COST Action CA17133 Circular City Working Groups

**WG1: Built environment**

The built environment puts the most pressure on the natural environment and its role in transforming to a CE system is pivotal (Pomponi and Moncaster, 2017). Within WG1 the nature-based solution (NBS) – circular economy (CE) aspect for buildings and at the settlement level are investigated with the main focus on vegetated building materials and resources to be obtained from the corresponding NBS.

**WG2: Sustainable urban water utilisation**

WG2 investigates the implementation of a safe and functional water cycle in the urban biosphere, where water is defined as a resource from which nutrients can be harvested from wastewater, heavy metal adsorbed by filter materials contributing to phytomining and the treated water is looped back for irrigation, sanitation and also recreational purposes.

**WG3: Resource recovery**

A significant portion of resources are lost when passing through the urban biosphere. The implemented NBS for mitigation or treatment purposes shall become sources for a variety of resources to be harvested, used, reused and recycled. Therefore, possible sources and implementation strategies within the urban biosphere are investigated in WG3.

**WG 4: Urban Farming**

WG4 focuses on the integration of resources from other working groups (water, nutrients…) into urban farming systems as well as on the resources provided through urban farming for further use in other WGs. Different urban farming systems especially developed for dense urban areas (e.g. underground, vertical and rooftop farming) are investigated.

**WG5: Transformation tools**

WG5 concentrates its effort on identifying, and engaging and establishing a long term relationship between the present and future consumers of the recovered and reused resources from NBS. It will also coordinate and lead the interdisciplinary activities the programme entails.