

## **OC29 - Ponds and wetlands in cities for biodiversity and climate adaptation**

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Climate related hazards cause more and more social, infrastructural, financial and environmental issues. Many of them are associated with water-related risks. Floods, droughts, extreme precipitation events and sea level rise, have been already observed, and will continue to threaten all Europe in the coming years. This is where, in 2020, 80% of the Europeans will experience the effects of global climate change (EEA, 2012); and 40.8% of them, will experience it in coastal regions, which cover c.a. 40% of EU territory (EUROSTAT).

Today, there is a need to design water resilient cities, by implementing blue-green infrastructures, such as Biowater Climapond and wetlands in urban areas, in order to improve stormwater management by increasing water retention at the surface but as well biodiversity.

Biowater Climapond is a module-based rainwater reservoir used to mitigate extreme runoffs from heavily urbanised areas, while it allows greater biodiversity as a natural habitat for animals and plants. This product has been developed by the campaign ‘Klimaspring’ granted by Realdania, where Amphi Consult was one of the partners. This one is based on Amphi Consult 30 years’ experience in pond restoration and creation in open landscapes. We plan to implement such blue-green infrastructure in two LIFE projects:

LIFERADOMKLIMA-PL (LIFE14 CCA/PL/000101) “Adaptation to climate change through sustainable management of water of the urban area in Radom City”; LIFEBlueGreenFastTrack “Time and Space for Water – Fast-track to increased climate resilience in EU cities”. The last one is currently being evaluated for acceptance by the European Commission. Five cities, Aarhus & Odense (DK), Lodz (PL), Aprilia (IT) and Faro (PT) are testing and proposing innovative nature-based solutions as a response to water-related climatic threats. Coastal management is one of the topics tackled in LIFEBlueGreenFastTrack, where three coastal cities are involved, Faro, Aarhus and Odense. For instance, a dike reconstruction and a new wetland are planned to be implemented near Odense to mitigate coastal flooding of its suburbs.

We believe that demonstrating such innovative blue-green infrastructures in our cities will make them more water-resilient and therefore adapted to climate change. Thus, a strong collaboration between stakeholders is key to find the best solutions for our cities.