

ECOCITIES:

Green Roofs and Walls as a source for ecosystem services in future cities

INTRODUCTION

Green roofs and walls are considered to be important suppliers of ecosystem services as biodiversity, air and water purification, nutrient recycling, C-sequestration and climate extreme (water and heat) regulation.

However, this has never been investigated in a comparative and integrated way for different types of green walls and roofs and the resulting ecosystem services have not been thoroughly (economically) valuated. This hampers an optimal implementation of these systems.





KNOWLEDGE IN ACTION









PROJECT OBJECTIVES

In the framework of the EcoCities project, we will perform an integrated and comparative study on different types of green roofs and walls. Both existing green systems as well as experimental set-ups will be studied. The project aims for:

- an in-depth assessment of the contribution of different green roofs and walls (variation in growth substrate and plant species) to different ecosystem services. The correct assessment of both below- as well as aboveground biodiversity, and its function in providing different ecosystem services, constitutes the thread throughout the project.
- an integrated (economical) valuation of each type of green system, taking into account all the costs and the (monetary) benefits of the ecosystem services provided, in relation to the scale at which they are applied (single building, neighbourhood, community).



OUTPUT

EcoCities will develop a catalogue and a scenario assessment tool with online visualization that both can be consulted to assess the public (ecosystem services) and private benefits/costs of a broad range of different green roofs and walls.

IMPACT

The tools generated by EcoCities can be applied in policy, green roof and wall industry, education and dissemination activities leading to a significantly increase of green roof and wall implementation in already existing as well as in new buildings.

These new green infrastructures will contribute to the ultimate aim of EcoCities: a more sustainable and healthy development of urban areas.

PARTNERS

The partners in this project are: Hasselt University, University of Antwerp, PXL and BBRI. Stakeholders (policy, civil society, industry, education) are member of the user committee.

FUNDING

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VALORIZATION MANAGER

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