



MILESTONE D

Prioritisation of air pollution sources in subway systems

Action A1

Inception report June 2015

IMPROVE LIFE13 ENV/ES/000263



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IMPROVE LIFE

Implementing Methodologies and Practices to Reduce
air pollution Of the subway enVironmEnt





The results from a total of 62 studies, carried out in 30 different cities, shown in the “Historical PM level and chemical composition database” report, indicate that although up to 27 scientific publications discuss the possible sources emitting airborne particles within the subway environment, there is only data on the contribution of each source to the total PM mass in four subway systems. Considering the sources identified in these studies the prioritisation of air pollution sources in subway systems is as follows (showing in brackets the number of citations):

- wheels abrasion (18),
- brake wear, both discs and pads (18),
- rails abrasion (17),
- wires, electrical supply (10),
- mineral dust (8),
- outdoor contamination including secondary inorganic compounds and traffic (6),
- ballast erosion (3),
- rubber tyres wear (1),
- oil combustions (1)
- solvent emissions (1)