

Building an ecosystemic transition model with transformative actions

Organised by the Euro-Mediterranean Economists Association

3rd November 2022, 9:30 – 17:00 CET

Hybrid event held at Sant Pau Art Nouveau Site, C/Sant Antoni Maria Claret 167, 08025 Barcelona, and Zoom













## Background

The effects of climate change are becoming more severe year by year, increasing the vulnerability of the Mediterranean region in terms of health, ecological biodiversity, security of resource supply and the economy. Amid the current uncertainty, there is a clear need to accelerate the implementation of climate change adaptation solutions that are effective in the short term and resilient in the long term. It is therefore necessary to formulate systemic solutions that can overcome the disciplinary barriers that often immobilise credible actions. To achieve this, there are two determining factors: on the one hand, transdisciplinary collaboration to pool goal-oriented knowledge, and on the other hand, securing sufficient funding through cooperation between the public, private sectors, academia and citizens. The role of research centres and think tanks is fundamental as agents of change, building bridges between disciplines to contribute to society based on scientific evidence. The synergy between initiatives promoted by each of these organisations is an alternative for translating the objectives into tangible concrete actions.

The Euro-Mediterranean Economists Association (EMEA) is working on the Sustainable Transformative Alliance (STA) addressed to national and regional policies on biodiversity and natural capital, green entrepreneurship, climate and sustainable finance and territorial resilience and linking rural and urban areas.

EMEA has developed the TRIS model based on 4 interactive pillars - mainly transparency, responsibility, inclusiveness and sustainability. This model aims to guide innovative economic policies towards a transformative scenario.

Under the Interreg Mediterranean project - Renewable energy, in which EMEA is a partner since 2020, the project developed the Ecosystemic Transition Unit (ETU) Initiative to guide the transferring actions and mainstreaming into policies for a transformative action at the local level. The initiative encourages local authorities and local entities to participate and include their projects on energy transition and beyond. The nexus between energy, food, and water could become a strategic driver for transformative actions at territorial level, linking land-use planning, productive sectors such as agroforestry and biomass production, and digitalization of this sector.

The aim of this workshop is to discuss the existing initiatives in the Euro-Mediterranean context and to coordinate actions to tackle common challenges. The workshop brings together initiatives related to blue and green economy industries in the Mediterranean, and representatives from key clusters in Spain and elsewhere to discuss synergies through a WFE NEXUS approach to support the acceleration of sustainable transformative actions.

## **Objectives**

- Presentation of the initiatives (TRIS, ETU, and others) under the STA to invited stakeholders
- Exchange of Initiatives and clusters in Spain and the Mediterranean
- Call for collaboration to achieve wider impact through a transformative scenario
- Confirm interest to participate in future working groups and other types of involvement
- Brainstorm about possible targeted joint actions through the transferring approach









## Summary of the event Stakeholder presentations

The event opened with Prof. Rym Ayadi, President of the Euro-Mediterranean Economists Association, presenting the Sustainable Transformative Alliance scenario and the TRIS model. The TRIS model, developed by EMEA, is an innovative mechanism for measuring socio-economic development in the Mediterranean. TRIS stands for "Transparent", "Responsible", "Inclusive" and "Sustainable". This new concept can be transposed to other regions of the world and be used as a bridge between Europe and Africa to push for data collection and monitoring mechanisms. To complement this, EMEA is also launching the Sustainable Transformative Alliance which aims to bring together different stakeholders to accelerate sustainable actions based on four pillars:

- Biodiversity and Nature Capital
- 2. Territorial Resilience
- 3. Sustainable Finance
- 4. Sustainable Entrepreneurship

The aim of this alliance is to bring stakeholders together to strengthen the science-policy interface to accelerate sustainable transformative action.

Following Prof. Rym Ayadi's introduction, the various organisations present explained their aims and visions on sustainable actions. Michele Bozzano, Head of the European Forest Institute (EFI) Mediterranean Facility. He explained that EFI facilitates and stimulates forest-related networking and promotes the dissemination of unbiased and policy-relevant information on forests and advocates for forest research and for the use of scientifically sound information as a basis for forest policies. He highlighted the role of forests in the Mediterranean, which is to manage water, regulate temperatures, and generate ecosystems. However, there is no economic incentive for people to manage these lands meaning they abandon the area seeking other opportunities. The challenge is how to incentivise good forest management and determine the desired outputs, such as carbon sequestration and undesired outputs, such as logging. He also highlighted that there is often a lack of understanding of the science among policymakers, such as carbon sequestration in the Mediterranean forests being ineffective. This is valuable information, and these interfaces need to be strengthened.

Secondly, François Guerquín. Director of Plan Bleu for the Environment and the Development in the Mediterranean joined the discussion online. Plan Bleu is a Mediterranean Observatory on environment and sustainable development established by the Barcelona Convention, part of the United Nations Mediterranean Action Plan. He demonstrated the importance of conveying the science to decision makers and proposing different well-researched scenarios. To do this, data must be shared and made available among acting institutions. Plan Bleu has a mandate from the Barcelona Convention to create an observatory on environment and development, WESR - wesr.unep.org/med – collecting and sharing relevant data across the Mediterranean

Rosa Suriñach, Advocacy and Outreach Coordinator at UN Habitat, Urban Resilience HUB continued with the presentations. She turned the conversation to building urban resilience, particularly within the context of climate change. The resilience must be built from a risk management perspective and with an understanding of chronic stress and pressure on the system. She went on to explain the City Resilience Global Programme and its aim to work together with local and regional governments to implement and support this journey with concrete actions that can be implemented by many different groups. In the Euro-Mediterranean region, they are working with the project MedCities in Tunisia and believe this case study can be an ambassador of the work done, encouraging replication in other areas.



Then the discussion turned to green and sustainable entrepreneurs in the Mediterranean region with a presentation from Enrique de Villamore, Director at Medwaves. He explained Medwaves' SwitchMed programme which provides tools and gui-dance for green entrepreneurs in the Mediterranean region filling the gaps in access to business resources.

The final organisation was Scientific Centre of Monaco, presented by Dr Nathalie Hilmi – Head of Research in the area Econo-mic and Ecological Vulnerability in the Mediterranean Region. She highlighted the importance of valuing natural capital using coral reefs as an example. Nature can be valued in different ways and it is possible to integrate its value into policy, however, the issue is that less than 5% of published valuation studies are taken into policy decisions. This is related to the STA initiative because the transformative change needed to address the global biodiversity crisis relies on shifting away from values that over-emphasise short term and individual material gains to nurturing sustainable-aligned values across society. To conserve natural capital against climate change, prevention is possible by helping nature to resist these environmental changes, main-taining genetic diversity, helping communities to adapt, and raising awareness.









## Working session on potential synergies

Prof. Ayadi thanked the various organisations for their presentations. Following the short break, the participants engaged in an open discussion on potential synergies and joint actions. Prof. Ayadi opened the session by highlighting the need to redefine value. Global financial institutions are not treating the climate crisis with the urgency required and to change this, we need a common understanding and philosophy of sustainable finance. Furthermore, financial institutions are largely interested in stability rather than changing the direction of the economy. There must be a shift to focusing on long-term challenges rather than being stuck in the short term.



Carlos Sessa continued this theme by discussing the TRIS model, introduced earlier by Prof. Ayadi, and regenerative economies. The extractive model is currently the norm; however, they are driving towards collapse as by nature they generate fragile economies. Regenerative economies, on the other hand, are solution seeking and they try to eliminate risks before they happen, for example, switching to renewable energy before fossil fuel reserves become critical. The TRIS model is the means to the end as a socio-economic model based on four principles: Transparency, Responsibility, Inclusiveness and Sustainability. Prof. Ayadi highlighted the links that exist between all the organisations present: forests, habitats, oceans, sustainability, and a key point of intersection can be identified within the aims of the Sustainable Transformative Alliance.

Michele Bozzano of the European Forest Institute for the Mediterranean responded to the question, how can the respective organisations contribute, by discussing the need for more data. He said that the key challenge is comparing the two situations of action or inaction e.g., cost of a forest fire vs the cost of preventing a forest fire. The data is readily available for the former but not for the latter. As an organisation, they hold power to mobilise the academic community within which they work. Prof. Ayadi suggests a point of intersection is state risk v insured risk given that the frequency of these events is increasing. Another issue is that these local authorities are working alone meaning more collaboration is needed.

Stefano Bonfa contributed to the discussion by explaining that there is a lot of data, however, within Europe, the data generated by horizontal projects is fragmented. There is a need to begin coordinating and collaborating within data and IT. Within the NEXUS (to be presented later), there is a desire to uncover the link to water, forests, energy, development, and strategies etc using the data we have.

Francois Guerquín explained the need to deal with governmental expectations. As presented earlier, Plan Bleu is working on a data observatory, however, he explained that the next step can be taken to progress to harmonised data. This kind of information supports decision making; however, he emphasises that the collection should be done with a network approach.

Rosa Suriñach explained how UN Habitat can commit to such an alliance. She explained that UN Habitat can play the role of connecting with national and local governments. They have connections with Ministries of Housing, however, their main partners in implementation are local governments. They can also support and amplify messages and adopt a campaign approach. She also explained that they can support on increasing resilience such as is being carried out in the project "Making Cities Resilient 2030" managed by UNDRR who identify the main hubs of resilience.



Enrique confirmed that Medwaves can contribute to the initiative. In the last phase of Medwaves Switchers activities, they plan to establish national partnerships with business support institutions. These partnerships are focused on green and circular economies in their own countries which could be used in such an alliance.

Prof. Ayadi suggested that a point of intersection could be how to measure community value. This is linked to the multi-bottom line approach and considering stakeholder value rather than shareholder value. There are a lot of intangible and abstract aspects to it and the difficulty is how to measure this. She emphasised that we need to be aware of greenwashing as a lot of "just" and "green" banking initiatives have no real impact.









Prof. Ayadi thanked the participants for their contributions and gave some final comments. She explained that our current economic model is based on competition not collaboration. Leadership is key and this alliance could be a step forward to shift our perspectives. We should have practices that enhance interactions between complementary activities within the community. There was a project that aimed to uncover complementary initiatives between countries – how can investments be used to create jobs in another country, for example.

### The ETU Initiative evolving to green living areas

Dr Cynthia Echave presented the ETU initiative under the INTERREG project. From an urban planning perspective, the discussion thus far had centred on post-carbon cities. Now we need to consider post-pandemic territories. One of EMEA's recent research projects has focused on the urban and rural symbiosis working on four themes: industrial (circularity and sustainable use of resources), technological (digitalisation and access to basic services, job creation, entrepreneurship), knowledge (innovation - social and technological solutions), and social (collective intelligence – communities and co-creation).



She explained that EMEA is working on the ETU – Ecosystemic Transition Unit. This is a model that proposes a holistic response to climate change, territorial equity, social innovation, green economy, cooperation, and commitment. Different components are considered and how different plans and policies can be addressed within each framework (e.g., SECAP, SUMP). The main target so far is the energy transition however, there is a need for the project to develop a knowledge transferring approach was developed and they will be tested on local authorities so the results and impacts can be capitalised.

She emphasised that it is crucial to make the maximum efforts to make an efficient use of the EU Funds applied into EU Projects through all the existing programmes. Within the framework of EU Projects, the capitalisation of results becomes a strategy to ensure effective knowledge transfer and effective replicability among all Member States. The ETU Initiative flagship cases are composed of nine rural, island and urban municipalities that have been chosen by the Interreg MED Renewable Energy community to receive technical support from the project's experts to apply the ETU Toolbox to support ongoing renewable energy projects, policies, and energy communities. The replication of tools and methodologies among the ETU flagship and territorial cases were supported by one or more than one modular projects project.

The project has also generated policy recommendations: collective self-consumption and energy communities in remote areas; integration of energy plans, mobility plans, and urban planning; and an assessment of capitalisation impact to enhance results in other EU projects.

Dr Echave finished by asking the colleagues present, what the current landscape is on the Nexus between energy, food, and water, and how they see the STA and territorial resilience being implicated and barriers to the implementation of the solutions. The session then proceeded to the presentations of the networks and clusters.









# Round of presentations of networks and clusters

Ali Rhouma, leader of the WEFE Nexus thematic area at the PRIMA Foundation, began the presentations. The PRIMA Foundation works in four thematic areas: management of water, farming systems, afro-food value change, and the water, energy, food, and ecosystems (WEFE) nexus. There is a dashboard created for the NEXUS, which details the number of projects by country, the budget, number of SME's involved etc. They have created a new CSA Community of Practices to encourage interaction between different projects. In the Mediterranean region, attention must be paid to the rural areas in the context of the social-ecological system. The WEFE Nexus Livelihood Conceptual framework works towards resilient communities. He explained that nexus planning could contribute to understanding the different complex interactions and inform on policy interventions that enhance sustainable socio-ecological outcomes. He concluded by inviting the participants to register in their database as an evaluator and that collaboration is welcome.

Secondly, Marisa Fernández presented the Zinnae cluster, which is made up of SMEs, research centres, local authorities, and municipalities managing water. She discussed the current challenges in water management – abundance of water, scarcity of water, and pollution. They are working on innovative collaborative projects with the aim of developing solutions to address these challenges. Examples of such solutions are BIO-H2 Biotechnology applied to biological hydrogen production in wastewater treatment plants. An SME within the cluster has developed a solution to value the organic matter in wastewater to produce biohydrogen. Another example is the project Bodegas 4.0 working on the digitalisation and water reuse in the winery sector. This achieved 10% of water savings in the first phase and 25% in subsequent phases. Finally, she presented the project CirclinWater, a Eurocluster to support SMEs to develop and implement water-smart solutions for agrifood and energy intensive industries as part of their transition pathways. This involves awarding innovation vouchers, knowledge vouchers, and internationalisation vouchers.

Following the water cluster, Clara Santamaria gave a presentation on the solar energy cluster, Solartys. Solartys is a non-profit association working to improve the competitiveness of companies working in the solar energy sector. Their working areas are innovation, training and capacity building, energy communities and auto-consumption, sustainability and circular economy aiming to generate business opportunities, promote R&D and innovation, and they identify public funding, networking, training, and capacity building. They work alongside the entire solar energy value chain bringing together manufacturers and distributors of materials and components, engineering, installers, and promoters of solar energy projects. The project Green Small Smart Cities is financed by the EU with the objective of increasing the use of sustainable technical solutions. She highlighted the possible collaborations as participation in joint European and national research projects, co-organisation of workshops and joint events with clusters or entities related to water and food, and finally, communication and knowledge sharing of joint initiatives.

Albert Palou from the BETA Centre based in the University of Vic shared the experiences of the organisation which aims to boost the R+D+I activity in the field of environmental technologies. It is a Technology centre created in November 2014, contributing to sustainable rural development and transition to circular bioeconomy. They want to improve the competitiveness and the quality-of-life society with a specific focus on rural regions, through the promotion and implementation of R+D+I project in cooperation with companies, public administrations, and social entities. They work in agri-food, water, bioenergy, and food loss and above all promoting green and circular economy in the Mediterranean and a dialogue for waste management governance.











Finally, Stefano Bonfa, Director of Innovation Association for Sustainable Economic Development (OSDE), explained the Metaverse Hub under Climatological Change and The Lileal start-up. These initiatives have the aim of building participation in the creation of value from the bottom up and using data to enhance community building. They developed "data hubs" to have centres of excellence where data is collected forming a network where all digital hubs are connected. Once data is collected, the nexus on energy, food, water etc. can be established and data can be interlinked. This is the integrated nexus hub methodology. This should be done in a regional setting but with easy application to the local level. The Innovation Hub and Platform is being tested in Italy asking questions such as what the overall strategy is to improve development, how can the region be made unique, what are the leading economic sectors etc. From there, data can be collected, sector plans can be developed, and the data can be integrated.

Emanuele Ricci, co-founder of OSDE, continued explaining the initiative that is a digital integrated model of a real ecosystem under implementation by OSDE and LILEA which allows for the simulation of processes and complex problems. It is currently underway in 15 municipalities in Italy. They are developing a new climate-water-energy-food ecosystem (WEFE) management metaverse, where sustainability and inclusiveness are the basis for policy tackling and data assisted decision-making. He emphasised that the approach is human-centric. The key takeaways are scenario modelling can improve operational efficiency and generate positive community outcomes, simulation allows communities see a variety of options, and finally it will allow for the development of better policies and business decisions.

Dr Echave asked for final remarks and the signposting of possible synergies. Ali Rhouma said that the sharing of data was the key challenge as it is critical for the NEXUS and push to implement in the Mediterranean region to avoid further disparity between the rural and urban. Stefano answered that most of the data being collected is free. There could be a push to access local data from local authorities which is a form of democratisation and freedom of information.

Laia Vinyez, project manager of MedCities, explained how the project can contribute. They are a collection of municipalities around Europe. Municipalities that can be part of multistakeholder initiatives as they have a public benefit in mind, and they can implement projects with this approach. They also consider the territorial dimension and the perspective of citizens. Prof. Ayadi commented that transparency of funds is important especially in Mediterranean countries.

Adriana Cliville from CREAF confirmed that they can provide scientific evidence and they are committed to informing decision makers on evidence backed policy. Dr Cynthia Echave confirmed that there will be a follow up and if participants are interested, we can gather again to discuss synergies in closer detail.

## Conclusion

The session successfully brought together relevant stakeholders in the region as a first step to discuss synergies wand joint actions under the framework of the Sustainable Transformative Alliance. All participants expressed the need to collaborate rather than duplicate efforts and suggested ways in which each organisation can use their assets to contribute to alliance. Key themes were networking and strengthening the interface between scientists and policymakers, data sharing and harmonisation, and the urgency with which these actions must take place.











## Agenda:

9:30 – 09:45	Registration – welcome
09:45 – 10:00	Part 1: Presentation of Sustainable Transformative Action Scenario Rym Ayadi, President of EMEA
10:00 – 11:15	Round of presentation of Initiatives PlanBleu, François Guerquin (online) Centre Scientifique de Monaco, Nathalie Hilmi (online) European Forest Institute for the Mediterranean, Michele Bozzano Medwaves: SwitchMed and Green entrepreneurship, Enrique de Villamore UN Habitat: Urban Resilience HUB, Rosa Surinach
11:15 – 1130	Coffee break
11:30 – 12:30	Working session about potential synergies  Open discussion with attendants about potential synergies and joint actions.
12:30 – 13:30	Lunch break
13:30 – 13:45	Part 2: The ETU Initiative evolving to green living areas: NEXUS approach Dr Cynthia Echave, Project Coordinator at EMEA
13:45- 15:00	Round of presentation of networks and clusters Prima Foundation, Ali Rhouma Cluster ZINNAE, Marisa Fernandez Cluster Solartys Solar, Clara Santamaria BETA Center, Albert Palou Oxford Sustainable Development, Emanuele Ricci (online)
15:00- 16:00	Working discussion about potential synergies around WFE NEXUS approach Open discussion with attendants about potential synergies and joint actions.
16:00- 16:15	Final remarks and next steps
16:15- 17:00	Aperitive











## Biographies of participants



## Professor Rym Ayadi President and Founder of Euro-Mediterranean Economists Association

Professor Rym Ayadi is the Founder and President of the Euro – Mediterranean Economists Association (EMEA). She is Founder and Director of the Euro-Mediterranean and African Network for Economic Studies (EMANES). She is Senior Advisor at the Centre for European Policy Studies (CEPS); Professor at the Bayes Business School, City University of London; and Member of the Centre for Banking Research (CBR); Academic member and Chair (2018-present) of the European Banking Authority – Banking Stakeholders Group (EBA- BSG). She is also Associated Scholar at the Centre for Relationship Banking and Economics (CERBE) at LUMSA University in Rome.



## Dr Cynthia Echave Project Coordinator and Senior Researcher, EMEA

Cynthia Echave is an architect & urban planner specialized in urban ecology. She carried out her PhD in Energy and Environment at the Polytechnic University of Catalonia. Her professional career is characterized by active participation in strategic urban planning projects based on resilience and liveability. At EMEA she is project coordinator and senior researcher in charge of transformative actions, knowledge transferring and capitalisation.



## **Carlo Sessa**Research Director and former President of Institute of Studies for the Integration of Systems of Rome

Carlo SESSA is Research Director and former President of Institute of Studies for the Integration of Systems of Rome. He was the Coordinator of several EU research projects, in the 5th, 6th and 7th Framework Programmes, in the fields of transport, urban issues and environment.



### Francios Gerquín Director, Plan Bleu

Since June 2020, François Guerquin is the new Director of Plan Bleu, activity center for environment and development in Mediterranean.

François Guerquin graduated from the French Polytechnic School, and the European Institute of Business Administration (INSEAD).



### **Dr Nathalie Hilmi** Head of Research, Scientific Centre of Monaco

Dr Nathalie Hilmi is an expert in Macroeconomics and International Finance. In 2010, she joined the Centre Scientifique de Monaco as head of the section « environmental economics » and collaborated with IAEA's Environment Laboratories to initiate correlation studies between environmental sciences and economics to better evaluate the socioeconomic extent of impacts and costs of action versus inaction regarding carbon emissions.











Michele Bozzano
European Forest Institute
Head of the Mediterranean and Genetic Facilities

Mr Bozzano coordinates European initiatives on forest genetic resources conservation & sustainable use and in forest landscape restoration.

He focuses on networking, capacity development and science-policy interface in the European forestry sector.



Rosa Surinach
Partnerships, Advocacy, and Outreach Coordinator at UN Habitat

Rosa is currently Coordinator of Advocacy, Communications and Partnerships for the UN-Habitat's City Resilience Global Programme. She led the launch of the Urban Resilience Hub among other outreach actions to promote urban resilience in the global arena.



**Enrique de Villamore Director, Medwaves** 

Enrique de Villamore has been Director of Medwaves since 2010. In the performance of its mandate, Medwaves has become a reference for international cooperation in the support to administrations and entrepreneurs in the transition to green and circular economies.



Ali Rhouma Project Manager, PRIMA

Prof. Ali Rhouma is an agricultural researcher and holds and European Master of environment at Swiss Federal Institute of Technology Lausanne and a PhD in plant protection. He is responsible of managing the calls of Nexus WEFE at PRIMA Foundation.



Marisa Fernández Cluster Manager, Zinnae

Marisa has been the manager of Zinnae since 2020 and has more than 25 years of experience working in efficient water management by promoting technological and social innovation. She has a degree in Economics from the University of Zaragoza and a Master's in Environmental Management from the Universities of Amsterdam, Leiden and Wageningen.



#### Clara Santamaria Cluster Manager, Solartys

Clara has more than 15 years of experience in economic development, promotion of business competitiveness in Spain and at international level, and in the coordination and management of a wide variety of projects. She is cluster manager of INNOVI - Catalan wine cluster), Habitat Cluster Barcelona, and currently managing SOLARTYS, solar energy cluster.













#### Albert Palou Vilar Head of Communications, BETA Technological Centre

Dr. Albert Palou is a Biologist, PhD in Experimental Sciences and Technology and the Head of communications and instutional Relations at the BETA TC.. He is involved in the Interreg MED Green Growth community, a network of 17 innovation projects on green and circular economy promoting sustainable development in the Mediterranean region.



### Emanuele Ricci OxSDE Science-Tech Director/LILEAL Climate fintech startup founder

Emanuele Ricci is Co-founder of the OSDE Innovation Association for Sustainable Economic Development looking at climate change. OSDE includes the major universities and research institutes in the Mediterranean.

He is also founder of LILEAL which is a start-up with the aim of matching the demand for work with the demand for specialized skills, using data to enhance community building and enable the creation of new production chains for the economic revitalization of cities and regions.



### Stefano Bonfa Director & Founder of Oxford Sustainable Development Enterprise

Dr Bonfa is an expert in Bigdata strategy and Machine Learning intelligence applications. He has over 30 years' experience in digital transformation and innovation strategy, building data innovation hubs for governments and private sector data incubation for the digital economy. He also conducted smart strategy specialisation for government at EU-National and regional level Director of Knowledge Data Centre.



Laia Vinyez Marcé Project Officer, Medcities

Laia has experience in urban sustainable development, social cohesion and local governance in the Mediterranean region. Project officer for the lead-partner management of EU Interreg Med Urban Transport Community and main partner of direct city to city cooperation initiative #TangerAccueil of #MC2CMProgramme (ICMPD, UCLG, UN Habitat).



Adriana Cliville International Communiciations, CREAF

Journalist with an interest in communication and digital marketing, the threads of my in outreach initiatives on the natural environment, renewable energy, technology, territory and its management with environmental criteria for companies, universities, public administration and consulting.

Gloria Budó General Director of External Relations, Generalitat de Catalunya