

23 October 16:30 – 18:30
BEST PRACTICES AND NEW PROJECTS
WORK TRACK – SUSTAINABLE DEVELOPMENT

Conveners: Walid el Baba (EAMC and WEBCO, Lebanon) and Piergiuseppe Morone (Unitelma Sapienza University of Rome)

Significant changes are expected to occur over the next few decades: most notably, the world population is projected to increase by almost one billion people within the next decade, and the “global middle class” is expected to nearly double by 2030. These trends add pressure to the world economic system and environment: emissions of greenhouse gases keep growing at global scale, materials and energy sources are fast approaching their physical limits and the amount of waste produced under the current system seems to be reaching a new peak.

Against this background, a transition from a society heavily based on mass consumption, uncontrolled waste generation and heavy fossil-fuel exploitation towards one based on resource-efficiency, new production and consumption behaviours, waste reduction, reuse and valorization, seems a desirable and much needed feat. In this regard, the Euro-Mediterranean area can represent an open-air laboratory. This Work Track dedicated to Sustainable Development brings together key players that can help to make such a transition possible, namely, researchers, experts and analysts who will provide their vision and practical understanding on challenges and opportunities for Mediterranean countries.

10 m Opening of the session

Walid el Baba (EAMC and WEBCO, Lebanon)

20 m Conceptual vision of a sustainable circular waste-based bioeconomy development in Mediterranean regions

Anastasia Zabaniotou (Aristotle University, Thessaloniki, Greece)

The Mediterranean is a geographical, cultural, and philosophical reference point encompassing multiple cultures, languages, faiths, and temporal rhythms of development. Innovation can play an important role at regional level, as regions are important engines of economic development. Sustainable regional bioeconomy, local knowledge, ethics and social benefits are linked to technological solutions.

20 m The impact of outdoor space quality on climate responsive building design in Mediterranean cities

Aram Yeretzian (American University of Beirut)

A main characteristic that differentiates cities around the Mediterranean Basin is the quality of the outdoor space, more specifically the degree to which that space is treated as a disposal area. This phenomenon is progressively growing with time as population sizes increase and cities strive to enhance their economies. The quality of the outdoor space significantly affects many aspects of life in a Mediterranean city, namely building design. After addressing this issue, the presentation will expand upon the potential of climate responsive and environmentally sensitive building design as a function of the quality of the outdoor space. The presentation will conclude by highlighting the benefits of climate responsive strategies in building design.

20 m Food waste valorisation for the production of added-value commodities: focus on citrus peel waste as a feedstock for sustainable bio-refineries

Michail Koutinas (Cyprus University of Technology, Limassol, Cyprus)

The food sector is currently emerging as an area providing a range of advanced and

multidisciplinary research and development approaches for sustainable waste management. Food manufacturing generates substantial quantities of residues and waste rich in molecules, such as carbohydrates, fatty acids and proteins, which can be used to generate added-value compounds including chemicals, biofuels and biopolymers through physicochemical and biochemical processing. The restructuring of the traditional fermentation industry into biorefineries that produce low value commodities (e.g. biofuels) as well as biobased chemicals and materials of high value can set the basis for replacement of petrochemical processing with a renewable resource and to develop a minimal waste community.

20 m Women, energy and environment

Francesca Jacobone (University Rome 3 and CREIS, Italy)

The aim of the “Women, energy and environment” training course is to promote: (a) Greater involvement of Mediterranean women in the Green Economy, Blue Economy and Smart Energy, and to foster energy saving; (b) The empowerment of women; c) Female entrepreneurship and women-led small and medium enterprises; and (d) Improvement of women’s lifestyles, living conditions and health and consequently of the population as a whole.

20 m BRIEF PRESENTATIONS OF NEW PROJECTS

Strengthening the capacities of Mediterranean and African scientists of the public and private sector regarding management and financing of bankable green projects for green growth in the Mediterranean and African regions

Amel Makhoulouf (Tunisian Engineering Council)

United Nations’ Sustainable Development Solutions Network (SDSN) at the University of Naples Federico II

Antonio Marzocchella and Alberta De Capua (University of Naples Federico II, Italy)

Solid waste sorting facility for the Fanar Municipality

Joslin Kehdy and Nour Kanso (Recycle Lebanon)

A new sustainable infrastructural plan to boost the competitiveness and the integration of the Southern Italian regions and North Africa

Filippo Romeo (Vision and Global Trend Institute, Italy)

10 m Conclusions

Piergiuseppe Morone (Unitelma Sapienza University of Rome, Italy)