Inc.; Giuseppe Caristi - Università di Messina
- 75.** Urban Wastewater Treatment (UWWT) Plants (UWWTPs) screenings (SCs) valorization options / Alessandro Frugis<sup>1</sup>, Massimo Spizzirri<sup>3</sup>, Giancarlo Cecchini<sup>1</sup>, Giulia Sagnotti<sup>1</sup>, Marianna Villano<sup>2</sup>, Gaia Salvatori<sup>2</sup>; 1 Acea Infrastructure S.p.A., 2 Dipartimento di chimica Università la Sapienza, 3 Acea Ato 2 S.p.A.

THURSDAY 7  
NOVEMBER

10:15 -  
13:15

Agorà Tiberio –  
Water Cycle Area  
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**Water Cycle and  
Blue Economy**  
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## Digitalization and optimization of the efficiency of water networks: from PNRR interventions to research and innovation actions

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CONFERENCE POSTERS

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**organized by Ecomondo STC & Marche Polytechnic University, University of Bologna, UTILITALIA (Italian federation of energy, water and environmental services)**

with speeches and posters from the Call for Papers 2024

Digital technologies are impacting nearly every sector in the water industry. Water utilities of all sizes — private and public — are shifting the way they operate and manage resources. Utilities are embracing digitalization to address problems ranging from aging water infrastructure to optimizing resource allocation. The national recovery funding is playing a crucial role in boosting digitalization of water infrastructure, while several innovation projects are implanting aligning the water sector to the digital transition. The workshop will present a framework of how projects funded by the PNRR are progressing and the most promising innovation projects selected from the Call for Papers.

### Session Chairs

Attilio Toscano, Ecomondo STC and University of Bologna  
Stefano Mereu, Member of Executive board in UTILITALIA and President of NEPTA (Italgas Group)

### Programme

10.15 Introduction by the Chairs

10.15-10.30 *Current progress of PNRR for digitalizing the water distribution systems*  
Angelica Catalano, Director General for Dams and Water Infrastructure, Italian Ministry of Infrastructure and Transport  
Attilio Toscano, Technical Structure of Mission, Italian Ministry of Infrastructure and Transport

10.30-10.45 *SWMS-sustainable leakage water reduction, the digital approach: results and opportunities*  
Paolo Lanza, Acquedotto Pugliese

10.45-11.00 *Monitoraggio via satellite per la manutenzione predittiva della fognatura: l'esperienza di Alfa Varese*  
Marco Sciarini, Michele Colombo, Giovanna D'Ambrosio, Daniele Cecconet, Oscar Facco, Annalisa Berni - Alfa S.r.l.

11.00-11.15 *Come ricavare valore dai dati provenienti dalla digitalizzazione delle reti idriche*

Paolo Ridella, Direttore Tecnico e Commerciale, B. M. Tecnologie Industriali Spa SB - Gruppo Almaviva

11.15-11.30 *Le potenzialità del Digital Twin per il settore Water*

Donato Pasquale, Responsabile Settore Water & Waste Water, Schneider Electric

11.30-11.45 *Innovazione, risparmio energetico e manutenzione predittiva per una gestione efficiente delle acque reflue*

Paolo Corbari, Managing Director di Vogelsang Srl

11.45-12.00 *Leveraging mioty LPWAN Technology for Enhanced Environmental Monitoring and Smart Metering in Smart Cities*

Yannik Kopp, Mattia Piva Inrieri, Anita Palkovi, Camilo Blesa - DIEHL

12.00-12.15 *La gestione ottimizzata dell'impianto di depurazione grazie a controllori avanzati ed automatici del processo*

Maria Serena Gironi, application excellence team manager Hach

12.15-12.30 *Optimization of Flash Mixing- and Flocculation tanks - Quantitative Methods for Analyzing Velocity Gradients (G-Values) by Computational Fluid Dynamics (CFD) Simulations*

Efraim Riess-Gonzalez, INVENT Umwelt- und Verfahrenstechnik AG 2. Averil Fernandes, Ms. Sc.: INVENT Umwelt- und Verfahrenstechnik AG

12.30-12.45 *Sistema sperimentale di allerta preventiva da allagamento e alluvione: un caso studio per Vicenza*

M. Dall'Amico, S. Tasin, N. Franceschetti, F. Di Paolo, A. P. Lonardi, V. Mascherini, F. Pilotti, L. Bonaldo - Waterjade S.r.l., S. Bagli, P. Mazzoli - Gecosistema S.r.l, P. Ronco, M. Celotto - Viacqua SPA

12.45-13.00 *Digitalizzazione delle infrastrutture irrigue nell'ambito dell'investimento 4.3 del PNRR: il supporto della banca dati DANIA*

Marianna Ferrigno, Veronica Manganiello, Luca Adolfo Folino, Massimo Tropeano, Marica Furini - CREA Centro Politiche e Bioeconomia

13.00-13.15 *Knowledge transfer and co-design for advanced digital skills in water management. The project Horizon WATERLINE*

Giuseppe Mangano, Research fellow, Department of Architecture and Territory (dArTe), Mediterranean University of Reggio Calabria

Giacomo Falcone, Researcher, Agriculture (AGRARIA), Mediterranean University of Reggio Calabria

Marina Mistretta, Full professor, Information Engineering, Infrastructure and Sustainable Energy (DIIES), Mediterranean University of Reggio Calabria

## **POSTER SESSION**

**1.** *Digitalizzazione, innovazione tecnologica e formazione continua in Gruppo CAP*

Francesca Mastromarino, Responsabile Efficientamento e Progetti Speciali Acqua di Gruppo CAP, Cecilia Paris, Responsabile Acquedotto di Gruppo CAP, Sonny Mazzeo, Responsabile Settorizzazione e Ottimizzazione Processi di Gruppo CAP



## 2. Historical analysis and seasonal forecast of water availability: a case study in Northern Italy

Matteo Dall'Amico (Waterjade S.r.l.), Stefano Tasin (Waterjade S.r.l.), Nicolo Franceschetti (Waterjade S.r.l.), Federico Di Paolo (Waterjade S.r.l.) Anna Paola Lonardi (Waterjade S.r.l.), Valentino Mascherini (Waterjade S.r.l.), Fabio Pilotti (Waterjade S.r.l.), Luca Bonaldo (Waterjade S.r.l.)

## 3. Metodologia di calcolo speditiva per l'indicatore MOB di ARERA

Matteo Dall'Amico (Waterjade S.r.l.), Stefano Tasin (Waterjade S.r.l.), Nicolo Franceschetti (Waterjade S.r.l.), Federico Di Paolo (Waterjade S.r.l.) Anna Paola Lonardi (Waterjade S.r.l.), Valentino Mascherini (Waterjade S.r.l.), Fabio Pilotti (Waterjade S.r.l.), Luca Bonaldo (Waterjade S.r.l.)

## 4. ENHANCED INSTRUMENT TO DETECT MICROPLASTICS IN WATER

Jarmo Hietanen, Harri Huttunen, Pasi Karjalainen, Ilkka Leinonen, and Janne Rahkonen, University of Oulu, Measurement Technology Unit, Kehräämöntie 7, 87400 Kajaani, Finland

## 5. Lo smart metering nell'idrico vola sulle ali della tecnologia e della Regolazione

Ing. Francesco Albasser - Studio Ingegneria - Milano- Corso magenta 46

## 6. ENAS Lotto 1: Interventi di risanamento tubazioni

Coghinas 1 - RELINING LU BAGNU –CASTELSARDO (SS) Karl-Heinz Robatscher - Responsabile aziendale - Rotech Srl Ing. Michele Meloni - Direttore filiale Sardegna - Rotech Srl

THURSDAY 7  
NOVEMBER

10:30 -  
13:00

Diotallevi 2 Room  
South Hall

**Policies and  
regulatory  
frameworks**  
Onsite event  
[Click here](#)

## The role of the OECD in monitoring the green economy and the contribution of Italian institutions

Language: Italian

### **organized by Permanent Representation of Italy to the International Organizations in Paris**

OECD countries, which represent more than 60% of global nominal GDP, lead the ecological and energy transition and the amount of data on the development of the green economy that they manage is enormous.

This special session on the functioning of the OECD's data collection and analysis policies of the most advanced economies will feature top-level speakers to highlight the contribution to the development of the green economy made by the international organisation together with its umbrella ones, such as the International Energy Agency and the International Transport Forum, with the support of Italian institutions, highlighting the specific role played by the Ministry of Foreign Affairs and International Cooperation (MAECI) and the Permanent Representation of Italy to International Organisations Paris.

The debate will focus on the economic aspects of the ecological and energy transition.

### **Session chair**

Luca Demicheli, Permanent Representation of Italy to International Organisations in Paris

## Programme

### Introduction

Aldo Ravazzi Douvan, Italian National Delegate to the OECD Environment Policy Committee (EPOC)

### *The OECD and the Inclusive Forum on Carbon Mitigation Approaches (IFCMA)*

Fabrizia Lapecorella, Deputy Secretary General, OECD (TBC)

### *The OECD environmental protection programmes and the Environment Policy Committee (EPOC)*

Alexa Piccolo, Special Advisor to the Director, Environment Directorate, OECD

### *The importance of playing a central role within the actions of the OECD and the Italian presidency of the G7*

Laura D'Aprile, Head of the Sustainable Development Department, Ministry of the Environment and Energy Security (MASE)

### *The contribution of the Italian Institute for Environmental Protection and Research (ISPRA) to the economic and financial analyses and to the environmental databases of the OECD*

Stefano Laporta, President / Maria Siclari, Director General, Italian Institute for Environmental Protection and Research (ISPRA)

### *International climate negotiations within the OECD*

Federica Fricano, Director of European Environmental Affairs, Ministry of the Environment and Energy Security (MASE)

### *The growing role of the International Energy Agency*

Laura Cozzi, Director of Sustainability, Technology and Outlooks / Paolo Frankl, Head of Renewable Energy Division, International Energy Agency (IEA) (TBC)

### *The International Transport Forum and the Italian presidency of the G7*

Giovanni Donato, Diplomatic Advisor to the Minister of Infrastructure and Transport (MIT)

The Ministry of Foreign Affairs and International Cooperation (TBD)

### *The role of industry*

Representative of SNAM / ENI (TBD)

Debate and conclusions

THURSDAY 7  
NOVEMBER

10:30 -  
16:30

Agorà Ariminum –  
Circular Economy  
Area D1 pav.

**Resource  
efficiency and  
Circular  
Economy**

*Onsite event*

[Click here](#)

## REUSE, REPAIR, RETHINK, REFORM. Designing for Circularity and Responsible Innovation



Language: English

Simultaneous translation: Italian

### **organized by Ecomondo STC & Spoke 1 of the MICS Foundation, University of Bologna**

Producing goods and services in Europe means distinguishing ourselves from global dynamics and processes by promoting values and quality that at a continental level represent our "way of doing quality industry with a high identity value". A way made up of many different visions with which to understand and implement circularity.

This conference intends to emphasize the most "noble" approaches of the circular economy: reuse, durability and repairability and, logically, eco-design. We will do so by presenting points of view and testimonies of an international scenario within the industrial manufacturing sector with respect to sustainability, observed both from the point of view of circularity (material dimension) and from the social one, read in particular through responsible innovation (immaterial dimension).

We intend to take stock of this phenomenon today in the panorama of production and scientific applications, involving some excellent experts as well as companies that in an original and courageous way are generating strongly recognized value through a transition to solutions based on these approaches.

The event is organized in two sessions, each of which focuses on the different dimensions of sustainability mentioned above (tangible and intangible). Each session includes inspirational interventions as well as case studies that show how those concepts are translated into real business in the EU.

The two sessions will be directly connected with an exhibition area where leading companies will showcase their activities in the field of reuse, repair, refit and eco-design.

### **Session Chairs**

Angelo Salsi, former Head of Department at European Commission

Francesco Matteucci, former Programme Manager at EISMEA

Flaviano Celaschi, University of Bologna and MICS Foundation

Laura Succini, University of Bologna

Erik Ciravegna, University of Bologna

### **Programme**

10.30-12.15 **Session 1**

***Framing the context: sustainability and its tangible dimension***

Introduced and moderated by:

Angelo Salsi, former Head of Department CINEA – European Commission

## Speakers:

Emanuele Bompan, Editor-in-Chief of Renewable Matter

Aurel Ciobanu, Director for Circular Economy, DG Environment, European Commission

Chiara Airoidi, Co-Founder & COO Cloov

Hans Carpels, President Euronics Geie

Olivier Beal, Director of Supplier and Purchasing Strategy Boulanger (TBC)

Debate

LUNCH BREAK

14.30-16.30 **Session 2**

***The other side: sustainability and its intangible dimension***

Introduction

Flaviano Celaschi, Full Professor at Alma Mater Studiorum - Università di Bologna and Spoke 1 Leader of MICS-Made in Italy Circolare e Sostenibile (PE11 PNRR)

Moderated by:

Erik Ciravegna and Laura Succini, Researchers at Alma Mater Studiorum - Università di Bologna

Speakers:

Ambra Trotto, Director of Transformation and RIS at EIT Culture & Creativity, Associate Professor at Umeå Institute of Design

Katharina de Melo, Academic Expert Institute for Business Ethics and Sustainable Strategy (IBES)

Silvia Mandelli, Senior Consultant Interzero Italy

Antonio Saverino, Head of Cleanliness & Bio Resources Department and Head of Recyclab at Thales Alenia Space Italia

Erik Ciravegna, Laura Succini, Researchers at Alma Mater Studiorum - Università di Bologna

Debate

16.30 Closing statements

Angelo Salsi, former Head of Department CINEA – European Commission

Flaviano Celaschi, Full Professor at Alma Mater Studiorum - Università di Bologna and Spoke 1 Leader of MICS-Made in Italy Circolare e Sostenibile (PE11 PNRR)

THURSDAY 7  
NOVEMBER

14:00 -  
15:30

Diotallevi 2 Room  
South Hall

**Policies and  
regulatory  
frameworks**

*Onsite event*

[Click here](#)

## Environmental crimes, criminological and practical aspects: the criminal enterprise and the honest entrepreneur

Language: Italian

### **organized by Italian Parliamentary commission of inquiry into illicit activities related to the waste cycle and environmental and agri-food crimes**

In an era of disputes between ecocentric and anthropocentric environmentalist doctrines, with the protection of the environment having taken on constitutional importance, the fight against illicit activities connected to the waste cycle and the verification of the correct implementation of current legislation on environmental matters constitute two conceptual axes that are only apparently simple, which underlie some critical issues, as well as numerous food for thought, for those who undertake the related arduous paths.

These activities, which involve a range of varied actions by the various institutional agencies involved, both from a command and control perspective by administrative bodies, and with an approach oriented towards the direct contrast of offenses with administrative and criminal sanctioning tools, put into practice carried out by the authorities typically responsible for control (A.G., p.g.), pass through criminological assessments (for example, connected to the more or less recurring modus operandi, to the economic purposes and the consequent importance of follow the money, to the so-called NIMTO syndrome on the part of public officials) and victimological (poor perception of illegal environmental phenomena, recurrence of the so-called NIMBY syndrome, reduced propensity to collaborate in the fight).

The increase in widespread awareness, broadly speaking, about the extent of the environmental crime, leads to the creation of a positive driving force of social disapproval and ideal distancing from deviant subjects, in favor of virtuous business operations, respectful of environmental regulations, often contagious, with tangible advantages in terms of ecology, public health, economy and legality.

### **Programme**

Moderator:

Maria Antonietta Spadorcia, Journalist

14.00 Welcome address and introduction

Maurizio Renzo Ermeti, President of Italian Exhibition Group

Jacopo Morrone, lawyer and President of the Italian Parliamentary commission of inquiry into illicit activities related to the waste cycle and environmental and agri-food crimes

Federico Casolari, University of Bologna – Director of the law department

Luigi Balestra, University of Bologna – Full professor of civil law – Law department

14.10-14.30 *Environmental crime: corporate, association or mafia-type crime?*

Giuseppe Amato, General Prosecutor at the Court of Appeal

14.30-14.50 *Environmental offenses and administrative liability of the entity pursuant to Legislative Decree no. 231/2001. Elements exempting administrative responsibility for the virtuous companies*

Pasquale Fimiani, General attorney at the Court of Cassation

14.50-15.00 *The procedures for extinguishing environmental offences under Article 318 bis of the "Testo Unico Ambientale"*

Carlo Foglieni, President of di AIGA (Italian Young Lawyers Association)

15.00-15.10 *The company manager who "could not not know". Guarantee figures and improper crime of omission*

Enrico Al Mureden, Lawyer and Full Professor of Private Law – University of Bologna – Law department – Expert consultant to the Parliamentary Commission of Inquiry into illicit activities related to the waste cycle and environmental and agri-food crimes

15.10-15.20 *Victimology and reluctance to report. Motivations, introspective and practical analysis, syndromes. Focus on the honest company manager who reports environmental crimes*

Chiara Penna, Criminal lawyer and Criminologist

15.20-15.30 *Ship recycling and recent environmental law, under the international, EU and national law*

Leonardo Salvemini, Lawyer and contract professor at various universities – Expert consultant to the Parliamentary Commission of Inquiry into illegal activities connected to the waste cycle and other environmental and agri-food crimes

15.30 Closure by the Chairs

THURSDAY 7  
NOVEMBER

14:00 -  
16:00

Agorà Augusto –  
Bioeconomy Area  
D2 pav.

**Water Cycle and  
Blue Economy**

*Onsite event*  
[Click here](#)

## Algaculture for harvesting and living

Language: Italian

Simultaneous translation: English

**organized by Ecomondo STC & Legacoop Agroalimentare North Italy, ITACA Cooperative Ulisse Alga Italiana**

Are algae the future? That is what we are going to discuss in this workshop: food, implants and research realities are going to share their experience in the sector and to underline potentialities and difficulties, building an interesting picture of the topic. From harvesting or collecting to everyday's life, algae have a huge portfolio of applications in fields requiring new and more sustainable raw materials. Proteins for human nutrition and feeding, biostimulants in agriculture, biofuels, cosmetics... What are all the algae possible applications and do they or could they affect everyday's living? What is the difference between microalgae and macroalgae? All of these compelling topics are going to be kicked off during this workshop.

### Session Chair

Alessio Bonaldo, Professor at the University of Bologna, Department of Veterinary Medical Sciences

## Programma

14.00-14.10 Intervention by Anna Montini, Blue Economy Councillor of Rimini Municipality

14.10-14.20 *The need for the fishing and aquaculture sector to move towards*  
Massimo Bellavista, Ecomondo STC for Blue Economy

14.20-14.30 Intervention by Eraldo Rambaldi, Director at A.M.A. Mediterranean Association of Fish Farmers

### **Microalghe**

14.30-14.40 *Microalgae: An overview on biodiversity and their applications*  
Alessandra Norici and Stefano Accoroni, Professors at *Università Politecnica delle Marche*

14.40-14.50 *The Scale Project: supply of bioactive composites from microalgae to promote a blue future for economics*

Johan De Coninck, Director at Bieconomy4Change

Marine Bellon, European Project Manager Bieconomy4Change, Francia

14.50-15.00 *Microalgae cultivation and harvesting and their applications in several commercial sectors*

Guido Emiliani, CEO, Research & Development at Micoperi Blue Growth

### **Macroalgae**

15.00-15.10 *Macroalgae: an overview on biodiversity and their applications*

Stefano Accoroni and Fabio Rindi, Professor at *Università Politecnica delle Marche*

15.10-15.30 *Macroalgae in the Netherlands: onshore field and indoor cultivation, applications and potential; specialized in nutritional application and animal health benefits in feed; initiators and operators of the Dutch seaweed hub Allround Seaweed Centre Eemshaven (Netherlands)*

Caterina Pezzola, Scientific consultant at Allround Seaweed

Joost Crommentuijn, Operations manager at Allround Seaweed

Hessel Altenburg, Feed expert and Sales manager at Allround Seaweed

15.30-15.40 *Macroalgae in Italy: field growth, application and potential*

Lisa Mustone, Business Development Responsible at algaUlisse

15.40-15.50 *Funding opportunities in EU for algae sector - FEAMPA*

*"Flagship/Regenerative ocean farming and algae innovation"*

Luca Marangoni, Deputy Head of the Sustainable Marine Economy Unit, CINEA – European Commission

15.50-16.00 Conclusions

Cristian Maretti, President of Legacoop Agroalimentare

THURSDAY 7  
NOVEMBER

14:00 -  
17:00

Agorà Malatesta –  
Environmental  
Monitoring Area  
D8 pav.

**Circular and  
Regenerative  
Bioeconomy**

Onsite event

[Click here](#)

## Maximizing biodiversity benefits in water and land dependent businesses Lesson learnt from agriculture & forestry and water sector

Language: Italian

### organized by Ecomondo STC & Etifor, Po River Basin Authority

The workshop will focus on best practices regarding the correlation between new Global and European Biodiversity frameworks and keyintensive land use business sectors. The aim is to present best practices that shows that it is possible to create best trade off between profit and biodiversity.

### Session Chairs

Alessandro Bratti, Ecomondo STC  
Fernanda Moroni, Po River Basin Authority

### Programme

14.00 Introduction

14.20-14.40 *The Ministry of the Environment and Energy Security's policy to preserve the Biodiversity*

Francesco Tomas, Directorate-General for the Protection of Biodiversity and the Sea, Ministry of Environment and Energy Security

14.40-15.00 *Water, Climate and Biodiversity*

Giulio Bocaletti, CMCC

15.00-15.20 *Ecosystem services*

Davide Pettenella, University of Padua

15.20-15.40 *Business & Nature: how companies can assess, reduce and report their impact on nature through international guidelines and frameworks*

Alessandro Leonardi, Etifor

15.40-17.00 **Tavola Rotonda**

Moderated by Andrea Gavazzoli

Giuseppe Dodaro, Fondazione Sviluppo Sostenibile

Lorenzo Ciccicarese, ISPRA

Massimiliano Evangelista, AlmaViva

Alessandro Bosso, ART-ER

Raffaella Zucaro, CER ANBI

Erika Marrone, Alce nero

Paola Gallani, Autorità di bacino distrettuale del fiume Po

Discussion and closure by the Chairs



THURSDAY 7  
NOVEMBER

14:00 -  
17:00

Noce Room A6  
Pav.

**Resource  
efficiency and  
Circular  
Economy**

*Onsite event*

[Click here](#)

## Applications of GVG for vibration reduction and in asphalt

Language: Italian

**organized by Ecomondo STC & ASSOAMBIENTE-UNIRIGOM (Union of Italian rubber recoverers)**

The restriction approved in Brussels will ban in the near future, the use of 0.5 mm recycled rubber granules (GVG - Granular Vulcanized Rubber) as infill in synthetic turf sports surfaces. It is a market that currently absorbs about 40% of the recycled rubber granules in Europe and in Italy GVG are currently used in about 5,000 sports installations.

It is thus necessary to find new market to avoid the collapse of the end-of-life tire recycling system and to support the chain of ELT recycling and the valorisation or recycled rubber in Italy, supporting the opening to new f the market flows.

The aim to present proposals for the future of a chain that has always had a strategic role for the national and global sustainability objectives.

### Session Chair

Renzo Maggiolo, President of UNIRIGOM

### Programme

Speakers:

Daniela Claps, ENEA

Representative of UNIRIGOM (TBD)

Serena Sgarioto, ECOPNEUS

Stefano Ravaioli, Direttore SITEB

Discussion and closure

Renzo Maggiolo, President of UNIRIGOM

THURSDAY 7  
NOVEMBER

14:00 -  
17:30

Diotallevi 1 Room  
South Hall

**Resource  
efficiency and  
Circular  
Economy**

*Onsite event*

[Click here](#)

## Measuring circularity of product and services in the prospect of new design regulation



Language: Italian

**organized by Ecomondo STC & Sant'Anna School of Advanced Studies, ENEA (Italian National Agency for New Technologies, Energy and Sustainable Economic Development)**

The event will focus on measuring the circular economy, a topic that is increasingly felt at different levels: system, sector, enterprise, and product. Following the success of the 2022 and 2023 initiatives, this year's workshop will look at the evolution of circularity measurement considering both the development of national and international legislation standards and the diffusion of experiences in the different sectors.

In particular this year focus will be on methods and processes to measure circularity of products and services, by using innovative tools based on check-up approaches as well as LCA-based circularity indicators.

The workshop aims to present an overview of the different international and national approaches and then explore the usefulness of measurement with companies and associations that have applied the different approaches and can contribute to the refinement of the available tools.

### **Session Chairs**

Marco Frey, Sant'Anna School of Advanced Studies

Claudia Brunori, ENEA (Italian National Agency for New Technologies, Energy and Sustainable Economic Development) - Department of Productive and Territorial Systems Sustainability

### **Programme**

14.00-14.20 *Introduction to the evolution of approaches and experiences in the area of circularity measurement*

Marco Frey, Sant'Anna School of Advanced Studies

### **Session on**

***The evolution of national and international initiatives related to measurement in the circular economy***

14.20-14.40 *The requirements for products and services in the standards UNI-ISO*

Laura Cutaia, ENEA – UNI/CT 057 chair

14.40-15.00 *The point of view of the European Commission*

Serenella Sala, European Commission

15.00-15.20 *How we can measure product circularity*

Fabio Iraldo, Sant'Anna School of Advanced Studies

15.20-15.35 *Circularity approaches in a PNRR Project (GRINS)*

Bruno Notarnicola and Umile Gianfranco Spinizzi, Università di Bari

15.35-15.50 *Public funding and circularity measurement in the research and innovation field*

Enrico Cancila, Arter

15.50-16.05 *The experience of Assofond*

Roberto Lanzani, Assofond

16.05-16.20 *The regenerative experience of Itelyum*

Marco Codognola, Itelyum

16.20-16.35 *The experience of Electrolux Group in the electrical equipment sector*

Stefano Zuin, Electrolux

16.35-16.50 *The interest of businesses in measuring circularity*  
Veronica Padula, Infocamere

16.50-17.05 *The experience of ENI*  
Massimo Mussida, Eni

17.05-17.20 *The experience of NEXTCHEM*  
Martina Nicole Verga, MyRechemical

17.20-17.30 *The experience of TCA SpA*  
Marco Tirinnanzi

17.30-17.40 Elena Mocchio, UNI - partner of the BIORADAR project

17.30 Discussion and closure by the Chairs

THURSDAY 7  
NOVEMBER

14:00 -  
17:30

Agorà Flaminia –  
Sites & Soil  
Restoration Area  
C1 pav.

**Sites and Soil  
Maintenance  
and Restoration**

*Onsite event*  
[Click here](#)

Sustainable strategies for the remediation of polluted sites: developments in national and international applied research

DOWNLOAD THE  
CONFERENCE POSTERS

Language: Italian

**organized by Ecomondo STC & Sapienza University of Rome, Unem (Energies for Mobility Union), ISPRA (Italian Institute for Environmental Protection and Research)**

with speeches and posters from the Call for Papers 2024

The conference will be more specifically dedicated to the remediation technologies with case studies that highlight their actual extent and their limits.

### Session Chairs

Marco Petrangeli Papini, Sapienza University of Rome  
Donatella Giacometti, Unem  
Fabio Pascarella, ISPRA

### Programme

14.00 Greetings and introduction by Session Chairs

14.15-14.30 *Definizione di un protocollo operativo per il biomonitoraggio di matrici contaminate da composti organoclorurati finalizzato alla caratterizzazione microbiologica di aree SIN/SIL in Italia*

Bruna Matturro, Simona Rossetti - IRSA-CNR

Alessia Arelli, Federico Araneo, Vincenzo Fiano, Chiara Fiori, Luigi Marangio, Giovanni Reina, Michela Serafini, Federico Silvestri, Francesco Zampetti - ISPRA

Enrico Alberico, ARPA Lombardia

Massimo Mazzola, ARPA Veneto

Giacomo Zaccanti, ARPA Emilia-Romagna

Marcello Mangone, ARPA Sardegna

Valentina Sammartino Calabrese, ARPA Campania

14.30-14.45 *L'innovazione tecnologica e della ricerca scientifica applicate al risanamento del territorio: il desorbimento termico del SIN di Bussi – bioremediation a Dogaletto e Massa Carrara – scavo in ambiente confinato e mezzi radiocomandati*

Andrea Del Frate, Edison Regea

14.45-15.00 *Application of an All-In-One ISCO Technology for the treatment of Monochlorobenzene, BTEX and Chloroform in groundwater at a Former Pharmaceutical Facility in Italy*

Alberto Leombruni, Michael Mueller - Evonik Operations GmbH

Brant Smith, Evonik Corporation, LLC

15.00-15.15 *Progetti sostenibili e vincoli autorizzativi: il sito di Crotone*

Stefano Lifone, Eni Rewind SpA

15.15-15.30 *Indagini ad Alta Risoluzione per una progettazione mirata e sostenibile degli interventi di Bonifica*

Federica de Santis, Mares Italia

15.30-15.45 *Trattamento innovativo di 18 milioni di litri di acque di falda contaminate da PFAS con un impatto ambientale inferiore del 98%*

Mariangela Donati, Marcello Carboni - Regenesis, Italy

Gareth Leonard, Regenesis, UK

15.45-16.00 *Visualizzazione avanzata dei dati ambientali e geologici con Earth Volumetric Studio (EVS) per una gestione sostenibile dei siti contaminate*

Cecilia Crugnola, Cesare De Bernardi - Arcadis Italia

16.00-16.15 *Tomografia geoelettrica per l'individuazione del DNAPL*

Devis Ferrarato, Vincenzo Giandinoto, Andrea Messina, Luca Piccapietra - Stantec

Daniele D'Emilio, Sabrina Filia, Federica Signoretta - Eni Rewind

16.15-16.30 *Progettazione e realizzazione di un impianto pilota per il trattamento multistadio di acque di falda contaminate*

Leonardo Magherini, Serena Barbero, Carlo Bianco, Tiziana Tosco, Rajandrea Sethi - Dipartimento di Ingegneria dell'Ambiente, del Territorio e delle Infrastrutture, Politecnico di Torino

Devis Ferrarato, Luca Piccapietra - Stantec

Federica Signoretta, Sabrina Filia, Daniele D'Emilio - Hydrogeology and Groundwater Modelling - HYDROM - Eni Rewind S.p.A.

16.30-16.45 *Declarazione riduttiva dei solventi clorurati: come riconoscere ed evitare lo stallo dei processi*

Maite Tejerina Nunez, Auroramaria Basile, Anna De Fina, Ruggero Passaro, Jean Pierre Davit - WSP Italia S.r.l.

16.45-17.00 *Il S.I.N. della ex miniera di amianto di Balangero e Corio (Torino): bonifica e prospettive di riqualificazione del sito*

Gian Luigi Soldi, Città metropolitana di Torino  
Elisa Pugliaro, Antonio Ghione - RSA Srl

17.15-17.30 Conclusions

## **POSTER SESSION**

**1.** *Bonifica del S.I.N. di Napoli Est: a che punto siamo?*

Adriano Pistilli, Responsabile Tecnico Gestione Rifiuti - Libero professionista

**2.** *Nuovo disoleatore Discoil "designed for longevity"*

Laura Badalucco, Rosa Chiesa (Università Iuav di Venezia); Roberto Bertolin, Lorenzo Grivellaro, Elisa Marchetto (OCS - Officine Costruzioni Speciali S.p.A.); Giorgio Gaino, Chiara Silvestri (Synthesis design)

**3.** *Valutazione Ambientale del Biorisanamento: tecniche e sostenibilità per la rigenerazione di siti contaminate*

Alessandra Fiorucci\*(1), Sara Pennellini (1), Maria Elena Bini (1), Alessandra Bonoli (1)

**4.** *Evaluation of groundwater remediation technologies through multi-criteria decision analysis: the case study of Brindisi industrial area*

D. Scaringi (1), M.G. Altieri (2), G. Capece (1), C. Cino (1), F. Godano (1), G. Nasca (1), F. Todaro (1), M. Notarnicola (1)

**5.** *Progetto Bagnoli*

Michele Florio, managing associate presso BonelliErede e leader Focus Team Infrastrutture, Energia e Transizione Ecologica

**6.** *Rinforzi del terreno in ambienti chimicamente aggressivi per il riutilizzo in loco*

Massimiliano Mongiorgi (Officine Maccaferri Italia S.r.l.)

**7.** *Indagine sperimentale e simulativa di un intervento di bonifica con tecnologia elettrocinetica*

Antonio Barone (a), Silvia Anna Frisario (b), Alessandra de Folly d'Auris (c), Sergio Ferro (a), Marco Vocciante

Eni Rewind in collaborazione con Eni e il Dipartimento di Chimica e Chimica Industriale dell'Università di Genova

**8.** *Restoration of urban sealed soil, contamination analysis and evaluation of crop pollution: the REUSES project*

Ginevra Giacomello (1,2), Dominique Serrani (3), Andrea Salvucci (3), Luigi D'Acqui (2), Stefania Cocco (3), Valeria Cardelli (3), Sara Di Lonardo (2,4), Niccolò Pampuro (1)

**9. Innovative approach to monitor GHG emissions from landfills and brownfield sites by combining ground measurements and satellite observations: first research activities for the development of a low-cost sensor toolbox**

Veronica Villa(1), Dario Vernola(2), Stefano Robbiani (3), Beatrice Julia Lotesoriere\*(1), Stefano Prudenza (1), Gabriele Viscardi (2), Manuel Roveri (2), Raffaele Dellacà (3), Yuri Ponzani (4), Laura Capelli (1)

**11. Impatto dei cambiamenti climatici sugli interventi di bonifica: un caso esemplare**

Vinicio Gagnanini, Elena Bunone, Pina Volpicelli, (Sogin S.p.a.) Mariangela Donati, Paolo Goria (Regenesis)

**12. Progetto Circolare "MushLoop"**

Roberto Ricci - Biosearch Ambiente S.r.l., Sara Camandona - Biosearch Ambiente S.r.l

**13. Monitoraggio ambientale integrato dell'area portuale di Taranto: realizzazione e gestione pluriennale di una rete di monitoraggio d'area, al fine di controllare lo stato qualitativo complessivo del sistema terra-mare del porto**

Gianluca Semitaio, Gaetano Interno, Maria Santoro

**14. Recovering the balance of the Earth through the chemistry of Nature**

Joan Puig Rigall. Aircure Tech

**15. L'exploitation minière artisanale, une menace pour l'espace protégé**

CNRA Nord (Bouaké, Côte d'Ivoire)" GOULIA Vlangny Jean-Baptiste Université

Peleforo Gon Coulibaly (Korhogo, Côte d'Ivoire)

THURSDAY 7  
NOVEMBER

14:00 -  
17:45

Agorà Tiberio –  
Water Cycle Area  
D8 pav.

**Water Cycle and  
Blue Economy**  
Onsite event  
[Click here](#)

Results, best practices, and critical issues of the government Commissioners for water infrastructure, resources and services

Language: Italian

**organized by Ecomondo STC**

Activities related to the upgrading and completion of water infrastructures, as well as to the proper sustainable management of water resources and services are increasingly urgent in connection with the implementation of European directives and regulations, as well as with the emergencies often induced by climate change. In the field of urban wastewater collection and treatment, Italy is currently facing the challenge of having to get out of infringement procedures and at the same time be ready to implement new directives to avoid future infringements. The fight against drought and water scarcity, also caused by extreme events, today must necessarily pass through a careful and pragmatic coordination of actions. Some large dams that have been planned for a long time are still unfinished works or at least not in full operation, despite their strategic function of multi-year water resource storage. The special government commissioners are responsible for the acceleration of these activities and will present success stories, still open criticalities and future challenges.

## Session Chairs

Alessandro Bratti, Technical Scientific Committee of Ecomondo and Po River District Basin Authority

Francesco Fatone, Technical Scientific Committee of Ecomondo and Università Politecnica delle Marche

Tania Tellini, Comitato Tecnico-Scientifico Ecomondo ed UTILITALIA

Attilio Toscano, Technical Scientific Committee of Ecomondo and Università di Bologna

## Programme

14.00 Introduction by the Chairs

14.15-15.30 **Fabio Fatuzzo** – *The structure and the activities of the Extraordinary Commissioner for wastewater treatment*

Sub-commissioners Toto Cordaro and Antonino Daffinà

*Interventions of the Technical Staff of the Extraordinary Commissioner for purification, technical focus on major interventions*

Intervention 1: Focus on Eastern Sicily - Giovanni Saitta, Giacomo Antronaco, Claudio Milazzo

Intervention 2: Focus on Western Sicily - coordinated by Toto Cordaro

Intervention 3: Focus on Calabria - coordinated by Antonino Daffinà

Intervention 4: Focus on Campania - coordinated by Vincenzo Belgiorno

15.30-16.00 **Nicola Dell' Acqua** - *The structure and activities of the Drought Commissioner: general framework*

Interventions by the technical staff of the Drought Commissioner

16.00-16.45 *The structure and the activities of the Commissioners for Dams*

**Attilio Toscano**, Campolattaro Dam (Campania)

**Angelica Catalano**, Sardinian Regional Dams

**Antonio Martini**, Pietrarossa Dam (Sicily)

16.45-17.00 **Guido Castelli** - *The structure and activities of the Extraordinary Commissioner for Repair and Reconstruction of the 2016 earthquake*

17.00-17.30 *Strategic water infrastructures: state of the art financing provided by MIT for the development of technical and economic feasibility projects*

Alessia Bondioli, Po River District Basin Authority

THURSDAY 7  
NOVEMBER

14:00 -  
18:00

Ravezzi 1 Room  
South Hall

Resource  
efficiency and  
Circular  
Economy

Onsite event

[Click here](#)

## Forum Africa Green Growth - 4th edition

Language: English

Simultaneous translation: English, French

**organized by Ecomondo, Ministry of the Environment and Energy Security, Mission Structure for the Implementation of the Mattei Plan at the Presidency of the Council of Ministers**

**With the collaboration of the Ministry of Foreign Affairs and International Cooperation and of RES4Africa**

Ecomondo, from 2021, will place Africa at the centre of its international development strategies, with the aim of increasing development opportunities for our companies in the water, energy, agri-food and circular bio-economy sectors, and fostering connection and exchange between the various stakeholders involved.

This new edition of the Forum will focus on that part of the Mattei Plan dedicated to Africa's sustainable development (sustainable sources and circular economy) and will see the participation of both institutional representatives and testimonials, including countries and companies.

The event represents a continuity with the actions and commitments of the G7 and Europe established and agreed upon in the 'Venaria Charter', retracing the G7 MASE themes in several 'stages' during the year of the Italian Presidency.

### Draft programme

14.00-15.00 *Greetings*

**Corrado Arturo Peraboni**, CEO Italian Exhibition Group

**Francesca Salvemini**, Head of the Minister's Technical Secretariat, Ministry of the Environment and Energy Security

Moderator:

**Francesca Salvemini**, Head of the Minister's Technical Secretariat, Ministry of the Environment and Energy Security

*Institutional greetings*

**Fabio Massimo Ballerini**, Sub-Saharan Africa Advisor, Office of the Diplomatic Advisor to the President of the Council of Ministers

**Alessandra Pastorelli**, Directorate General for the Promotion of the Country System, Ministry of Foreign Affairs and International Cooperation

**Loredana Gulino**, Head of General Administration, Planning and Natural Heritage Department (DiAG), Ministry of the Environment and Energy Security

**H. E. Khalid Atlasi**, Plenipotentiary Minister of the Kingdom of Morocco to Italy

*Opening Speeches*

**Antonio Montanari**, Vice President CONFINDUSTRIA ASSAFRICA & MEDITERRANEO

**Paolo Cutrone**, Area Manager Mediterraneo RES4Africa

### Session 1

***Mattei Plan: dialogue between institutions and the private sector for a sustainable development in Africa***



**15.00-16.00****Panel 1 – *The Mattei Plan in Morocco in the field of sustainable energy training***

The Mattei Plan supports the establishment of a Centre of Excellence aimed at the entire African continent and based in Morocco for training in the renewable energy and energy transition sector, whose objective is to strengthen the necessary managerial and professional capacities.

Morocco, thanks to its efforts in recent years to develop renewable energies on the southern shore of the Mediterranean, has been chosen for the creation of a Centre of Excellence for training in renewable energies dedicated to all African countries. The project will be developed under the aegis of the Italian and Moroccan governments, in line with EU policies, with a view to cooperation open to the continent. The centre will train experts, administrators and technicians in the field of renewable energy and electricity infrastructure, contributing directly to African energy development in a sustainable manner.

Moderator:

**Francesca Salvemini**, Head of the Minister's Technical Secretariat, Ministry of the Environment and Energy Security

Speech proposal:

**Giulia Genuardi**, Managing Director Enel Foundation

**Abdessamad Faik**, Mohamed VI Polytechnic University

**Mirco Torquati**, Large-scale plant sales manager, 3SUN GigaFactory

**Simone Pasquini**, Area Manager Africa, CESI SpA

**Mr. Mouhcine Benmeziane**, Head of the Cooperation, Monitoring and Communication Department, IRESEN (Marocco)

**Ms. Sharon Wachuka Kinyua**, Administration and Liaison Coordinator at ESAK (Electricity Sector Association of Kenya) and Energy and Extractives Sector Board Member at KEPSA (Kenya Private Sector Alliance)

**16.00-17.00****Panel 2 – *Energy, agriculture, circular economy and socio-economic development in Kenya***

The Mattei Plan supports the development of the biofuel supply chain in Africa through the production of vegetable oil, to be used as feedstock for biorefineries, from raw materials grown on degraded, polluted or abandoned land, from second-harvest crops, not in competition but in synergy with the agro-food chain. Added to this is the support for the use and valorisation of waste (used cooking oil) and agro-industrial waste to promote circular economy processes. The objective of these initiatives is to regenerate degraded territories through the introduction of best agricultural practices and mechanisation, creating rural income and market access for the local farmers involved and thus fostering socio-economic development.

In Kenya, the Mattei Plan, in agreement with the local government as part of its energy diversification policy, is supporting these initiatives along the lines of what Eni has done, through the Italian Climate Fund and together with the International Finance Corporation (World Bank Group), with a total loan of USD 210 million. This will enable the involvement of up to 200,000 Kenyan smallholder farmers and expand the socio-economic impact of the initiative, while supporting the production of advanced biofuels and the decarbonisation of the global transport system.

Moderator:

**Loredana Gulino**, Head of General Administration, Planning and Natural Heritage Department (DiAG), Ministry of the Environment and Energy Security

Speech proposal:

**Luigi Ciarrocchi**, Director CCUS, Forestry & Agri-feedstock – ENI

**Francesco Masera**, Head of Business Promotion and Portfolio Management International Cooperation CDP Cassa Depositi e Prestiti

**Laetitia Dumas**, Team Lead Programme and Operations, Occupational Safety and Health Branch, International Labour Organization (ILO)

Kenyan farmer pre-recorded video

## **Session 2 – Round table**

### **Case studies of cooperation and future perspectives in the circular economy sectors applied to textiles, WEEE, packaging, bioenergy**

17.00-17.45 Short speeches by representatives of companies or consortia of companies

Moderator:

**Fabio Fava**, President of Ecomondo Scientific Technical Committee and University of Bologna

*Case History by CONFINDUSTRIA ASSAFRICA & MEDITERRANEO*

**Giuseppe D'Alessandro**, CEO EEMAXX ENGINEERING

*Experiences of direct support for the establishment of EPR systems on the African continent*

**Joachim Quoden**, EXPRA

**Amanda Fuso Nerini**, CONAI

*The friperie sector in Tunisia. A virtuous story for the valorisation of textile*

**Andrea Fluttero**, Presidente of UNIRAU

*New technologies for new wealth. Italian companies as a possible catalyst for Africa's circular economy*

**Rocco Lombardi**, Confindustria Cisambiente

*The Farming for future project: An agricultural model scalable across national borders*

**Piero Gattoni**, Presidente CIB

17.45 Conclusions

THURSDAY 7

NOVEMBER

14:30 -

17:00

Ravezzi 2 South  
Hall**Circular and  
Regenerative  
Bioeconomy**

Onsite event

[Click here](#)

## States general for soil health – III edition: opportunities for soil regeneration and climate neutrality: carbon farming and nature-based solutions. National session

Language: Italian

**organized by Ecomondo STC & European Mission A Soil Deal for Europe, Re Soil Foundation, Coldiretti (Federation of Italian Farmers), National Bioeconomy Coordination Board (NBCB)**

According to the European Soil Observatory, about 60 to 70% of soils in the EU are currently likely to be affected by one or more soil degradation processes, among all by soil sealing.

Agricultural soils annually lose 7.4 million tons of CO<sub>2</sub> due to the too-rapid mineralization that occurs, almost unnoticed, under agricultural crops, the same soil where seventy-eight percent of soil consumption occurs. Ecosystems in the Mediterranean area are particularly vulnerable and the region itself is warming 20% faster than the global average (source: UNEP).

Unhealthy soil generates side effects and is unable to provide essential ecosystem services, such as: producing safe nutrition and food, providing biodiversity, purifying and regulating water and its cycle, ensuring adequate nutrient cycling, storing CO<sub>2</sub> contributing to carbon and mitigating climate, and ultimately supporting human activities as a whole.

Lately, the debate about the urgent need for soil conservation has increased at all levels in Europe, partially due to the efforts of the European Mission “A Soil Deal for Europe”. And the publication of the Soil Strategy in November 2022 launched the process to adopt a Directive on Soil Monitoring and Resilience.

The third edition of the “States General for Soil Health – opportunities for soil regeneration and climate neutrality: carbon positive actions and nature-based solutions” will take place on 7th November 2024. In the morning session, the latest European policy updates and an overview of the key elements needed to protect soil health, such as carbon farming and nature-based solutions, as well as best practices for soil regeneration on different types of soil's use will be explored and discussed. The afternoon session will offer an overview of the Italian scenario, with a focus on regenerative agriculture and on best practice of soil regeneration in the local communities.

### Session Chairs

Debora Fino, Turin Polytechnic, Re Soil Foundation President

Claudio Ciavatta, University of Bologna, Re Soil Foundation Board Member

### Programme

14.30-14.45 *Keynote: One Health approach for soil health*

Francesco Giardina, Coldiretti

14.45-14.55 Introduction by the Chairs

14.55-15.30 ***Italian policy framework update***

14.55-15.10 *Soil health monitoring in the "EU Soil Monitoring Law" framework*  
Francesca Assennato, ISPRA

15.10-15.25 *National forestry strategy and the carbon credit registry*  
Ilaria Falconi, CREA

15.30-16.00 **Regenerative agriculture-best practices**

15.30-15.40 *What is regenerative organic agriculture*  
Dario Fornara, Davines/Rodale Institute EU

15.40-15.50 *The use of compost for soil regeneration*  
Massimo Centemero, CIC

15.50-16.00 *Biogas for sustainable agriculture-case study*  
Lorella Rossi, Consorzio Italiano Biogas

16.00-16.30 **Soil regeneration in the local community**

16.00-16.10 *How to help farmers adopt regenerative agriculture practices*  
Andrea Ferrarini, Università Cattolica del Sacro Cuore

16.10-16.20 *Example of Living lab in Italy (EU project)*  
Eleonora Bonifacio, Living SoilLL

16.20-16.30 *Soil literacy and citizen engagement: "Prepsoil"*  
Margherita Caggiano, Re Soil Foundation

16.30-16.45 *ECHO project presented by ECHO Amdassadors*  
Cosimo Masini e Andrea Butelli

16.45 Q&A and Conclusions

THURSDAY 7  
NOVEMBER

14:30 -  
17:30

Agorà Fellini –  
Sites & Soil  
Restoration Area  
C3 pav.

**Resource  
efficiency and  
Circular  
Economy**  
*Onsite event*  
[Click here](#)

## The EU Emissions Trading System and its Impact on the Mobility of Goods and People

Language: Italian

**organized by Ecomondo STC & FIAP (Italian Federation of Professional Road Hauliers), Confitarma**  
**in collaboration with PWC**

The acronym EU ETS, which stands for the European Union Emissions Trading System, refers to the CO2 emissions market in Europe. It is one of the main sustainability tools adopted by the European Union to achieve CO2 reduction targets in major industrial sectors and the aviation sector, included in the "Fit for 55" path. The ETS system has been active since 2021 in the 27 EU member states and in the countries of the European Free Trade Association (EFTA): Iceland, Liechtenstein, Norway, and in the power plants of Northern Ireland. Since January 2020, it has also been connected to Switzerland's emissions trading system. The system is regulated by Directive 2003/87/EC, better known as the ETS Directive, now supplemented by EU ETS2, which introduced emissions reductions for SMEs not included in the previous regulation, including those operating in road transport. The ultimate goal of this mechanism, aimed at accelerating the transition towards sustainable and intelligent mobility, is to achieve a substantial reduction in emissions by 2030 compared to the levels recorded in 2005. The conference analyzes the impact and effects of the system, both current and projected, on the transport of goods and people, with particular attention to maritime transport and road transport, which constitute the primary and fundamental intermodal combination in international trade.

### **Session Chair**

Piero Savazzi, Coordinator of the General Secretariat & Technical and Regulatory Area

### **Programme**

14.30-14.40 *Welcome address*

Roberto Scarpa, FIAP President

14.45-15.10 *The Energy and Environmental Transition in Transport and the Impact of European Policies Related to the "Polluter Pays" model*

Paolo Guglielminetti, Partner PwC Italia, Global Railways & Roads Leader

15.10-15.50 *The ETS and EU ETS 2 Rules: Current Status and Evolution*

*ETS* | Pasquale Bisogno, Deputy Head of Performances and Decarbonization presso d'Amico International Shipping SA

*ETS 2* | Piero Savazzi, Coordinatore Segreteria Generale & Area Tecnica e normativa FIAP

15.50-16.20 *The Effects of ETS on Maritime and Road Transport and Guidelines on the Use of Revenues from the Sale of ETS and ETS 2 Certificates*

*Maritime Transport* | Luca Sisto, Confitarma Director

*Road Transport* | Alessandro Peron, FIAP Secretary General

16.20-17.00 *Final Round Table*

with ample space for in-depth discussions, comparisons with National and European Policies, and audience questions.

Will intervene:

On. Salvatore Deidda, Presidente Commissione Trasporti alla Camera dei Deputati

On. Maria Grazia Frijia, Componente Commissione Trasporti alla Camera dei Deputati

THURSDAY 7  
NOVEMBER

16:30 -  
18:15

Agorà Augusto –  
Bioeconomy Area  
D2 pav.

**Agroecology and  
Bioenergy**  
Onsite event  
[Click here](#)

## Sustainability and circularity of bioenergy production



Language: Italian

**organized by Ecomondo STC & Ricerca sul Sistema Energetico – RSE SpA**

The use of short chain biomass for energy purposes, although in the past it has not always been adequately considered in European and Italian energy policies, is proving to be a valuable solution for the decarbonization and sustainability goals of national agricultural and suburban communities. Indeed, today much of the available biomass is still not used according to modern and scientific criteria of sustainability and circularity. The conference aims to provide a point of view in this regard from the main scientific actors operating in this sector in Italy.

### Session Chair

Michele de Nigris, Director of Sustainable Development and Energy Sources Department, RSE SpA

### Programme

16.30 Greetings

Carloalberto Giusti, Chairman of RSE SpA

16.40-16.50 *Introduction*

Franco Cotana, CEO of RSE SpA

16.50-17.00 *Biomass emissions: reality versus myths*

Domenico Cipriano, RSE SpA

17.00-17.10 *Biomass-based energy carriers*

Valentina Coccia, Università degli Studi di Perugia

17.10-17.20 *The use of biomass and its social and economic impact*

Ilaria Falconi, CREA - Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria

17.20-17.30 *Decarbonization of the Italian agri-food sector*

Francesca Bazzocchi, RSE SpA

17.30-17.40 *Valorization of agro-industrial waste in the energy and energy efficiency sectors*

Marco Barbanera, Università degli Studi della Tuscia

17.40-17.50 *The European Project DIVERSE: a transnational approach for the integration of sustainability and biodiversity protection criteria in bioenergy production, to support the development of low carbon energy mix in the Alpine Space regions*

Cristina Cavicchioli, RSE SpA

17.50-18.00 *Company case study: From dedicated energy crops to integrated production of food crops and “advanced” biomass: the experience of Elevion Group in the conversion of the feeding strategy of an advanced biomethane production plant for the transport sector in the province of Verona*

Andrea Salogni, Elevion Group Italy

18.00 Discussion and closure by the Session Chair

# FRIDAY 8 NOVEMBER

FRIDAY 8  
NOVEMBER

10:00 -  
12:45

Neri 1 Room South  
Hall

**Policies and  
regulatory  
frameworks**

*Onsite event*

[Click here](#)

## End of Life Vehicles: towards the new ELV regulation

Language: Italian

**organized by Ecomondo STC & ASSOAMBIENTE (National Association of Environmental Services Companies and Circular Economy)**

The vehicle demolition sector is currently experiencing a great revolution. From the proposal of a new Regulation on end-of-life vehicles – amending the Directive 2000/53 - which will bring new objectives and new obligations for all subjects in the ELV supply chain, to the changes introduced at National level with the entry into force next June 2024 of the new electronic register of end-of-life vehicles and with the arrival of RENTRi which will see its first applications at the beginning of 2025.

The main goal of the conference is to explore and illustrate the changes to the obligations of the subjects of the supply chain brought about by the aforementioned Regulations and discuss them with all the subjects interested in the change.

### Session Chair

Paolo Barberi, Vice President of Assoambiente

### Programme

10.00 Introduction by the Chairs

10.10-10.30 *The New electronic register of end-of-life vehicles*  
Salvatore Moretto, PRA Director

10.30-10.50 *RENTRi – New IT waste traceability system*  
Chiara Leboffe, Assoambiente

10.50-11.00 *The proposal for a Regulation on end-of-life vehicles*  
Matteo Ricci, Environment Commission European Parliament (TBC)

### 11.10-12.45 **Round table**

Moderator:

Paolo Campanella, FEAD Director

Speakers:

Antonio Cernicchiaro, UNRAE - National Union of Foreign Car Representatives

Luca De Vita, ANFIA - Italian Association of the Automotive Industry

Luca Campadello, ERION

Stefano Leoni, AIRA - Industrial Association of Car Recyclers

Cinzia Vezzosi, ASSOFERMET - National Association of Steels, Metals, Scrap

Gianfranco Soranna, FEDERAUTO - Italian Car Dealers Federation

Alfonso Gifuni, CAR - Confederation of car wreckers

Ruggiero Delvecchio, ADQ - National Association of Quality Car Wreckers

Anselmo Calò, ADA - Association of Automobile Wreckers



FRIDAY 8  
NOVEMBER

10:00 -  
13:00

Agorà Tiberio –  
Water Cycle Area  
D8 pav.

**Policies and  
regulatory  
frameworks**

*Onsite event*

[Click here](#)

## Evidence and innovative perspectives of the MTI4 in water sector

Language: Italian

**organized by Ecomondo STC & REF Ricerche, UTILITALIA (Italian federation of energy, water and environmental services)**

The MTI-4 for the period 2024-2029 lays the foundations for a more resilient water service capable of responding to the challenges related to climate change.

Restoration of natural capital, construction of large reservoirs, promotion of wastewater reuse, energy neutrality, development of renewables, management of urban drainage, are all ingredients of a holistic and sustainable approach to the industrial development of the sector. Environmental sustainability passes through coordinated planning at the various levels of governance and requires industrial actors capable of deploying all the tools made available by national regulation.

### Session Chairs

Donato Berardi, Director of REF Laboratory

### Programme

10.00 Introduction by the Chairs

10.10-10.30 *First lectures from MTI-4: an overview*

Samir Traini, REF Ricerche

10.30-10.50 *Energy supply: how MTI4 has influenced purchasing patterns*

Carmen Monaco, Utilitalia

10.50-11.10 *Possible solutions and impacts from EU-funded innovation actions: the interaction with ARERA regulation*

Francesco Fatone, Marche Polytechnic University

11.10-12.30 **Round Table**

Moderated by:

Rita Mileno, Director of Utilitatis Servizi

Speakers:

Ester Benigni, A2A

Maria Martocchia, Acea

Luigi De Caro, Acquedotto Pugliese

Andrea Lanuzza, Aquanexa

Filippo De Simoi, Hera

Alessandro Cecchi, Iren

Francesca Menabuoni, Suez

12.30-13.00 Discussion and closure

Jacopo Manca, ARERA

FRIDAY 8  
NOVEMBER

10:00 -  
13:15

Ravezzi 2 South  
Hall

**Water Cycle and  
Blue Economy**  
Onsite event  
[Click here](#)

## Waste reduction and management in fishing ports to promote sustainable fisheries

Language: Italian

Simultaneous translation: English

**organized by Ecomondo STC & University of Padua, Legacoop  
Agroalimentare Northern Italy, Lavoratori del Mare Fisheries Cooperative**

Marine litter and plastic pollution are a global issue threatening marine ecosystems. Fisheries, fishing ports and seafood supply chains can be a source of the litter directly or indirectly released into the sea, but they are also a central part of the solution: for example, they can substantially contribute to reducing pollution by 'Fishing for Litter' or adopting more sustainable management practices. This session aims to bring together governmental, academic and private stakeholders, including fishery representatives and ports, to discuss open problems related to sustainable marine litter management as well as the pros and cons of different solutions. Talks will showcase best practice examples, such as the Interreg Italy-Croatia project FishNoWaste (2024-26) focusing on waste management in Adriatic fishing ports, explore current regulations, and describe the sustainability of supply chains in a circular economy perspective, with a final round table.

### Session Chair

Alberto Barausse, University of Padova

### Programme

10.00 Introduction by the Chairman  
Alberto Barausse, University of Padova

10.15-10.30 Introductory Remarks  
Anna Montini, Blue Economy Councillor of Rimini Municipality

10.30-10.45 Introductory Remarks  
Elisabetta Gualmini, Industry, Research and Energy Committee of the European Parliament

10.45-11.00 *IT-HR CBC Programme Support Preventing Marine Litter Pollution*  
Marin Miletic, Joint Secretariat ITA-HR

11.00-11.15 *Outline of the FishNoWaste Project*  
Tommaso Musner, University of Padova

11.15-11.30 *BlueMissionMed to support the Mediterranean fishing sector*  
Fantina Madricardo, National Research Council (CNR)  
Vanessa Moschino, National Research Council (CNR)

11.30-11.45 *Regulatory analysis regarding Marine Litter*  
Ministry of the Environment and Energy Security (TBC)

11.45-12.30 *International case studies and best practices:*

*The experience of fishing and waste management in the North Sea*

Hendrik Kramer, entrepreneur (NL)

*Waste reduction and management in fishing ports - an example from Croatia*

Pero Tutman, Institute of Oceanography and Fisheries (HR)

*The role of the private sector in reducing plastic pollution*

Luca Barani, Sea the Change (IT)

12.30-13.00 *Round table*

*Supply chains of litter and of seafood: issues and potential*

Representative of fishing ports and national/regional stakeholders

13.00 Closure by the Chairman

FRIDAY 8  
NOVEMBER  
10:15 -  
13:00

Agorà Augusto –  
Bioeconomy Area  
D2 pav.

**Circular and  
Regenerative  
Bioeconomy**  
*Onsite event*  
[Click here](#)

## Wood and biomaterials for construction: a path to decarbonisation and circular economy

DOWNLOAD THE  
CONFERENCE POSTERS

Language: Italian

**organized by Ecomondo STC & Confagricoltura (General Confederation of Italian Agriculture), Alberitalia Foundation, National cluster Forestry-wood**

with speeches and posters from the Call for Papers 2024

Timber and biomaterials are an increasingly strategic resource for green building and for fighting climate change thanks to their ability to replace products from fossil sources, to recover waste biological materials, and to improve the energy performance of the environments built, and above all carbon storage over time.

Although the prospects of the sector have been discussed for several years, the diffusion of such buildings is still very limited, except in some specific contexts, and this is also in relation to the lack of specific policies and measures for the green building sector. A situation that could see an evolution also thanks to the definition of the carbon farming certification system for wood products; also considering the sensitivity of citizens on the issues of sustainability and health linked to biomaterials in construction.

Starting from these elements, the objective of the conference is to analyze with representatives of the world of research, associations, professionals, local administrators, etc., the strengths and weaknesses of the sector, at a national level, for a reflection on what levers should be activated to spread a model of housing and construction with lower impact, greater efficiency, and more linked to the resources of our territory, at competitive costs. This with reference to the different biomaterials and dispelling some myths about the safety of buildings made with biobased materials.

## Programme

9.30 Participants' registration

10.00 *Greetings*

Enrico Allasia, Confagricoltura

Pietro Oieni, DIFOR III MASAF

10.30-10.45 *Introduction and moderation*

Marco Marchetti, Fondazione Alberitalia - Sapienza Università di Roma

10.45-11.00 *The supply of raw materials for construction in Italy*

Alessandra Stefani, President of National cluster Forestry-wood

11.00-11.15 *The role of the forestry doctor in silvicultural planning for the purpose of supplying wood assortments for construction*

Daniele Gambetti, Conaf

11.15-11.30 *Report of wooden houses in Italy*

Ugo Terzi, FederlegnoArredo

11.30-11.45 *Building decarbonization: from strategies to implementation*

Mariadonata Bancher, Agenzia CasaClima

11.45-12.00 *Wood market and supply chain*

Angelo Luigi Marchetti, Filiera Legno

12.00-12.15 *Collaboration between science, industry and architecture*

Claudiu-Nicolae Sonda, Policy Officer. Construction & Sustainability CEI-Bois

12.15-13.00 **Case studies and experiences**

*The experience of Panguaneta for the development of poplar cultivation*

Nicoletta Azzi

*The short, certified and sustainable supply chain of Magnifica Comunità di Fiemme*

Andrea Bertagnolli, Ilaria Zorzi - Magnifica Comunità Fiemme

*The LIFE Be-WoodEN project: building with wood and enhancing the supply chain to achieve sustainability in the construction sector by following the principles of the New European Bauhaus*

Irene Diti

*The poplar supply chain in the PNNR MICS project: valorization of by-products in production processes and experimentation with new digital manufacturing approaches*

Paolo Simeone e Guido Gallegari

13.00 **Conclusions**

Davide Pettenella, University of Padua

FRIDAY 8  
NOVEMBER  
11:00 -  
13:30

Agorà Blue  
Economy B8 Pav.

**Water Cycle and  
Blue Economy**  
Onsite & live  
streaming event  
[Click here](#)

## Blue skills and employment development: strategies and good practices for blue growth

Language: Italian  
Simultaneous translation: English

**organized by Ecomondo STC & Legacoop Agroalimentare, Demetra Formazione, Cooperativa MARE**

Blue skills and job development are key components to support sustainable blue growth. The implementation of effective strategies is necessary to anticipate changes and the adoption of good practices in this area can improve the competitiveness, resilience and sustainability of the blue economy. The initiative, in addition to presenting some consolidated good practices and the strategies that have been implemented, intends to offer an overview of the scenario of employment opportunities offered by the integration of the different sectors of the Blue Economy with a timely assessment and forecast of skills by intervening, in fact, to fill blue skills gaps and forecast skill requirements based on sector trends and technological advances as well as present education and training programs to encourage younger generations to approach the different sectors of the blue economy.

### Session Chair

Massimo Bellavista, Legacoop Agroalimentare, member of Ecomondo STC for the Blue Economy

### Programme

11.00 Welcome greetings

Anna Montini, Councilor for the Blue Economy of the Municipality of Rimini

11.10-11.20 Contribution MEP Elisabetta Gualmini, Industry, Research and Energy Commission of the European Parliament

11.20-11.30 Contribution Prof. Elena Gaudio, Ministry of Education and Merit (remote)

11.30-11.40 *The experience of the Politecnico del Mare di Catania*  
Cristina Bellissima, Professor

11.40-12.10 *The BOUTCAR project. Blue Jobs Through Blue Careers:*

*Project overview & the Italian perspectives*

Laura Zambrini, Demetra Formazione

*Demand for education and training in the Spanish context*

Jorge Romon, ARVI

*Fishery and aquaculture demanding for education on the Greek experience*

George Triantaphyllidis, UPAT University of Patras

12.10-12.20 *OPTIMA Project: Good practices in molluscs aquaculture*

Andrea Gugnali, M.A.R.E.

12.20-12.30 *Bluelinks: Blue Economy New Skills project*  
Angela Nazzaruolo, Delta 2000

12.30-12.40 *WINBLUE – Women in Blue Economy project*  
Rebecca Pogni, University of Siena

12.40-12.55 *The European initiative “Fishers of the Future”*  
Joan Roussoulière-Azzam, Policy Officer DG MARE, European Commission (remote)

12.55-13.10 *Sustainable fisherman*  
Hendrik Kramer, Fish entrepreneur

Open discussions

Conclusions  
Rosalie Tukker, Policy Advisor Européche

FRIDAY 8  
NOVEMBER

11:00 -  
13:30

Ravezzi 1 Room  
South Hall

**Financing,  
education and  
communication**

*Onsite event*

[Click here](#)

R&D for the green transition: a public-private strategy.  
State of the art, opportunities, and best practices.  
Innovative PHD

Language: Italian

**organized by Ecomondo STC & CONFINDUSTRIA, Innovation Award per tesi di laurea magistrale e di dottorato di Chimica Verde Bionet e Federcanapa**

R&D is the basis to be protagonists of the green transition.  
Where are we? How to strengthen our capacity?  
Let's start from the best practices to share a common strategy.

Researchers who know how to be protagonists of public-private partnerships have a central role.

Innovative PHDs represent one of the pillars of the actions envisaged by the PNRR in Mission 4 component 2 "From Research to Business". They aim to train young researchers involved in joint projects between the public research system and businesses. A great growth opportunity. 6000 innovative doctorates have been achieved. We will listen to the direct experiences of young researchers, companies, and universities. The meeting will also be an opportunity to reflect on how to ensure continuity of the instrument.

### Programme

Moderated by  
Ilaria Vesentini, Il Sole24Ore

### 11.00-11.20 Round Table – *The new paradigm*

Enrico Montaperto, Direzione Generale degli ordinamenti della formazione superiore e del diritto allo studio, Ministero dell'Università e della Ricerca

Giorgio Centurelli, Direttore Generale della Direzione generale gestione finanziaria, monitoraggio, rendicontazione e controllo – Unità di missione PNRR presso il Ministero dell'ambiente e della sicurezza energetica

Nicoletta Amodio, Executive Adviser Ricerca e Innovazione, Confindustria – Direttore Fondazione Mai

Raffaele Saccà, Direttore Area Conto Formazione e Articolazioni Territoriali Fondimpresa

### 11.20-12.00 *Best practices: Innovative PHD*

Daniele Biondi, Responsabile Impianto FIB3R di Imola, HERA

Christian Coppola, Responsabile material science Centro Ricerca Versalis Ravenna

Andrea Masetti, Dottorando Dipartimento di Chimica Industriale Università di Bologna

Federico Bugli, Dottorando Dipartimento di Chimica Industriale Università di Bologna

Marco Carricato, Delegato per Dottorato di Ricerca, Università di Bologna

### 12.00-12.20 *Public-private partnerships*

Maria Cristina Ravagnolo, National Biodiversity Future Center- NBFC

Marta Rapallini, Program Manager Fondazione FAIR- Future Artificial Intelligence Research

### 12.20 *Innovation Award Chimica Verde Bionet*

*Federcanapa per tesi di laurea magistrale e di dottorato*

### 12.50 Closure

Francesco Priolo, Rettore dell'Università di Catania, Delegato a Ricerca e Dottorati CRUI