

# 4<sup>th</sup> TERRAenVISION Conference:

Dates: 8-11<sup>th</sup> July 2024, València, Spain (pre-/post-excursions 6-7/12-13 July)



Nature-Based Solutions to facilitate the transition for living within the Planetary Boundaries



# Program for TERRAenVISION 4 in València

## **Preconference excursions**

6 <sup>th</sup> July	The lagoon of Prat de Cabanes Torreblanca. The challenges of a coast under the
	pressure of Turism
7 <sup>th</sup> July	Due to rough sea the boat trip is cancelled. We are now planning an alternative
	trip. Soon to be updated here.

Monday 8th of July:			
11.00-	City walk for NBS in Valencia city. Departing from the NORD train station.		
13.00			
13.00-	Registration		
14.00			
14.00-	Opening by UVEG		
14.30			
14.30-	<b>Opening keynote: Fernando Val</b>	ladares (CSIC)	
15.00			
15.30-	-	D SOLUTIONS FOR AGRICULTURE AND	
17.00	NATURE AREAS (SOIL, WATER AND LANDSCAPE) (Aula)		
	Keynote 1: Robert Zougmore (AICCRA West Africa Lead, CGIAR)		
	Keynote 2: Dinesh Dhanush (Clim-Eat)		
	Discussion between keynotes and audience		
17.00-	Coffee/tea/orxata break		
17.30			
17.30-	AN Land management and	AN Microorganisms in Agriculture: Direct	
19.00	carbon sequestration in Application or Management (room 2)		
Parallel	agricultural soils (Aula)		
Session			
19.00-	Poster session		
20.30			

Tuesday 9 <sup>th</sup> July			
8.00- 9.00	Registration		
9.00- 10.30	Plenary session theme Methodologies: how to measure processes and impact of Nature-based solutions (Aula) chair: Keynote 1: Gemma Garcia Blanca (Technalia) Keynote 2: Stéphane Ourevitch (EUSSO) Discussion between keynotes and audience		
10.30- 11.00	Coffee/tea/orxata break		
11.00- 12.30 Parallel session	NH: Nature based solutions for increasing resilience to water-related hazards (Aula)	MET: Advances in land ecosystem restoration monitoring using remote sensing and machine learning (room 2)	Workshop: Synergies and trade-offs of carbon sequestration as a climate mitigation solution (room 3)
12.30- 14.00	Lunch break		
14.00- 15.30 15.30-	Plenary session theme: Nature-based solutions for natural hazards (Fire, Floods and Droughts) (Aula) chair: Keynote 1: Heleen van den Hombergh (IUCN) Keynote 2: Celia Gouveia (University of Lisbon) Discussion between keynotes and audience Coffee/tea/orxata break		
16.00 16.00- 17.30 Parallel session	AN: Nature-based solutions for agriculture and natural areas (soil, water and landscape)(Aula)	· · · · · · · · · · · · · · · · · · ·	MET: NBS for sustainable soil management and biodiversity. (room 3)
17.30- 19.00	Poster session with refreshments		
21.00-	Conference dinner in DON PELAYO RESTAURANT Address restaurant: Carrer d'Antonio Sacramento, 17, Quatre Carreres, 46013 València		

Wedn	ednesday 10th July			
8.00- 9.00	Registration			
9.00- 10.30 10.30- 11.00	Plenary session theme: SCIENCE BROKERS FOR TRANSITIONING TO A CLIMATE RESILIENT AND CIRCULAR SOCIETY (Aula) chair: Margot De Cleen Keynote 1: Wouter Vanneuville (European Environment Agency) Keynote 2: Pablo Modernel, (Friesland Campina) Discussion between keynotes and audience Coffee/tea/orxata break			
11.00- 12.30 Parallel session 2	SB: Science brokers for transitioning to a climate resilient and circular society (Aula)	carbon neu	Workshop: Realising trality across scales evel to landscapes	Workshop Humus (room 2)
12.30- 14.00	Lunch break Plenary session theme: Theme Nature-based solutions for urban and industrial areas (soil, water and spatial planning). Sustainable solutions for the València City. (Aula) chair: Artemi Cerdà Keynote 1: Guiseppe Grezzi (Mobility plans in València city) Keynote 2: Natxo Lacomba (European Green Capital Valencia) Keynote 3: Emilio Barba (Universitat de València) Discussion between keynotes and audience			
14.00- 15.30				
15.30- 16.00	Coffee/tea/orxata break			
16.00- 17.30 Parallel session	Nature based solutions in u (Aula)	rban areas	Workshop Transi Circular Land and So Building networks, b interests and coping regulation (Room 3)	bil Management; bringing together
17.30- 19.30	Poster session with refreshments and closing of indoor event			

## 11<sup>th</sup> July: Conference excursion

11<sup>th</sup> July NBS in coastal wetlands in Valencia. Nature and agriculture. The Natural Park of L'Albufera. A Geographical Approach.

### **Post-conference excursions**

12 <sup>th</sup> July	Drip and flood irrigation systems in La Costera and La Safor districts. Water and Soil under the commercial agriculture. Problems and solutions.
13 <sup>th</sup> July	Rainfed vineyards and olives in Moixent and Font de la Figuera. Quality of agriculture products and landscapes. There is a future for traditional rainfed agriculture?

# Detailed indoor Program

# 4<sup>th</sup> TERRAenVISION Conference: Dates: 8-10 July 2024, València, Spain



Nature-Based Solutions to facilitate the transition for living within the Planetary Boundaries



### 8<sup>th</sup> July 2024

Venue: University of Valencia Facultad de Geografía i Història Blasco Ibàñez, 28, 46010-Valencia, Spain

11.00-13.00: City walk for NBS in Valencia city. Departing from the NORD train station.

13.00-14.00 Registration

### 14.00-15.00 Opening of the conference

### Opening by representatives of the University of Valencia

Opening Keynote: Fernando Valladares (CSIC, Spain)

Title: Re-civilization begins with nature



### Bio:

Fernando Valladares holds a PhD in Biological Sciences and is a research professor at the Spanish Council for Scientific Research (CSIC), where he directs the Ecology and Global Change group at the National Museum of Natural Sciences. He is also an associate professor at the Universidad Rey Juan Carlos in Madrid. He has published more than 450 scientific articles and books in ecology and plant biology being a

highly cited scientist in the area of Ecology and Environment (he is since 2016 among the 1% most cited scientists in the world with an H-index of 85). He is currently vice-president of the Iberian Society of Ecology. His research has focused on the impacts of global change on terrestrial ecosystems. He contributes weekly to numerous media outlets and performs daily active scientific dissemination in his channels "The health of humankind" on Youtube, Twitter, Instagram and Facebook. In 2020 he received the Information Transparency Award from the Association of Environmental Information Journalists (APIA), the Luis Balaguer Ecosystems Distinction from the Spanish Association of Terrestrial Ecology (AEET), and the Climate Leader Award in the Research and Education category granted by the Climate Reality Project-Spain. Complete information on his research and his outreach program as well as detailed CVs can be found at www.valladares.info

### 15.30-17.00: PLENARY SESSION NBS FOR AGRICULTURE AND NATURE AREAS (two keynotes and discussion)

Keynote Agriculture 1: Dr Robert Zougmoré, *Team Leader Climate Action, West & Central Africa, Alliance of Bioversity International & CIAT, Dakar, Senegal* (online)

# *Title: Taking climate-smart solutions to the next level: successful outcomes and lessons learnt in Africa*



#### Bio:

Robert Zougmoré works as Principal Scientist with the Alliance of Bioversity International & CIAT where he leads the West and Central Africa Climate Action and the West Africa cluster of AICCRA (Accelerating-Impacts-of-CGIAR-Climate-Research-for-Africa). From 2010 to 2021, he was the Africa Program leader of the CGIAR Research Program on Climate Change-Agriculture-and-Food-Security (CCAFS), at ICRISAT Bamako, Mali, where he led research initiatives and fostered partnerships to address pressing climate challenges. Agronomist and soil scientist with a PhD in Production Ecology & Resources Conservation -Wageningen University, he is Director of Research (equivalent to University Professor) under CAMES cadre. His career is spanning over 30 years dedicated to tackling critical issues such as climate change adaptation, soil

fertility management, and rural development across Africa. His impactful work has significantly advanced agricultural practices and sustainability in the region. Through rigorous research, effective leadership, and passionate advocacy, Robert continues to play a pivotal role in enhancing the resilience and development of agricultural systems in West and Central Africa. As the coordinator of the AICCRA, Robert brings a wealth of experience in climate change adaptation and mitigation solutions, biodiversity conservation, agriculture, forest ecosystems management, water science, stakeholders' engagement and science-policy interfacing. His leadership ensures strategic programming actions that harness climate science for actionable outcomes, impacting over 30 countries across Africa and beyond. Robert has published widely with more than 100 papers and book chapters on soil erosion, integrated soil, water and nutrient management options and their economic benefits, and climate-smart agriculture.

### Keynote Agriculture 2: Dinesh Dhanush (Clim-Eat) Title: Building Bridges for Nature-based Solutions in agriculture



Bio:

Dhanush is the Founder and Chief Climate Catalyst of Clim-Eat, the 'think and do tank' for food and climate which he established in 2021 at COP26. Clim-Eat focuses on bridging science and policy on food and climate issues by synthesizing knowledge, convening stakeholders, providing strategic advice, and strategic policy engagement.

His previous work experience includes roles within the private sector, NGOs, and the UN and CGIAR systems, in China, India, Thailand, The Netherlands and the UK. He has worked on a range of issues including forestry,

environmental policy, climate change adaptation, and advocacy, at the national, regional, and global levels.

Dhanush has an interdisciplinary academic background, combining an MBA, MSc in Carbon management, and a PhD in Environmental Governance. He is a member of the Advisory Boards of the EAT Foundation. ClieNFarms and the Global Food and Environment Institute at the University of Leeds.

### 17.00-17.30 COFFEE/TEA/ORXATA BREAK

### 17.30-19.00 PARALLEL SESSIONS

8th July	AN Microorganisms in Agriculture: Direct Application or Management (room 2) Chairs: Elena Baraza; Antonia Romero-Munar; Álvaro López-García; Arnau Miralles; Arantxa Mollins	
17:30- 17:45	Application of Mycorrhizal Fungi Inoculants in Grapevines: Successes and Failures	Elena Baraza
17:45- 18:00	Influence of Rhizophagus irregularis and natural inoculum on soil microbial community and early growth of Vitis vinifera cv. Merlot	Arnau Miralles Ferrer
18:00- 18:15	Effects of sustainable management strategies on soil microbial activity and grapevine performance	Antonio Romero- Munar
18:15- 18:30	Land use effects on soil microalgae and cyanobacteria communities	Rosangela Addesso
18:30- 18:45	Phenomic and genomic characterization of pre-market bioproduct: insights on multifunctionality.	Francesco Vitali
18:45- 19:00	Discussion	

### 8th AN Land management and carbon sequestration in agricultural soils July Chairs: María José Marques Perez, Blanca Sastre, Emmanuelle Vadour, Youssef Fouad, Cheng Liu (Aula)

17:30-	Natural-based solutions for agriculture: Insights from the literature	Vitor Martinho
17:45		
17:45-	Influence of the use of cover crops on the enzymatic activity of olive	Juan Pedro Martin-
18:00	grove soils - SANCHOSTHIRST Project	Sanz
18:00-	Influence of Cover Crops on Soil Water Retention and Bulk Density	María José Marques
18:15	in Diverse Agricultural Semi-Arid Soils	Perez
18:15-	CARBON STOCK IN TILLED AND COVER CROPPED OLIVE GROVES	Javier Gonzalez
18:30	AND VINEYARDS IN SARDINIA	Canales
18:30-	Impact of biochar amendment on the soil sponge function of a sandy	Oscar Gonzalez
18:45	loam Portuguese pasture soil	Pelayo
18:45-	On the use of climate indicators for strategic planning of natural	Franck Binard and
19:00	solutions in French vineyards, the case of St Emilion	Bunafsha
		Mislimshoev

19.00-	Poster session with refreshments
20.30	

### 9<sup>th</sup> July 2024

Venue: University of Valencia Facultad de Geografía i Història Blasco Ibàñez, 28, 46010-Valencia, Spain

8.00-9.00 REGISTRATION

# 9.00-10.30 PLENARY SESSION THEME METHODOLOGIES: HOW TO MEASURE PROCESSES AND IMPACT OF NATURE-BASED SOLUTIONS

### Keynote 1: Gemma Garcia- Blanco

Title: Climate proofing and nature positive planning: The role of strategic planning in Nature-based Solutions transformation



Bio: Researcher in the energy, climate and urban transition department. Climate change adaptation team-- Tecnalia research & innovation Geographer (University of Oviedo) MSc in Environmental Sciences (University of East Anglia UK) currently PhD student in the doctoral programme in Social, Political and Cultural studies (University of the Basque Country).

Research experience on the fields of sustainable spatial and urban planning, environmental assessment, strengthening initiatives for public administrations. Current research interests: Nature positive and climate

resilient planning, climate adaptation strategies, and synergies between adaptation and mitigation from an innovative planning perspective.

### Keynote 2: Stéphane Ourevitch, Supervisor of the EU Space Support Office (EUSSO)

Title: Leveraging Copernicus Data for Designing, Monitoring and Evaluating Nature-Based Solutions



### Biography

Stéphane Ourevitch is the Supervisor of the EU Space Support Office (EUSSO), an undertaking of the European Commission in charge of running a helpdesk to support the users of the EU Space Programme and its (Copernicus for components Earth Galileo and EGNOS for Observation. Satellite Navigation, GovSatCom for Emergency Communications etc.) and promoting them in an international context and on social media.

He has been working for the past 18 years in Outreach and User Uptake activities for Copernicus projects and contracts. He is the co-founder of ALSO Space, created in 2022 as a spinoff of SpaceTec Partners (now Novaspace), where he leads the firm's Earth Observation, Emergency Management, Security, and Communication activities. He is an expert in Copernicus related strategic communication, event management, social media, and website development and management. Stéphane has a Master's Degree in Political Science and International Affairs (Sciences Po Paris), and an MBA (INSEAD) as well as a Doctoral Degree in Defence Studies.

### DISCUSSION BETWEEN KEYNOTES AND AUDIENCE

### 10.30-11.00 COFFEE/TEA/ORXATA BREAK

#### 11.00-12.30 PARALLEL SESSIONS

9th July	Workshop Synergies and Trade-offs of carbon sequestration in agricultural soils as a climate mitigation solution Chairs: Cheng Liu, Daan Verstand
11:00-	The general term 'carbon sequestration' refers to the process by which carbon dioxide
12:30	(CO2) is removed from the atmosphere and stored in long-term reservoirs, such as oceans, forests and soils. This case study is limited to carbon sequestration in agricultural soils. Carbon sequestration in agricultural soils is often referred to as a potential climate mitigation solution which also helps to improve soil quality: a win-win situation. However,
	the potential of this solution is often unclear. The proposed session will use this case study to evaluate the potential of carbon sequestration in agricultural soils, and to identify potential measures that might cause trade-offs or synergies with other research topics.

9th July	MET: Advances in land ecosystem restoration monitoring using remote sensing and machine learning Chairs: Ioannis Louloudakis, Ioannis Daliakopoulos, Anna Brook, Marco Micotti	
11:00- 11:15	Forest dynamics monitoring and restoration assessment using multi-source Earth Observation data. The case study of a Hydropower Restoration Program in Colombia	Carlos Pedraza Penaloza (online)
11:15- 11:30	Assessing NW Iberian Blue Carbon Ecosystems and their dynamics in recent decades	Manuel de Figueiredo Meyer
11:30- 11:45	Comparison of Different Digital Elevation Models (DEM) in the Google Earth Engine Database with Türkiye Topographic Map Data	Sinan Demir (online)
11:45- 12:00	Fencing Mediterranean Shrubland, a Decade Latter	Ioannis Louloudakis
12:00- 12:15	Land restoration effectiveness assessed by satellite-based remote sensing technologies as a new monitoring approach	Ghadir Zbedat
12:15- 12:30	Is the abandonment of esparto grass (Stipa tenacisso) fiels generating soil degradation and socio-economic impacts of Southeatern Spain And	Alicia Maria Arredondo Tudela
	Introducing earthworms as nature-based solution to improve soil properties related to water retention capacity in vineyards	Jose Carvajal- Pachon

9th July	NH: Nature based solutions for increasing resilience to water-related hazards Chairs: Valerio Vivaldi and Nadia Bertolini	
11:00-	Nature-Based Solutions for Extreme Flood Events in South East	Jacky Croke
11:15	Queensland: Challenges and Innovations	
11:15-	Sustainable vineyards strategies enhancing groundcover and soil	Valentina Vaglia
11:30	management for improving biodiversity, maintaining vine quality and	
	the agroecosystem health.	
11:30-	Assessing the impact of hybrid measures on water retention and soil	Jiri Jakubinsky
11:45	erosion using environmental modeling tools	
11:45-	Drought and land use land cover dynamics in the Mediterranean	Brahim Meskour
12:00	Globally Important Agricultural Heritage Systems (GIAHS) site:	(online)
	Insights from Arganeraie Biosphere reserve in Morocco	
12:00-	\I remember it was a heavily rainy day, when the two rivers	Nadia Bertolino
12:15	merged\": environmental histories of water, rural land and the	
	anthropization of the Po Valley."	
12:15-	Mainstreaming Nature-based Solutions in Planning, Design, and	Bunafsha
12:30	Operation of Infrastructure in Ghana	Mislimshoeva

12.30-14.00 LUNCH BREAK

# 14.00-15.30: PLENARY SESSION THEME: NBS FOR NATURAL HAZARDS (FIRE, FLOODS AND DROUGHTS)

Keynote 1: Heleen van den Hombergh (Senior Expert Agro-Commodities IUCN) Title: NL2120, between disaster risk reduction and transformation with NbS



#### Bio

Heleen van den Hombergh is advisor sustainable trade chains and nature based solutions at IUCN National Committee of the Netherlands (IUCN NL) with background and expertise in multidisciplinary research, multi stakeholder platform facilitation and advisory work in nature conservation.

The broad multi stakeholder Dutch "NL2120"" consortium seeks to upscale and embed in Dutch policies the use of Nature based solutions. Heleen leads its work package on knowledge valorisation and international exchange and export of NbS expertise. The 25 organization-wide NL2120 consortium has just

started its work. In her keynote called "Dutch NbS cooperation for national and international hazard mitigation" she will dive into the consortium's plans, mention examples of its members ongoing work on hazard mitigation with NbS, as well as some useful tools to define and and assess the quality of NbS to support hazard mitigation over time.

### Keynote 2: Celia Gouveia (University of Lisbon)

Title: Droughts, heatwaves, and fires: Exploring compound and cascading hazards and their impacts on vegetation dynamics under a climate change perspective



Bio

Researcher in climatology with over around 15 years of experience. Research topics focus on climate variability and extreme events, such as fires, droughts, and heatwaves, including remote sensing applications to characterize vegetation dynamics, carbon balance, vegetation recovery, crop yields, and crop losses. Senior researcher at Earth Observation Unit of Instituto Português do Mar e da Atmosfera (IPMA) in Portugal an Invited Professor at Science Faculty University of Lisbon Scientific Coordinator of National Wildfire team at ARISTOTLE-eENHSP

consortium since 2018. Principal Investigator at IPMA for several national and international scientific projects.

DISCUSSION BETWEEN KEYNOTES AND AUDIENCE

### 15.30-16.00 COFFEE/TEA/ORXATA BREAK

### 16.00-17.30 PARALLEL SESSIONS

9th July	AN: Nature-based solutions for agriculture and natural areas (soil, water and landscape) (aula) Chairs: Saskia Visser	
16:00-	Defining Nature Positive Food System	Cheng Liu
16:15		
16:15-	Nature-based solution choices: the role of terracing in ecosystem	Wei Wei
16:30	restoration in fragile mountains of China	
16:30-	Assessing Cd and Zn accumulation in the rocket biomonitor Eruca	Louise Verhoest
16:45	vesicaria in inter- and rotational cropping with hyperaccumulator	
	Noccaea caerulescens	
16:45-	Isotope based investigation of Agricultural impact on quality and	Prasanta Sanyal
17:00	quantity of groundwater in the north-western Ganga plain, India	
17:00-	Understanding the role of on-farm agrobiodiversity conservation for	Dante Gbejewoh
17:15	agroecological transformation in southeastern Ontario	(online)
17:15-	Discussion	
17:30		

9th July	MET: NBS for sustainable soil management and biodiversity. (room 3) Chairs: Saskia Keesstra	
16:00- 16:15	Pruned branches management in orchards: fire against chipping.	Artemi Cerda
16:15- 16:30	Application of an All-In-One ISCO Technology for the treatment of Monochlorobenzene, BTEX and Chloroform in groundwater at a Former Pharmaceutical Facility in Italy	Alberto Leombruni
16:30- 16:45	Nature based solutions for regeneration of a small brook and adjacent wetland in the Netherlands	Roel Dijksma
16:45- 17:00	Full-scale Application in Italy of a Combined ISCR and ERD Technology for the treatment of an Aerobic Aquifer Impacted with Carbon Tetrachloride and Chloroform	Alberto Leombruni
17:00- 17:15	Spatial distribution of soil bacterial communities in Mediterranean grazing areas	Jesus Barrena
17:15- 17:30	Forest related nature-based solutions for climate-change induced effects: wildfires and forestry pests mitigation	Saskia Keesstra

9th July	NH NBS for landscape resilience (fire, droughts and extreme events) (room 2) Chairs: Ronald Poeppl; Carlos Sanchez, Bunafsha Mislimshoeva, Lea Wittenberg, Artemi Cerda	
16:00- 16:15	Ensuring Food and Fiber Security Begins with Accounting for Soil Water Repellency in Agroecosystems	Dara Park
16:15- 16:30	Introducing indices to assess the effects of in-stream large wood on water and sediment connectivity in small streams	Ronald Poeppl
16:30- 16:45	Public Space as urban soil design for ecological cycles well-being	Gaia Nere Terlicher (online)
16:45- 17:00	Nature-based Solutions: Concepts, Principles and Applications to Achieving Implementation of Nationally Determined Contributions	Gemedo Dalle (online)
17:00- 17:15	Exploring the potential of NBS in facing water-related challenges in the Mediterranean Basin and beyond	Giorgia Bottaro
17:15- 17:30	Discussion	

### Wednesday 10 July

### 8.00-9.00 REGISTRATION

# 9.00-10.30 PLENARY SESSION THEME: SCIENCE BROKERS FOR TRANSITIONING TO A CLIMATE RESILIENT AND CIRCULAR SOCIETY

### Keynote 1: Wouter Vanneuville (European Environment Agency) Title: Benefits and costs of nature-based solutions when scaling them to the next level



#### Bio

Wouter is a MSc. In Geography with a focus on landscape sciences. He worked for almost 15 years on water resource management topics, and in particular on the EU Floods Directive from an academic perspective, as a Member State representative and from a European perspective while being seconded to the European Environment Agency. After a short period back at the Flemish Ministry of Mobility and Public Works, he returned to the European Environment Agency's group on Climate change impacts, vulnerability and adaptation 8 years ago. There his focus is on national adaptation policies, adaptation reporting and economics of adaptation.

### Keynote 2: Pablo Modernel, (Friesland Campina)

Title: From measuring to action: How to promote steps towards sustainable farming systems: The journey of a multinational dairy cooperative.



### Bio:

Pablo's research focuses on sustainable livestock systems with emphasis on grazing systems. His aim is to study the contribution of grasslands to food systems and the ecosystem services and disservices that grazing systems provide. Furthermore, he has worked on the resilience of grazing livestock systems in Southern South America. He is working on the role of livestock in a circular food system, assessing the potential of global grasslands to produce food and the associated environmental impacts

### DISCUSSION BETWEEN KEYNOTES AND AUDIENCE

### 10.30-11.00 COFFEE/TEA/ORXATA BREAK

### 11:00-12:30 PARALLEL SESSIONS

10th	SB: Science brokers for transitioning to a climate resilient and circular society	
July	Chairs: Margot De Cleen (Aula)	
11:00-	After the party is over: looking back at the successful conception of	Sverre van Klaveren
11:15	four Dutch NBS	
11:15-	Watch differently, Think differently, Act differently: Building blocks to	Margot De Cleen
11:30	work towards the goals of theEU SoilStrategy	
11:30-	Exploring perceptions of sustainability and its indicators in grape and	Dante Gbejewoh
11:45	wine production in South Africa.	(online)
11:45-	VULNERABILITY ASSESSMENT TOOL FOR CLIMATE-CHANGE	C. Rodriguez
12:00	RESILIENT WASTE INFRAESTRUCTURE	
12:00-	The VeBS project - \The Proper Use of Green and Blue Spaces for	Elena Maestri
12:15	the Promotion of Health and Well-being\""	
12:15-	Discussion	
12:30		

10th July	Territorial approaches to Soil Quality Management: a global issue with a deep local meaning. (room 2) Chairs: Francesco molinari, Annalaura Vannuccini	
11:00- 11:15	The Humus Project: our approach	Francesco molinari
11:15- 11:30	The Humus Project: preliminary results	Annalaura Vannuccini
11:30- 11:45	The organic soil enrichment as a remedy for agri- environmental problems	Monika Jakubus
11:45- 12:00	Maintaining soil organic matter quality and stability in an olive orchard sustainably managed for 21 years: insights in local and global implications	Adriano Sofo
12:00- 12:15	ISCR-based Remediation of Herbicide/Pesticide-impacted Soils in Europe: 22 Years of Success and Surprises	Alberto Leombruni
12:15- 12:30	Discussion	

Workshop: Realising carbon neutrality across scales from farm level to landscapes Organisers: Hanneke Heesmans, Saskia Visser (room 3)
The agricultural transition involves a multifaceted approach, integrating efforts at various
scales: farm level, regional level, and national level. At the farm level, individual farmers
adopt innovative practices to enhance productivity and environmental stewardship.
Collective action, amplifying impacts beyond individual efforts can be taken at a larger level
through cooperatives, by pooling resources and knowledge. At the national level, deep
demonstration projects showcase large-scale, systemic transformations, providing models
for nationwide replication. Each scale plays a crucial role, with farm-level actions driving
grassroots change, cooperatives fostering community resilience, and national initiatives
setting ambitious frameworks for sustainable agriculture. This multiscale approach ensures
comprehensive progress towards a resilient and sustainable agricultural future.
The results discussed in this workshop will be used for a policy brief regarding these scaling mechanisms.

### 12:30-14:00 LUNCH

### 14.00-15.30 PLENARY SESSION THEME: NATURE-BASED SOLUTIONS FOR URBAN AREAS: SUSTAINABLE SOLUTIONS FOR THE VALÈNCIA CITY.

### Keynote 1: Natxo Lacomba TITLE: THE ROUTE OF EUROPEAN GREEN CAPITALS



**Bio:** Doctor in Biology and career civil servant, he is currently Head of the Parks and Gardens Service of the Valencia City Council, where he arrived in 2018 to take charge of the Climate Change Service. He has previously developed a three-decade professional career in the Ministry of the Environment (Generalitat Valenciana), always dedicated to the conservation and management of protected areas and wildlife.

### Keynote 2: Giuseppe Grezzi Title: València is moving towards the future: measures and projects for the city of the 21st century



### BIO:

Giuseppe Grezzi is italian born. Since 2000 he has lived in València in Spain. He worked as a translator and founded Coop Ecovida, dedicated to environmental services. Specializing in mobility and transport, he was assistant to the region and the municipality. Elected city councilor in 2015, he was appointed Deputy Mayor, Councilor for Sustainable Mobility and Public Space and President of the EMT Public Transport Company.

*In 8 years of management, València has become a symbol of cities in transition* 

towards sustainable mobility, the recovery of quality public spaces and the push for cycling. EMT was awarded as the best urban transport company of 2018. València has 198km of cycle paths, of which 75km created in the last 8 years. València was named European Green Capital 2024. In May 2023 there was a change of government, and Giuseppe Grezzi is currently a municipal councilor of the 'Compromís' party (in english 'commitment')."

**Keynote 3: Emilio Barba (***Vice-Rectorate for Sustainability, Cooperation, and Healthy Living, University of Valencia)* 

Title: Towards a sustainable university campus: Actions of the University of Valencia within the framework of the 2030 Agenda



**Bio:** *Emilio* **Barba** is Professor of Ecology at the University of Valencia. He currently serves as Head of Initiatives for the Office of the Vice-Rector for Sustainability, Cooperation, and Healthy Living, and Co-director of the Valencian Agenda for Anti-Depopulation (AVANT) Chair. His research activities are conducted at the Cavanilles Institute of Biodiversity and Evolutionary Biology at the University of Valencia, where he leads the Terrestrial Vertebrate Ecology Research Group. His research

focuses on behavioural ecology and bird population ecology, including the impacts of human activities and climate change on bird populations. Currently, he is leading a research project

on the suitability of urban green infrastructure to promote biodiversity. Additionally, as Head of Initiatives for the Office of the Vice-Rector for Sustainability, he addresses issues related to carbon footprint reduction, energy efficiency, and sustainable mobility.

### DISCUSSION BETWEEN KEYNOTES AND AUDIENCE

#### 15.30-16.00 COFFEE/TEA/ORXATA BREAK

#### 16:00-17:30 PARALLEL SESSIONS

10th	Nature based solutions in urban areas (aula)	
July	Chairs: Ronald Poeppl, Bunafsha Mislimshoeva, Carla Ferreira	
16:00-	The recovery of urban peripheries and the creation of spaces for	Francisco Escriva
16:15	citizenship: the project of the Gandia Green Ring.	(No show)
16:15-	Climate adaptation through natural based solutions: heat wave	Carlotta Garcia
16:30	resiliency in schoolyards	
16:30-	The VeBS project - Multifunctional reforestation: a tool for urban	Nicolo Accornero
16:45	resilience	
16:45-	Implementing Nature-Based Solutions in Western Romania: Current	Rares Halbac-
17:00	Projects and Ongoing Initiatives for Sustainable Development	Cotoara-Zamfir
17:00-	The potential of nature reserves to enhancing Urban Ecological	Carla Ferreira
17:15	Sustainable Development	(online)
17:15-	Discussion	
17:30		

Workshop Transition towards Circular Land and Soil Management; Building networks, 10th July bringing together interests and coping with friction in regulation Organisers: Margot de Cleen (room 3) Workshop 'Transition towards Circular Land and Soil Management'; Building networks, 16:00-17:30 bringing together interests and coping with friction in regulation. In the Netherlands the executive agency of the Ministry of Infrastructure and Water Management, hashtag#Rijkswaterstaat, set up a national network with local authorities, industries, farmers and knowledge institutions on circular land and soil management. Within this network partners exchange knowledge and experiences, start projects together and develop tools to communicate and understand the drivers behind collaboration or the inhibitions to collaborate. These instruments help to find pathways towards cooperation fitting all the partners. An example of such a tool is the Social Readiness Level Instrument. Within this workshop we will share our experiences and show the working of the hashtag#SocialReadinessLevel instrument. The SRL, derived from the Technology Readiness Level, serves as a pragmatic qualitative instrument. It leverages input from diverse stakeholders to track innovation progress and identify critical factors such as bottlenecks, synergies, and necessary actions. We invite you to join us if you want you to learn about building a network with stakeholders, to find out about tools to share interests and prioritize joint activities in circular land management. You are welcomed to try out some of the tools we developed and you get to know the do's and don'ts in match making.

We want to discuss with you how to overcome differences in interests and frictions in regulation in the field of circular land and soil management.

POSTE	RS	
AN1	Contrasting fertilization and phenological stages shape microbial- mediated phosphorus cycling in maize agroecosystem	M. Barquero Martinez
AN2	BENEFITS ON THE EX VITRO PLANT PERFORMANCE OF THE EARLY ARBUSCULAR SYMBIOSIS ESTABLISHMENT IN ROOTING PROCESS OF PRUNUS ROOTSTOCKS	Antonia Romero
AN3	Evaluation of Field Inoculation of Kocuria rhizophila and Streptomyces violaceoruber as Biostimulants in Two Grapevine Rootstocks	Arnau Miralles Ferrer
AN4	Ecotoxicological bioassays essential tools to improve knowledge about the quality of biochars	Oscar Gonzalez Pelayo
AN5	Soil amendment with biochar at agronomic rates improves borrowing conditions for grounddwelling communities: case study in biodiverse pastures	Oscar Gonzalez Pelayo
AN6	Spontaneous cover crops enhances soil water storage in olive groves after natural rainfalls	Blanco Esther Sastre
AN7	Comparative Study of Soil Management Techniques and Their Effects on Soil Carbon and Water Availability in Vineyards	Maria Jose Marques
AN8	Effects of straw-biochar mulchingon soil runoff-erosion, organic matter and CO2 balance in a vineyard in Alentejo (southern Portugal)	Oscar Gonzalez Pelayo
AN9	Biochar application to soil improves aboveground biomass in a sown biodiverse annual pasture, without trade-offs on community composition and structure	Oscar Gonzalez Pelayo
AN10	Enhancing MRV Frameworks for Afforestation: A Path to Credible Carbon Markets	C. Rodriquez
AN11	Evaluation framework to predict the fate of organic materials	Wieke Vervuurt
AN12	Assessing biochar ecototoxicity upon soil application: Implications for lettuce (Lactuca sativa L.) germination and Daphnia magna behavior	Oscar Gonzalez Pelayo
AN13	NOVATERRA Project: multidisciplinary and international consortium to enhance sustainable production in vineyard and olive groves	Gonzalo Sacristan Perez-Minayo
AN14	Legume-rich grasslands enhance the quality of forage and other ecosystem services in agroecosystems	Zydre Kadziuliene
AN 15	Assessment of soil management practices in Vineyards using Sentinel-2: Challenges in enhancing soil organic carbon content prediction	Hayfa Zayani
AN17	Do we underestimate the efficacy of spontaneous woody vegetation in urban settings ?	Michal Pastor
MET1	Bioremediation Potential of Agricultural Waste: A Study on Spent Mushroom Substrates and Petroleum Hydrocarbon Degradation	Carlos Garcia Delgado

NH1	Low-cost Hydrological Monitoring System For Managing Nature- based Solution (NbS) Related to Slope Instabilities	Margherita Pavanello
NH2	Analisys of the proneness to soil erosion and shallow landslides in Oltrepo Pavese(Northern Italy) using RUSLE and infinite slope stability models	Matteo Giganti
NH3	Nature-based Solutions for shallow landslide mitigation in vineyards: the example of Oltrepo Pavese (Northern Italy)	Antonio Gambarani
NH4	The renaturalization of urban river channels and the mitigation of flood risk, the Corredor Verde Barranco de Beniopa, a project as a nature-based solution	Francisco Escriva (no show)
NH5	The impact of plant types on water repellency as a consequence of forest fires.	Artemi Cerda
NH6	Pruned branches management in orchards: fire against chipping.	Artemi Cerda
NH7	Quantifying Hillslope Splash and Sheet Erosion Using Soil Particle Size Distribution	Saeedreza Moazeni
NH8	A Comprehensive Bibliometric Analysis of Forest Fire Research in Iran	Saeedreza Moazeni
NH9	Hydrological Impacts of Forest Fires on Watersheds: A Comprehensive Review and Bibliometric Analysis	Saeedreza Moazeni
NH4	Assessing Soil Hydrological Responses to Watershed Management and Topography in Iran	Saeedreza Moazeni
UR1	Waste2bio, a Walloon initiative for the socio-economic and environmental redevelopment of polluted and derelict lands through Nature-based-solutions	C Nouet
UR2	Snags and stumps as catalysts of biodiversity in temperate forest ecosystems	Ewa Blonska
UR3	Rhizosphere effect: Microbial and enzymatic dynamics in the rhizosphere of various shrub species	Jaroslaw Lasota
UR4	Blue Infrastructure in Urban Areas: A Lost Opportunity? Insights from Western Romania	Rares Halbac- Cotoara-Zamfir
SB1	Enhancing Higher Education in Agriculture Through Multi- Institutional Course Design and Implementation.	Dara Park
SB2	Real-Time Insights: Revolutionizing Ecophysiological Education Amidst the Climate Change using the Interactive BioMeteorological Online Lab	X Nalevankova
SB3	Developing a Carbon farming framework supporting Ireland to meet its climate targets.	Saskia Visser
SB4	Innovative governance schemes for coastal protection	Irene Luján