



“Gh. Asachi” Technical University of Iasi, Romania

***ICEEM/03 – ENVIRONMENTAL MANAGEMENT
SECTION***

Environmental Impact and Life Cycle Assessment

**POLLUTION MITIGATION BY GREEN ROAD
INFRASTRUCTURES**

Marco Pasetto^{*}, Andrea Manganaro

Construction and Transport Dept., University of Padova, Via Marzolo, 9 – 35131, Padova, Italy

Abstract

The environmental insertion of transport infrastructures is nowadays a complicated undertaking for both designers and environmental analysts, given the many types of impact connected with both the construction and operating stages. This is particularly evident where the level of urban sprawl has intensified problems of widespread criticalities in terms of noise level and air quality for the safeguarding of human health. Today, Furthermore, as a consequence of the increasing attention being paid by the European Union to the conservation of historical-architectural and natural goods, the subject of the environmental insertion of new transport infrastructures has become very topical, especially as concerns the potential offered by the insertion of vegetated buffer strips.

This paper refers to a case-study conducted on a route inserted in the Veneto Region (north-east Italy) and demonstrates the innumerable benefits that these mitigation measures can produce for the surrounding territory.

Keywords: green buffer strip, road mitigation

^{*} Author to whom all correspondence should be addressed: Phone: +39 049 8275569, Fax: +39 049 8275577, e-mail: marco.pasetto@unipd.it