Nature4Cities

Nature Based Solutions for re-naturing cities: knowledge diffusion and decision support platform through new collaborative models



INSPIRATION



Re-naturing cities has recently emerged as a new strategic priority within the European framework Programme for Research and Innovation. In this regard, nature-based solutions (NBS) to urban and societal challenges - such as green roofs and walls, urban forests, alternative stormwater management systems, urban agriculture - are considered cost-effective measures, inspired and supported by nature, to simultaneously provide environmental, social and economic benefits and help building more resilience in urban regions. Most NBS cannot be just thought as replacements of conventional solutions, but they require a new whole governance approach. They bring more and more diverse, nature and natural features and processes into urban agglomerations, through locally adapted, resource-efficient and systemic interventions. Hence, integrating NBS in urban planning requires both a change of mind across multiple stakeholders, new governance, business and financing models as well as new integrated assessment capabilities.

INNOVATION

Nature4Cities is one of the first large scale projects funded by European Commission within the H2020 programme to build a common international ground for NBS-related Research and Innovation. The rationale underpinning Nature4Cities is based on the building of a NBS knowledge base and associated integrated analysis framework, the development of a holistic assessment methodology, the adaptation of existing technologies for urban data management and citizens' participatory engagement, as well as the co-development and demonstration with partner cities.

Nature4Cities has the ambition to integrate various domains of expertise into a large consortium, providing with field-tests of the developed tools in real operation conditions across partner cities. Within this project coordinated by the French private RTO Nobatek, LIST will notably be one of the partners responsible for the development of an assessment prospect for NBS, contributing to the formulation of two value scales associated with the implementation of those solutions across the Nature4Cities' case studies: a monetary scale to analyse the value of urban ecosystem services, and a "quality of life" assessment scale. This combination will help placing the economic, environmental and social impacts (as costs, benefits and co-benefits related to NBS) into a common ground. A PhD project is also activated to support the LIST's activities in Nature4Cities.

IMPACT

The project consortium is drawn upon nine countries that take a pro-active part in the European dynamics of research, development and innovation, at the cross-section of urban green infrastructure planning and construction sector, environmental assessment, social sciences, innovation management and Information and Communication Technology supporting tools. A special interest group will be created to broaden the scope of the project and identify early adopters of Nature4Cities technologies, such as green areas managers, urban planners, landscape designers, architects, policy makers, environmental professionals. Nature4Cities will therefore provide a knowledge diffusion and decision support web-platform for urban re-naturing through new collaborative models. The project eventually intends to support local authorities and urban planners in the sustainable developments of urban areas and infrastructure, offering them new tools to engage citizens in the design and implementation process. By creating a reference framework on NBS, Nature4Cities will contribute to generate a global market and new business opportunities for green economy and sustainable urban development.

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Partners

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