

Information about the lecture

Speaker	Prof. Dr. Cristina Matos Silva
Title	Technical and socio-economical feasibility of greening urban transport infrastructures
Group of topics	June 21 st , 2017 Cost-Benefit analysis
Language	english
Content	Nowadays, national and local governments are forced to rethink urban environments in order to minimize environmental problems and improve citizens' quality of life. Sustainable strategies for cities include restoring the environmental integrity of metropolitan areas. E.g., there is the need to provide habitat and biodiversity protection, restore connections to nature, assure ecological balance, improve urban hydrology or air quality. Urban transport infrastructures, typically with high noise levels, visual pollution and large under-exploited areas, seek for adequate interventions. Improvement projects associated to greening these infrastructures are one of the most interesting alternatives. Although there is an underlying assumption that green roofs and green walls can enhance the economical value of infrastructures and cities, there is the need to quantify the economical merit of these solutions. This work focuses on innovative approaches for decision support and ranking of solutions on greening urban transport infrastructures. Two alternatives are analysed: (i) Green roofs decking underground highway or railway tracks; (ii) Green roofs, indoor and outdoor green walls in public buildings, e.g. stations or rail yards. Green roofing existing transport corridors may or not include the need of burying tracks, leading to different magnitude of costs and separated analyses. Results are presented for two case studies in Lisbon city, Portugal.