

Ecomondo 2022

08 / 09 / 10 / 11 NOVEMBER

Legend

	Agri-food, Forestry and Bio-based Industry
	Blue Economy
	Circular Economy Value Chains
	Environmental Monitoring & Control
	Financing, Education and Communication
	Hydrogeological Risks and Mitigation Measures
	Policies and Regulations
	Research and Innovation
	Sustainable Remediation and Regeneration of Contaminated Sites
	Waste Management and Valorization
	Water Management and Valorization
	

TUESDAY 8 NOVEMBER

TUESDAY 8
NOVEMBER

09:30 -
17:30

Gemini Room C4
Pav.

**Hydrogeological
Risks and
Mitigation
Measures**

Innovative methods and technologies for landslide risk assessment and mitigation

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & Italian Geotechnical Society

Landslide risk is currently a social priority connected to regeneration and sustainability items and also to environmental and economic aspects. Therefore, it's very important to adopt innovative construction methods and technologies for its assessment and mitigation compatible with the environment. In this context, the conference will be dedicated to this specific topic of innovation of methods and technologies, really crucial for the development of the territory and society and for the environment protection.

Session Chairs

Daniele Cazzuffi, CESI SpA - Milano

Nicola Moraci, Mediterranean University of Reggio Calabria

Programme

9.30-10.00 Registration

10.00-10.20 Introduction

Daniele Cazzuffi, CESI SpA - Milano

Nicola Moraci, Mediterranean University of Reggio Calabria

Session 1. Landslide risk evaluation and mitigation: analysis criteria

Chair: Nicola Moraci, Mediterranean University of Reggio Calabria

10.20-10.45 *The current regulation in force framework for landslide risk management*
Vera Corbelli, Southern Apennines River Basin District Authority

10.45-11.10 *Landslide susceptibility assessment and hazard at different scales: probabilistic and physically-based approaches*
Maria Clorinda Mandaglio, University of Salerno

11.10-11.35 *Landslide risk analysis: qualitative and quantitative approaches*
Settimio Ferlisi, University of Salerno

11.35-12.00 *Potential landslide risk mitigation strategies*
Giovanni Vaciago, SGI - Milan

12.00-12.25 *New perspectives for landslide risk management*
Leonardo Cascini, University of Salerno

12.25-13.00 Discussion

Session 2. Landslide risk assessment and mitigation: case studies

Chair: Maria Clorinda Mandaglio, University of Salerno

14.15-14.40 *Debris flow susceptibility and hazard assessment: the case of Favazzina (RC)*

Mariantonietta Ciurleo and Nicola Moraci, Mediterranea University of Reggio Calabria

14.40-15.05 *Rockfall susceptibility and hazard assessment*

Maria Rita Migliazza, Polytechnic University of Turin

15.05-15.30 *Slow landslide risk assessment: applications at different scales*

Giovanni Gullà, Research institute for geo-hydrological protection of the Italian National Research Council (CNR - IRPI)

15.30-15.55 *Rockfall risk assessment*

Monica Barbero and Maria Lia Napoli, Polytechnic University of Turin

15.55-16.20 *Examples of innovative and sustainable measures for the slow landslide risk mitigation*

Piergiorgio Recalcati, Tenax SpA, Viganò - LC

16.20-16.45 *Implementation of mitigation measures in the national information systems*

Daniele Spizzichino, ISPRA (Italian Institute for Environmental Protection and Research)

16.45-17.15 Discussion

17.15-17.30 Closing remarks

Daniele Cazzuffi, CESI SpA - Milan

TUESDAY 8
NOVEMBER

09:30 -
17:30

Tiglio Room A6
Pav

**Waste
Management
and Valorization**
*Conference open to
Papers*

Waste as Resources: Innovative technologies for recycling and recovery

Language: English

Organized by: Ecomondo Scientific Technical Committee & Italian Chemical Society – Division Environmental and Cultural Heritage Chemistry, ATIA – ISWA

CALL FOR PAPERS

The ambitious goals of the new Circular Economy Action Plan, as well as the strategic importance for Europe to limit its dependence from other world regions, in terms of material and energy resources, require the implementation of innovative recycling and recovery processes. This seminar is aimed at presenting technological innovations, which can improve the efficiency of secondary material valorization, increasing the circularity of materials and decreasing energy consumption. The presented activities could be related to different sectors (urban or industrial waste, residues, by-produSTC) and various categories of materials (plastics, metals, WEEE, textiles, building and construction, food, etc.)

Session Chairs

Mauro Majone, STC Ecomondo, Università "La Sapienza" Roma
Fabrizio Passarini, STC Ecomondo, Università di Bologna
Marco Ricci, ISWA International

Programme

9.30-9.40 *Introduction by the Chairs and a short summary on the papers presented through posters*

9.40-10.30 Invited lectures

9.40-9.55 *Med4Waste Project: Mediterranean Dialogue for Waste Management Governance*

Lara Panzani, Project coordinator and Responsible Area Balcani, COSPE Onlus, Italy

9.55-10.10 *CIRCULAR BIOCARBON: a BBI-JU first-of-a-kind flagship biorefinery designed to valorise the Organic Fraction of Municipal Solid Waste (OFMSW) and Sewage Sludge (SS) into value-added products.* Natalia Alfaro Borjabad, URBASER, Spain

10.10-10.25 *CIRCULAR Economy in Latin America: Advances in Circular Economy and solid waste management in Latin American countries*

Gustavo Solorzano, DSLatinoamericana, ISWA-Mexico

10.30-13.00 Presentations selected from the call for papers

10.30-10.45 *Extending the life of computer equipment, reuse and carbon footprint*
Alejo Calatayud (Revertia, reusing and recycling, S.L.)

10.45-11.00 *Solvent-assisted extraction of gaseous and liquid impurities from polymer melts*

Kevin Moser, Irma Mikonsaari, Elke van de Walle (Fraunhofer ICT)

11.00-11.15 *Utilisation of waste tires as a feedstock for a new refinery aiming at recycled carbon*

Nazari, M., Marinez Aguilar, M. & Lavoie, JM (Université de Sherbrooke Québec, Canada)

11.15-11.30 *Plastic recycling and design*

Alessandro Garlandini (ilVespaio)

11.30-11.45 *Treating Red Gypsum by Innovative Technologies in Industrial Symbiosis Operation schemes*

Francesco Negri, Flavio Manenti (Politecnico di Milano, Italy), Enrica Bargiacchi (Consortium INSTM, Italy), Nelson Marmioli, Elena Maestri, Sergio Miele (Università di Parma, Italy)

11.45-12.00 *Cold asphalt containing 100% reclaimed asphalt: a sustainable technology for cycle paths and maintenance interventions*

Paola Di Mascio, Nicola Fiore, (Università di Roma La Sapienza, Italy), Carlo Polidori (Associazione Italiana Professionisti Sicurezza Stradale), Loretta Venturini (Iterchimica S.p.A.)

12.00-12.15 *Experimental study on lightweight concrete with artificial aggregates containing industrial waste*

Ilenia Farina, Gianmarco Di Rienzo, Cinzia Salzano, Francesco Colangelo (Università degli Studi di Napoli Parthenope, Italy), Salvatore Puca (Consorzio ASI Napoli), Renato Olivares, Luigi Cossentino (ARPAC Dipartimento di Napoli, Italy)

12.15-12.30 *CISUFLO: Circular Sustainable Floor coverings*

Guy Buyle (Centexbel), Marco de la Feld, Antonietta Pizza, Madeira Scauri (ENCO srl), Ansgar Paschen (TFI), Elina Pohjalainen (VTT), Jan Jordan (RWTH ITA), Claudius Haerper (RWTH STO), Rajesh Mehta (TNO)

12.30-12.45 *AraBat: a green hydrometallurgical process for recycling spent lithium-ion batteries by reusing agri-food waste*

Raffaele Nacchiero, Leonardo Binetti, Gian Maria Gasperi, Giovanni Miccolis, Leonardo Renna, Vincenzo Scarano (AraBat srl, Foggia), Francesco Contillo, Paolo Marasco, Mauro Marone, Deborah Racca, Matteo Francavilla. (University of Foggia, Italy)

12.45-13.00

13.00-14.00 Break

14.00-14.15 *Overcoming the challenges of fire safety in the waste and recycling industry*

BOSCH

14.15-17.15 **Presentations selected from the call for papers**

14.15-14.30 *Digitalisation of Waste Management process: advantages of interoperability*

Stefano Lifone (Eni Rewind S.p.A.)

14.30-14.45 *Does ecological transition start from schools? An educational approach to circular economy* Francesca Realini, Giuseppa Cucchiara, Angelo Gulotta (I.I.S. "L. Cobianchi", Verbania, Italy)

14.45-15.00 *Junker, the app for waste sorting and recycling*

Noemi De Santis (GIUNKO SRL)

15.00-15.15 *Demonstrating sustainable value creation from industrial CO2 by its thermophilic microbial conversion into acetone*

Carlo Alberto Oppici, Patrizia Circelli (Ciaotech srl - PNO Group, Rome)

15.15-15.30 *Assessing the environmental sustainability of crude glycerol purification by acid treatment*

Marco Tomatis, Harish Jeswani, Taha Attarbach, Vincenzo Spallina (University of Manchester, UK), Martin Kingsley (Argent Energy, Ellesmere Port, UK), Adisa Azapagic (University of Manchester, UK)

15.45-16.00 *BIO-Based pESTicides production for sustainable agriculture*

Anna Franciosini (Ciaotech srl - PNO Group, Rome)

16.00-16.15 *technology: Technical solution and industrial plant design*

Giorgia Pagliano, Andrea Bassi, Alisar Kiwan, Daniele Pirini, Eleonora Torricelli, Davide Collini (B-PLAS Sbrl Via Gessi, 16, 48022 Lugo, Italy), Cristian Torri (Università di Bologna, Ravenna, Italy) B-PLAS

16.15-16.30 *FARMŸNG: FIAGship demo of industrial scale production of nutrient Resouces from Mealworm* Anna Franciosini, Patrizia Circelli (Ciaotech srl - PNO Group, Rome)

16.30-16.45 *Food industry by-products as a resource for biopolymers production: the USABLE Project approach*

Marianna Villano, Angela Marchetti, Mauro Majone (Sapienza University of Rome, Italy), Jesus Rodriguez, Vadim Scerbacov (Innoven Srl, Italy), Joana Fradinho, Maria Reis (UCIBIO- FCT-UNL, Portugal), Rakesh Nair (Bio Base Europe Pilot Plant, Belgium), David Bolzonella (University of Verona, Italy), (1), Josè Maria Lagaron (IATA-CSIC, Spain)

16.45-17.00 *Waste as Resources: Innovative technologies for recycling and recovery* Alessandro Reginato (Gruppo CAP)

17.00-17.15 *The production of biofuels for aircrafts and ships from waste and discards* Paola Zitella, Barbara La Licata, Alexia Boulanger, Giorgia Pellegrino (Environment Park SpA, Torino, Italy)

17.15-17.30 *Sustainable recycling of urban waste into valuable products without chemicals supplementation*

Barbara Tonanzi, Agata Gallipoli, Andrea Gianico, Camilla M. Braguglia (IRSA-CNR, Monterotondo - Rome, Italy), Giancarlo Cecchini, Alessandro Frugis, Marco Lazzazzara (ACEA ELABORI SpA, Rome, Italy)

17.15-17.30 **Discussion and Closure (by the chairs)**

Sessione Poster

WMV1-P1 Life cycle assessment apple processing waste valorisation in synthetic leather manufacturing / Michele Costantini, Jacopo Bacenetti (University of Milan, Milan, Italy), Carlo Ingrao (University of Bari, Bari, Italy), Umberto Bacenetti (Mabel Srl, Campi Bisenzio, Italia)

WMV1-P2 Characterization of flows, stocks, and recycling indicators of Mn, Ni, and graphite / Luca Ciacci, Elena Bernardi, Fabrizio Passarini (University of Bologna, Italy)

WMV1-P3 Glycidol: overview on main syntheses and conversions into value-added compounds / Prisco Prete, Carmine Capacchione, Antonio Proto, Raffaele Cucciniello (Università degli Studi di Salerno, Italy), Daniele Cespi, Fabrizio Passarini (Università degli Studi di Bologna, Italy)

WMV1-P4 The Date Marking campaign against food waste by Too Good To Go / Ilaria Ricotti (Too Good To Go Italy Srl)

WMV1-P5 AirPrex P-Recovery and Sludge Optimization / Rudolf Bogner, Davide Perduca (Perduca Ambiente srl, Mantova, Italy)

WMV1-P6 Circular Economy as a good answer to crises: the CESME project / Valeria Stacchini (Metropolitan City of Bologna, Italy)

WMV1-P7 Sustainably Improving and Scaling the Recovery of Recyclables with AI and Data / Gary Ashburner (AMP Robotics)

WMV1-P8 Bioconversion mediated by black soldier fly (*Hermetia illucens*): the HERMES project / E. Santangelo, M. Carnevale, F. Gallucci, C. Beni, F. Petrazzuolo, E. De Santis, A. De Iudicibus, A. Assirelli (CREA Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria), S. Amone, M. De Mei, F. Lecce (ENEA, Centro Ricerche Casaccia)

WMV1-P9 Intelligent waste infra management as a part of Corporate Carbon Responsibility / Johanna Alakerttula, Sanna Taskila, Mikko Ahokas (Macon Oy, Finland), Outi Laatikainen (KAMK University of Applied Sciences, Finland)

WMV1-P10 The transformation of waste in biological fertilizer: circular economy for private companies and public administration / Tommaso Pardi, Violante Mori, Luca Mori (BioXplosion srl, Pisa, Italy)

WMV1-P11 LCA of Concrete Made with Recycled Peritoneal Dialysis Plastic as Aggregate Material / Benedetta Copertaro, Gianluca Magrini (Newster System S.r.l., Cerasolo di Coriano (RN) – Italy), Rebecca Craine, Evangeline Buckmaster, Jakob Winkler, Vanessa O'Brien, Thomas Pickard, Olivia Flower, Louise Bardwell (The Australian National University- Canberra), Ryan Pike (Waste Group, Australia)

WMV1-P12 Analysis of citizens behaviour in the processes of separate collection / Mangiagli Sebastiano (Istituto Tecnico Industriale "E. Fermi", Siracusa, Italy)

WMV1-P13 Sustainable fashion industry: barriers and drivers for the transition towards circular economy / Simona Fortunati (Università degli Studi della Tuscia di Viterbo, Italy)

WMV1-P14 Preparation of Underfloor heating panels with poly laminate sheets and caps from recycled packaging / Buonocore Gregorio, Luca Pierantonio (Università della Calabria, Italy)

WMV1-P15 GLycerol to Aviation and Marine prOducts with sUstainable Recycling / Manuela Guiducci (Ciaotech srl, PNO Group, Rome, Italy)

WMV1-P16 Application of hyperspectral imaging to the recycling of different solid waste streams / Giuseppe Bonifazi, Giuseppe Capobianco, Paola Cucuzza, Riccardo Gasbarrone, Ludovica Fiore, Roberta Palmieri, Silvia Serranti, Oriana Trotta (Sapienza University of Rome, Italy)

WMV1-P17 Imaging iperspettrale per il riconoscimento di plastiche derivanti da attività agricole nei terreni / Giuseppe Bonifazi, Eleuterio Francesconi, Riccardo Gasbarrone, Silvia Serranti (La Sapienza Università di Roma, Italia).

WMV1-P18 Recycling of rare earth elements from electric motors of the e-mobility / Gianluca Torta, Fabrizio Passarini, Luca Ciacci, Ivano Vassura (University of Bologna - Alma Mater Studiorum, Italy).

WMV1-P19 Construction and plastic wastes as resources for new modular bike paths / Marc Martín, Luis Granda (LEITAT Technological Center, Terrassa, Spain), Grégory Coué, Carolina Carbó (Kompuestos, Palau Solità i Plegamans, Spain)

WMV1-P20 Feasibility study of a circular scenario for personal protective equipment waste / Marco Marconi (Università degli Studi della Tuscia), Daniele Landi (Università degli Studi di Bergamo), Edoardo Bocci (Università degli Studi eCampus)

WMV1-P21 Co-hydrothermal carbonization of stabilised organic fraction and landfill leachate for activated carbon production / Alessandro Cardarelli, Marco Barbanera (University of Tuscia, Viterbo, Italy), Pierpaolo Lombardi (Ecologia Viterbo srl, Roma, Italy), Andrea Nicolini (CIRIAF, University of Perugia, Italy)

WMV1-P22 New recyclability solutions by MTB / Esthel Osso & Guilhem Grimaud (MTB ECO-INNOVATION Team)

WMV1-P23 REMADYL: Removal of Legacy Substances from polyvinylchloride (PVC) via a continuous and sustainable extrusion process / Guy Buyle (Centexbel), Marco de la Feld, Giuseppe Salvio, Madeira Scauri (ENCO srl), Johan Pauwels (Deceuninck), Jan Diemert (Fraunhofer-Institut für Chemische Technologie), Marta Estrellés Luna (AIMPLAS)

WMV1-P24 Supercritical water precipitation for metal recovery and recycling: an advanced solution to improve the supply chain sustainability in the surface treatment industry / Carlotta Micale, Dario Mosconi, Riccardo Momoli, Marco Bersani (Circular Materials s.r.l.)

WMV1-P25 Supercritical water precipitation for metal recycling and cyanides abatement from wastewaters: a case study / Carlotta Micale, Dario Mosconi, Riccardo Momoli, Marco Bersani (Circular Materials s.r.l.)

WMV1-P26 Supercritical water precipitation for precious metal recycling from galvanic wastewaters: case studies for Au, Pt and Ru / Carlotta Micale, Dario Mosconi, Riccardo Momoli, Marco Bersani (Circular Materials s.r.l.)

WMV1-P27 e-hyrec® and e-lorec® devices for selective recovery of LNAPL and DNAPL / Camilla Lanari, Guido Bonfedi, Federico Villani (Eni Rewind, San Donato M.se, MI), Francesca Rubertelli, Andrea Chiodini, Stefano Loda (Eni S.p.A. Novara, Italy)

WMV1-P28 Microbial Cell Factories for hemp lignocellulosic biomass valorization / Stefano Raimondi, Raffaella Ranieri, Celeste Fiorani, Maddalena Rossi, Alberto Amaretti (University of Modena and Reggio Emilia, Modena, Italy), Simone Cusimano, Gianluca Ottolina (National Research Council, Milan, Italy)

WMV1-P29 CarboxyLCA: Assisting the decision-making in waste valorization by computer-aided design tool / Mateo Saavedra del Oso, Miguel Mauricio-Iglesias, Almudena Hospido (Universidade de Santiago de Compostela, Spain).

WMV1-P30 Management coordination and recovery strategies for sludge and urban waste (Ecoval project) / Miguel Mauricio, Marta Carballa (University of Santiago de Compostela), Anton Taboada-Santos (Cetaqua Galicia, Water Technology Centre), Ángela Muñiz (Fundación Empresa Universidad de Galicia).

WMV1-P31 Introducing TERRE: a strategic project driving circular bioeconomy transition in agrosystems / A. Macagnano (CNR), M. Mari (CNR), G. Santagata (CNR), P. Cerruti (CNR), A. Maienza (CNR), B. Matturro (CNR), Giuseppe Scarascia-Mugnozza (University of Tuscia), Fabrizio De Cesare (University of Tuscia)

WMV1-P32 Waste-to-Chemical processes as alternatives to the energy valorisation of plastic waste / F. Viganò, A. Conversano, D. Di Bona, D. Sogni, S. Consonni (Politecnico di Milano, Milan, Italy; LEAP Scarl, Piacenza, Italy)

WMV1-P33 Risk and opportunity analysis of a waste (EWC 030105) to energy plant / Massimiliano Londei (Sinergia EPC srl), Federico Ferrini (Techfem S.p.a.), Gianluca Pallotta (LUBE S.r.l.), Daniele Vanzini (MIT Ambiente S.r.l.)

WMV1-P34 Innovative food supply chains and new business models for slaughterhouse waste: BS Green case study / Giuseppe Pulina (Università di Sassari, Italy), Andrea Massidda (BS GREEN), Simone Bonizzardi (ANAERGIA)

WMV1-P35 VINUM. Circular economy transition on wine making: valorization of wastes / Sauro Vittori, Doaa Abuelenein, Germana Borsetta, Giovanni Caprioli, Ahmed Mustafa (UNICAM), Enrico Ciarimboli (Mayor of Morro D'Alba Municipality)

WMV1-P36 Zero Waste Cities - Brazilian Zero Waste Model / Rodrigo Sabatini, Taina Wanderley (Istituto Lixo Zero Brasil)

WMV1-P37 Hydrogen and Methane processing plastic, tires waste by innovative LASER PYROLYSIS / Paolo Peri (Kima Eko Engineering), Davide Russo, Christian Spreafico (University of Bergamo, Italy), Riccardo Degl'Innocenti (University of Lancaster, UK)

WMV1-P38 Using Computer Vision and AI to automate the identification of Contaminated material in Recycling collections / Ken Tierney (AMCS Group, Limerick, Ireland).

WMV1-P39 The industrial green revolution in biomass extraction and downstream / Giorgio Capaldi, Lorenzo Gallina, Arianna Binello, Luisa Boffa, Giancarlo Cravotto (Università degli Studi di Torino, Italy).

WMV1-P40 Recycling of plastic materials in road construction industry / Daniela Laura Buruiana, Viorica Ghisman, Gabriel-Bogdan Carp ("Dunarea de Jos" University of Galati, Romania)

WMV1-P41 Re-use of slag waste in the agricultural sector / Nicoleta Bogatu, Georgiana Ghisman, Cristian-Dragos Obreja, Viorica Ghisman, Daniela Laura Buruiana (Dunarea de Jos University of Galati, Romania)

WMV1-P42 Tanning industry and circular bioeconomy: energy recovery from circular sludges / Daniela Caracciolo (Stazione sperimentale per l'industria delle pelli e delle materie concianti srl, Pozzuoli, Italy), Massimo Urciuolo, Renata Migliaccio, Giovanna Ruoppolo (CNR, Napoli, Italy), Francesca Di Lauro, Marco Balsamo, Fabio Montagnaro (Università degli studi di Napoli Federico II, Italy).

WMV1-P43 PCR from Domestic Waste Collection: the Italian model as leading reference / Massimo Veronelli (Sirmax spa, Cittadella - PD, Italy)

WMV1-P44 Technology to the rescue for a smart and sustainable approach to waste management / Leon Hayes (Taoglas Waste Technologies, Glasnevin, Ireland)

WMV1-P45 Fundamental measures for an exactly circular economy / Roberto Guizzardi, Marcela Naranjo Girardi (Tecnoservizi Ambientali Srl, Bergamo, Italy)

WMV1-P46 Circular Economy for Bio-Mass Valorisation: Two Successful Case Studies / Valentina Beghetto, Vanessa Gatto, Riccardo Samiolo, Manuela Facchin, Silvia Conca, Noemi Bardella (Crossing Srl, Treviso, Italy)

WMV1-P47 Utilisation of Ground Coffee Waste as Furniture Material / Gülşah BALAMUT ARSLAN, Merve ASLAN KADIZ (Kastamonu Entegre Ağaç Sanayi & Ticaret A.Ş., Istanbul, Turkey)

TUESDAY 8
NOVEMBER

10:00 -
13:00

Global Water Expo
Room

Water
Management
and Valorization

Digitalization and cyber-physical systems for water-smart cities and industries: demos and showcase

Language: English

Organized by: Ecomondo Technical-Scientific Committee, DigitalWater2020 Synergy Group and ICT4WATER, Water Europe, European Commission, Università Politecnica delle Marche

Digital and cyber-physical systems in urban and industrial water cycles are more and more available at commercial level, while innovations have been developed and validated in recent EU-Horizon2020 projects which have reached their final stage. In this context, ICT4WATER is a large cluster of EU projects to boost digital innovation in water sector, while DigitalWater2020 Synergy Group (DW2020) is a group of n.5 Horizon2020 projects that has closely worked on four thematic tasks forces: FIWARE and ontology, Sensors and demonstration, Business models and Communication. In addition, digital twins and cyber-physical systems have been proposed for urban-industrial symbiosis and water-smart industries. After presenting the final results of DW2020, the workshop will provide demos of relevant solutions and serve as an interactive session to support market uptake.

Section chairs

Nicolas Caradot – Berlin Competence Centre for Water - Coordinator of Digital Water City

Giulio Pattanaro – European Commission

Francesco Fatone – Technical Scientific Committee Ecomondo and Università Politecnica delle Marche

Programma (TBD)

10:00 – 10:10 Introduction by the Chairs

10:10 – 10:25 *Digital Water in Horizon2020 and Horizon Europe*

Giulio Pattanaro – EC-JRC

10:25 – 10:40 *ICT4WATER and Digital Water 2020 synergy group: current results after years of cluster implementation*

Lydia Vamvakieridou-Lyroudia – KWR (Netherlands)

10:40 – 10:55 *Current full scale digital framework in 5 European large water utilities of Berlin, Paris, Copenhagen, Sofia and Milano: challenges and solutions*

Speaker TBD

10:55 – 11:10 *Summary of policy recommendation from 5 digital water projects DWC, SCOREWATER, AQUA3S, FIWARE4WATER, NAIADES*

Ulf Stein and Nico Caradot – Ecologic and Berlin Competence Centre for Water (Germany)

11:10 – 12:30 Demo and showcase (co-chair Nicolas Caradot):

- Digital innovation in drinking water in digital water projects
- Digital innovation in sewer collection in digital water projects
- Digital innovation in wastewater treatment in digital water project

12:30 – 12:45 *Digital solutions for urban-industrial symbiosis in H2020 ULTIMATE project*

Aitor Corchero – EURECAT (Spain)

12:45 – 13:00 *Digital twin and cyber-physical framework in water smart industries in H2020 AQUASPICE* Georgios Arampatzis – Technical University of Crete (Greece)

TUESDAY 8
NOVEMBER

10:00 -
13:30

Monitoring &
Control Room

**Environmental
Monitoring &
Control**

*Conference open to
Papers*

Odor emissions: from abatement technologies to new control strategies

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & ISPRA, Italian Chemical Society - Division of Environmental and Cultural Heritage Chemistry

CALL FOR PAPERS

The Ecomondo Odor Emissions conference (at its twelfth 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, Institute for Protection and Environmental Research

Gaetano Settimo, National Institute of Health

Programme

10.00 Introduction by the Chairs and a short summary on the papers presented through posters

10.20-10.50 *Update on national and international technical standards*
Domenico Cipriano, RSE SpA (energy sector research organization)

10.50-12.40 **Speeches from the Call for Papers**

10.50-11.00 *Monitoraggio odori in continuo e ottimizzazione di processo grazie alla modellazione CFD*

Davide Scaglione, Gruppo CAP

11.00-11.10 *Implementazione di un modello di micromixing in un codice di dispersione a particelle*

Gianni Tinarelli, Daniela Barbero, ARIANET S.r.l. - Roberto Sozzi

11.10-11.20 *SIFT-MS on site: l'analizzatore che respira*

Corrado Corradi, Giulio De Prosperis, Alessandro Frugis, Giancarlo Cecchini, Alessandro Filippi, Acea S.p.A.

11.20-11.30 *Analisi chimica di composti odoriferi mediante TD-GC-MS/FID/PFPD*

Elisa Polvara, Marzio Invernizzi, Selena Sironi, Dipartimento di Chimica, Materiali e Ingegneria Chimica "Giulio Natta" del Politecnico di Milano - Daniele Morisini, SRA Instruments S.p.A.

11.30-11.40 *Approccio sperimentale integrato per lo screening di eventi odoriferi in poli industriali*

Antonio Mazzone, A.R.P.A. Puglia; F. Serini, Antonio Fornaro, Labservice Analytica Srl; Davide Vignola, Pollution Analytical Equipment

11.40-11.50 *Sviluppo di un sistema di monitoraggio in continuo per lo studio dell'efficienza di un impianto di trattamento emissioni odorifere*

Federico Cangialosi, Edoardo Bruno - Tecnologia e Ambiente srl; Antonio Fornaro, Francesco Serini - Labservice Analytica srl

11.50-12.00 *Electronic Nose for real-time monitoring of odour emissions at a*

Wastewater Treatment Plant Stefano Prudenza, Alessandra Panzitta, Carmen Bax, Laura Capelli, Dipartimento di Chimica, Materiali e Ingegneria Chimica "Giulio Natta" del Politecnico di Milano

12.00-12.10 *Challenges in characterization of odour emissions from wood chip storage*

Francesca Tagliaferri, Marzio Invernizzi, Selena Sironi, Dipartimento di Chimica, Materiali e Ingegneria Chimica "Giulio Natta" del Politecnico di Milano

12.10-12.20 *Progetto SAVAGER Sorveglianza AVanzata GEstione Rifiuti*

Nadia Fibbiani, Dipartimento di Como Varese - ARPA Lombardia

12.20-12.30 *Controlli sulla gestione dei rifiuti transfrontalieri sul territorio*

ARPA Lombardia, Roberta Meroni, ARPA Lombardia; Marco Ciccarelli, ARPA Campania

12.30-12.40 *A Sustainability-Centric Tool for Schools' Carbon Footprint Assessment: CO2 School*

Tommaso Bosi, Dipartimento di Ingegneria dell'Università degli Studi Roma Tre - Paolo Di Nardo, Dipartimento di Medicina Università di Roma Tor Vergata

12.40-13.00 **Poster Session**

EMC1-1 *Comparison of aerated bins and sealed containers; evaporation effect and odour control in private household biowaste collection*

Hanna Virpiranta, Mikko Ahokas (Macon Oy, Finland), Outi Laatikainen (KAMK University of Applied Sciences, Finland)

EMC1-2 *Laboratorio di monitoraggio ambientale basato su drone*

Gianluca Stani SRA Instruments

EMC1-3 *Stazione di monitoraggio in continuo delle emissioni degli odori e della qualità dell'aria*

Gianluca Stani SRA Instruments

13.00-13.30 Discussion and conclusions

TUESDAY 8
NOVEMBER14:00 -
17:00

Workshop Room

Circular
Economy Value
Chains**Advanced experiences on circular economy in the WEEE sector**

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & ERION

Knowledge of the Circular economy principles needs to be spread to the society but must be communicated not as a theory but as something reachable and concrete. Industrial examples will be provided using as reference sector the Electrical and Electronic Equipment sector. Best practice already in place will be showcased by industrial actors from all the nodes of the chain: from design and innovative business models to social aspeSTC in waste management.

Session Chair

Giorgio Arienti, Erion WEEE

Programme

14.00 Introduction by the Chairs

Giorgio Arienti, Erion WEEE

14.20-15.00 *Sustainability from the point of view of EEE producers*

Diego Cavallari, ACER Italy S.r.l.

Roberta Bernasconi, Whirlpool Italia S.r.l.

15.00-15.20 *Preparation for reuse of large appliances*

Manuel Odasso, RI-GENERATION S.b.a r.l.

15.20-16.00 *From pre-treatment to recycling innovative activities*

Giuseppe Piardi, Stena Recycling S.r.l.

16.00-16.20 *Pay-per-use in the household EEE sector*

Roberto Reale, REDO SGR S.p.a. Società Benefit

Nicola De Cesare, COMPASS RENT S.r.l.

16.20-16.40 *Not only circular "economy" but also social aspeSTC*

Danilo Vismara, LABORAEE S.r.l.

16.40-17.00 Discussion and Closure by the chair

TUESDAY 8
NOVEMBER

14:00 -
17:30

Monitoring &
Control Room

**Environmental
Monitoring &
Control**

*Conference open to
Papers*

Indoor air quality: sources of emissions, air changes, energy efficiency and the new control and monitoring technologies

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & National Institute of Health

CALL FOR PAPERS

The conference aims to provide a picture of indoor air quality in the various closed environments, which have been at the center of attention in the world because of the role played in the recent pandemic shock, considering the challenge opened by the entire sector in the field of the design linked to new lifestyles, materials, ventilation, energy efficiency and indoor air monitoring technologies. The space dedicated to the discussion will represent an important moment for an exchange on the different approaches in relation to the challenges that will have to be faced.

Session Chairs

Gaetano Settimo, National Institute of Health
Gianluigi de Gennaro, University of Bari "Aldo Moro"

Programme

14.00 Introduction by the Chairs (and a short summary on the papers presented through posters)

14.20-14.40 *TBD*

Luca Fontana, World Health Organization (TBC)

14.40-15.00 *Indoor air quality: where are we?*

Gaetano Settimo, National Institute of Health

15.00-15.15 *The planning of a new school centered on students*

Mauro di Molfetta, Municipality of Statte

15.15-15.30 *Indoor air quality in school environments: SIAQ (School Indoor Air Quality) project.*

Bosio * C., Cecere * E., Del Din * A., Faustin * G., Franzoi * M., Frascetta * L., Frasnelli * D., Giacomini * S., Giovannini * S., Lazzarotto * F., Lazzeri * C., Manca * D., Mazzarelli * M., Tomio * T., Volcan * D., Modonese * D., Pellizzari * V., Burzacca * P., Donega ** M., Tirler ** W. * Galileo Galilei Technical Technological Institute, Bolzano; ** Eco-Research, Bolzano

15.30-17.15 **Speeches from Call for Papers**

15.30-15.45 *CO2 Lab: un percorso didattico STEM per il monitoraggio della CO2 in ambienti scolastici*

Francesco Suriano¹, Francesco Riminucci¹, Francesco Marucci¹, Enrico Cozzani¹, Stefano Zampolli², Marica Canino²; ¹Consorzio Proambiente S.c.r.l.-Tecnopolo Bologna CNR, Bologna, ²Istituto per la Microelettronica e Microsistemi IMM-CNR, Bologna

15.45-16.00 *Organic contaminants in the Italian Universities indoor environments*
Paola Romagnoli, Catia Balducci, Mattia Perilli, Marina Cerasa, Angelo Cecinato,
National Research Council of Italy-Institute of Atmospheric Pollution Research,
Montelibretti (RM)

16.00-16.15 *Effetto dei fattori socio-demografici e ambientali sulle dinamiche di diffusione dell'infezione da SARS-CoV-2: il modello endemico-epidemico*
Katuscia Di Biagio, Marco Baldini, Servizio Epidemiologia Ambientale, ARPA Marche;
Jacopo Dolcini, Dipartimento di Scienze Biomediche e Sanità Pubblica, Università
Politecnica delle Marche

16.15-16.30 *Inquinamento indoor: l'impatto delle diverse fonti energetiche sulla salute*
Simone Augusto Castagna, Liguigas Innovhub Stazioni Sperimentali per l'Industria
srl, Milano

16.30-16.45 *Indoor Air Quality e Smart Bulding: sinergie e opportunità*
Andrea Lanna, Lorena Nappa-OVER, Giuseppe Santoro-CBRE, Luca Alberto Piterà-
AICARR, Michele Rossi, Nicolas Fernando Marrugo Cardenas-VEOLIA, Umberto
Paracchini-KIEBACK&PETER

16.45-17.00 *Garibaldi Complex: efficienza energetica e qualità dell'aria per un modello energetico innovativo*
Michele Mariella, Giuseppe Sperduto, Alessio Bosi, Mellacqua, Maire Tecnimont,
Antonella Santoro, NUVAP

17.00-17.15 *Il radon negli ambienti di vita confinati e gli interventi di efficientamento energetico degli edifici*
Silva Brini¹, Elisabetta De Maio¹, Francesca De Maio¹, Giuliana Giardi¹, Arianna
Lepore¹, Daniela Santonico¹, Giuditta Graziano², 1ISPRa Istituto Superiore
Protezione e Ricerca Ambientale; 2MiTE Ministero della Transizione Ecologica.

17.15-17.45 Discussion and Closure (by the chairs)

Poster session

EMC2-1 *An indoor case study: analysis of fragrances in a house during cleaning operations and under normal conditions*

Serena Santoro¹, Marina Cerasa¹, Paola Romagnoli¹, Massimiliano Frattoni¹, Paolo Ceci², Catia Balducci¹, 1National Research Council of Italy-Institute of Atmospheric Pollution Research, Montelibretti (RM); 2National Research Council of Italy-Institute of Atmospheric Pollution Research - secondary office c/o Ministry of Ecological Transition, Roma.

EMC2-2 *Seasonal trend of PM_{2.5} and PAHs in a private home, and effects of 2020 CoViD-19 lockdown*

Catia Balducci¹, Cecinato Angelo¹, Paola Romagnoli¹, Mattia Perilli¹, Serena Santoro¹, Marina Cerasa¹, Paolo Ceci², 1National Research Council of Italy-Institute of Atmospheric Pollution Research, Montelibretti (RM); 2National Research Council of Italy-Institute of Atmospheric Pollution Research - secondary office c/o Ministry of Ecological Transition, Roma.

EMC2-3 *Analisi in continuo sino a 12 parametri e valutazione della trasmissibilità dei virus*

Gianluca Stani, SRA Instruments, Cernusco sul Naviglio (MI).

EMC2-4 *Analysis of the relationship between environmental fine PM concentrations and indoor air quality*

Andrea Lanna, Giuseppe Molinaro, Lorena Nappa, Alessandro Peruzzi, Gian Marco Sabatucci, OVER

EMC2-5 *Dall'agricoltura un isolante per l'edilizia*

Giuseppe Marconi e Leonardo Amadio, SAVE AS SrL, Maltignano AP.

EMC2-6 *Una proposta integrata di miglioramento e di monitoraggio della IAQ*

Gian Luca Guerrini, Raffaella Moro, REair Srl, Milano, Angelo del Favero, Università La Sapienza di Roma e Università Cattolica di Roma.

EMC2-7 *Synthesis of Bio-Based Wood Adhesive*

Salise Oktay, Nilgün Kizilcan, Başak Bengü S.O. Istanbul Technical University, Turkey.

EMC2-8 *Utilisation of Ground Coffee Waste as Furniture Material*

Gülşah Balamut Arslan Kastamonu Entegre Ağaç Sanayi & Ticaret A.Ş., Merve Aslan Kadiz, Department of Research and Development, 34906, Istanbul, Turkey

TUESDAY 8
NOVEMBER

14:00 -
17:30

Ravezzi 1 Room
South Hall

Research and
Innovation

Cluster meeting: Horizon 2020 and Horizon Europe projects contributing to the EU Plastics Strategy

Language: English

Organized by: European Research Executive Agency (REA)

On 16 January 2018, the EU adopted its European Strategy for Plastics in a Circular Economy. The strategy is part of the EU Action Plan for Circular Economy, and builds on existing measures to reduce plastic waste. The EU Plastics Strategy is a key element of Europe's transition towards a carbon neutral and circular economy as set out in the EU Green Deal and Research&Innovation actions are paramount to ensure such transition. Since 2018, Horizon 2020 and Horizon Europe (EU's research and innovation framework programmes) have funded projects which develop innovative solutions to boost the circular economy for plastics. The meeting wants to showcase the contribution of Horizon 2020 and Horizon Europe projects to the EU Plastics Strategy and therefore to the EU Green Deal. The meeting will see the participation of around 20 ongoing Horizon 2020 and Horizon Europe projects contributing to the EU Plastics Strategy and EU Action Plan for Circular Economy from different angles: from improving the sorting separation and recycling of multi-layers materials, to removing hazardous substances in plastics, from better understanding and monitoring the impact of plastics in the environment (including pollution) to tackling specific plastics challenges in agriculture.

The Horizon 2020 projects involved in the meeting have already taken part in other clustering events, where some cluster representatives / ambassadors have been appointed. This cluster meeting wants to be also a follow-up of previous clustering meetings, with the additional contribution of recently-signed Horizon Europe projects. Relevant project activities and solutions that have the potential to contribute to EU policy developments in the area of circular and sustainable plastics will be presented and further clustering opportunities will be identified.

Session chairs

REA representative (TBC)

Horizon 2020 and Horizon Europe cluster representatives (TBC)

Programme

14.00-14.10 Welcome and objectives of the meeting

Speaker from REA (TBC)

14.10-14.30 *Brief overview of Horizon 2020 and Horizon Europe funding opportunities linked to the EU Plastics Strategy*

Speaker from REA (TBC)

14.30-17.00 *Individual contribution of Horizon 2020 and Horizon Europe projects to the EU Plastics Strategy*

Short pitches by Horizon 2020 and Horizon Europe project representatives

17.00-17.30 Conclusion and follow-up actions

Short final messages by Horizon 2020 and Horizon Europe cluster representatives and REA

TUESDAY 8
NOVEMBER

14:00 -
17:30

Reclaim Expo
Room C3 Pav.

Blue Economy

Regeneration of coastal areas and ports and adaptation to climate change

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & ISPRA, GNRAC, Legambiente, WaterfrontLab

The funding lines of the PNRR, Italian National Plan for Relaunch and Resilience, dedicated to the regeneration of urban areas and ports, in the view of the energy and ecological transition, represents an extraordinary opportunity also for the redevelopment and reorganization of coastal areas in terms of sustainability, resilience and adaptation to the effects of climate change such as sea level rise, coastal erosion and marine flooding. The redevelopment of coastal urban areas, waterfronts, real estate and infrastructure, the protection, enhancement and redevelopment of the natural heritage, can contribute to the overall regeneration and safety of coastal systems through integrated, "multi-objective" projects. Reducing vulnerability and exposure to coastal risks and ensuring sustainable development together, represent the indispensable rails for the policies of relaunch of coastal-maritime tourism, quality and safety of living and doing business in coastal areas, looking beyond the difficult crisis period we are coming from. To launch virtuous projects in this sense, synergies must be created between administrators, managing bodies, economic operators, and stakeholders from the various areas of interest. The conference intends to bring this need to the attention of the public and show those most significant experiences on the national and international scene, already realized or in progress, and be the first of a series of events on the subject as an opportunity for meeting and exchange between administrators and sector operators to encourage the transfer of best practices and the start of possible new projects.

Section Chairs

Roberto Montanari, Emilia-Romagna Region
Enzo Pranzini, University of Florence, GNRAC

Programme

Section 1 - COASTAL AREAS, REGENERATION AND ADAPTATION TO CLIMATE CHANGE

The European initiative "Knowledge Hub on Sea Level Rise" and the impacts on the coast

Nadia Pinardi, University of Bologna, Co-chair KH-SLR;

Coastal cities and climate change: the pilot cases of the north coast of Matanzas (Cuba)

Juan Alfredo Cabrera Hernández, Observatorio COSTATENAS Universidad de Matanzas, Cuba.

Spatial planning and coastal adaptation in the State of Rhode Island

Grover Fugate, Coastal Resources Management Council of Rhode Island

The MiTE Experimental Programme on adaptation to climate change in urban areas: the projects of coastal municipalities

Francesca Giordano, ISPRA;

Two-sided erosion and controlled environmental regeneration

Michele Manigrasso, Italian Coastal Landscapes Observatory, Legambiente

Waterfront requalification and adaptation to Sea Level Rise: the Rimini experience

Anna Montini, Councillor for Ecological Transition, Environment, Sustainable Development, Blue Economy, of Rimini Municipality;

Section 2 - PORT REGENERATION, ENERGY TRANSITION AND DEVELOPMENT OF PORT AREAS

Palermo Port Authority

Pasqualino Monti Presidente

Economic and urban perspectives of the Port of Genoa

Marco Sanguineri, Director of Planning and Development, Port Authority of the Western Ligurian Sea / Beatrice Moretti, Architect, PhD, Department of Architecture and Design, University of Genoa

Green Ports: the future of the Port of Ravenna between efficiency, intermodality and sustainability

Daniele Rossi, President of Ravenna Port Authority

The LNG depot by the Port of Ravenna, a concrete contribution to the energy transition

Alessandro Gentile, CEO of Depositi Italiani GNL, PIR Group

Coastal and port interfaces. Themes and projects

Matteo di Venosa, Associate Professor of Urban Planning, G. d'Annunzio University of Chieti – Pescara.

For a sustainable development of smaller ports: the middle Adriatic as a case study

Gerardo Doti, Associate Professor of History of Architecture, University School of Architecture and Design of Camerino.

TUESDAY 8
NOVEMBER

14:00 -
18:00

Global Water Expo
Room

**Water
Management
and Valorization**

The National Recovery and Resilience Plan (PNRR) and water resource management

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & Utilitalia

The National Recovery and Resilience Plan (PNRR) is offering a significant acceleration of investments and reforms of the Integrated Water Service (SII) and can therefore affect the improvement of the service and contribute to overcoming the criticalities of the sector, especially in some areas. The challenges, issues and proposals for the industrial development of utilities and the role of institutions for the implementation of the PNRR and the achievement of the milestones envisaged in the management and protection of water resources will be addressed.

Session chair

Giulia Chieffo, Vice Director Utilitalia

Programme

14.00 *Governance of the IIS and PNRR investments*

Maria Gerarda Mocella, Utilitalia

The role of the Ministry of Infrastructure and Sustainable Mobility

Attilio Toscano, Ministry of Sustainable Infrastructure and Mobility

The role of the Ministry of Ecological Transition

Giuseppe Lo Presti, Ministry of Ecological Transition

Implementation of the PNRR over a large area: Renaturation of the Po river - recovery of the country's most important ecological corridor in defense and development of the territories

Alessandro Bratti, University of Ferrara

The role of ANEA

ANEA Representative (TBC)

The point of view of the suppliers of technologies and plants for water treatment

Representative of AQUA ITALIA / Anima Confindustria (TBC)

PNRR and Environment

Stefano Ciafani, Legambiente

The role of ARERA

Representative of ARERA (TBC)

17.45 *Conclusions*

Alessandro Russo, Vicepresident Utilitalia

TUESDAY 8
NOVEMBER

14:00 -
18:00

Noce Room A6
Pav

**Circular
Economy Value
Chains**
*Conference open to
Papers*

The industrial symbiosis for the national strategic circular economy

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & ENEA e SUN (Symbiosis Users Network)

CALL FOR PAPERS

Industrial symbiosis is a crucial tool for reducing dependence on raw materials, boosting competitiveness and the post-Covid economy and increasing the resilience through the establishment of territorial ecosystems able to absorb exogenous imbalances. In 2017, the Italian document "Towards a Model of Circular Economy for Italy - Overview and Strategic Framework" drawn up by the Ministries of the Environment and of the Economic Development, underlined the importance of industrial symbiosis as a tool for system eco-innovation, highlighting the need to set up an organic and systematic portfolio of economic and financial instruments to support businesses. In this direction, in 2021 the updated "National strategy for the circular economy", foreseen among the 63 fundamental reforms for the implementation of the Italian National Recovery and Resilience Plan, identified industrial symbiosis as one of the nine areas of intervention necessary to achieve the transition towards the circular economy in our Country, also providing support for the development of projeSTC, also through specific regulatory and financial instruments.

That event, now in its sixth edition, offers an opportunity to take stock of the road travelled so far and to define the goals that are to be achieved in the future in terms of policies and real operational cases.

Session Chair

Laura Cutaia, ENEA – SUN Symbiosis Users Network

Programme

14.00-14.10 Introduction

14.10-14.50 Invited speakers

Silvia Grandi, Ministry of Ecological Transition
 Giacomo Vigna, Ministry of Economic Development
 Paolo Ferrecchi, Emilia-Romagna Region
 Marco Ravazzolo Confindustria (General Confederation of Italian Industry)

14.50-15.50 Invited speakers – technical

Industrial symbiosis applied to the Lombard context

Enrico Maffa, Tenova

The industrial symbiosis in the process industry: the Norwegian experience

Stine Skagestad, EYDE Cluster

Certification and standardization of industrial symbiosis

Carlo Brondi, CNR, SUN GdL4

Results of the survey

Massimo Ramunni, Assocarta - SUN GdL1

15.50-17.20 Presentations from Call for papers

L'importanza della co-progettazione nello sviluppo in un progetto di simbiosi industriale

Elisa Amodeo, INVENTOLAB

Towards an industrial symbiosis network in Marche region: an exploratory research

Alessandra Bonoli, Università di Bologna

Evaluation of the potential for development of the industrial symbiosis network for production of secondary pig iron by metallurgical sector in the Lombardy region

Reza Vahidzadeh, Università degli Studi di Brescia

Il contributo e il potenziale della Simbiosi Industriale – il caso di studio della provincia di Milano

Alessandro Reginato, Gruppo CAP

Assessing environmental/social benefits of industrial symbiosis in urban residues management

Giuseppe Mancini, Università di Catania

Agri-fiSh Project. Circular economy application: from the field to the net. Innovative feeds from agricultural wastes for a sustainable aquaculture

Germana Borsetta, Università di Camerino

Dall'agricoltura un packaging compostabile

Giuseppe Marconi, Save As

Green products from industrial symbiosis: are consumers ready for them?

Luca Fraccascia, Sapienza Università di Roma

End of waste: l'esperienza applicativa
Alessandra Carboni, Montana

17.20-17.50 **Pitch – Case study**

Industrial symbiosis in the production of sustainable textiles: Orange Fiber s.r.l.
Rosario Carrabino, Università di Catania

Organic waste upcycled materials and industrial symbiosis practices: the current Italian scenario
Luca Alessandrini, Politecnico di Milano

Bioeconomia circolare nel settore vitivinicolo: il ruolo della Simbiosi Industriale
Giulia Abbati, Università degli Studi Roma Tre

Ponticelle: dal risanamento alla riqualificazione di un'ex area industriale
Giuliano Romano, Eni Rewind

Industrial Symbiosis checklist for assessing the potential of Italian SMEs
Valentina Ventura, Università di Bologna

Simbiosi Industriale per la crescita economica sostenibile: analisi di modelli di collaborazione
Eugenio Papa, Università di Bologna

17.50-18.00 Discussion and Closure by the chair

Poster Session

SUN – P1 *Quantification of circular economy indicators in the wine sector: case study Cantine Nicosia S.p.A*
Manuela Turco*, Sergio Arfò*, Chiara Tabita* , Aldo Carpitano**, Agata Matarazzo*; * Università di Catania, **Nicosia S.p.A.

SUN – P2 *Principles, methods and practices for declaring the content of recycled or reclaimed material in*
Svitlana Berzina, Svitlana Perminova, All-Ukraine NGO Living Planet

SUN – P3 *Quantification of environmental and economic performance indicators of a composting pilot plant for the correct waste management in Sicily*
Sergio Arfo*, Agata Matarazzo*, Giuseppe Guagliardi**, Angelo La Piana**, Alessia Arfo***; *Università di Catania, **Progitec S.r.l, **Università LUISS Guido Carli

SUN – P4 *Hydrogen ready gas engines with MW size*
Klaus Payrhuber, Andrea Pivatello, Jenbacher srl

SUN – P5 *Sviluppo di una metodologia per la valutazione di sinergie territoriali da database open source*
Chiara La Porta*, Tiziana Beltrani**, Marco Bortolini*, Valentina Ventura*, Laura Cutaia**, Marco La Monica**, Cristina Mora*; *Università di Bologna, **ENEA

SUN – P6 *Italian coal phase-out: strategic co-optimization on the day-ahead and ancillary services market*

Ilaria Livi*, Edoardo Somenzi*, Federico Pontoni**, Filippo Del Grosso*;

*Fondazione Eni Enrico Mattei, ** Fondazione Eni Enrico Mattei e Università Bocconi

SUN – P7 *Simbiosi industriale potenziale basata sul trasferimento di scoria nera*

Anna Gobetti*, Giovanna Cornacchia *, Marco La Monica**, Giorgio Ramorino*;

*Università di Brescia, **ENEA

SUN – P8 *Potentialities and weakness of EECs in Sardinia: chances to educate tourists and children*

Marta Fundoni, Università di Sassari

SUN – P9 *Industrial symbiosis applied to the sustainable fashion sector*

Motta F.*, Mertoli F.*, Zerbo A.*, Puleo R.*, Russo S.**: *Università di Catania,

**Università Luiss Guido Carli

SUN – P10 *Sviluppo sostenibile e smart cities e communities: il ruolo della finanza pubblica e privata.*

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

SUN – P11 *BIOMODEL4REGIONS*

Patrizia Circelli Ciaotech srl (PNO Group)

SUN – P12 *Materie prime, filiere globali e sistemi locali in una prospettiva eco-industriale. Il caso del legno*

Casolani V., Taddeo, R., Simboli, A. Università "G. D'Annunzio" di Chieti-Pescara

SUN – P13 *Comunità Circolari e nuovi modelli di produzione e consumo*

Flavio Cammillozzi, Enrico Miletto, Giancarlo Cecchini, Alessandro Filippi; Acea Elabori S.p.A.

SUN – P14 *Industrial symbiosis as the new opportunity to boost circular consumption models*

Elena Chiti, GM Ambiente & Energia S.r.l., SpinLife S.p.a.

SUN – P15 *B10-WALL*

Rete di imprese APEA Regionale CARTONECO e nLAB

SUN – P16 *Misurare l'economia circolare nel settore agroalimentare: una panoramica delle review*

Valentino Tascione*, Gavina Manca*, Andrea Raggi**, Luigia Petti**; *Università di Sassari, **Università di Pescara

SUN – P17 *3 strumenti per la neutralità climatica: carbon credits, carbon farming e carbon standards*

Michele Milan* Elisa Ferrari**, Daniele Dal Molin**, *EcamRicert e Merieux NutriSciences, **Bios srl

TUESDAY 8
NOVEMBER

14:15 -
16:15

Diotallevi 2 Room
South Hall

Financing,
Education and
Communication

Towards transparency: the role of sustainable finance against greenwashing

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & Italian Sustainable Investment Forum and ART-ER

Sustainable finance is crucial to achieve the European Green Deal targets and a sustainable post-pandemic recovery. However, while the demand for sustainable financial securities continues to grow, greenwashing has become a fundamental issue. If not managed and efficiently prevented, greenwashing can undermine decarbonization efforts of public and private organizations. For this reason, contrasting greenwashing is today one of the main challenges. Everyone has to contribute to this. Public authorities have to implement effective science-based policy measures towards a sustainable economy. Companies have to commit for a clear and accurate sustainability reporting, in order also to attract sustainable investments. Responsible investors have to put in practice sustainable science-based investment strategies and decisions. Consumers have to ask for more disclosure and orient their choices towards more transparent brands.

Session Chairs

Francesco Bicciato, Executive Director, Italian Sustainable Investment Forum (FFS)
Enrico Cancila, Area manager, ART-ER ("Attractiveness Research Territory" Emilia-Romagna Joint Stock Consortium)

Programme

14.15-14.25 Welcome remarks

Francesco Bicciato, Executive Director, Italian Sustainable Investment Forum (FFS)
Enrico Cancila, Area manager, ART-ER ("Attractiveness Research Territory" Emilia-Romagna Joint Stock Consortium)

14.25-14.40 *Institutional speech* - The role of European institutions in fighting greenwashing

Elisabetta Siracusa, Senior Advisor, DG FISMA (TBC)

14.40-14.55 *A new challenge for ISPRA: sustainable finance*

Roberta Alani, Environmental Certifications Service, ISPRA (Italian Institute for Environmental Protection and Research)

14.55-15.10 *Presentation of the paper by FFS on system strategies against greenwashing*

Arianna Lovera, Senior Programme Officer, Italian Sustainable Investment Forum (FFS)

15.10-16.10 Roundtable - *Towards transparency: industry, public institution and finance facing greenwashing*

With:

Enrico Cancila, Area Manager, ART-ER

Sara Capuzzo, President, Ènostra

Massimo Fileni, Vicepresident, Fileni Holding

Paolo Pastore, General Director, Fairtrade Italia

Giovanna Zacchi, Head of ESG Strategy, BPER Banca

Giorgio Zampetti, General Director, Legambiente

Moderated by Dania Mondini, Journalist, Rai TG1

16.10-16.15 Conclusion remarks

TUESDAY 8
NOVEMBER

14:15 -
17:30

Agri-food,
Forestry and Bio-
based Industry

NRRP and agriculture 4.0: synergies between supply chains for sustainable development

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & Consorzio Italiano Biogas (CIB)

Mission 2 of the NRRP, dedicated to “Green Revolution and Ecological Transition”, establishes interventions for sustainable agriculture and circular economy. These interventions are extremely important for the agricultural sector which will progress not only technologically but it will be able to offer its concrete contribution protecting soils, the environment and food production.

Session Chairs

Piero Gattoni, President of Consorzio Italiano Biogas (CIB)

Programme

Session 1 – NRRP: the role of technologies for the agroecological transition

14.15-14.30 *Introduction*

Piero Gattoni, President of Consorzio Italiano Biogas (CIB)

14.30-14.50 *Technologies financed under the NRRP*

Angelo Frascarelli, Director of Cesar

14.50-15.05 *Research and innovation as drivers for sustainable agriculture*

Stefano Vaccari, Director General of CREA (Council for Agricultural Research and Economics)

15.05-15.20 *Agriculture 4.0 for the agro-food system*

Marco Perona, Scientific Director of Osservatorio Smart Agrifood Brescia

15.20-15.35 *Farming 4.0 as territorial environmental protection*

Angelo Gentili, National Head of Agricultural ProjeSTC of Legambiente environmental association

15.35-15.50 A story of innovative agriculture: CIB partner (TBD)

Sessione 2 – The development prospects to give concrete shape to the NRRP actions

16.00-17.00 Round table

Massimiliano Giansanti, President of Confagricoltura (General Confederation of Italian Agriculture)

Representative of ORIGIN

Maurizio Gardini, President of Confcooperative (Confederation of Italian cooperatives)

Representative of Agronomi

Representative of Federunacoma (Italian Agricultural Machinery Manufacturers Federation)

Representative of CAI (Confederation of Italian Agromechanics and Farmers)

17.00-17.15 A story of innovative agriculture: CIB partner (TBD)

17.15-17.30 Closing

Representative of Italian Ministry of Agricultural, Food and Forestry Policy (TBC)

TUESDAY 8
NOVEMBER

14:30 -
17:15

Ravezzi 2 South
Hall

**Waste
Management
and Valorization**

Industrial and Municipal waste between industrial development, planning and market

Language: Italian

Simultaneous translation: English

Organized by: Ecomondo Scientific Technical Committee & Utilitalia

The distinction between industrial and municipal waste has very specific historical reasons and, above all, important consequences in terms of management and management responsibility. However, it takes on a different meaning depending on the perspective with which one looks at the world of waste. Territorial planning and the logic of the market operate, in a different way, starting from a clear separation between these two worlds. On the other hand, in the industrial perspective, where the only useful distinction is that between recoverable and non-recoverable waste, this distinction seems to lose meaning. Through the comparison between institutions, public authorities and waste operators, the conference will investigate the limits and implications of the distinction between municipal and industrial waste, in an attempt to understand if and possibly how it is possible to overcome it in a purely industrial logic.

Session Chair

Federico Foschini, President of Municipal Waste Europe

Programme

14.30 Introduction and coordination by the Chairman

Federico Foschini, President of Municipal Waste Europe

Industrial waste in waste management plans of Italian Regions

Luca Mariotto, Director of Environment Sector of Utilitalia

Waste deriving from treatment of municipal waste between legislation, regulation and market

Andrea Farì, Ambientalex

Roberto Scazzola, Scientific and policy officer European Commission DG ENV (TBC)

Waste deriving from treatment of municipal waste: data reporting for verification of compliance with european and national targets

Andrea Lanz, Italian Institute for Environmental Protection and Research

Laura D'Aprile, Head of Department of Ecological Transition and green investments, Italian Ministry of Environmental Transition

16.00 *The testimony of industry*

Marco Ravazzolo, Head of Environment and Energy, Industrial policies sector Confindustria

Patrick Hasenkamp, Vice President Waste of VKU, German Association of Local Utilities

Herwart Wilms, Managing Director of Remondis

17.00 Conclusions

Filippo Brandolini, Vice President of Utilitalia

TUESDAY 8
NOVEMBER

16:30 -

18:30

Diotallevi 2 Room
South Hall

**Circular
Economy Value
Chains**

Circular energies: The materials at the service of the energy transition

Language: Italian

Organized by: Ecomondo Scientific Technical Committee, Key Energy Scientific Technical Committee & RETEAMBIENTE

In the coming decade, the development of the renewable energy sector will be both impetuous and critical. And it will have to come to terms with the difficult sourcing of the necessary raw materials, fluctuating fossil fuel prices, the water crisis, and more. Therefore, new strategies to harvest renewable energy from the territories must be added to the large photovoltaic and wind power programmes, leveraging specific material flows that can become important carriers for this purpose. Many sectors are already prepared to be involved in this new scenario: from agro-food to sludge or organic fraction management, from the wood and furniture sector to pruning waste, with innovative high-performance solutions, consistent with their respective supply chains. And so, subjects that are already today players in the circular economy can become co-leaders of the energy transition, according to an integrated strategy that promotes new uses of biomaterials and renewable matter. This is a unique challenge, as the energy sector has so far not embraced the issue of material circularity, whilst renewable fuel strategies are only in their infancy. The convention - through the contributions of experts, industrial operators, and key players in transition policies - aims to look at "who can do what" and start a discussion on how current and significant the contribution of materials can be in accelerating and consolidating the energy transition.

Session Chairs

Gianni Silvestrini, Presidente of Key Energy Scientific Technical Committee e Scientific Director of the Kyoto Club

Programme

Moderated by:

Sergio Ferraris, Director of the magazine Nextville

16.30 Participants' accreditation and beginning of the activities

16.35-16.45 *The EU vision on energy transition and 2030 targets*

Simona Bonafè, MEP, Member of the Committee on the Environment (ENVI)

16.45-16.55 *Energy Communities: Citizens, Businesses, and the Public Administration*

Gianni Silvestrini, Scientific Director of the Kyoto Club

16.55-17.05 *Energy Economics and Ecological Transition*

David Chiaromonti, Polytechnic of Turin

17.05-17.15 *Technological development and digitisation for the sustainable growth of the electricity sector*

Agostino Re Rebaudengo, President of Elettricità Futura (TBC)

17.15-17.25 *Energy Circularity*

Nicola Tagliafierro, Head of Sustainability Enel X Global Retail

17.25-17.35 *Sewage sludge vs. renewable energy*

Andrea Lanuzza, General Manager Operations of CAP Group

17.35-17.50 *Valorisation of wine waste in industrial production*

Carlo Dalmonte, President of Caviro Spa

17.50-18.00 *Using biomass to achieve carbon neutral targets*

Filippo Capurso, Sustainability Coordinator Andriani S.p.A.

18.00-18.10 *Prospects for biogas and biomethane production in agriculture*

Piero Gattoni, Presidente of CIB (Consorzio Italiano Biogas)

18.10-18.20 *Il futuro degli impianti nella digestione anaerobica*

Franco Lusuriello, CEO BTS Biogas

WEDNESDAY 9 NOVEMBER

WEDNESDAY 9
NOVEMBER

09:30 -
17:30

Gemini Room C4
Pav.

**Hydrogeological
Risks and
Mitigation
Measures**

Integrated systems for monitoring of works in areas affected by natural, anthropic and environmental hazards

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & Italian Geotechnical Society - Associazione Geotecnica Italiana (AGI)

The monitoring of slopes, of civil and environmental works, such as bridges, tunnels, landfills and contaminated sites, is a crucial current issue, related to frequent problematic situations connected to the risk and to the disaster prevention, which is considerably linked to urban and extra-urban regeneration issues.

Session Chairs

Daniele Cazzuffi, CESI SpA - Milan

Nicola Moraci, Mediterranea University of Reggio Calabria

Programme

9.30-10.00 Registration

10.00-10.20 Introduction

Daniele Cazzuffi, CESI SpA - Milan

Nicola Moraci, Mediterranea University of Reggio Calabria

Session 1. Monitoring Systems of slopes, geotechnical structures and infrastructures

Chairs:

Nicola Moraci, Mediterranea University of Reggio Calabria

Settimio Ferlisi, University of Salerno

10.20-10.45 *Control and monitoring of the soil/work complex: regulations in force framework*

Stefano Aversa, Parthenope University of Naples

10.20-10.45 *Slow-moving landslide monitoring systems for the built heritage damage analysis*

Giovanni Gullà, Research institute for geo-hydrological protection of the Italian National Research Council (CNR - IRPI)

10.45-11.10 *Multi-source integrated systems for monitoring works in subsiding areas*

Dario Peduto, University of Salerno

11.10-11.35 *Large excavations monitoring systems in urban area*

Giovanni Vaciego, SGI - Milan

11.35-12.00 *Bridge integrated monitoring systems*
Settimio Ferlisi, University of Salerno

12.00-12.25 *Integrated and innovative monitoring systems for the underground works*
Alessandra Sciotti, Italferr SpA, Rome

12.25-12.50 Speaker TBD

12.50-13.00 Discussion

Session 2. *Integrated monitoring systems for landfill and contaminated sites*

Chairs:

Nicola Moraci, Mediterranea University of Reggio Calabria

Quintilio Napoleoni, Sapienza University of Rome

14.00-14.25 *Control and monitoring of landfill and contaminated sites: regulations in force framework*

Evelina Fratalocchi, Marche Polytechnic University

14.25-14.50 *Old landfill monitoring systems*

Quintilio Napoleoni, Sapienza University of Rome

14.50-15.15 *New landfill monitoring systems*

Roberto Raga, University of Padova

15.15-15.40 *Monitoring systems of contaminated sites*

Daniele Biondi, Herambiente SpA - Bologna

15.45-16.20 *Efficiency of contermination systems for landfills and contaminated sites*

Alberto Angeloni, Montana SpA - Milan

16.20-16.45 *Geophysical surveys for the leachate control*

Giorgio De Donno, Sapienza University of Rome

16.45-17.15 Discussion

17.15-17.30 Closing remarks

Daniele Cazzuffi, CESI SpA - Milan

WEDNESDAY 9
NOVEMBER

10:00 -
12:30

Tiglio 2 Room A6
Pav

**Environmental
Monitoring &
Control**

*Conference open to
Papers*

Health Impact Assessment (VIS): the collaboration between national and regional institutions in the deepening of the National Institute of Health (ISS) Guidelines

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & National Institute of Health

CALL FOR PAPERS

The workshop aims to describe the useful collaboration between national and regional institutions for the purpose of deepening the guidelines (LGs) on HIA, drafted by the Istituto Superiore di Sanità. Currently, a CCM project funded by the Ministry of Health and carried out in collaboration with the local authorities of Emilia Romagna, Marche, Sardinia and Friuli Venezia Giulia, deepens the methodologies and approaches of the LGs taking into account, also, the needs experienced at different institutional levels and in different areas, stimulating the search for a homogeneous and consistent approach on the Italian territory.

Session Chairs

Maria Eleonora Soggiu, National Institute of Health
Gianluigi de Gennaro, University of Bari "Aldo Moro"

Programme

10.00 Introduction by the Chairs

10.20-10.40 *Environment and Health: the commitment of the Ministry of Health*
Pasqualino Rossi, Ministry of Health

10.40-11.00 *The results of the CCM HIA project "Health Impact Assessment: training of personnel belonging to regional control bodies and deepening of the ISS Guidelines"*
Maria Eleonora Soggiu, Higher Institute of Health

10.40-11.00 *Ecotoxicological assessment in the context of the HIA*
Mario Carere and Ines Lacchetti, Higher Institute of Health

11.00-11.20 *Criticalities in epidemiological assessments in the context of VIS for industrial plants*
Roberto Pasetto, Higher Institute of Health

11.20-11.40 Paolo Collarile, Central Friuli University Health Authority

11.40-12.00 *Speech from Call for Papers*

11.40-12.00 *Volatolomics da espirato*
Claudio Clini¹, Giuseppe Novelli², Federica Sangiulo², Alessandro Filippi³, Giancarlo Cecchini³; Alessandro Frugis³; Corrado Corradi³

¹SAGEN Associazione Salute Ambiente Genoma; ²Professore Ordinario di Genetica Medica dell'Università degli Studi di Roma "Tor Vergata"; ³AceaElabori

12.00-12.15 Discussion and Closure by the Session Chairs

Poster Session

EMC3-1 *Metodi e approcci per la gestione e tutela dei servizi ecosistemici dei suoli nei cantieri*

Andrea Monti, Elena Ballabio, Elena Castelli, Erika De Finis, Alessia Mariotto, Elisa Nava, Valeria Spirolazzi, Arpa Lombardia

WEDNESDAY 9

NOVEMBER

10:00 -

12:45

Workshop Room

Circular
Economy Value
Chains

The recycling industry: towards the new European targets between non-technological barriers and the boost for innovation

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & UNIRIMA, ASSORIMAP, ASSOFERMET

Assofermet, Assorimap and Unirima, 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 and with the common goal: recognizing the centrality of recycling in Italian and European industrial and environmental policies. These strategic sectors in the development and promotion of a circular economy in the waste sector, having/ a total of about 4,000 plants and 45,000 employees throughout the national territory, although they are excellences of our Country, leaders in the production of EoW / SRM, they have to deal with a growing bureaucracy, often unclear regulations, failure to comply with the principles of competition, the need for constant innovation to be competitive and to face the increasingly complex challenges of the markets. In order to respond to the principles outlined by the Circular Economy and the Green New Deal, the field of the production of raw materials from waste treatment activities therefore needs adequate tools that relaunch the sector and, above all, that this important sector of the circular economy be placed at the center of national and European industrial policies.

Session Chair

Silvia Serranti, Sapienza University of Rome

Programme

10.00 Introduction

Silvia Serranti, Sapienza University of Rome

Recycling chains: industrial development and sustainability to win the European challenge of circularity

Assofermet (National association of recycling of ferrous and non-ferrous metals)

Brief introduction by Cinzia Vezzosi, Assofermet and Euric Vice President

Francesco Costa, CO.MET.FER. Spa

Assorimap (National Association of Recyclers and Regenerators of Plastic Materials)

Brief introduction by Walter Regis, President

Remo Brusafferri, B. For PET Srl

Unirima (National Union of Pulp Recovery and Recycling Enterprises)

Brief introduction by Francesco Sicilia, General Manager

Annamaria Buono, Calabria Maceri e Servizi SpA

The European framework

Emmanuel Katrakis, Secretary General EURIC - European Recycling Industries' Confederation

Ton Emans, President PRE - Plastics Recyclers Europe

Mattia Pellegrini, Head of Unit DG ENV - Circular Economy - From Waste to Resources

12.30 Conclusions

WEDNESDAY 9

NOVEMBER

10:00 -

13:00

Tiglio 1 Room A6
Pav

**Agri-food,
Forestry and Bio-
based Industry**

Circular economy in agri-food systems as a firm benchmark in the uncertainty of future scenario

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & National Agrifood Cluster CL.A.N.

The Italian agri-food system has always been a model of sustainable production and consumption, able to combine the growing needs of the world population with the competitiveness of agri-food systems while respecting environment, local communities, and social growth. The agri-food chain, which Cluster CL.A.N. represents at different levels, is aware of how the use of agricultural resources in all their components (including by-products and residues), in compliance with the rules for the protection of health and environment, creates a virtuous circle functional to the implementation of the EU Circular Economy current policies and regulations. At this regard, it is essential to accelerate the research and implementation of alternatives in the management of waste, energy (from renewable sources, but with a low environmental impact at the end of life) and water (reduction of losses and waste, recovery and process water sanitization, desalination, etc.), and on the sustainable management of packaging and related waste. All this without forgetting, especially in the persistent climate of uncertainty due to the complex contingent circumstances, that the sustainability of agri-food systems will be achieved only by combining the three pillars (environmental, social, and economic) according to a principle of equal balance between them. The workshop organized by Cluster CL.A.N. will be an opportunity to let Cluster members (companies, research, and territories) express their opinions on these issues. The outputs will be collected into a Position Paper to be shared with interested institutions and stakeholders.

Session Chairs

Mauro Fontana, President of the National Agrifood Cluster CL.A.N.

Massimo Iannetta, President of the CL.A.N. Scientific and Technical Committee

Programme

10.00-10.05 Opening and welcome words

Mauro Fontana, President CL.A.N.

10.05-10.20 *Setting the scene of Italian and European bioeconomy*

Giorgio Urbano, Manager of Industrial Sustainability Strategy Rina Consulting

10.20-12.45 **Round Table: talk contributions by Cluster Members**

Moderator: Massimo Iannetta, President Scientific and Technical Committee CL.A.N.

10.20-11.20 *The point of view of Cluster associated companies*

Ambrogio Invernizzi, President In.Al.Pi. S.p.A.

Alice La Tona, Innovation Director Mutti S.p.A.

Rosario Rago, President Rago Group

Andrea Rigoni, CEO Rigoni di Asiago S.r.l.

11.20-11.50 *The point of view of Cluster associated R&D bodies*

Veronica Lattanzio, Senior Researcher at CNR and Coordinator

of FoodSafety4EU project - FoodSafety4EU multistakeholder platform for food safety in Europe

Davide Viaggi, Full Professore University of Bologna - Sustainable and circular innovation through supply chain relationships and education: the CONSOLE and BIOBEC projects

11.50-12.30 *The point of view of Cluster associated territorial institutions*

Luciano Concezzi, Head of innovation and research Dept. at Parco Tecnologico 3A - Regione Umbria - Regional actions for the circular economy and sustainable development

Valeria Fascione, Councilor for Research, Innovation and Start-up at Campania Region (tbc)

12.30-12.45 Summary of Round Table outcomes

Patrizia Brigidi, Vicepresident of Scientific and Technical Committee CL.A.N. and CL.A.N. representative within the National Bioeconomy Coordination Board

12.45-13.00 Key conclusions

Representative of Italian Ministry for Ecological Transition (TBC)

13.00 Closing remarks

Mauro Fontana, President CL.A.N.

WEDNESDAY 9
NOVEMBER

10:00 -
13:00

Ravezzi 2 South
Hall

**Circular
Economy Value
Chains**

Measurement of circularity

Language: Italian

Organized by: Ecomondo Technical Scientific Committee & Scuola Superiore Sant'Anna, ENEA

The event will focus on the measurement of circular economy within the framework of assessing the contribution of enterprises to the ecological transition. The measurement of circularity represents a prerequisite for implementing the transition path from a take-make-dispose economic model to a circular and regenerative model. It is based on the monitoring of physical and economic aspects of the examined systems (organizations, supply chains, sectors, etc.) in order to acquire information useful for identifying areas for improvement and setting new priorities. Various approaches and methods for measuring circularity have been developed in recent years, but no single, universal approach has been consolidated to adequately capture the complexity and multiple aspects involved in the path to the circular economy. This workshop aims to present an overview of the different international and national methodologies and explore the importance of measurement with companies that have applied one of these approaches.

Session Chairs

Marco Frey, Scuola Superiore Sant'Anna
 Roberto Morabito, ENEA Department of Productive and Territorial Systems
 Sustainability

Programme

10.00-10.20 *Introduction to different models and experiences in the measurement of circularity*

Marco Frey, Scuola Superiore Sant'Anna

10.20-11.50 Session on **"National and international initiatives related to indicator systems in the circular economy"**

10.20-10.40 *The voluntary standardization UNI-ISO*

Laura Cutaia, ENEA - President CT UNI 57

10.40-11.00 *The CE perspective*

Paola Migliorini, Deputy Head of Unit, European Commission, DG Environment, Sustainable Production, Products and Consumption (TBC)

11.00-11.20 *The Scuola Sant'Anna's methodology for evaluating circularity and its applications in retail and FMCG companies*

Fabio Iraldo, Scuola Superiore Sant'Anna

11.20-11.30 *The Circul-up tool*

Carolina Gomez, GS1

11.30-11.50 *Tools for measuring the circular economy in the Circular Economy Platform (ICESP)*

Filippo Servalli, RadiciGroup Co-coordinator GdL3 ICESP

11.50-12.50 Session on **"Experiences of measuring circularity by enterprises"**

Fernarda Pavini, Enel

Paola Volpe, Eni

Barbara Cimmino, Yamamay

Alessandra Teruggi, Metro

Guio Saul, Sit-in RadiciGroup

Parmalat representative

12.50-13.00 Conclusions

WEDNESDAY 9
NOVEMBER

10:00 -
13:30

Diotallevi 2 Room
South Hall

Research and
Innovation

Transition towards carbon neutrality

Language: English

Organized by: Ecomondo Scientific Technical Committee & BNCT working party, OECD

We have started down the complex transition from today's fossil carbon to a new energy and renewable carbon future. The pathway is relatively clear in energy, reflected in the current success of solar and wind technologies, but other sectors will also have to be addressed. The chemicals industry represents a large opportunity for carbon capture and utilisation (CCU). The renewable carbon family of bio-based carbon and CO₂-based carbon and carbon from recycling represent huge, relatively untapped opportunities. However, we need an overarching carbon management strategy for the chemical sector that enshrines the sustainable, circular economy approach. The present workshop reviews progress to date on a project on Carbon Management of the Bio-, Nano- and Converging Technologies (BNCT) working party of the OECD. Case studies from six countries will be presented and discussed.

Session Chairs

Jim Philp, OECD

Programme

10.00-10.30 *Introduction*

Chairs:

Ole Jørgen Marvik, Innovation Norway

Jim Philp, OECD

10.00-10.10 *Introduction by Ole Jørgen Marvik: A systemic approach to the carbon cycle*

10.10-10.30 *BNCT work on carbon management, 2021-2022: an overview*

Jim Philp, OECD

10.30-12.30 *Roundtable*

During the two-year period 2021-2022, a total of 16 case studies on CCU(S) technologies in nine different countries were received. Five of these are summarised here to reflect the diversity of technologies and feedstocks. A sixth case study presents funding mechanisms for the green transition to net-zero carbon.

Chairs:

Jim Philp, OECD

Christian Patemann, Former Director European Commission - DG RTD, Environment and Bioeconomy

10.30-10.50 *Using innovation challenges as funding mechanisms to accelerate emerging CCUS technologies in Canada*

Andrew Klain, Canadian Forest Service/Economic Analysis Division, Natural Resources, Canada

10.50-11.10 *Bio-based, biodegradable and compostable bioplastics for organic recycling and the creation of compost*

Giulia Gregori, IT Cluster Circular Bioeconomy SPRING

11.10-11.30 *CO₂ from waste incineration to cultivate microalgae at Saga City*
Ritsuko Aihara, Ministry of Agriculture, Forestry and Fisheries, Japan

11.30-11.50 *Sustainable chemicals and fuels production using nanotechnology in Korea*
Ki Tae Park, Konkuk University, Korea

11.50-12.10 *Atmospheric CO₂ for storage and use - a proposed Norwegian industrial ecosystem?*
Ole Jørgen Marvik, Innovation Norway, Norway

12.10-12.30 *Fermentation of waste gases to sustainable aviation fuel (SAF): the importance of hybrid technologies*
Jay Fitzgerald, United States Department of Energy

12.30-12.50 Discussion and comments on the case studies presented

Chairs:

Fabio Fava, University of Bologna
Angelo Salsi, European Commission

12.50-13.15 *Open discussion: What do we need to make holistic technology and policy choices in carbon management?*

13.15 Closure by Chairs

WEDNESDAY 9
NOVEMBER

10:00 -
13:30

Monitoring &
Control Room

**Water
Management
and Valorization**
*Conference open to
Papers*

Zero Polluted and Circular Water - Sludge management, treatment and valorization

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & University of Brescia, IRSA-CNR, ISS, Utilitalia

CALL FOR PAPERS

In view of the EU Green Deal and Zero Pollution Action Plan, the need of a new regulatory framework to support sustainable and resilient sludge management, incorporating a broader scope for risk assessment and strict sludge quality control is more and more felt for quick. Approximately 25kg of dry sludge are produced per person per year all across Europe as by-product of the wastewater treatment process, and the size of the sludge production is strictly related to the efficacy of the treatment. Sludge use will be tackled from a circularity perspective, aiming at pollution prevention, resource efficiency and business opportunities. In this context, several new technologies are being developed in the last years, but in many cases these are unfortunately not sufficiently mature to be developed at a large scale, and need to be framed by appropriate legislation. Successful examples will be showcased.

Session Chairs

Giorgio Bertanza, University of Brescia

Camilla Braguglia, IRSA CNR (Water Research Institute - National Research Council)

Tania Tellini, UTILITALIA (Italian federation of energy, water and environmental services)

Programme

10.00-10.10 Introduction by the Chairs (and a short summary on the papers presented through posters)

10.10-10.30 *Updates on Sewage Sludge Directive and UWWTD*

Bernd Gawlik, Joint Research Centre, European Commission (TBC)

10.30-10.50 *Sludge Recovery in agriculture: ecotoxicology for the circular economy (the SLURP project)*

Roberta Pedrazzani e Giorgio Bertanza, University of Brescia

Sara Castiglioni, Mario Negri Institute

10.50-11.10 *New sustainable technologies to transform sewage treatment plants into "green factories" as required by PNRR*

Elena Mauro, Utilitalia

Giancarlo Cecchini, Acea Elabori

Francesca Portincasa, AqP

Andrea Lanuzza, Gruppo CAP

11.10-11.30 *Risk analysis scenarios in sludge management*

Eleonora Beccaloni, Italian National Institute of Health

11.30-13.15 **Speakers from Call for Papers**

11.30-11.45 *AirPrex P-Recovery and Sludge Optimization*

Davide Perduca, Perduca Ambiente srl

11.45-12.00 *Use of sewage sludges for CO2 removal*

Davide Papurello, Dipartimento di Energia-Politecnico di Torino

12.00-12.15 *Sludge reduction in the Grosseto Hub through Newlisi hydrolysis: a case study*

Edoardo Riccio, Newlisi spa

12.15-12.30 *Potenzialità della stabilizzazione aerobica nella riduzione drastica dei fanghi: sperimentazione* Marta Domini, DICATAM-Università di Brescia

12.30-12.45 *Potenziale dei trattamenti idrotermici propedeutici all'incenerimento dei fanghi di depurazione*

Federico Viganò, Politecnico di Milano

12.45-13.00 *Disidratazione tramite filtropressa di fanghi di depurazione post HTC*

Daniele Pirini, B-Plas

13.00-13.15 *Si fa presto a dire Idrocarburi! Uso ed abuso di un parametro non proprio "semplice"*

Tiziano Vendrame, ARPA Veneto

13.15-13.30 Discussion and closure by the Chairs

Poster Session

WTMV1 – 1 *Test a scala reale SANITAIRE TARON per l'ottimizzazione della linea fanghi*
Simone Leoni, Acea Elabori

WTMV1 – 2 *PONDUS - Thermo-Alkaline Hydrolysis of sewage sludge*
Davide Perduca, Perduca Ambiente

WTMV1 – 3 *DePrex Degassing - Recovery of dissolved methane in anaerobically treated biosolids*
Davide Perduca, Perduca Ambiente

WTMV1 – 4 *Bioconversion of urban sewage sludge mediated by larvae of black soldier fly, Hermetia illucens*
Silvia Arnone, ENEA Roma

WTMV1 – 5 *The Roles of Wastewater Treatment Plants (WWTPs) in Energy Production & Net-Zero in Europe: "Lessons from Germany and Italy"*
Lamiaa Chab, Università della Tuscia di Viterbo

WEDNESDAY 9
NOVEMBER

10:30 -
13:00

Diotallevi 1 Room
South Hall

Financing,
Education and
Communication

Blue skills and careers for the European Green Deal

Language: English

Organized by: Ecomondo STC & Italian Ministry of Education, European Commission

The green and digital transition is already opening up to new opportunities in the blue economy's job market. However, the lack of well-trained professionals and highly-skilled personnel working in sectors, including offshore marine renewable energies, shipping, underwater operations, biotechnologies and aquaculture, and limited public perception of blue careers, can hinder the sustainable blue economy to contribute to the objectives of the green deal and of a circular economy. To fully exploit its potential, there is a need of creating an ecosystem for blue skills able to improve or put in place, where it is not existing, an effective cooperation amongst stakeholders, matching the needs of the industries and attracting women and new generations in this labour market.

The Blue Careers programme, which since 2016 has provided grants, under the European Maritime and Fisheries Fund (EMFF), to retrain and reskill the blue economy sectors, will now expand to cover the training needs stemming from the European Green Deal and the pandemic crisis. The key objectives will also encompass the development of core green skills and boosting digital skills. This includes promoting the use of the GreenComp, a European reference framework for sustainability competences.

Session Chair

Luca Marangoni, Deputy Head of Unit, European Climate, Infrastructure and Environment Executive Agency - CINEA Unit D3 – Sustainable Blue Economy, European Commission

Programme

10.30 Introduction by the Chair

10.35-10.50 *Opening speech*

Barbara Floridia, Undersecretary of State, Ministry of Education, Italy (TBC)

10.50-11.05 *EU support to the development of Blue Careers*

Sonia Karasavidou, CINEA Unit D3 - Sustainable Blue Economy, European Commission

11.05-11.20 *The GreenComp framework*

Guia Binachi, Joint Research Centre (JRC-Seville), Unit B7 - Knowledge for Finance, Innovation and Growth, European Commission

11.20-11.35 *The enabling role of digital innovation hubs for the Green Deal*

Harald Gruber, European Investment Bank

11.35-11.50 *A Mediterranean perspective for new skills and jobs*

Mounir Ghribi, Italian National Institute of Oceanography and Applied Geophysics (OGS)

11.50-12.45 *Panel discussion (best practices, lessons learnt, bottlenecks, opportunities)*

Chair: Silvia Grandi, Director General, Italian Ministry of Ecological Transition

Panelists:

Raphaela Gutty, Cluster MARE FVG (ASSESS project)

Lucie Saxton, STC Group (TEAMS project)

Jerneja Penca, Euro-Mediterranean University (COE-SUBE - Centre of Excellence on Sustainable Blue Economy)

12.45-12.50 Closure by the chairs

WEDNESDAY 9

NOVEMBER

11:00 -

13:00

Innovation Arena -
South Hall

**Circular
Economy Value
Chains**

Textiles as an opportunity: challenge and commitment of the Stakeholders of the sector

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & LVMH Italia

Textiles have been identified as a key value chain in the EU action plan, to promote sustainability and circularity, as well as traceability and transparency, through a combination of eco-design requirements, producer responsibility schemes and labelling systems. The intention, during the debate within the main actors of the fashion and luxury system, is to highlight the contribution of all stakeholders in responding to these challenges, bringing to light proposals, targets and ongoing projects. We believe that new European inputs and requirements will boost innovation in the sector and will give new impulse in the industrial competitiveness by promoting new business models.

Session Chair

Eleonora Rizzuto, Comitato Tecnico Scientifico di Ecomondo, Direttore Sviluppo Sostenibile di LVMH Italia e coordinatrice del sottogruppo Tessile, Abbigliamento e Moda per ICESP

Programme

Moderation by RAI for Sustainability Journalist

11.00-11.20 *Introduction*

Eleonora Rizzuto, Director of Sustainable Development LVMH Italia and coordinator of the Textile & Fashion sub-group for ICESP

- *Presentation of the Agenda/Participants*

- *Regulatory introduction*

Roberta De Carolis, Project Manager ENEA-ICESP (Italian Circular Economy Stakeholder Platform)

New European textile regulation: possible focus on implementation in Italy

EU ECESP (European Circular Economy Stakeholder Platform) representative (name to be confirmed)

11.20-11.50 *Circular Creativity in LVMH*

Alexandre Capelli, Deputy Director Department Environment LVMH Corporate

Specialised Suppliers: Textiles and Social Innovation

Anna Fiscale, Founder Progetto Quid

Circular Thinking: Collaborations & more

LVMH's Maison representative (name to be confirmed)

11.50-12.20 *Best Practices*

Sara Mariani, Chief Sustainability Officer OTB

Rossella Ravagli, Sustainability Director ARMANI

Dario Gruenenfelder, Co-founder MUNTAGNARD

12.20-12.40 *Research & Development, Innovation*

Alexandre Capelli, Deputy Director Department Environment LVMH Corporate

Aura Blockchain Consortium (name to be confirmed)

12.40-13.00 *Debate: Vintage & Second Hand, comparing opinions* (all referents on stage)

RAI journalist and Eleonora Rizzuto, Director of Sustainable Development LVMH Italia and coordinator of the Textile & Fashion sub-group for ICESP

WEDNESDAY 9

NOVEMBER

14:00 -

15:30

Diotallevi 1 Room
South Hall

**Circular
Economy Value
Chains**

Separate collection of urban textile waste

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & UNICIRCULAR-UNIRAU (Union of used clothing collection, recycling and reuse companies)

Italian municipalities will be obliged to guarantee the separate collection of urban textile waste from 1 January 2022, in continuity with the supply chain that has been structured spontaneously in the last 20 years. A future EPR scheme will be able to guarantee the necessary resources to reach the most important collection, reuse and recycling targets, contributing to an industrial evolution of the current post-consumer supply chain, especially in the parts where there are the most critical issues. Today, almost a year after the establishment of the obligation of separate collection, an EPR system is still awaited. Where are we? What are the weak links of supply chain on which to intervene? In this context, the publication of “European strategy for textiles”, political document with no normative value, will give a reference framework within Directives, Regulations and national normative will be structured in subsequent times. The strategy will deal in a broad way with sustainability and circularity of the textile sector, from the eco-design of products to production, from consumption models to the different types of products relating to textiles (fashion, technical clothing, home textiles, hospitality textiles, furnishing textiles, etc.), up to the management of urban textile waste. The conference intends to focus in particular on this last specific and limited aspect.

Session chair

Andrea Fluttero, EPR models expert and UNIRAU (Union of used clothing collection, recycling and reuse companies)

Programme

Introduction

Andrea Fluttero, EPR models expert and UNIRAU (Union of used clothing collection, recycling and reuse companies)

The municipalities owners of the municipal waste collection private

Filippo Brandolini, UTILITALIA (Italian federation of energy, water and environmental services) (TBC)

Franco Bonesso, ANCI (National Association of Italian Municipalities)

Specialized collectors

Carmine Guanci, Alliance of Cooperatives

Karin Bolin, Humana People to People

Companies of the selection

Carmine Esposito, F.LLI ESPOSITO

Recycling Industry

Fabrizio Tesi, ASTRI Italian recycled textile association

The vision of the future actors of epr schemes

Consortia of producers

Discussion and closure

Silvia Grandi, Director of the Circular Economy Department, Italian Ministry for Ecological Transition (TBC)

WEDNESDAY 9
NOVEMBER

14:00 -
17:00

Diotallevi 2 Room
South Hall

Blue Economy

The BlueMed Pilot healthy plastics-free Mediterranean sea and the EU Mission Restore our Ocean and Waters by 2030

Language: English

Organized by: Ecomondo Scientific Technical Committee & BlueMed GSOs, Federchimica-PlasticsEurope Italia, Conference of Peripheral Maritime Regions (CPMR), National Research Council of Italy (CNR)

The Mission Restore our Oceans and Waters by 2030 provides a holistic and coherent framework for developing a systemic approach to the reduction of marine litter in the hydrosphere of the Mediterranean Sea (MED). This can be achieved by structuring and connecting the relevant existing initiatives and exploiting the R&I and policy knowledge generated by the funded projeSTC on the MED decontamination from marine litter. A special role with this respect can be played by the 9 national hubs of the BLUEMED Pilot Plastics free healthy MED but they need to be better structured in their territories, interconnected among them and with the wide community of the plastic producing and transforming operators of the MED basin. Mediterranean regions can benefit from synergies by engaging regions' network and mobilising stakeholders to cooperate across their territories facilitating the process by promoting alignment of policies and by also supporting internationalization of financing. This event, jointly organized by the Euro-Mediterranean Group of 16 Senior Officials of BlueMed Initiative (www.bluemed-initiative.eu), Conference of Peripheral Maritime Regions (CPMR) and Federchimica-PlasticsEurope Italia, aims at creating the bordering conditions for the implementation of such a MED innovation ecosystem with a core role in the effective deployment of Mission Implementation Charter and piloting of the Mission objectives for the MED by 2030.

Session Chairs

Representative of Federchimica-PlasticsEurope Italia

Chairs of BlueMed GSO

Representative of Conference of Peripheral Maritime Regions (CPMR)

Programme

14.00-14.15 Introduction by the Chairs

14.15-14.30 *The Mission priorities for the Mediterranean basin: challenges and opportunities for a systemic change*

Representative of European Commission (TBC)

14.30-15.15 *The BlueMed Pilot: status of implementation and main achievements*

Chair: Representative BlueMed GSO

Roundtable: Status of implementation of the BLUEMED national hubs of the Pilot healthy plastics-free Mediterranean sea and road maps for their structuring

15.15-16.00 *Roundtable: Role of the Plastic Industrial Associations of the Mediterranean Basin in the BLUEMED national hub structuring and implementation*

Chair: Federchimica-PlasticsEurope Italia

16.00-16.45 *Many actors, one ecosystem and roadmap: the Mediterranean Lighthouse Chair: Conference of Peripheral Maritime Regions (CPMR)*

16.45-17.00 Q&A session

17.00 Discussion and Closure Targeting 2030 and beyond

WEDNESDAY 9

NOVEMBER

14:00 -

17:30

Neri 2 Room
South Hall

**Policies and
Regulations**

Technical Seminar: Waste management and new regulations 2022

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & Edizioni Ambiente and the Magazine "Rifiuti - Bollettino di informazione normativa"

REGISTRATION IS COMPULSORY

The legislative dynamism that shapes waste management can sometimes risk disorienting companies and Public Administration. Once again, this year, the Magazine "Rifiuti-Bollettino di informazione normativa" offers the usual overview of the most important legislative and regulatory innovations that, in the course of 2022, have been added to a complex operational reference scenario. The outlining of new developments, however, also in this edition of Ecomondo, does not preclude an in-depth examination of topics that, although not recent, have reached a certain degree of complexity of application over the years. Therefore, the necessary in-depth studies that the complexity of the discipline always requires are also carried out.

Session Chairs

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

Programme

14.00-14.30 Participants' accreditation and beginning of the activities

14.30-14.45 *Waste management in the light of the circular economy. The point on the End of Waste decrees*

Silvia Grandi, General Director Circular Economy Ministry of Ecological Transition (TBC)

14.45-15.00 *The procedure and timeframes for End of Waste controls in the view of the Ispra 2022 guidelines*

Daniele Salvatori, Arpae Emilia Romagna

15.00-15.15 *Putting the entity "on probation" in proceedings pursuant to Legislative Decree 231/2001: the organizational model and access to the benefit*

Gabriele Taddia, Lawyer

15.15-15.30 *Backfills and their management between the concepts of waste and soil*
Loredana Musmeci, Chemist

15.30-15.45 *The land reclamation procedure of contaminated sites between acceleration and simplification in the light of recent regulatory changes*
Andrea Sconocchia, Arpa Umbria

15.45-16.00 *Actions against environmental damage: the new formats for requesting state intervention and the activities of SNPA as a tool for the surveillance of the land*
Paola Di Toppa, ISPRA

16.00-16.15 *The preparation for re-use and the administrative discipline to legitimately conduct it*
Paola Ficco, Lawyer - Environmental jurist - Director of the magazine "Rifiuti - Bollettino di informazione normativa"

16.15-16.30 *The PNRR and the DNSH (Do Not Significant Harm) principle: the support provided by ISO 14001 and EMAS in the waste sector*
Andrea Sillani, AICQ-SICEV Certified Environmental Auditor

16.30-16.45 *The RENTRI and the state of the art on computerised waste traceability*
Daniele Gizzi, President of the Italian Register of Environmental Operators

16.45-17.00 *Computerised waste traceability: a practical demonstration*
Daniele Bagon, Register of Environmental Operators - Regional Section of Liguria

17.00-17.15 *The loading and unloading register and the 'optional' sanction of the suspension also of the administrator*
Stefania Pallotta, Metropolitan City of Venice

17.15-17.30 *Corporate 'greenwashing' policies and non-financial reporting. Investigative logic*
Massimiliano Corsano, Ten. Col. of the Carabinieri - Commander of the Operational Department for Environmental Protection and Ecological Transition

17.30 *The environmental questioning and its value for the criminal court*
Conclusions
Pasquale Fimiani, Attorney General at the Supreme Court of Cassation

WEDNESDAY 9
NOVEMBER

14:00 -
17:30

Global Water Expo
Room

**Water
Management
and Valorization**
*Conference open to
Papers*

Zero Polluted and Circular Water - Concerning pollutants (PFAS and persistent mobile chemicals, microplastics, AMR): occurrence, fate, health and environmental risk management

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & Italian National Institute of Health, Legambiente, Marche Polytechnic University, Utilitalia

CALL FOR PAPERS

Per- and polyfluoroalkyl substances (PFAS) and other so called persistent, mobile (PM) substances, as well as other contaminants of emerging concern, are being recognized as serious threats to the safety of water resources. The way towards a zero pollution, toxic-free environment need knowledge and know-how about analytical methods and environmental chemistry, source detection, transport and fate, preventive measures, treatment technologies and proper legislation. The workshop will present the current scenario and state-of-the-art solutions within the context of emerging technologies and policy mechanism.

Session Chairs

Luca Lucentini, Ecomondo STC and Italian National Institute of Health
 Andrea Minutolo, Ecomondo STC and Legambiente (Italian environmental association)
 Francesco Fatone, Ecomondo STC and Marche Polytechnic University

Programme

14.00-14.10 Introduction by the Chairs

14.10-14.25 *There isn't One Health without One Water*
 Luca Lucentini, Italian National Institute of Health (TBC)

14.25-14.40 *Persistent chemicals and contaminants of emerging concern: current trend towards legislation and regulation in Europe and Italy*
 Speaker (TBD)

14.40-14.55 *The zero-pollution challenge in Horizon 2020 and Horizon Europe*
 Giulio Pattanaro, European Commission

14.55-15.10 *Establishing a zero-pollution circular economy: an overview of the Horizon2020-Green Deal project PROMISCES*
 Julie Lions, BRGM (France) – Project Coordinator (TBC)

15.10-15.25 *Pilot and full scale PFAS removal in urban water cycle technologies*
 Edoardo Slavik, Idroclean Srl, ITELYUM AMBIENTE

15.25-15.40 *Microplastics in lakes and urban water infrastructures: the Life Blue Lakes*
 Representative of Legambiente (Italian environmental association) (TBD)

15.40-15.55 *Effect-based monitoring of water and sludge*
 Giorgio Bertanza and Roberta Pedrazzani, University of Brescia

15.55-16.10 *Safety and risk management plans in urban water cycle and CECs: case studies*
 Representative of Italian National Institute of Health (TBD)

16.10-16.20 *Heat treatment of PFAS in liquid matrices*
 Mantovani M. (a), Zanetti N. (a), Beltrame D. (b), Zerlottin M. (b), Della Zassa M. (a), Canu P. (a, c)
 (a) K-INN Tech s.r.l., Spin Off of the University of Padua (b) Acque del Chiampo S.p.A., Arzignano (VI) (c) Department of Industrial Engineering, University of Padua

16.20-16.30 *PROMISCES: convenient PFAS analysis in complex matrices*
 Marco Lazzazzara, Alessandro Frugis, Giancarlo Cecchini, Alessandro Filippi - Acea Elabori SpA, Acea Group

16.30-16.40 *Range of solutions for the management of the solution from PFAS in the subsoil*

Marcello Carboni, REGENESIS

16.40-16.50 *New integrated tools for monitoring the quality of groundwater*

Desdemona Oliva, CAP Group

16.50-17.00 *Development of a profitable methodology for the determination of microplastics in water intended and intended for human consumption*

Gioia V., Lazzazzara M., Castellani M., Filippi A., Frugis A., Cecchini G. - Acea Elabori SpA, Acea Group

17.00-17.10 *Acque Borate - optimization of the treatment and product recovery process*

Cinzia Mazzara and Antonino Patania, Eni Rewind S.p.A.

17.10-17.20 *O3 in wastewater purifiers: a new vision towards better performance and lower costs*

Riccardo Calvi, Pier Luigi Radavelli, SIAD Società Italiana Acetilene e Derivati SpA

17.20-17.30 Discussion and conclusion

POSTER SESSION

WT MV2 – 1 *Grey water footprint is a tool for assessment of Groundwater Chemical Pollution?*

Serio Francesca, Imbriani Giovanni, De Donno Maria Antonella, Department of Biological and Environmental Sciences and Technologies, University of Salento, Prov. le Lecce-Monteroni, 73100 Lecce, Italy

WT MV2 – 2 *Treatments of water contaminated by organic dye treated with carbon nanotubes*

De Luca Pierantonio, Macario Anastasia, University of Calabria

WT MV2 – 3 *Black Sea: Diagnostic pollution of the Black Sea. Applicazione del modello DPSIR per la formulazione di proposte di miglioramento dell'area del Mar Nero*

N. Bertolini - ambiente S.p.A., M. Mannocci - ambiente S.p.A.

WT MV2 – 4 *Sviluppo di un innovativo processo di rimozione del boro con lisciviato di ceneri pesanti*

Carlo Limonti*, Giulia Maria Curcio*, Francesco Marchio**, Alessio Siciliano*, * Università della Calabria, Rende (Cosenza), ** Econet srl, Lamezia Terme (CZ)"

WT MV2 – 5 *TETI - TECnologie innovative per il controllo, il moniToraggio e la sicurezza in mare*

David Giraldi; Prof. Antonio Mazzola; Simone Panfiglio Ambiente S.p.a. ; Università degli studi di Palermo; NAVTEC

WT MV2 – 6 *Merging The Circular Economy with The Blue Economy*

Christopher J Rochfort - The Centre for Organic Research & Education (CORE)

WEDNESDAY 9
NOVEMBER

14:00 -
18:00

Biobased Industry
Room

**Waste
Management
and Valorization**
*Conference open to
Papers*

Biowaste: XXIV Conference on Composting and Anaerobic Digestion. Technical Session

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & Italian Composting Consortium

The session will give space to the presentation of research and case studies regarding issues related to the recycling of waste with an organic matrix: the topics include the characterization of the input matrices, the optimization of recycling processes from the point of view of the circular economy, use of organic fertilizers, biomethane and other products that can be generated from the valorisation of waste.

Session chairs

Massimo Centemero, Italian Composting Consortium
Alberto Confalonieri, Italian Composting Consortium

Programme

14.00-18.00 Speeches selected from Call for Papers

Studio degli effetti del compost sulla comunità microbica del suolo per migliorare la salute delle piante

S. Nigris* **, T. Bonato***, W. Zanardi***, B. Baldan* **; *Dipartimento di Biologia, Università degli Studi di Padova, ** Centro di Ateneo Orto Botanico, Università degli Studi di Padova, ***S.E.S.A. Spa

Risultati operativi di produzione di biogas da FORSU

P.P. Cella Mazzariol*, G.F. Galanzino*, P. Pitardi*, E.V. Ghiggini*; *Gruppo Entsorga

Evaporation to make the digestate from anaerobic digestion reusable

C. Del Piccolo*; * VEOLIA WATER TECHNOLOGIES ITALIA

Alimentare soluzioni per il fabbisogno energetico nazionale: il caso Easy Energia Ambiente

A. Massone*, P. Rinaldi**, E. Colpani*; *Anaergia, **Easy Energia Ambiente

Digestato da FORSU: valutazione della stabilità di nuovi materiali fertilizzanti

E. Sinisgalli*, M. Soldano*, M. Garuti*, S. Piccinini*; *CRPA

L'utilizzo del compost alla luce degli obiettivi del green new deal europeo

G. Chilosi*, M. Jarasevic*, A. Catalani*, C. Morales Rodriguez*, V. Petroselli*, A. Vannini*, R. Mancinelli*, G. Custodi**, D. Cecili**, M. Sganappa**; * Università degli Studi della Toscana, ** Acea Ambiente

Upcycling di fanghi agroindustriali: l'innovativa tecnologia B-Plas

A. Kiwan*, D. Pirini*, C. Torri**, G. Pagliano*, E. Torricelli*, A. Bassi*, D. Collini*; *B-Plas sbrl, ** Università di Bologna

Utilizzo in orticoltura di Ammendante Compostato Misto

P. Sambo*, C. Nicoletto*, T. Bonato**, W. Zanardi**; *DAFNAE - Università degli Studi di Padova, **S.E.S.A. Spa

Carbond: calculation of the sequestration of SOC in soil and enhancing ecosystem services following sustainable agricultural management

C. Loiudice*, G. Carlucci*, T. Berloco*, D. Laterza*, E. Lardo*, A. Fiore*, G. Lorusso*; *AGREEMENT SRL

Digitalizzazione del biometano. Casi studio: biometano 4.0 agricolo e da FORSU

G. Fusillo*, P. Previati*; *LOGOS ITALIA S.r.l. (Mendelsohn)

ZEOWINE ZEOLite and WINery waste as innovative product for wine production

D. Manzi*, G. Masciandaro**, S. Doni**, C. Macci**, C. Masini*, G. Mattii***, E. Cataldo***; *DN360, ** CNR IRET, ***UNIFI

Poster Session

WMV3 – 1 *Modello circolare applicato ai biocarburanti, digestione anaerobica e biometano*

A. Caramia*; *Bureau Veritas Italia Spa

WMV3 – 2 *Bilancio del carbonio biogenico in impianti di digestione anaerobica*

P.P. Cella Mazzariol*, G.F. Galanzino*, P. Pitardi*, E.V. Ghiggini*; *Gruppo Entsorga

WMV3 – 3 *Best practices for reducing costs of anaerobic digestion*

O. Ellis*; *Biogasworld

WMV3 – 4 *Water wash upgrading technology to convert wastes in RNG: example of Madrid*

N. Hocquet*; *Greenlane Biogas

WMV3 – 5 *Impianto di digestione anaerobica per produzione di biometano e compostaggio rifiuti organici*

S. Margani*, P. Di Iorio*, D. Amadio*, F. Santini*, F. Pantano*; *Cogesa Spa

WMV3 – 6 *Il compostaggio di comunità, la soluzione ottimale dal punto di vista economico e ambientale*

S. Margani*, P. Di Iorio*, D. Amadio*, F. Santini*, F. Pantano*; *Cogesa Spa

WMV3 – 7 *Compostable Bioplastics - recent developments in standards and certification*

E. Miceli*; * DIN CERTCO

WMV3 – 8 *La trasformazione dei rifiuti in fertilizzante organico: l'economia circolare per privati e PA*

T. Pardi*, V. Mori*, L. Mori*, *BioXplosion Srl

WMV3 – 9 *Anaerobic Codigestion of tomato pomace and buffalo slurry*

E. Santangelo*, M. Cali**, E. Rossi**, R. Scalella**, N.C. La Mantia**, A. Chiariotti**, *CREA Research Center for Engineering and Agro-Food Processing, **CREA Research Center for Animal Production and Aquaculture

WEDNESDAY 9
NOVEMBER

14:30 -
17:00

Tiglio 2 Room A6
Pav

**Agri-food,
Forestry and Bio-
based Industry**

Biorefineries for local regeneration: state of art and critical issues

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & Italian Cluster of Circular bioeconomy SPRING

Shifting from non-renewable fossil raw materials and minerals to circular bio-based production processes is essential to reach the EU's climate targets as set out in the European Green Deal. Towards this goal multi-product biorefineries are key elements to improve the efficiency of biomass utilization and to boost resource efficiency and waste prevention, as well as recycling and circularity. According to some estimates, approximately 300 biorefineries will need to be deployed in Europe by 2030 in order to meet the growing EU market demand in this sector. The bioeconomy represents one of the most important sectors of EU intervention to stimulate growth in rural and coastal areas and for the diffusion of sustainable solutions. In recognition of the strategic value of the bioeconomy, the Council of the European Union decided to adopt the regulation establishing the Circular Bio-based Europe Joint Undertaking (CBE JU), one of nine European partnerships, which will succeed the BBI JU. Despite the strategic value of this sector, which is proving to be able to regenerate brownfield sites, create new jobs, and create bioproducts that do not impact ecosystems, the biobased industry is facing many challenges such as the impossibility of reusing certain waste streams, the need for significant and risky investments for the industrial scale-up, the lack of a regulatory and policy framework boosting the sector, etc. The conference aims to deepen the strengths, priorities and critical issues of the sector.

Session Chair

Mario Bonaccorso, Cluster Spring Director

Program

14.30 Welcome

Introduction by the Chairs

14.40 Supporting the bio-based industrial sector

Luca Bianchi, General Director Svimez (TBC)

Danilo Porro, MUR delegate Cluster 6 Horizon Europe (TBC)

Luca Pagetti, Head of Startup Growth Financing Department at Intesa Sanpaolo Innovation Center (TBC)

Cristina Prandi, Professor and Vice Rector for Research - UniTO

15.10 Emerging sustainable technologies and industrial scale-up

ENVIRONMENT PARK – Management and potential valorization of bioplastics separated from the OFMSW

Paola Zitella – Manager of Green Chemistry area, Environment Park

OHOSKIN - Sustainable, vegan leather alternative from oranges and cacti

Adriana Santanocito – Ohoskin CEO (TBC)

PLANTAREI BIOTECH – Plants and food residues in cosmetics and medicines
Elena Sgaravatti – Plantarei Biotech CEO

REWOW - From waste oils to bio-based polymers for high value-added sectors
Antonino Biundo – Rewow CEO

TERRANEXT – Bioeconomy Accelerator
Enrico Nosedà – Chief Innovation Advisor Cariplo Factory (TBC)

15.50 Panel Discussion: Biorefinery for local regeneration, challenges and opportunities

Andrea Lanuzza Technical Director, Gruppo CAP
Giulio Bonazzi, Aquafil CEO (TBC)
Giacomo Rispoli Senior Executive Director Waste To Chemical Nextchem (TBC)
Giulia Gregori, Novamont Strategic Planning and Corporate Communication Manager
Stefano Carosio, Executive Director STAM

16.30 Conclusion

Laura D'Aprile, Head of Department for Ecological Transition and Green Investments (TBC)
Alessandra Todde, Deputy Minister for Economic Development (TBC)
Luca Annibaletti, coordinator of the Business Crisis Unit, Italian Ministry of Economic Development (TBC)

WEDNESDAY 9
NOVEMBER

14:30 -
17:30

Ravezzi 2 South
Hall

**Circular
Economy Value
Chains**

Participatory circular economy initiatives in Europe and Italy

Language: Italian

Organized by: Technical Scientific Committee of Ecomondo, ENEA and ICESP

The theme of resilience is even more relevant due to the recent crises, both the pandemic and the conflict in Ukraine. Ensuring the security of resources supply, that also lead to financial stability for businesses and families, become as important as urgent, in order to guarantee sustainable growth and citizens well-being through innovation, eco-design, skills complementarity and expertise. In this sense, the actions envisaged in the European Circular Economy Action Plan (CEAP, March 2020) are the reference for the initiatives and strategies of the member Countries. All actors are called to build a new economic model that requires integrated governance, research and innovation with a multidisciplinary approach, investments and incentives, procedural simplifications, market creation and cultural change. Important elements of the circular economy (CE) are the participation and collaboration between actors that can be engaged through networks and hubs, creating knowledge, dialogue, awareness and trust. Furthermore, it is essential to collect and disseminate good practices in order to foster winning solutions along the supply chains and in the cities/territories.

The multidisciplinary approach and the dissemination of good practices (GPs) can be the driving force and inspiration for the activation of transition paths to CE and ICESP implements the Italian GPs database (about 200 GPs), available on www.icesp.it. The GPs related both to supply chain and territorial approach, are reviewed by a specific committee and then published on ICESP web site and, in parallel, sent to ECESP. GPs are selected according to the following criteria: degree of innovation, replicability, maturity, quantification of impacts.

The conference will be an opportunity to explore current activities and ICESP GPs, in line with Italian and European initiatives, highlighting the perspectives for supporting the transition in a systemic view.

Session chairs

Roberto Morabito, Director of the Department for Sustainability, ENEA
Margherita Finamore, Pesaro Municipality, representing the ICESP Coordinators Committee

Programme

14.30-14.50 Introduction by the chairs

Initiatives in Europe

14.50-15.10 *European Circular Economy Action Plan progress*

Paola Migliorini, European Commission, DG Environment for Sustainable Production, Products and Consumption Unit

15.10-15.30 *ECESP and leadership group on "network and governance"*

Ladeja Godina Košir, Coordination Group of the European Circular Economy Stakeholder Platform (ECESP)

Initiatives in Italy

15.30-15.50 *Circular Economy national strategy*

Silvia Grandi, Directorate General for Circular Economy, MITE

15.50-16.10 *The circular transition of value chains*

Giacomo Vigna, Directorate General for Industrial Policy, Innovation and Small and Medium-Sized Enterprises, MISE

16.10-16.30 *Role of technical standardization for the circular transition*

Elena Mocchio, Innovation Division, UNI

16.30-16.50 *ICESP in the Italian circular economy context*

Grazia Barberio, ENEA and ICESP technical coordinator

16.50-17.10 *Multidisciplinary approach and ICESP good practices*

Alessandra De Santis, Economicircular.com and co-coordinator of the ICESP WG6

17.10-17.30 Discussion and closure

WEDNESDAY 9
NOVEMBER

14:30 -
17:30

Ravezzi 1 Room
South Hall

Waste
Management
and Valorization

How the National Recovery And Resilience Plan (NRRP) will change the municipal waste management: an outlook on the future of the Italian circular economy

Language: Italian

Organized by: Ecomondo Scientific Technical Committee, Utilitalia & Italian Composting and Biogas Consortium

The national recovery and resilience plan (Mission 2 Measure 1) has provided for a specific investment line (1.1) that allocates 1.5 billion euros for the enhancement of separate waste collection, the revamping and construction of new treatment plants for separately collected municipal waste, and innovative plants for the treatment of waste still on fringes of circular economy. Through the discussion among the various subjects involved (institutions, industry associations, waste operators), the conference aims to make a first assessment of the initiative, evaluating how local authorities and companies have seized the opportunities of the NRRP, and how the projects admitted to the funding will shape the future of municipal waste management in our Country.

Session chair

Alberto Ferro (Coordinator of Utilitalia Commission on collection, recycling and EPR schemes)

Programme

14:30 *Introduction and coordination by the Chairman*

Alberto Ferro (Coordinator of Utilitalia Commission on collection, recycling and EPR schemes)

14:45 Institutional speakers

Laura D'Aprile, Head of Department of Ecological Transition and green investments, Italian Ministry of Environmental Transition

Valeria Frittelloni, Head of National Center for Waste and Circular Economy, Italian Institute for Environmental Protection and Research

Giovanni Portaluri, Head of Public Investments, INVITALIA

Lorenzo Bardelli, Director of Environment Division of Italian Regulatory Authority for Energy, Networks and Environment

15:45 *Closing the loop and innovation in waste management: the winning projects of the NRRP calls*

Luca Mariotto, Director Environmental Sector of Utilitalia

Massimo Centemero, Director of the Italian Compost and Biogas Consortium

16:05 *Contributions from companies whose projects have been admitted for funding*

Selection of 4 companies winners of the NRRP calls, members of the Italian Compost and Biogas Consortium and of Utilitalia

17:15 *Conclusions*

Lella Miccolis, President of the Italian Compost and Biogas Consortium

Filippo Brandolini, Vice President of Utilitalia

WEDNESDAY 9
NOVEMBER

15:30 -
18:00

Mimosa Room B6
Pav

**Research and
Innovation**

Pitch session with Horizon Europe beneficiaries

Language: English

Organized by: Ecomondo and Key Energy Scientific Technical Committees & European Commission

The pitch session builds up on the framework that composes the Pillar III of Horizon Europe, the EU's key funding programme for research and innovation. Pillar III focusses on supporting the development of disruptive and market-creating innovations and on enhancing European innovation ecosystems. The pitch session model echoes this strategic approach and gives the selected beneficiaries the opportunity to present their ideas in front of an expert jury and interested audience.

The companies will pitch their research and business ideas to selected experts and investors coming from the private sector. A feedback session by jury that is composed of selected experts will follow with the purpose of highlighting the added-value of the proposed solutions from a technological and business perspective. The idea is to bring scientists, managers and entrepreneurs together to discover new innovative companies in the field of green technologies. The ECOMONDO audience is also invited to join the discussion and to bring in their input.

Session Chairs

Francesco Matteucci and Marco Pantaleo, European Commission

Programme

CINEA, REA and EISMEA, three Executive Agencies of the European Commission, will invite to pitch funded SMEs and projects working on energy- and environmental-related topics and renowned investors and experts as jury members.

Each SME will pitch for 5 minutes.

10 minutes will be dedicated for feedback and discussion given by a jury composed of experts, investors and audience.

WEDNESDAY 9
NOVEMBER

16:00 -
18:00

Diotallevi 1 Room
South Hall

**Circular
Economy Value
Chains**

Textile waste prevention and circular textiles: the role of cities and regions and the potential of regional policies

Language: English

Organized by: ACR+ Association of Cities and Regions for Sustainable Resource Management

The textile sector is a resource-intensive sector with significant impacts on the climate and environment and is identified as a key value chain in the EU Circular Economy Action Plan. The upcoming requirement for separate collection of textile waste in the EU, combined with implementation of EPR schemes and principles and the recent achievements in sorting and recycling technology empower regions and cities with an important role in facilitating the transition towards a more resilient, circular, and sustainable way. This session will discuss challenges faced by cities and regions as well as strategies and solutions to tackle them, and how they can interact effectively with national and EU strategies.

Session Chair

Francesco Lembo, ACR+

Programme

16.00-16.10 Registration

16.10-16.25 Introduction. Cities and Regions at the forefront of textile waste prevention.

Francesco Lembo, ACR+

16.25-16.40 *Committee of Regions opinion on the EU Strategy for Sustainable and Circular Textiles.*

Luca Menesini, Mayor of Capannori and CoR Rapporteur on the opinion on the EU Strategy for Sustainable and Circular Textiles

16.40-16.55 *The Circular Fashion Pact to weave a more sustainable future in Catalunya*

Pilar Chiva, Director of Circular Economy Department at Agencia de Residuos de Catalunya

16.55-17.10 *Vision & Roadmap towards a circular textile sector in the Metropolitan Region of Amsterdam*

Marten Boels, Metropolitan Region of Amsterdam

17.10-17.25 *The role of EPR eco-organisations in supporting the transition towards textile waste prevention and circularity*

Maud Hardy, General Manager at Re_Fashion

17.25-17.40 The European Week for Waste Reduction 2022, waste is out of fashion!

Serena Lisai, ACR+

17.40-18.00 Q&A and wrap-up

THURSDAY 10 NOVEMBER

THURSDAY 10
NOVEMBER

09:30 -
17:00

Tiglio Room A6
Pav

**Waste
Management
and Valorization**
*Conference open to
Papers*

Operational and assessment tools for the management of materials and energy in a circular economy

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & Italian Chemical Society – Division Environmental and Cultural Heritage Chemistry, ATIA – ISWA, Italian LCA Network – WG Waste Management and Treatment

CALL FOR PAPERS

One of the structural reforms of our Country, subsequent to the implementation of the National Recovery and Resilience Plan, is the National Waste Management Programme, in the minds of Ministry seen as one of the coordination tool for territories, in order to allow them a targeted plan, based on own specific needs. Besides the level of public policies, it is becoming more and more determinant, also for the individual companies, to verify the compliance of own activities to the principles of circular economy, to stand on the market as active players in the ecological transition and improve their competitiveness.

In this seminar, the contributions of institutions, companies, research bodies are accepted, which present more sustainable management approaches, good practices of prevention and resource savings, environmental and socio-economical assessment, in relation to different productive activities and services.

Session Chairs

Fabrizio Passarini, STC Ecomondo, Università di Bologna
Lucia Rigamonti, Politecnico di Milano
Danilo Bonato, Direttore Generale Erion

Programme

9.30-9.40 Introduction by the Chairs and a short summary on the papers presented through posters

9.40-10.25 Invited lectures

9.40-9.55 *Project INTERREG "RESET - RESEARCH centers of Excellence in the Textile sector"*

Besnik Mehmeti (Comune di Prato)

9.55-10.10 *Project LIFE "EBP - Ecofriendly multipurpose Biobased ProduSTC from municipal biowaste"*

Simone Solaro (Hysytech srl)

10.10-10.25 *Assessment tools for company environmental performances; focus on the role of produSTC end of life*

Isabella Capurso (Interseroh TSR)

10.25-13.00 **Presentations selected from the call for papers**

10.30-10.45 *Piani di azione a supporto dei servizi per l'economia green e circolare*
Valeria Stacchini (Città metropolitana di Bologna)

10.45-11.00 *Il ruolo del green public procurement per favorire il riciclo e il recupero*
Mascioli Alessandra, Peretti Cristina (CNR - IIA)

11.00-11.15 *Analyzing the role of Green Public Procurement for a sustainable Public Administration. Limits and opportunities in the Italian national ecological transition*
Crovella, T., Lagioia, G., Paiano, A. (University of Bari Aldo Moro)

11.15-11.30 *Analysis of waste properties for the selection of components of the Waste Management Center*
Džafer Dautbegović, Darko Petković (University of Zenica), Mirsada Hasanbašić (ALBA Zenica)

11.30-11.45 *Waste management in Algeria, state of the art and opportunities*
Mohamed Karim Ouamane (National Waste Agency Algeria)

11.45-12.00 *Ambasciata Rifiuti Zero*
Rodrigo Sabatini, Taina Wanderley (Istituto Lixo Zero Brasil e Ambasciata d'Italia a Brasilia)

12.00-12.15 *The use of hyperlocal social network technology in micro regions to promote SGDs in cities*
Caetano Seleme Zagonel, Marcelo Crivano Lopes (Smart Citizen, Brasil)

12.15-12.30 *Big data processing, visualization and analysis of waste management at province scale for the circular economy*
Ehsan Liaghati, Giorgio Bertanza, Marta Domini, Reza Vahidzadeh (Università degli Studi di Brescia), Alessandro Corsini, Chiara Lanzini (Confindustria Brescia)

12.30-12.45 *Standard di riferimento per l'economia circolare: stato dell'arte e prospettive*
David Giraldi, Patrizia Vianello (Ambiente s.p.a.)

12.45-13.00 *LCA as a tool verify the potential of circular economy in the waste-wastewater-energy nexus*
Giuseppe Mancini (University of Catania), Lida Lombardi (Niccolò Cusano University), Antonella Luciano (ENEA), David Bolzonella (University of Verona), Debora Fino (Polytechnic of Turin)

13.00-14.00 Break

14.00-17.00 **Presentations selected from the call for papers**

14.00-14.15 *Carbon fibers waste recovery via pyro-gasification: Pilot plant testing and LCA*
Luca Ciacci, Fabrizio Passarini, Loris Giorgini (University of Bologna), Cristian Tosi (CURTI S.p.A.)

14.15-14.30 *L'auto del domani sarà circolare. Il Caso del Gruppo Sirmax nel mercato automotive*
Massimo Veronelli (Sirmax spa)

14.30-14.45 *La filiera della lavorazione dei metalli preziosi alla prova della transizione ecologica: buone pratiche dal basso per le aziende della Moda del Lusso*
Marco Tortora (Associazione FAIR e BABEL Università di Firenze), Mauro Lombardi (PIN di Prato e BABEL Università di Firenze), Giuseppe Tortora (Associazione FAIR; Ordine degli Ingegneri di Firenze), Francesco Lombardi (Valmet Group Spa)

14.45-15.00 *Aerosols Recycling: The case for the UK with European Implications?*
Anne Laleman (Alpha-Financials Environmental, UK)

15.00-15.15 *Linee guida per la gestione delle terre di fonderia*
Gualtiero Corelli, Roberto Lanzani (Assofond)

15.15-15.30 *Recupero e valorizzazione di alghe infestanti per la produzione di sensori biocompatibili*
Antonella Macagnano, Massimo Mari (CNR - IIA), Carla Mazziotti (CNR - DIITET)

15.30-15.45 *Applicazioni innovative di recupero di materia e energia nei depuratori*
Desdemona Oliva (Gruppo CAP)

15.45-16.00 *Technical aspects in the evaluation of offshore CO2 storage in depleted levels of hydrocarbon*
Romualdo Marrazzo, Francesco Astorri (ISPRA)

16.00-16.15 *Life Cycle Assessment of a Decentralised Approach to Dairy By-product Valorisation: Opportunities for Sustainable Intensification and Circularity*
Eric Mehner, Mentore Vaccari (University of Brescia), Daniele Pizzichini (ENEA Casaccia), Valentina Fantin (ENEA Bologna)

16.15-16.30 *Analisi LCA del trattamento di rifiuti C&D per la produzione di aggregati riciclati per calcestruzzo*
Andrea Piccinali, Irma Cavallotti, Giovanni Plizzari, Sabrina Sorlini (Università di Brescia), ICA - Società di Ingegneria Chimica per l'Ambiente S.r.l.

16.30-16.45 *The use of the PEF method to valorize the use of recycling material in the textile industry*
Michael Knaute (Green Soluce from CBRE), Alicia Boyano Larriba (European Commission DG Environment), Camille Le Gal, Leila Gimeno (FAIRLY MADE)

16.45-17.00 *Migliorare la sostenibilità ambientale. Il caso dei prodotti gicléeart*
Di Noia A. E., Nicoletti G. M., Cappelletti G. M., Russo C. (University of Foggia)

17.00-17.15 Discussione e chiusura dei lavori

Sessione Poster

WMV2-P1 Biometanazione: una soluzione per i nuovi sistemi energetici / Gianfranco De Feo (Micropyros BioEneerTec GmbH), Leonardo Senatori (Pietro Fiorentini SpA), Raimund Brotsack (Deggendorf Institute of technology)

WMV2-P2 "RIFIUTIAMOCI": diventiamo utenti consapevoli e monitoriamo le nostre abitudini / Matteo Lombardi (Ellequadro Ingegneria srls)

WMV2-P3 Gli obiettivi di riciclo nella pianificazione regionale: il caso della Regione Lombardia / Giorgio Ghiringhelli, Michele Giavini, Elisa Amodeo, Silvia Colombo (ARS ambiente Srl)

WMV2-P4 Il Testo Integrato della qualità del servizio di gestione dei rifiuti urbani (TQRIF) di ARERA / Giuseppe Sbarbaro, Monica Benzi, Stefano Amandolesi (UTILITEAM Srl), Giorgio Ghiringhelli (ARS Ambiente Srl e Università Cattaneo – LIUC)

WMV2-P5 Il Centro dei Riutilizzo come strumento di riduzione rifiuti e educazione al valore della materia / Giorgio Ghiringhelli (ARS ambiente Srl e Università Cattaneo – LIUC), Claudia Colombo, Gianfranco Carraro (AGESP Spa)

WMV2-P6 Smaltimento dei rifiuti urbani durante la pandemia di COVID-19 nelle Marche: produzione e costi pro-capite / Katuscia Di Biagio, Massimiliano Boccarossa, Marco Baldini (ARPA Marche), Jacopo Dolcini (Università Politecnica delle Marche).

WMV2-P7 L'economia circolare per la riqualificazione e l'innovazione dei mercati locali / Marino Cavallo (Città Metropolitana di Bologna)

WMV2-P8 Assessment of PM and Gaseous Macro-pollutants Emissions During Biomass Combustion / Francesco Gallucci, Beatrice Vincenti, Enrico Paris, Adriano Palma, Monica Carnevale, Mariangela Salerno (Council for agricultural research and economics, CREA-IT, Monterotondo - RM), Attilio Tonolo (Ministry of Agricultural, Food and Forestry Policies - MiPAAF)

WMV2-P9 Sustainability tools applied in the videogame sector. ISO 29110/2016 standard in cinic games / Marco Di Mauro, Enrico Cocuccio, Chiara Tabita, Agata Matarazzo (University of Catania), Serena Dal Maso (CINIC GAMES S.R.L. - Firenze)

WMV2-P10 CARBOND: a tool for calculating the sequest of carbon in the soil and enhancing agro-ecosystem services in fruit growing / Lojudice C., Carlucci G. (AGREENMENT SRL, Matera), Berloco T., Laterza D., Lardo E., Fiore A., Lorusso G.

WMV2-P11 Low-cost biogas purification systems: LCA study / Papurello Davide, Peccolo Melissa (Politecnico di Torino)

WMV2-P12 Bio-based binder for furniture: Fibreboard production with microfibrillated cellulose (MFC) as binder / Tassos Kladis, Yun Jin (FiberLean Technologies Ltd – Germany)

WMV2-P13 Digital tool to foster circular economy and sustainably close broken value chains / Pasqualina Sacco, Davide Don (Fraunhofer Italia Research Scarl, Italy), Mateja Dermastia (Anteja, Slovenia), Jon Goriup (VGG.AI, Germany), Michael Keller (School of Engineering and Architecture, Fribourg, Switzerland)

WMV2-P14 Quantification of social performance indicators in a company monitoring energy from renewable sources Carrabino R., Matarazzo A., Arfò S. (Università degli Studi di Catania), Massaro S., Falzone G. (BaxEnergy Italia s.r.l.)

WMV2-P15 Risparmio idrico ed efficientamento energetico, partendo dall'analisi morfologica e topografica del luogo come territorio-ambiente, per un progetto di fattibilità di un resort in area Sub Sahariana / Paolo Mauri, Lorenzo Pessina (Ambiente Spa), Giovanna Rossato (Progetto CMR)

WMV2-P16 Screening tramite drone di una discarica di RSU per la ricerca dei punti di emissione di metano / Giuseppe Tassielli, Bruno Notarnicola, Pietro A. Renzulli, Maurizio De Molfetta, Donatello Fosco (Università degli studi di Bari "Aldo Moro")

WMV2-P17 Materiale di riporto e consumo di suolo: criticità della normativa italiana / Eugenio Capponi, Alessandra Magnani (HPC Italia S.r.l.)

WMV2-P18 Recircle Srl / Marco Di Carlo (Recircle Srl)

WMV2-P19 Retrofitting negli impianti trattamento acque: il reattore MBBR / Andrea Baldini (Sebigas Renewable Energy srl)

WMV2-P20 Technical and economic feasibility analysis of the pilot project in Marsili in Sicily / Federica Marino, Sergio Arfò, Agata Matarazzo (University of Catania), Francesco Italiano, Cinzia Caruso (N TLINK SRL- Valverde - CT)

WMV2-P21 Life Cycle Thinking in the ancient grains of Sicily. The Integra Project / Vittoria Spina, Sergio Arfò, Agata Matarazzo (University of Catania), Carlo Ingrao (University of Bari Aldo Moro), Giuseppe Spina (Studio Associato Agriengineering, Catania)

WMV2-P22 Battery storage technological innovations: study case Baxenergy Ltd / Marco Di Mauro, Salvatore Gulina, Antonio Zerbo (University of Catania), Concetta Patania, Simone Massaro (Baxenergy Italia S.R.L., Acireale)

WMV2-P23 Applicazione tematiche ambientali previste dal DNSH nell'ambito della riqualificazione edilizia / A. Della Valle, G. Martinoli (Progetto CMR), P. Colombo, P. Mauri (Ambiente S.p.A.)

WMV2-P24 Reducing foreign dependence in electric energy production? / Francesco Albasser (Studio Ingegneria, Milano)

WMV2-P25 Economic and financial analysis of plants for obtaining energy from hydrogen sources in Sicily / Nicolò Mazzoleni, Sergio Arfò, Alberto Zufalo, Rosario Carrabino, Antonio Zerbo (University of Catania)

WMV2-P26 Economia circolare in agricoltura: Restituire alla terra la fertilità della terra/ Eleonora Campi (Terranova Srl)

WMV2-P27 Development of an Italian Life Cycle Inventory Database of Agri-Food Products (ILCIDAF): a customized model to estimate heavy metals emission / Bruno Notarnicola (Università degli studi di Bari "Aldo Moro"), Luigia Petti, Giuseppe Saija, Alfio Strano, Rosa Di Capua, Francesco Astuto, Manuela D'Eusanio, Nicola Casolani, Teresa Maria Gulotta, Giovanni Mondello, Giacomo Falcone, Antonio Fazari, Gregorio Vono

WMV2-P28 Economica circolare e Biocarburanti: biometano e non solo / Alessandra Caramia (Bureau Veritas Italia Spa)

WMV2-P29 La produzione dei rifiuti e influenza della tariffa puntuale / Ernesto Infusino (Università della Calabria), Roberta Infusino (Libera professionista)

WMV2-P30 Technology to the rescue for a smart and sustainable approach to waste management / Leon Hayes (Taoglas Waste Technologies)

WMV2-P31 PNRR, PITESAI e crisi ucraina, acceleratori per la transizione ecologica / Tiziana Fiorella, Andrea Marega (Partner, Ughi e Nunziante Studio Legale), Cristina Maria Celotto (Associate, Ughi e Nunziante Studio Legale)

WMV2-P32 Projects LIFE RE-SHOES and RE-SKIBOOT: efficient and cost-effective recycling processes for more sustainable sport equipment / Martino Colonna (University of Bologna – RE-SPORT srl)

WMV2-P33 Sistemi di gestione integrata per il recupero dei materiali da Veicoli Fuori Uso abbandonati / Luca Pomili, Alessio Fabrizi (Pomili Demolizioni Speciali Srl)

WMV2-P34 Economia circolare e forme di valorizzazione. Analisi della catena del valore del PET riciclato / Nadia Lambiase (Università degli Studi di Torino - Mercato Circolare)

THURSDAY 10
NOVEMBER

10:00 -
12:30

Diotallevi 2 Room
South Hall

**Sustainable
Remediation and
Regeneration of
Contaminated
Sites**

The States General for Soil Health - International session

Language: English

Organized by: Ecomondo Scientific Technical Committee & European Mission A Soil Deal for Europe, Re Soil Foundation

According to the 'Caring for Soil is Caring for life' report published by the European Commission in 2020, 60-70% of all European soils are unhealthy due to current management practices, pollution, urbanization, and the effects of climate change: specifically, 25% of soils in southern, central, and eastern Europe are at high or very high risk of desertification, while today's rate of soil reuse is stuck at 13%. The estimated cost associated with soil degradation in the EU exceeds 50 billion euros/year. For these reasons, the health of this valuable non-renewable resource has been identified by the European Union as one of the 5 Missions - A Soil Deal for Europe - launched by the Commission to address science and innovation towards the challenges our society is facing. Soil becomes a key element of the Green Deal to support Europe's growth aimed at achieving zero net soil consumption by 2050. Soil protection contributes to further challenging goals such as reducing greenhouse gas emissions to the atmosphere by 55 percent by 2030 and achieving climate neutrality by 2050. In an increasingly uncertain economic and geopolitical context, in which Europe and Italy are facing a growing scarcity of raw materials, restoring the health of our soils, curbing their degradation and consumption will be crucial to increase our self-sufficiency and support the industrial revitalization of our country and Made in Italy. Today, in Italy, more than a quarter of the land is degraded and soil consumption causes our country to lose about 2 square meters/second. That's why the National Coordination Group for the Bioeconomy (CNBBSV) of the Presidency of the Council of Ministers, which also comprises the Ministry for Agricultural, Food and Forestry Policies – MIPAAF and the Ministry for Universities and Research - MUR, in collaboration with ISPRA, CREA and Re Soil Foundation (founded by University of Bologna, Coldiretti, Novamont and Turin Polytechnic), launches in Rimini the first States General for Soil Health conference, an open, shared and participatory advisory event which aims to set the course for soil regeneration, a non-renewable resource crucial to ensure life on Earth but increasingly at risk. The States General for Soil Health therefore intend to bring together the main national and international stakeholders and experts to draft a programmatic platform aimed at supporting the development of an Italian Soil Strategy, through the analysis of the environmental, economic, legislative and social scenario, of good practices and multidisciplinary and multi-actor existing projects, which are already providing answers in this direction. The States General for Soil Health will take place for the first time on 10 November 2022, with the aim of presenting the European policy framework in the morning session, and the state of the art at national level in the afternoon session.

International morning session

Session Chairs

Catia Bastioli, former member of EC Mission Soil health & food, member of Re Soil Foundation

Roberto Moncalvo, President of Coldiretti Piemonte, Re Soil Foundation Board Member

Programme

10.00 *Welcome*

Italian Ministry of Agricultural, Food and Forestry Policies (TBC)

Catia Bastioli, former member of EC Mission Soil health & food, member of Re Soil Foundation

Angelo Riccaboni, EC Mission Soil health & food Italian representative

10.10 **Soil strategy for 2030: Soil in the European policy framework and international agendas**

The Status of soil health – FAO point of view

Lucrezia Caon, Land and Water Officer FAO (Soil Management)

Soil in the Union for the Mediterranean

(TBD)

Protect soil biodiversity – where are we going

Claudia Olazabal, Head of Unit, Natural Capital, Land use and Management, DG ENVI (TBC)

Directions for innovation in the CAP

(TBD)

11.00 **Panel discussion**

Moderated by: Roberto Moncalvo, President of Coldiretti Piemonte, Re Soil Foundation Board Member

Research & innovation in agriculture: best practices and challenges

Rattan Lal, Professor, School of Environment and Natural Resources

Pedro Berliner, Emeritus Full Professor, The French Associates Institute for Agriculture and Biotechnology of Drylands

Eduardo Cuoco, Director, IFOAM Organics Europe

David Chiaramonti, Full Professor, Polytechnic University of Turin, Department of Energy, member of Re Soil Foundation

11.45 *Horizon Mission Soil – The PREPSOIL project*

Margrethe Balling Høstgaard - PREPSOIL project manager - DCA, Aarhus University, Denmark

11.55 Q&A

12.10 **Closure (by the chairs)**

THURSDAY 10
NOVEMBER

10:00 -
13:00

Ravezzi 1 Room
South Hall

**Agri-food,
Forestry and Bio-
based Industry**

A 2.0 Farm to Fork: regenerative agrifood supply chains, food security and economic competitiveness

Language: Italian

Organized by: Ecomondo STC & Confagricoltura, Federalimentare, ENEA

The decisions related to the agrifood production and processing shall be more and more oriented to ensure, from one side, safer supplies – of agricultural raw materials as well as technical means and competitive energy prices – and, on the other side, the transition towards sustainable productions and processing which represents the most important challenge, today, for the agrifood systems. It concerns key objectives without any possibility of alternatives or contradictions. In this frame the new technologies play an essential role both in the primary and industrial sectors as they allow to meet the future challenges with a modern and innovative vision, aimed at promoting the agricultural production and the development of agrifood systems and at facilitating the sustainability in the industrial processing, the mitigation of the effects of climate change and fight against the climate change.

Session Chairs

Maurizio Notarfonso, Federalimentare (The Italian Food & Drink Industry Federation)
Massimo Iannetta, Confagricoltura (General Confederation of Italian Agriculture)

The decisions related to the agrifood production and processing shall be more and more oriented to ensure, from one side, safer supplies – of agricultural raw materials as well as technical means and competitive energy prices – and, on the other side, the transition towards sustainable productions and processing which represents the most important challenge, today, for the agrifood systems. It concerns key objectives without any possibility of alternatives or contradictions. In this frame the new technologies play an essential role both in the primary and industrial sectors as they allow to meet the future challenges with a modern and innovative vision, aimed at promoting the agricultural production and the development of agrifood systems and at facilitating the sustainability in the industrial processing, the mitigation of the effects of climate change and fight against the climate change.

Session Chairs

Maurizio Notarfonso, Federalimentare (The Italian Food & Drink Industry Federation)
Massimo Iannetta, ENEA

Programme

10:00 Opening speech
Massimo Iannetta, ENEA

10:15 EU Commission DG AGRI - (Director Sustainability and income support) – Pierre Bascou *

10:30 Denis Pantini Nomisma

10:45 Italian Ministry of Agriculture

11:00 – 12:00 Business case studies of supply chains:

Tomatoes (Calispa), crops (Cerealdocks), poultry (Fattorie Menesello), dairy (Auricchio)

12:00 – 13:00

Round table with:

Giovanni Toffoli, Assofertilizzanti,
Riccardo Vannelli, Agrofarma
Massimiliano Giansanti, Confagricoltura
Ivano Vacondio, Federalimentare
Presidente Assobiotec, TBD

13:00 Closing remarks

THURSDAY 10
NOVEMBER

10:00 -
13:00

Noce Room A6
Pav

**Circular
Economy Value
Chains**

Markets and innovative uses for recycled rubber, a Critical Raw Material for national economy

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & Ministry of Economic Development, ENEA and UNIRIGOM (Assoambiente/sect. Unicircular)

Since 2020, natural rubber has been included in the European list of “Critical Raw Materials”, which are strategic for the economy and the supply market. The rubber that is obtained from ELTs by mechanical treatment remains vulcanised and can therefore only be destined, to limited applications (sports surfaces, modified asphalts, street furniture, etc.) in the form of granules or powder, as “filler”. The possibility of reusing rubber from ELTs in the production of tyre compounds, after a devulcanisation process, is to be preferred because it allows to “close the circle”, but also because it can provide greater stability to the market of alternative uses of ELT granule and powder. Nowadays, innovative, low-energy and environmentally friendly processes have been developed for the use of recycled rubber both in the production of new tyres and for other uses in the automotive and electronics sectors.

In the wake of European initiatives, the Ministry of Economic Development (MiSE) and the Ministry of Ecological Transition (MiTE), with the support of ENEA, have promoted a political and technical table for Critical Raw Materials (CRM), with the aim of strengthening coordination on the issue, enhancing CRMs planning in terms of sustainability of supplies and circularity, and of contributing to the creation of regulatory, economic and market conditions to ensure a safe and sustainable supply of CRMs for Italy, including rubber.

Session Chairs

Andrea Fluttero, President of UNIRIGOM
Claudia Brunori, Head of Efficient Use of Resources Division, ENEA

Programme

10.00 -10.15 *Welcome and introduction speech*
Andrea Fluttero, President of UNIRIGOM

10.15-10.45 *Critical raw materials: economic and regulatory framework and initiatives at European and national level*
Claudia Brunori, Head of Efficient Use of Resources Division of ENEA

10.45-11.15 *Valorisation of waste and rubber scraps in terms of circularity*

Fabio Bertolotti, Director of Assogomma

11.15-11.45 *Methods and measurements to characterise materials from rubber recycling*

Franco Cataldo, Actinium Chemical Research srl

11.45-12.45 *Key success stories by rubber recycling companies:*

LIFE GREEN VULCAN: project status updates and new perspectives in rubber recycling for automotive applications

Giuseppe Magistrale, Rubber conversion

Representative of Arkema

Representative of Bridgestone

Representative of Trelleborg

12.45-13.00 *Conclusions*

Giacomo Vigna, Directorate General for Industrial Policy, Innovation and Small and Medium-Sized Enterprises, Ministry of Economic Development

Micaela La Vecchia, Division III "Circular Economy" official and Critical Raw Materials Table coordinator, Ministry of Economic Development

THURSDAY 10
NOVEMBER

10:00 -
13:00

Reclaim Expo
Room C3 Pav.

**Sustainable
Remediation and
Regeneration of
Contaminated
Sites**

Ecological transition in the remediation and redevelopment of contaminated sites in Italy

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & Sapienza University of Rome, UNEM, Legambiente

Reclaim Expò continues to offer a meeting point for all those interested in the complex problem of remediation of contaminated sites at national and local level, from the institutions (Ministries, Regions, SNPA, ...) to the professional operators, which include the responsible subjects or otherwise interested in the remediation and the companies that offer services and technologies. The general framework of reference will be, once again, the sustainable management of "remediation", where the needs for the environmental remediation and those for the health safety are combined with acceptable costs for remediation and the economic recovery of the reclaimed areas. This year, particular attention will be given to the concept of "ecological transition" applied to the remediation of polluted sites, also with reference to the possibility offered by the PNRR.

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 Giacopetti, Unem (Energies for Mobility Union)

Giorgio Zampetti, Legambiente (Italian environmental association)

Programme

10.00-10.15 Greetings and introduction by the session presidents

10.15-10.30 *PNRR and opportunities in the recovery of orphan sites*

Maria Sicari, General Director of ISPRA (Italian Institute for Environmental Protection and Research)

10.30-10.45 *The scientific research for the development of sustainable remediation processes*

Marco Petrangeli Papini, Sapienza University of Rome

10.45-11.00 *The ecological transition and investment: industry proposals for sustainable development*

Marco Ravazzolo, Confindustria (General Confederation of Italian Industry)

11.00-11.15 *Transparency of procedures as a tool for accelerating the recovery processes of polluted areas*

Stefano Ciafani, Legambiente (Italian environmental association)

11.15-11.30 *Impact of National Concern Areas on Residents' Health: Knowing in order to reclaim*

Mario Sprovieri, CNR

11.30-11.45 *"The IMPEL Water and Land Remediation" project*

Marco Falconi, ISPRA

11.45-12.00 *Joint experimentation ISPRA - UNEM for the use of passive samplers in monitoring in contaminated sites*

Antonella Vecchio, ISPRA; Guido Bonfedi, ENI Rewind

12.00-12.15 *Energy and environmental sustainability criteria for remediation*

Francesca Benedetti, Italian Ministry for Ecological Transition Consultant Lawyer

12.15-12.50 Round table with:

Legambiente, trade associations, client companies, environmental operators, Italian Ministry for Ecological Transition and ISPRA (Italian Institute for Environmental Protection and Research) / SNPA (National System for Environment Protection) representative

12.50-13.00 Conclusions

THURSDAY 10
NOVEMBER

10:00 -
13:00

Mimosa Room B6
Pav

Circular
Economy Value
Chains

PNRR in the Construction Sector: state of the art, critical issues and opportunities

Language: Italian

Organized by: Ecomondo Scientific Technical Committee, Key Energy Scientific Technical Committee & Green Building Council Italia

The efficient and correct application of PNRR funds requires compliance with the 6 environmental objectives of the European Regulation on the Taxonomy of Green Investments. The construction sector is the one most affected by all these objectives. In order to benefit from the economic support of the PNRR, awareness of the environmental quality level of the construction work and the ability in reporting the objectives achieved are therefore essential. The PNRR also requires compliance with stringent schedules for planning, designing and executing the works. It is known that the construction sector is the slowest among the others due to the complexity of the process and the regulatory framework that governs it. The comparison on legislative instruments for their effective application and where necessary the revision and adaptation to the objectives of the PNRR is therefore of great importance and interest. The conference will try to address these two aspects, environmental quality and design capacity, starting from the vision of the two main ministries involved in the construction sector, the MiTE and the MIMS, then bringing on a roundtable with public administrations, which manage the projects financed by the PNRR, and the construction technology chains that provide the construction solutions.

Section Chairs

Marco Caffi, Green Building Council Italia, Ecomondo Scientific Committee
Gian Marco Revel, Marche Polytechnic University, Key Energy Scientific Committee

Agenda

10.00-10.10 Introduction by the Chairs

10.10-10.20 *The PNRR opportunity for the sustainable transformation of the built environment*

Marco Mari, Green Building Council Italia

10.20-10.40 *The environmental objectives of the PNRR for buildings and their reporting*

Silvia Grandi, MiTE (Ministry of Ecological Transition) (TBC)

10.40-11.00 *Tools at the service of the building processes financed by the PNRR*

Andrea Ferrante, MIMS (Ministry of Infrastructure and Sustainable Mobility)

11.00-11.20 *Case history of building processes financed by the PNRR*

Franco Zinna, Head Casa Department Municipality of Milano (TBC)

11.20-12.50 Panel discussion: The tools and technological solutions at the service of building processes financed by the PNRR - constraints and opportunities

- Tiziana Pescosolido, Municipality of Rome (TBC)
- Margherita Finamore, Municipality of Pesaro
- Federica Brancaccio, ANCE (TBC)
- Dario Costantini, CNA (TBC)
- Fabrizio Capaccioli, Green Building Council Italia
- Agostino Re Rebaudengo, Elettricità Futura
- Paolo Barberi, ANPAR
- Francesco Fatone, International Water Association and Water Europe Ambassador
- Gaetano Settimo, Istituto Superiore della Sanità

12.50-13.00 Discussion and Closure

THURSDAY 10
NOVEMBER

10:00 -
13:30

Neri 1 Room South
Hall

**Policies and
Regulations**

End of Waste, a key passage in the Circular Economy

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & ISPRA (Italian Institute for Environmental Protection and Research)

End of Waste is a key link in the implementation of Circular Economy principles in waste management. Decree Law No. 77 of 31 May 2021, converted into Law No. 108 of 29 July 2021, again amended Article 184 ter of Legislative Decree No. 152/2006 introducing the mandatory and binding opinion of ISPRA, or the regional environmental protection agency with territorial jurisdiction in the authorization procedures on a case-by-case basis. The day represents an opportunity to provide an update on the various technical and legal aspects of the application of the regulation.

Session Chair

Valeria Frittelloni, Ecomondo STC and Director of the National Centre of Waste and Circular Economy, ISPRA (Italian Institute for Environmental Protection and Research)

Programme

10.00-10.15 Institutional greetings

10.15-10.35 *Introduction*

Marco Lupo, General Director of ARPA Lazio Region (Regional Agency for the Protection of the Environment) and Vice President SNPA (Italian National System for Environmental Protection)

10.35-10.55 *National legislation framework*

Maddalena Mattei Gentili, Directorate General Circular Economy, Italian Ministry for Ecological Transition

10.55-11.15 *Updating the SNPA Guideline on the End of Waste Status*

Francesca Minniti, ISPRA (Italian Institute for Environmental Protection and Research)

11.15-11.35 *Legal aspects of the SNPA guidelines*

Giuseppe Battarino, Magistrate Consultant of the Bicameral Commission on illegal activities related to the waste cycle

11.35-11.55 *Assessment of health aspects in the EoW requirements*

Federica Scaini, National Institute of Health

11.55-12.15 *ARPA Piemonte's inspection activities*

Elena Foddanu, ARPA Piemonte (Regional Agency for the Protection of the Environment)

12.15-12.35 Case by case authorisations – represented by the Italian Regions

12.35-13.00 *Conclusions by the Chair*

THURSDAY 10
NOVEMBER

10:00 -
17:30

Diotallevi 1 Room
South Hall

Blue Economy

The Blue Circular Bioeconomy in the Mediterranean

Organized by: Ecomondo Scientific Technical Committee & Cluster BIG, WestMed Initiative, UNIDO SwitchMed

For centuries, the sea has enabled trade, offered livelihoods, and defined the socio-economic development of the Mediterranean region. Economic activities emanating from the sea continue to play an essential role in providing the region's incomes, food and a range of development opportunities. Nevertheless, depleted fish stocks, faltering catching rates, low efficiency and environmental impact of fish production activities are challenging the sector.

In this context, switching current production patterns of fishery, aquaculture and fish processing value chain toward more sustainable and circular business models is at the forefront of national and regional Blue Economy strategies.

This conference will discuss how more resource efficient mode of production will be key for the future sustainability of the fish processing industry, saving water and energy per unit of product. Innovative solutions for processing fish waste into co-products with a high added value could help the industry become more profitable, diversify the product portfolio, create new jobs, improve the resilience of businesses, and better retain the value from maritime resources into the economy. Fishery and aquaculture production with its steady upward trend over the last decades plays an essential role to ensure food for human consumption. Considering the relevance of both sectors and the existing challenges in the production chain (ghost gears, by-catch, discharge and waste of sea-food products, waste generated from transportation and packaging, etc.), the opportunity to develop circular economy initiatives in the Mediterranean is great and would largely benefit both the economy of the sectors and the marine environment.

Circular economy opportunities are distributed along the entire value chains of sea food products. In order to be able to implement changes in the circular economy direction, it is essential to fully understand the specificities of fisheries and aquaculture industry, including the different segments (small-scale and large-scale fisheries, but also possibly for single species/product) not only at country level, but also at sub-national/local level.

The development of a sustainable aquaculture, able to generate fish stocks while limiting its impact on maritime ecosystems is paramount. The introduction of smart technologies is a cornerstone to unlock the potential for business models that can turn challenges into opportunities while managing marine resources in an eco-efficient way.

Session Chairs

Leonardo Manzari, WestMed

Roberto Cimino, Cluster BIG

Mr. Benoit Watelet, UNIDO SwitchMed Blue Economy Team Leader

Programme

10.00 *Introduction by the Chairs*

Session 1: Setting the context

10.20-10.35 *The Blue Bioeconomy in the Mediterranean*
Leonardo Manzari, Westmed Initiative Assistance Mechanism

10.35-10.50 *The Blue Bioeconomy in the Med Southern Shore*
Roberto Cimino, Cluster BIG
Ezeddine Kacem, Cluster Maritime Tunisien

10.50-11.00 *Presentation of the Cluster Big*
Giovanni Caprino, Cluster Big

11.00-11.15 *The strategic action plan in the national and European context*
Emilio Campana, CNR

Session 2: Creating Blue Innovation Ecosystems in the Mediterranean

11.15-11.30 *Blue Biotechnologies: the experience of B-Blue, BlueBioMed and Mistral projects*
Cristian Chiavetta, ENEA
Stefano Valentini, ART-ER

11.30-11.45 *Experience in Portugal*
Forum Oceano - R. Eiras, Secretary General

11.45-12.00 *Experience in Greece*
Cluster Strategis - G. Yovanof, President

12.00-12.20 Q&A Panel Discussion (chairs with speakers)

Session 3: Promoting Blue Economy innovation in the Mediterranean

12.20-12.40 Ilaria Pais, FAROS

12.40-13.00 *Blue Sea Land and its role in the promotion of blue Bioeconomy in the Mediterranean sea*
Nino Carlino, President of Mazara del Vallo Fishing District (TBC)

13.00-13.15 Final remarks and conclusions (chairs)

13.15-14.00 Lunch break

Session 4: BIG vision and proposals for a blue circular bioeconomy

Session chairs:

Emilio Campana, Cluster BIG, Scientific Committee Coordinator
Giovanni Caprino, Cluster BIG, President

14.00-14.10 *BIG proposals for a blue circular economy in the fishing and aquaculture sectors*
Carlo Pretti, CIBM – CTS BIG

14.10-14.20 *Technological gaps and needs to foster a circular economy for the fishing sector: a*

zero-emission fishing fleet

Stefania Valentini, Federpesca

14.20-14.30 *The renewable energy powered fishing vessel*

Representativo of CNR (TBD)

14.30-14.40 *TEOREMA project: results and future perspectives*

Claudio Lugni, CNR

14.40-14.50 *BIG proposals for renewable energies*

Gianmaria Sannino, ENEA, CTS BIG

14.50-15.00 *Industrial perspectives for marine renewable energy in Italy*

Claudio Lugni, CNR

Gianni Scherl, Fincantieri

15.00-15.10 *ITEM project: results and future perspectives on blue biotechnologies*

Giovanna Romano, SZN

15.10-15.20 *BIG proposals for blue biotechnologies*

Donatella De Pascale, SZN - CTS BIG

15.20-15.30 *Industrial perspectives for blue biotechnologies in Italy*

Representativ of Italbiotec (TBC)

Session 5: SwitchMed: sustainable and circular fish food systems for a Blue Economy in the Mediterranean

Session Chair

Mr Benoît Wuatelet, SwitchMed Blue Economy Team Leader at UNIDO

15.45-15.50 *Opening remarks*

Mr Benoît Wuatelet, SwitchMed Blue Economy Team Leader at UNIDO

15.50-16.05 *Keynote Speech and Thematic contribution 1: Fisheries and Aquaculture: State of play of circular economy practices and future opportunities*

Ms Magali Outters, SwitchMed Policy Team Leader at MedWaves

16.05-16.20 *Thematic contribution 2: Biotechnological applications of co-products valorisation in the fish processing value chain. The Moroccan experience for biomedical, nutraceutical, cosmetic, agro-industrial applications*

Dr Mariem Kharroubi, Research Director and Head of the CVSTPM (Centre Spécialisé de Valorisation des Produits de la Mer) of the INRH (National Institute of Halieutic Research)

16.20-16.30 *Business Case 1: Integrated aquaculture farming processes: macroalgae cultivation in natural environments.*

Ms Nadia Selmi, Deputy Director at Selt Marine Group

16.30-16.45 *Thematic contribution 3: Identified business models and opportunities to increase the circularity of the fish processing value chain in Morocco.*

Mr Charles Delannoy, CEO and General Manager at Procidys

16.45-16.55 *Business Case 2: Re-use of waste from fisheries and aquaculture production and activities.*

Ms Nawal Allaoui, CEO and Founder at SEASKIN

16.55-17.10 *Thematic contribution 4: The UNIDO SwitchMed pilot project in Tunisia for a sustainable aquaculture: improving the FCR (Feed Conversion Rate) using SMART Technologies for resource-efficient production systems.*

Dr Mohamed Salah Azaza, Senior research scientist and Director of the Aquaculture Laboratory at the INSTM (Tunisian National Institute of Marine Sciences and Technology)

17.10-17.20 *Q&A and conclusion remarks*

Mr Benoît Wuatelet, SwitchMed Blue Economy Team Leader at UNIDO

THURSDAY 10
NOVEMBER

10:00 -
17:45

Global Water Expo
Room

**Water
Management
and Valorization**
*Conference open to
Papers*

Water Project Europe - Challenges and eco-innovation actions addressing water scarcity and drought in Mediterranean countries

Language: English

Organized by: Ecomondo Scientific Technical Committee & Water Europe

CALL FOR PAPERS

The degree of water scarcity and its political, economic and social implications are felt much more severely in regions like the Mediterranean, where climate change is coming at a very high pace. In the last 50 years, the total water demand has doubled as a result of demographic pressure and from the development of water-intensive activities, such as tourism and manufacturing. Water quantity and quality challenges together with proper strategies for integrated water management, considering irrigation, energy production, and domestic and industrial use, need to be properly addressed. International collaboration and innovation actions are preferable mechanism to tackle these challenges from technical and socio-economic point of view. In the morning this workshop will gather the final main results of relevant EU-funded projeSTC which developed and validated demonstrative and full scale solutions. In the afternoon, industrial case studies for alternative water sources and risk management will be presented

Session Chairs

Evdokia Achilleos and Giulio Pattanaro, European Commission
Andrea Rubini, Water Europe and Ecomondo STC

Programme

MORNING SESSION

10.00-10.10 Introduction by the Chairs

10.10-10.25 *Mediterranean and global priorities regarding desertification and relation with climate change challenges*

Abdeladim Lhafi, High Commissioner for Water and Forests and the Fight against Desertification and Commissioner General of COP 22 (TBC)

10.25-10.40 *H2020 and HEU projects addressing water scarcity challenges*

Evdokia Achilleos and Giulio Pattanaro, European Commission

10.40-11.40 *Horizon2020 HYDROUSA final short workshop*

Simos Malamis (National Technical University of Athens) and HYDROUSA consortium

11.40-12.30 *PRIMA FIT4REUSE and DSWAP final short workshop*

Attilio Toscano (Alma Mater Studiorum-Università di Bologna) and FIT4REUSE consortium

12.30-13.10 *Horizon2020 DIGITAL WATER CITY final short workshop*

Nicolas Caradot (Berlin Competence for Water) and DWC consortium

13.10-13.25 *Finding innovative solutions for water scarcity in Southern Europe*

Blanca Chocarro Ruiz (EIT Water Scarcity)

13.25-13.30 Discussion and Closure (by the chairs)

AFTERNOON SESSION

Session Chairs

Francesco Fatone, Ecomondo Technical Scientific Committee and Polytechnic University of Marche

Attilio Toscano, Ecomondo Technical Scientific Committee and University of Bologna

14.00-14.15 Introduction by the Chairs

14.15-14.30 *European guidelines on water reuse and risk management planning*

European Commission - JRC

14.30-16.00 Panel discussion

Representatives of Italian Ministry of Infrastructure, Ministry of the Ecological Transition, UTILITALIA, ANBI, District Authority, Reclamation Consortia

Call for papers session

16.00-16.15 *Lago di Bracciano: nuove conoscenze e soluzioni per la preservazione della risorsa*

Jacopo Eusepi, Carlo Romagnoli, Giancarlo Cecchini, Alessandro Filippi (Acea Elabori S.p.A.)

16.15-16.30 *Using Biosensors to ensure water quality and disinfection balance in Municipal Water Reuse for local Agriculture*

Tom Williams (Enebio Ltd); Roberto Di Cosmo and Marco Bernardi (Gruppo Cap)

16.30-16.45 *SFS-H Phytotreatment for irrigation reuse channels: Oxi-Nitro efficiency tested on pilot plant*

Carmine Fiorentino, Maurizio Mancini (University of Bologna)

16.45-17.00 *Smart Water Management to prevent Water Scarcity*

Pietro Oliva (Grundfos)

17.00-17.15 *The Alliance For Water Stewardship: a recognized, innovative, resilient solution to water scarcity*

Eugenio Capponi, Beatrice Bizzaro, Ilaria Troncia, Alessandra Magnani (HPC Italia)

17.15-17.30 *The water-energy nexus in a drinking water supply system*

Francesco Arfelli, Luca Ciacci, Fabrizio Passarini (University of Bologna)

17.30-17.45 Discussion and conclusions

POSTER SESSION

WT MV3 – 1 *Assessing Sustainability in Reusing of a Treated Wastewater for Irrigation*

Russo C.*1, Bianchi P.2, Cappelletti G. M.1, Di Noia A. E.1, Grilli L.1, Nicoletti G. M.1

1 Department of Economics, Management and Territory, University of Foggia, 2

Department of Economy, University of Foggia

WT MV3 – 2 *Una strategia avanzata di ottimizzazione dei processi di potabilizzazione di acque superficiali*

Adriano Zaratti, Simone Leoni, Alessandro Frugis, Giancarlo Cecchini, Alessandro

Filippi (Acea Elabiori - ROMA) Armando Zitelli, Dario Sabini, Davide D'Alonzo, Claudio

Puliti (ACEA ATO2 - ROMA)

WT MV3 – 3 *Organic matters and nitrogen removal in FWS basins: comparisons in mediterranean WWT plants*

Carmine Fiorentin, Maurizio Mancini, DICAM, Università di Bologna

WT MV3 – 4 *L'Acquaponica, i giovani e il futuro*

Patrizia Balzarini, Carlo Ramoni - I.I.S. "L. Cobianchi", Verbania, Italia

WT MV3 – 5 *Sistema digitale per il riuso irriguo di acqua reflua: il progetto digital-water.city a Milano*

Marco Bernardi, Responsabile Ricerca, Innovazione e Sviluppo Industriale, Gruppo

CAP

WT MV3 – 6 *Measuring the water stress in agricultural sector. an application for mediterranean area towards circular economy*

Crovella, T., Lagioia, G., Paiano, A. Department of Economics, Management and

Business Law, University of Bari Aldo Moro

WT MV3 – 7 *Merging The Circular Economy with The Blue Economy*

Christopher J Rochfort - The Centre for Organic Research & Education (CORE)

WT MV3 – 8 *Smart Water Management to prevent Water Scarcity*

Pietro Oliva, Grundfos

THURSDAY 10
NOVEMBER

10:30 -
13:00

Workshop Room

**Waste
Management
and Valorization**

The role of Waste Management in european and national policies on energy transition and circular economy

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & Utilitalia, Assoambiente

The crises in the world scenario oblige Europe to give a strong acceleration for reducing external dependence in the supply of energy and material resources. This challenge, which is both economic, environmental and geopolitical, requires us to look at the strategic role of waste management with renewed pragmatism, with particular reference to its important contribution to the achievement of the targets on self-sufficiency, decarbonisation, energy transition and efficient and circular use of resources. The conference will illustrate the most recent analyses conducted at European and national level about the contribution that a full development of waste management can give to the circular use of materials and energy, and the related economic and environmental benefits. In the subsequent round table, institutions (European and national) and representatives of the waste management industry will be asked to discuss the recipes needed to face the new challenges.

Session chair

Giordano Colarullo, General Director Utilitalia

Programme

10.30 *Introduction and coordination by the Chairman*

Giordano Colarullo, General Director Utilitalia

10.45 *CO₂ mitigation potential by the European waste management sector*

Bärbel Birnstengel, Prognos

11.00 *Institutional interventions*

Chris Bolesta, European Commission DG ENER (TBC)

Sara Romano, Head of Energy Department of Ministry of Ecological Transition (TBC)

11.30 Round table

Moderator: Jacopo Giliberto, Sole24ore (TBC)

Davide Tabarelli, President Nomisma Energia

Francesco Ferrante, Vice president Kyoto Club

Chicco Testa, President Assoambiente

Luca Dal Fabbro, President Iren, Vice President Utilitalia

THURSDAY 10
NOVEMBER

11:30 -
13:10

Neri 2 Room
South Hall

**Circular
Economy Value
Chains**

Moving the Mediterranean textile and fashion industry towards greener and circular business models

Language: English

Organized by: Ecomondo Scientific Technical Committee, UNIDO and MedWaves

The fashion industry has created one of the largest consumer goods markets, with highly sophisticated value chains of significant economic importance. In the OECD countries, the fashion is the second largest market for consumer goods after food. It follows that such a large industry has an enormous impact on the environment. The fashion industry is thought to be one of the most polluting industries in the world ([UN News, March 2019](#)). Besides the high water and carbon footprint, the sector makes intensive use of chemicals that are not only hazardous to the environment and humans, but also represent a major obstacle to textile recycling. Rising global demand for textiles for various end user applications has made natural fibers increasingly scarce and a critical cost factor. In response to sustainability challenges, spurred also by growing consumer awareness of the impacts of garment production, global brands are seeking better alternatives including renewable and recycled fibers, cleaner production processes and circular business models. One of the aspects central to the implementation of [circular economy](#) practices in the fashion industry is related to raw material consumption. The manufacturing of garments generates huge amounts of textile waste along the supply chain, both at post-industrial and at post-consumer level. This conference will discuss how businesses have launched platforms and collaborations in order to reach circularity targets such as implementing recycling technologies and increasing the use of sustainably produced fibers and implementing safer chemical protocols.

Session Chairs

Ms. Roberta De Palma, Chief Technical Advisor at UNIDO

Ms. Anna Ibañez de Arolas, Project Manager at MedWaves

Programme

11.30–11.35 *Welcoming*

Ms. Roberta De Palma, Chief Technical Advisor at UNIDO

11.35–11.45 *Keynote Speech*

Representative from EURATEX (TBD)

11.50–11.58 *SwitchMed pilot projects from Tunisia, Egypt and Morocco, in collaboration with the ZDHC Foundation, targeting safer chemical protocols in the textile industry.*

Ms. Elisa Gavazza, Southern Europe Hub Manager at ZDHC Foundation

11.58-12.06 *Safer chemical management in the textile industry and the impacts of hazardous chemicals on the circularity in the textile value chain*

Ms. Marie Louis Bishara, President of the Apparel Export Council of Egypt (TBC)

12.06-12.14 *Sustainability challenges and opportunities of the industry in the North African Region: Strategic partnerships and collaborations to advance circularity, traceability and transparency in the textile waste recycling value-chain.*

Ms. Sara Mariani, Corporate Sustainability Manager at OTB

12.14-12.22 *Circular business opportunities in Tunisia? What is needed to support textile and garment industries in Tunisia in becoming the suppliers of the future?*

Mr. Haithem Bouajila, Managing Director at Tunicotex

12.22-12.30 *Circular business models for valorizing post-industrial textile waste and business opportunities for localizing recycling value-chains in the Mediterranean.*

Mr. Khalid Kairouch, Production manager at EVLOX

12.35-12.45 *Circular business opportunities in the south Mediterranean: how can businesses lead the way to sustainable fashion?*

Ms. Ferda Ulutas Isevi, Sustainability and Circular Economy consultant

12.45-12.55 *Case Study 1: Circular business models for post-consumer textile waste: attaining the sustainability triple bottom line, integrating and scaling up entrepreneurship in Lebanon.*

Mr. Omar Itani, CEO and Founder at Fabric Aid

12.55-13.05 *Case Study 2: Recovering resources after disposal: eco-innovative recovering value and upcycling strategies in the fashion sector in Egypt.*

Ms. Mai Hossam, Founder and Managing Partner at Darjee

13.05-13.10 Closure (by the chairs)

THURSDAY 10
NOVEMBER

14:00 -
15:15

Innovation Arena -
South Hall

Research and
Innovation

EU funding for green projects – a world of possibilities

Language: English

Organized by: Ecomondo and Key Energy Scientific Technical Committees & European Commission

In the workshop, European Commission representatives will present the European Innovation Council (EIC), the European Climate, Infrastructure and Environment Executive Agency (CINEA) and the European Research Executive Agency (REA), as well as their 2022 Work Programmes and thematic funding calls.

Session Chairs

Francesco Matteucci, EIC Programme Manager

CINEA Representative (TBC)

Arnoldas Milukas, Head of Unit REA B.3 - Biodiversity, Circular Economy and Environment

Programme

14.00 *Introduction*

Fabio Fava, University of Bologna & President of Ecomondo Scientific Technical Committee

The European Innovation Council and the EIC 2022 WP

Francesco Matteucci, EIC Programme Manager

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 an hands-on content wise approach. The EIC provides funding through both open and challenge-based calls that in EIC WP2022 cover, amongst others, green topics such as long-term energy storage, carbon capture and utilization (CCU) or hard to abate industries decarbonisation. The EIC has been established under the EU Horizon Europe programme and operates on a budget of €10.1 billion for the 2021 – 2027 period.

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

CINEA Representative (TBC)

The European Climate, Infrastructure and Environment Executive Agency (CINEA) has been established by the European Commission to implement parts of EU funding programmes for transport, energy, climate action, environment and maritime fisheries and aquaculture. The Agency has a key role in supporting the European Green Deal – one of the European Commission's main strategic priorities. CINEA aims to support its beneficiaries, establish strong partnerships, deliver high-quality programme and project management, foster effective knowledge sharing and create synergies between programmes - to support a sustainable, connected, and decarbonised Europe. The Agency manages 7 EU Programmes worth around €55 billion: Connecting Europe Facility (CEF), Horizon Europe, LIFE programme, European Maritime, Fisheries and Aquaculture Fund (EMFAF), Innovation Fund, EU Renewable Energy Financing Mechanism and Just Transition Mechanism.

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

Arnoldas Milukas, Head of Unit REA B.3 - Biodiversity, Circular Economy and Environment

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 Cluster 6 of Pillar 2 of Horizon Europe, which is about "Food, bioeconomy, natural resources, agriculture and environment" (budget of €7.4 billion for the 2021 – 2027 period).

Discussion

Fabio Fava, Francesco Matteucci, CINEA Representative (TBC), Arnoldas Milukas

15.10 Closure by the chairs

THURSDAY 10

NOVEMBER

14:00 -

17:30

Neri 1 Room South
Hall**Circular
Economy Value
Chains**

Critical raw materials: national table, strategy, developments and prospects

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & Italian Ministry of Economic Development (DGPIIPMI), Italian Ministry for Ecological Transition, ENEA, National Critical Raw Materials Table

The policies for the Critical Raw Materials have assumed a more strategic and central role recently. As a direct consequence, the National Table "Critical Raw Materials" was launched with the objective of enhancing the coordination about the topic. Moreover, it fosters planning in terms of sustainability and circularity of Critical Raw Materials' supply with the aim of achieving the creation of normative, economic and market conditions through the involvement of institutions, trade associations, research institutes and industry consortia. Nowadays, the Table aims at mapping the Italian needs of Critical Raw Materials, by integrating data with the availability of Critical Raw Materials, then using the resulting information as a basis for the definition of a national strategy for Critical Raw Materials.

In this regard, on January 2022 four Technical Working Groups were created, each one related to a specific domain, with the purpose of putting in place a far-sighted system of supply and demand for each sector and geographical area. More in detail, the Working Group 1 called "Needs Analysis", and coordinated by Confindustria, engages in the evaluation of the future needs of the Critical Raw Materials at the Italian and European level. It analyses particularly the gap between supply and demand in order to achieve a proper planning of the solutions to cope with possible future difficult scenarios. The Working Group 2 "Mining" is coordinated by ISPRA and deals with the identification of the potentialities of the primary and secondary mining activities to achieve sustainable mining activities in Italy, and the collection of Raw Materials from abandoned sites and mineral waste. The Working Group 3 "Eco-design" coordinated by ENEA, wants to engage in the analysis of the opportunities derived by eco-design to reduce the demand for Critical Raw Materials. The Working Group 4 is defined "Urban Mining" and focuses on WEEE. It contributes through the offer of normative proposals for the simplification of waste collection from produSTC at the end of their life-span, following the analysis for the best practices at the European and global level.

The seminar aims at analysing the progress of the Working groups and discusses such crucial themes with some of the main actors on the Italian productive system which are also involved in the green supply chain.

Session Chairs

Giacomo Vigna, Italian Ministry of Economic Development

Claudia Brunori, ENEA (Italian National Agency for New Technologies, Energy and Sustainable Economic Development)

Programme

14.00 *Introduction – National Critical Raw Materials Table*

Maurizio Montemagno, Directorate General for Industrial Policy, Innovation and Small and Medium-sized Enterprises, Italian Ministry of Economic Development
Carlo Zaghi, General Directorate for Circular Economy, Ministry of Ecological Transition

14.40 *GdL 1: supply and demand analysis: status update*
 Marco Ravazzolo, Confindustria (General Confederation of Italian Industry)

15.00 *GdL 2: the national mineral potential*
 Fiorenzo Fumanti, ISPRA (Italian Institute for Environmental Protection and Research)

15.20 *GdL3: Ecodesigned, status update and next steps*
 Roberta De Carolis, ENEA (Italian National Agency for New Technologies, Energy and Sustainable Economic Development)

15.40 *GdL 4: Urban mining status update and next steps*
 Federica Forte, ENEA (Italian National Agency for New Technologies, Energy and Sustainable Economic Development)

16.00 *Round table*
 Moderated by: Claudia Brunori, ENEA (Italian National Agency for New Technologies, Energy and Sustainable Economic Development)

Batteries (FAAM) - Dott. Federico Vitali
 Metallurgy (CUMDI) - Dott. Fausto Pizzoni
 WEEE recovery (ENEL) - Dott. Fabrizio Iaccarino
 Geothermics (Energia Minerals) - Dott. Marcello De Angelis
 UNICIRCULAR (Circular Economy Companies Union) - Giuseppe Piardi

17.00 Q&A

17.15 Closure
 Renzo Tomellini, Head of the technical secretariat, Ministry of Ecological Transition

17.30 End of works

THURSDAY 10
 NOVEMBER

14:00 -
 17:30

Reclaim Expo
 Room C3 Pav.

**Sustainable
 Remedation and
 Regeneration of
 Contaminated
 Sites**

*Conference open to
 Papers*

Sustainable strategies for the remediation of polluted sites: virtuous examples and recent developments in national and international applied research

Language: Italian

**Organized by: Ecomondo Scientific Technical Committee & Sapienza
 Università di Roma, UNEM, Legambiente**

CALL FOR PAPERS

The conference will be more specifically dedicated to the remediation technologies, with case studies that highlight their actual extent and their limits. The interventions will be fully selected by the call for papers. In recent years, scientific research has allowed significant improvement both in the understanding of the dynamics of contamination and in the development of appropriate technologies for the characterization and remediation of polluted sites. There are notable developments in the field of "sustainable" remediation technologies, a term which in the case of remediation often coincides with that of "effective".

Session Chairs

Marco Petrangeli Papini, Sapienza University of Rome
 Donatella Giacopetti, Unem (Energies for Mobility Union)
 Fabio Pascarella, ISPRA (Italian Institute for Environmental Protection and Research)

Programma

14.00-14.15 Greetings and introduction by the Session Chairs

Speeches from the Call for Paper

14.15-14.30 *SURE by Ramboll: Case example of sustainability assessment in groundwater remediation*

Arianna Pantano et al., Ramboll

14.30-14.45 *Criteri per l'individuazione dei contaminanti indice da sottoporre all'analisi di rischio*

Maurizio Guerra et al., ISPRA

14.45-15.00 *La tecnica dell'iperossigenazione per le bonifiche nei PV carburanti - valutazioni e sostenibilità*

Simone Biemmi et al., Arcadis Italia S.r.l.

15.00-15.15 *Treatment by thermal desorption of dioxin-contaminated soils and vapor management through thermal oxidizer at Bien Hoa Airbase*

Jan Haemers, Haemers Technologies SA - inglese

15.15-15.30 *Feasibility of mycoaugmentation in clean-up of TPH-contaminated soil: LIFE MySOIL project*

Fiora Bagnato et al., Eni Rewind - University of Tuscia - DIBAF - Dep. for Innovation in Biological, Agro- food and Forest Systems

15.30-15.45 *Interventi combinati, chimico-fisici e biologici, per la gestione di un pennacchio di contaminazione da solventi clorurati in area urbana*

Paolo Ciampi et al., Sapienza Università di Roma

15.45-16.00 *Combinazione di trattamenti sperimentali e consolidati per una efficace e sostenibile bonifica da PFAS: caso studio*

Anna de Fina et al., Golder WSP

16.00-16.15 *Trattamento rapido di un plume clorurati mediante barriera iniettabile di adsorbimento e ISCR*

Marcello Carboni et al., Regenesis CECAM srl.

16.15-16.30 *Utilizzo dei Soil Gas per l'Analisi di Rischio: protocollo SNPA e software Rome Plus*

Pierluigi Rendicini et al., Ecotherm

16.30-16.45 *Siti contaminati e bonifiche in Italia: alcuni recenti esempi virtuosi di trattamento sostenibile*

Alberto Leombruni et al., Evonik Active Oxygens

16.45-17.00 *Regeneration of groundwater by innovative chemical treatments*

Andrea Santambrogio et al., Stantec

17.00-17.15 *Casi applicativi di biorisanamento – strategie combinate e limitazioni*
G. Cerruti et al., HPC Italia s.r.l - ENI-Energy Evolution Green/Traditional Refining & Marketing - M3R-Monitoring & Management of Microbial

17.15-17.30 *La bonifica di un sito inquinato con l'impiego di idonee soluzioni tecnico operative*

Antonella Lomoro et al., Studio di ingegneria per l'ambiente

17.30 Debate and conclusions

Digital posters

1. *Una review tecnico normativa della gestione dei c.d. "space junk"*

(Francesco Ventura, Daniela Barba (QBM S.r.l.))

2. *Management strategies of contaminated sediments in a Site of National Interest (SIN)*

2. *Management strategies of contaminated sediments in a Site of National Interest (SIN)*

(Nicola Cardellicchio - University of Basilicata, Dep. of Science; Francesco Cardellicchio, CNR Institute of Methodologies for Environmental Analysis)

3. *Remediation of the polluted regalbuto site: case study Metaservice S.R.L.*

(SPADARO A. (1) - SPADARO O. (1) - CARRABINO R. (1) - ZERBO A. (1) - MUSUMECI S. (2) - BELLOMO G. (1) 1:Dipartimento Economia e Impresa - Università degli Studi di Catania 2: MetaService s.r.l.)

4. *Progetto Nuraghe: un esempio di bonifica sostenibile a km 0*

(Pier Filippo Mocciaro, Eni Rewind S.p.A.)

5. *Sviluppo del Modello Geologico 3D per il sito Acciaierie d'Italia di Taranto*

(G. Bonfedi*, A. Taverna*, F. Canova* R. Fiore**, A. Gallicchio** * Eni Rewind S.p.A. ** Acciaierie d'Italia)

6. *Valutazione della sostenibilità delle bonifiche: il DSS ASTRA e il software STAR-LCA*

(S. A. Frisario*, S. Breda**, M. Menegaldo***, A. Bonfà**, M. Carisi***, A. Zabeo***, F. Villani*, G. Bonfedi*, L. Pizzol**, P. Scanferla**, A. Marcomini**, * Eni Rewind S.p.A. ** Fondazione Università Ca' Foscari *** GreenDecision s.r.l.)

7. *RECAP: A practical Definition of Sustainable Remediation*

(Jan Haemers, Haemers Technologies SA)

8. *La fitodepurazione come tecnologia di bonifica nature-based per rafforzare i processi di attenuazione naturale*

(Aurora Basile, Maite Tejerina Nunez, Anna De Fina, Ruggero Passaro, Nicola Bentivoglio - Golder WSP)

9. *Manuale IRSA-ISPRA-ARPAV "Sviluppo e valutazione di modelli di flusso in acquiferi porosi"*

(Emanuele Romano (IRSA), Chiara Fiori (ISPRA), Massimo Mazzola (ARPAV), Elisabetta Preziosi (IRSA))

10. *Sustainable strategies in polluted site remediation*

(Chantal Savaria, geological engineer, Founding President of Savaria Experts-Conseils inc. and Lecturer at Sherbrooke's University)

11. *Bio-Remediation di acque sotterranee mediante un approccio innovativo e sostenibile*

("Antonio Molinari, Laura Quintarelli, Mauro Fortugno, Andrea Campioni, Affiliations: Ramboll Italy S.r.l., Roma")

THURSDAY 10
NOVEMBER

14:00 -
18:00

Ravezzi 2 South
Hall

Financing,
Education and
Communication

Women entrepreneurship in green tech

Language: English

Organized by: Ecomondo Scientific Technical Committee & APRE

The workshop "Women entrepreneurship Green tech" aims at raising awareness regarding the policies and support measures put in place to strengthen the presence of women in leading enterprises in the green tech sector, that encompasses a wide area of scientific research, including energy, atmospheric science, agriculture, material science, and hydrology. While the female employment rate has increased to 67.3% (Eurostat, 2020), just 34.4% of the self-employed are women, 31% of those working as start-up entrepreneurs (Female entrepreneurs – women in enterprises: Motivation, work-life balance, challenges, 2017). Data shows that women continue to be under-represented among Doctoral graduates in the majority of narrow STEM fields (She figures, 2021). Therefore, less women are employed in STEM work's fields after the cycle of studies. However there are lots of networks and initiatives that boost women's presence in those sectors. This workshop will be the opportunity to show and engage projects, people and actions towards a more strong presence of women in the green tech sectors.

Programme

14.00-14.15 *Introduction*

Maria da Graça Carvalho, European Parliament

SESSION 1 – Voices and policies

14.15-14.25 *Energy and gender: a critical issue in energy sector employment and energy access*

Katharina Habersbrunner, WECF (TBC)

14.25-14.35 *Increase the promotion of women in the field of clean energy. The International C3E Initiative*

Tania Giuffrida, ENEA/C3E International (TBC)

14.35-14.45 *Promote gender-sensitive action around the energy transition. The Global Women's Network for the Energy Bio-based sector*

Christine Lins, GWNET

14.45-14.55 *The empowerment of women entrepreneurs' mission of the European Institute of Innovation and Technology (EIT)*

Anna Clark, President Women@EIT

14.55-15.05 *EEN – Women Entrepreneurship Sector Group*
Idaira Robayna Alfonso, EISMEA

BREAK – 15 minutes

SESSION 2 – Methodologies to support women in the green tech sector

15.30-15.45 *Introduction*

Luisa Prista

15.45-15.55 *Women wanted 2021: W4RES open call to support projects lead by women in the RHC sector*

Despoina Ntagiakou, Steinbeis

15.55-16.05 *EIC Funding opportunities for women's entrepreneurs in energy tech sectors*

Stefania Marassi, APRE

16.05-16.15 [InspiringFifty](#) - increase diversity in tech by making women role models more visible

Kathy Vredevelt, Inspiring Fifty

BREAK – 15 minutes

SESSION 3 – Success cases

16.30-16.45 *Introduction*

Serena Fabbrini, APRE

16.45-16.55 *Fostering urban transition via effective energy efficiency plans in social housing: the H2020 project SUPER-I*

Paola Zerrilli, University of York

16.55-17.05 *Women TechEU: Supporting deep-tech start-ups led by women - the case of Splastica*

Emanuela Gatto, Tor Vergata

17.05-17.15 *EIT Woman Award winner*

TBC

17.15-17.25 *From milk waste to new textile: Duedilatte project*

Antonella Bellina, Ceo and Founder Duedilatte (TBC)

17.25-17.35 *Wsense: underwater monitoring and communication systems*

Chiara Petrioli, Founder & CTO, Wsense SRL

17.35-17.45 *EIC Women Leadership Programme*

Alessandra Balduini (TBC)

17.45-18.00 *Closing*

Luisa Prista e Serena Fabbrini

THURSDAY 10
NOVEMBER

14:00 -
18:00

Agorà Energy 1
Pav. B7

**Research and
Innovation**

Africa Green Growth

Language: English

Organized by: Res4Africa, Ecomondo Scientific Technical Committee and Key Energy Scientific Technical Committee

The main objective of the *Africa Green Growth* forum is to foster the entrance of our Italian companies in the vast African market, promoting their advanced technology and integrated solutions that will be able to meet the needs of food, water, raw materials and energy supply. The two main focuses will be “Water Energy and Food Nexus”, and “Green Hydrogen”: at the same time, circular economy, bioeconomy and young entrepreneurship will also be under the spotlight.

With the support of the Italian Trade Agency, The Italian Ministry of Foreign Affairs and International Cooperation, The Italian Ministry of Ecological Transition, and the Italian Ministry of University and Research, Embassies of the target countries in Italy will be involved, along with African government representatives, associations, institutions and qualified media: this will allow them to introduce the guidelines on the above-mentioned sectors for the next 2-5 years. At the same time, commercial delegations will be welcomed to establish a solid network between the industrial and the institutional sector.

THURSDAY 10
NOVEMBER

14:30 -
17:30

Noce Room A6
Pav

**Policies and
Regulations**

The start of the regulation for technical and contract quality of waste management: the impact on operators and local authorities

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & Utilitalia

In 2022 ARERA (The Italian Regulatory Authority for Energy, Networks and Environment) continued the regulatory design process for municipal waste management introducing some very important measures. The Authority has identified and regulated the application of uniform criteria at the national level of the technical and contract quality of services, and has also defined minimum standards for information access on services quality by user. Furthermore, with the Tariff Method for Waste for the second regulatory period (2022-2025) the Authority has extended the tariff regulation to treatment services, identifying the criteria for defining the access tariffs to the plants. The conference aims to analyze the effect of the recent Authority measures on the operational activity of waste management operators, on their investment programs, and to assess how they can guide the future evolution of municipal waste management.

Session chair

Alessandro Cecchi, Executive Board of Utilitalia, Director of Regulatory Affairs Iren SpA

Programme

14:30 *Introduction and coordination by the Chairman*

Alessandro Cecchi, Executive Board of Utilitalia, Director of Regulatory Affairs Iren SpA

Governance, management, regulation: snapshots of the national situation

Francesca Mazzarella, Director of Utilitatis

Evaluation on the new regulatory measures

Paolo Carta, Director of Regulatory Affairs Utilitalia

Andrea Ferri, IFEL-ANCI (National Association of Italian Municipalities)

Marisa Abbondanzieri, President of ANEA (National Association of Territorial Government Authority)

Panel discussion: operators' point of view on new regulatory measures

Moderator: Luca Mariotto, Director of Environmental Sector of Utilitalia

Ester Benigni, Head of Regulatory Affairs & Competition A2A

Filippo De Simoi, Head of Regulation and tariff systems Hera S.p.A.

Lella Miccolis, Sole Director Progeva

Luigi De Francisci, Head of Regulatory Acea

Sabino Persichella, President AMIU Puglia S.p.A. and Vice President Utilitalia

17:15 *Conclusions*

Lorenzo Bardelli, Director of Environment Division of Italian Regulatory Authority for Energy, Networks and Environment

THURSDAY 10
NOVEMBER

14:30 -
17:30

Workshop Room

Circular
Economy Value
Chains

From Sustainability to Circularity - Codesign and open innovation in the packaging value web

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & Osservatorio Innovazione Packaging - Advanced Design Unit del Dipartimento di Architettura- Università di Bologna

The circular design of resources involves redesigning the relationships within the supply chain and thinking in system terms. The Packaging System has undergone profound shake-ups and transformations in recent years, and circularity is no longer just a possibility, but a real strategy to enable the sector to feed itself, people to benefit from consumer products, and the planet to sustain us.

In this meeting, the Packaging Innovation Observatory ([Osservatorio Innovazione Packaging](#)) - a transversal competence centre that aims to connect actors and disciplines in the sector, to aggregate and rework knowledge, to trigger innovation - investigates with witnesses and case studies the strategic importance, in view of circularity, of collaboration (enabled by co-design) and open innovation.

Shared and porous participation is necessary, in fact, especially in projects aimed at circularity and sustainability, where the active role of the consumer and co-participation between responsible actors from different areas (political, economic, social, environmental) are essential for the success of the projects, and to face common challenges and high objectives, overcoming the logic of market competition.

In fact, project collaboration is a tool that fosters communication processes between the main actors of the Value Web (Bouwman & Janssen, 2010) - a supply chain that is no longer linear but interconnected - allowing lines of responsible innovation in the packaging system to be defined and collective steps to be taken to address current challenges.

It is also increasingly evident that "innovation thrives in an open environment, where interaction with various stakeholders is seen as a resource of competitive advantage", and not as a limitation (Blok & Lemmens, 2015).

In this context of responsible innovation, through a systemic supply chain approach and collaboration between actors, sustainability outcomes are achieved - despite the difficulties - that have a greater impact than they would as individual actors.

Session Chairs

Flaviano Celaschi, Packaging Innovation Observatory - Advanced Design Unit, Department of Architecture - University of Bologna
Clara Giardina, Advanced Design Unit, Department of Architecture - University of Bologna

Programme

14.30-15.00 *Designing a circular transition by co-creating with small and large companies, government agencies, cities, non-profit organisations, researchers, creatives and media*

Ladeja Godina Košir, Founder and Executive Director [Circular Change](#), Co-chair CG ECESP

15.00-16.15 *Open and participatory innovation in the supply chain: from food & beverage to flexible packaging, how important collaboration is*

Federica Brumen Sustainability, ecodesign, relations with companies, R&D – Comieco
Alberto Palaveri, President – Giflex
Franco Fassio, Associate Professor in Industrial Design - Università degli studi di Scienze Gastronomiche di Pollenzo

16.15-17.30 *Towards circularity: Italian best practices*

Valentina Folli, Art Director - Icma Sartorial paper: Rinascimento, A virtuous cycle to create high-end papers

Laura Taraborrelli, Sales Manager - ALISPED: circular logistics in fashion sector
Alessandra Fazio, President - Istituto Italiano Imballaggio: promoting collaboration, ethics and circularity

17.30-18.00 Questions and Answers

18.00 Session Chairs' conclusions

THURSDAY 10
NOVEMBER

14:30 -
17:30

Diotallevi 2 Room
South Hall

**Sustainable
Remediation and
Regeneration of
Contaminated
Sites**

The States General for Soil Health - National session

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & European Mission A Soil Deal for Europe, Re Soil Foundation

According to the 'Caring for Soil is Caring for life' report published by the European Commission in 2020, 60-70% of all European soils are unhealthy due to current management practices, pollution, urbanization, and the effects of climate change: specifically, 25% of soils in southern, central, and eastern Europe are at high or very high risk of desertification, while today's rate of soil reuse is stuck at 13%. The estimated cost associated with soil degradation in the EU exceeds 50 billion euros/year. For these reasons, the health of this valuable non-renewable resource has been identified by the European Union as one of the 5 Missions - A Soil Deal for Europe - launched by the Commission to address science and innovation towards the challenges our society is facing. Soil becomes a key element of the Green Deal to support Europe's growth aimed at achieving zero net soil consumption by 2050. Soil protection contributes to further challenging goals such as reducing greenhouse gas emissions to the atmosphere by 55 percent by 2030 and achieving climate neutrality by 2050. In an increasingly uncertain economic and geopolitical context, in which Europe and Italy are facing a growing scarcity of raw materials, restoring the health of our soils, curbing their degradation and consumption will be crucial to increase our self-sufficiency and support the industrial revitalization of our country and Made in Italy. Today, in Italy, more than a quarter of the land is degraded and soil consumption causes our country to lose about 2 square meters/second. That's why the National Coordination Group for the Bioeconomy (CNBBSV) of the Presidency of the Council of Ministers, which also comprises the Ministry for Agricultural, Food and Forestry Policies – MIPAAF and the Ministry for Universities and Research - MUR, in collaboration with ISPRA, CREA and Re Soil Foundation (founded by University of Bologna, Coldiretti, Novamont and Turin Polytechnic), launches in Rimini the first States General for Soil Health conference, an open, shared and participatory advisory event which aims to set the course for soil regeneration, a non-renewable resource crucial to ensure life on Earth but increasingly at risk. The States General for Soil Health therefore intend to bring together the main national and international stakeholders and experts to draft a programmatic platform aimed at supporting the development of an Italian Soil Strategy, through the analysis of the environmental, economic, legislative and social scenario, of good practices and multidisciplinary and multi-actor existing projects, which are already providing answers in this direction. The States General for Soil Health will take place for the first time on 10 November 2022, with the aim of presenting the European policy framework in the morning session, and the state of the art at national level in the afternoon session.

Session Chairs

Sonia Filippazzi, Environmental journalist, RAI (TBC)
Anna Luise, DG GLO ISPRA

Programme

14.30 *Welcome*

Sonia Filippazzi, Environmental journalist, RAI (TBC)
Anna Luise, DG GLO ISPRA

14.50 ***The Status of soil in Italy***

Soil consumption and degradation in Italy

Michele Munafò, SINA Manager, ISPRA

15.10 ***The Italian policy framework***

How to put soil at the core of the ecological transition

Laura D'Aprile, Ecological transition and green investments department, Italian Ministry of Ecological Transition (TBC)

Actions for Soil protection included in the CAP Strategic Plan

Representative of Italian Ministry of Agricultural, Food and Forestry Policies (TBC)

Affrontare il tema a livello regionale

Francesca Assennato, ISPRA

15.50 **Panel discussion - *The associations' voice***

Maria Letizia Gardoni, President of Coldiretti Bio

Massimo Centemero, General Director, Consorzio Italiano Compostatori

Piero Gattoni, President of Consorzio Italiano Biogas

16.20 ***Restarting with research and education***

The Soil Hub project

Roberta Farina, Researcher, CREA

The Italian Lighthouse Farms network

Sara Guerrini, Agronomist, Re Soil

Dissemination and education activities

Representative of the Education and dissemination activities Re Soil committee

17.00 ***The importance of research and funding for soil protection and regeneration: what more could be done?***

Introduction:

Walter Ganapini, Re Soil Foundation TSC President

Italian Ministry for Universities and Research representative (TBC)

17.20 Conclusions

FRIDAY 11 NOVEMBER

FRIDAY 11
NOVEMBER

09:30 -
13:00

Ravezzi 2 South
Hall

**Financing,
Education and
Communication**

The skills challenge for the workforce transition

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & ASviS

The topic of the availability of skilled workforce in an appropriate quality and quantity, of the upskillig and reskilling, is key to addressing the green transition, achieving on the ground the same goals of the national recovery and resilience plan, making our production system competitive and resilient, and preparing our society for the future challenges. Given that transition processes impose both speed and effectiveness, it is of utmost urgency to implement strategic planning for skills, defining scientific content, ambitious policy agendas through a participatory dialogue between government, business, academia, trade unions, and other stakeholders, while also pursuing social inclusiveness goals. Building on the theoretical-scientific elaboration and policy goals already adopted at the EU level, the conference aims to contribute to accelerating the debate on this critical issue.

Session Chairs

Pierluigi Stefanini, President of ASviS (Italian Alliance for Sustainable Development)
Fabio Fava, President of Ecomondo Scientific Technical Committee and Full Professor at University of Bologna

Programme

9.30 Introduction by the Session Chairs

9.45-10.45

The core contents of a quality training for the green transition

Guia Bianchi, co-author of the GreenComp study - EU Commission, JRC

Reflections and elements of an assessment of workforce upskillig and reskilling needs in Italy, variables, uncertainties, economic sectors most affected, planned policies and implementation tools

Giuditta Alessandrini, ASviS Secretariat

10.45-12.15 *Roundtable discussion*

Moderated by: Giacomo Bottos, Director of Pandora magazine

Mauro Luseti, President of Legacoop (TBC)

Gianna Fracassi, Deputy Secretary CGIL

Patrizia Lombardi, President of RUS (Italian network of universities for sustainable development)

Elly Schlein, Vice President of Emilia-Romagna Region, with powers to combat inequalities and the ecological transition (TBC)

12.15-12.45 Discussion and Closure by the Chairs

Andrea Orlando, Ministry of Labor (TBC)

Pierluigi Stefanini, President of ASviS

FRIDAY 11
NOVEMBER
09:30 -
13:15

Global Water Expo
Room

**Policies and
Regulations**

Water-smart Governance and Regulation - Taxonomy and innovation based regulation for decarbonisation in water sector: opportunities and limits

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & ARERA, UTILITALIA and REF Ricerche Laboratory

The EU taxonomy and proper water regulatory framework could play an important role helping the EU scale up sustainable investment and implement innovations to achieve the European green deal targets. The Do No Significant Harm principle (DNSH) is also central in national NRRPs, which may not cause any significant harm to the environment. In Italy water regulation has already provided significant progress towards technical, economic and environmental sustainability. Further steps have been considered even to support the successful implementation of measures to achieve the Green Deal objective. By dialogue with water authorities, industries and utilities, the workshop will provide state of the art and future steps to optimize water governance.

Session Chair

Andrea Guerrini, Ecomondo STC and ARERA (Italian Regulatory Authority for Energy, Networks and Environment)

Programme

9.30-10.00 Registration Desk

10.00-10.10 *Opening address*

Andrea Guerrini, ARERA (Italian Regulatory Authority for Energy, Networks and Environment)

10.10-10.30 *Effect of UE Taxonomy: case studies and inter-links with ARERA regulations for decarbonization*

Samir Traini, REF Ricerche

10.30-10.50 *Road map, drivers and solutions for climate smart water utilities*

Francesco Fatone, Marche Polytechnic University

10.50-11.10 *Governance and regulation for wastewater reuse*

Tania Tellini, Utilitalia (Italian federation of energy, water and environmental services) and ANBI (National Association of Consortia for the Management and Protection of Land and Irrigated Waters)

11.20-13.00 Panel Discussion

Moderated by Donato Berardi, REF Ricerche
Speakers from different Multi-utilities (TBD)

13.00-13.15 Discussion and Closure

Andrea Guerrini, ARERA (Italian Regulatory Authority for Energy, Networks and Environment)

FRIDAY 11
NOVEMBER

10:00 -
13:00

Biobased Industry
Room

**Agri-food,
Forestry and Bio-
based Industry**
*Conference open to
Papers*

New frontiers for forestry chains: policies and governance to give value to a strategic resource for the Country

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & Confagricoltura, Tuscia University, University of Molise

CALL FOR PAPERS

The last year and a half saw the publication of the European forest strategy and immediately after that of the national one, highlighting how the political context is increasingly attentive to the enhancement of forest resources, wood production and the effeSTC of the sector in the climatic, economic and social fields. In the last period, the rapid changes in the international geopolitical framework are driving new economic scenarios and development opportunities for the forestry sector, which is once again central to the self-procurement strategies of raw materials of individual countries. In this context, the development of a real forest bioeconomy can be the pivot to start the establishment of competitive, cohesive and innovative supply chains that produce at the same time renewable produSTC and ecological benefits, capable of guaranteeing permanence in rural and mountain areas, as well as ecosystem services of great value for city inhabitants.

Session Chairs

Marco Marchetti, University of Molise
Enrico Allasia, President of Confagricoltura (General Confederation of Italian Agriculture) Federation of forest resources and wood

Programme

10.00 *Introduction*

Prof. Marco Marchetti UNIMOL University

10.20 *The national forestry strategy and economic support to the sector*

Alessandra Stefani - General manager Forestry department Italian Ministry of Agriculture

10.40 *A frame that is changing*

Davide Pettenella - Tesaf Padova University

11.00 Marc Palah Director, European Forest Institute (EFI) e Chair of the Circular Bioeconomy Alliance (CBA)

11.20 *The word to forestry owner*

Tim Hartl, The Confederation of European Forest Owners (CEPF)
Enrico Allasia, President of Confagricoltura Federation of forest resources and wood

11.40 Case studies Panels, Textiles, Paints

Lamel legno tbd

Finedin tbd

12.40 Call for papers

Governing the ecological transition and protecting ecosystem services that make production systems resilient

UniGe Liguria Region

FOstering Research and Ecological Solutions for (green) Transition, the FOREST Project
Unibz, Fraunhofer

Light chipper for MOUNTAIN TERRITORIES in Emilia Romagna (CLEAN-ER project)
CINSA

Biomaterials from nanotechnologies for the recovery of waste from the agroforestry chain

CNR, Unitus

13.00 Conclusions

FRIDAY 11
NOVEMBER

10:00 -
13:00

Neri 2 Room
South Hall

Research and
Innovation

Earth Observation for Sustainable and Green Transitions

Language: English

Organized by: Ecomondo Scientific Technical Committee and Polytechnic University of Turin

The most recent events, from the pandemic to the Ukrainian conflict, have forced us to pay great attention to the fragility of the environment in which we live but also to the international relations that have been established and the rise of the new economies. This moment of great uncertainty also leads to redefining sustainable transitions from both a climatic and energy point of view by reshaping resilient circular economies enabled by analytical techniques founded on a data driven approach. From this point of view, earth observation, and the open data generated, play a fundamental role by allowing, thanks to their synoptic vision, to conduct multispectral and multitemporal analysis capable of extracting added value information, fundamental for the understanding phase of the problems and the implementation of consequent policies, from agriculture to bio & blue economy, to biobased industry.

Section Chairs

Giovanni De Santi, Politecnico di Torino & Former Director DG JRC EU Commission
Giuseppa Padula, Università di San Marino

Programme

The Institutional framework (10.00-11.30)

10.00-10.05 *Introduction*

Giovanni De Santi

Recovery and resilience plan for the space and Bioeconomy

Giancarlo Giorgetti, Minister, Italian Ministry of the Industrial Development

The European Copernicus Programme: new challenges in a changing world

Thierry Breton – EC Commissioner, DG DEFIS and DG JRC (TBC)

Destination Earth: how the digital twin of the Earth will help tackle climate change and protect nature

M. Vestagen– EC Commissioner DG CNET (TBC)

Towards a modern, sustainable blue economy

Virginijus Sinkevicius – EC Commissioner DG MARE (TBC)

Earth observation and cutting-edge spaceborne technology to understand the planet

Josef Aschbacher, ESA General Director

Italian network for space applications

Guido Saracco, Rector, Politecnico di Torino

The operational framework (11.30-13.30)

Christian Patermann, former Director DG RTD, EU Commission

Piero Boccardo, Politecnico di Torino

12.00-12.05 *Introduction*

Piero Boccardo

Earth Observation Knowledge Center: from practices to policies

Stephen Quest - European Commission DG JRC (TBC)

The European Blue economy Observatory

Charlina Vitcheva European Commission DG Mare

CINECA and the ECMWF (European Centre for Medium-Range Weather Forecasts): industrial and environmental impact of High-Performance Computing

Sanzio Bassini, CINECA, Italy

Digital Twin Consortium and the initiative of Predictive Earth Digital Twin

Dan Isaacs, CTO Digital Twin Consortium

Towards a modern, sustainable bio economy

Florika Fink-Hooijer – Director DG ENV (TBC)

13.00-13.30 Discussion and Closure (by the chairs)

FRIDAY 11
NOVEMBER

10:00 -
13:00

Neri 1 Room South
Hall

**Circular
Economy Value
Chains**

End of life vehicles: towards the new ELV directive

Language: Italian

Organized by: Ecomondo Scientific Technical Committee & Assoambiente

The European directive on end-of-life vehicles (2000/53/EC), adopted over 20 years ago, largely achieved the very ambitious objectives and challenges it set at the time: freeing the environment from abandoned cars, establishing minimum requirements for the management of waste from ELVs and set targets for reuse / recycling / recovery of ELVs. Directive 2000/53 / EC was also the first waste legislation to introduce provisions on producer responsibility. It is an excellent example of an instrument at the service of the circular economy. Today, twenty years later, the challenges are different, the design, technologies and materials have changed and the directive needs to be adapted accordingly.

For this reason after a first evaluation of the ELV directive by the European Commission, the car end-of-life sector awaits the proposal to revise the ELV directive, presumably adopted by 2022. The representatives of the car end-of-life sector are discussing it.

Session Chairs

Paolo Barberi, Unicircular - Assoambiente section

Programme

10.00 Introduction and greetings

10.20-10.40 *The new ELV directive: presentation and analysis of the proposal*
Jaco Huisman, ELV - DG ENVIRONMENT B3 (TBC)

10.40-11.00 Hank Jan Nix, EGARA - European Group of Automotive Recycling Associations (TBC)

11.00-12.30 Panel discussion

Alfonso Gifuni, CAR - Confederazione Autodemolitori Riuniti (TBC)

Antonio Cernicchiaro, UNRAE - Unione Nazionale Rappresentanti Veicoli Esteri (TBC)

Luca De Vita, ANFIA - Associazione Nazionale Filiera Industria Automobilistica (TBC)

Stefano Leoni, AIRA - Associazione Industriale Riciclatori Auto (TBC)

Anselmo Calò, ADA - Associazione Demolitori Autoveicoli

12.30 Debate and conclusions