

UFIPOLNETnews No. 5 (June-2006)

Dear reader,

here are NEWS for measuring ultrafine particles in ambient air and related subjects.

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1 Air Pollution Levels at Traffic Hotspot Areas in European Cities: DG ENV; Science for Environment Policy 04 May, 2006 Issue 20 (EN)

"Traffic-related air pollution is still one of the most worrisome problems in urban areas in Europe. In relation to human health, particulate matter (PM) is one of the pollutants of most concern. There is clear evidence of the adverse health effects from fine particulate matter (PM), and so it is alarming that most traffic-related emissions are in the fine particulates range (< PM2.5).

A recent report by the European Environmental Agency (EEA) studied the air pollution levels at traffic hotspot areas in 20 European cities compared to the urban background concentrations for NO2, NOx, PM10, and PM2.5. The goal of this study was to determine which local emission reductions are needed in streets in order to not exceed air quality limit values1, which are aimed at protecting public health. To analyse and project the air quality, the authors considered the current situation (reference year 2000) and two scenarios aimed at 2030: Current Legislation (CLE) and Maximum Feasible Reductions (MFR). The methodology applied in the report was developed in the EU-funded 'Street Emission Ceiling (SEC)' project. It allows an analysis of the air quality scenario projections at street level and considers particular policies and measures at regional, urban, and street scales.

The main findings of the current study were:

Air pollution is found to be above recommended levels in all the 20 European cities that were considered in the study, especially in streets and other urban hotspots.

For the 2030 air quality projection, the indicative limit value (based on 2010 targets) for PM10 is not expected to be met even in the most optimistic scenario (MFR).

For the 2030 air quality projection, the results suggest that at street level, the annual limit value for NO2 will be met in only very few cities under the CLE scenario and in most cities under the MRF scenario. The PM2.5 reduction is in line with the significant reductions in the urban and in the street scale PM emissions attributed to the introduction of Euro-5 and Euro-6 compliant vehicles.

The current study illustrates how imperative it is to improve air quality in densely populated urban areas, where human exposure is high due to increased pollutant concentrations. Action is currently being considered at the EU level to combat the particulate matter. At the moment, there is debate on a proposal for a Regulation on type-approval of motor vehicles with respect to emissions and on access to vehicle repair information (for example a new 'Euro 5' standard for diesel cars to limit emissions of particulate matter to 5 mg per kilometre). This proposal received the broad support of EU Environment ministers earlier in March 2006. "

Source: <u>http://reports.eea.eu.int/technical_report_2006_1/en</u> (2006- p.52).



2 Margot Wallström and Stavros Dimas, Vice-President and Member of the EC, measuring the quality of air (EN)

"Participation of Margot Wallström, Vice-President of the EC in charge of Institutional Relations and Communication Strategy and Stavros Dimas, Member of the EC in charge of Environment, in an experiment to measure the level of air pollution by particle matter."



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Commission proposes clean air strategy to protect human health and the environment Reference: IP/05/1170 Date: 21/09/2005 IP/05/1170

Brussels, 21 September 2005

"The European Commission today proposed an ambitious strategy for achieving further significant improvements in air quality across Europe. The Thematic Strategy on air pollution aims by 2020 to cut the annual number of premature deaths from air pollution-related diseases by almost 40% from the 2000 level. It also aims to substantially reduce the area of forests and other ecosystems suffering damage from airborne pollutants. While covering all major air pollutants, the Strategy pays special attention to fine dust, also known as particulates, and ground-level ozone pollution because these pose the greatest danger to human health. Under the Strategy the Commission is proposing to start regulating fine airborne particulates, known as PM2.5, which penetrate deep into human lungs. The Commission also proposes to streamline air quality legislation by merging existing legal instruments into a single Ambient Air Quality Directive, a move that will contribute to Better Regulation."



3 UFIPOLNET second annual workshop from 16 – 17 May 2006 (EN)

On the UFIPOLNET workshop from 16 – 17 May 2006 scientists and air pollution network manager from Sweden, Czech Republic, USA and Germany have met. The meeting was hosted by the Leibniz Institute of Tropospheric Research in Leipzig. The Agenda included evaluation of the past work, practical lessons for the user team and planning of implementation of the particle measuring device. The LIFE-Monitoring TEAM from PARTICIP visited the event as well. The new measuring devices will be tested during the next months in Dresden and Leipzig.



4 COST action 633: Particulate matter: Properties related to health effects (EN)

"COST is one of the longest-running instruments supporting co-operation among scientists and researchers across Europe. COST now has 35 member countries and enables scientists to collaborate in a wide spectrum of activities in research and technology." (http://www.cost.esf.org/index.php)

"Atmospheric particles or dust (particulate matter, PM) have been always considered a major component of air pollution. Epidemiological studies in the recent years gave a strong hint on extended morbidity and mortality even due to relatively low PM burdens (e.g. Dockery et al, 1993).

In many European as well as other countries extensive monitoring programs focus on PM and special parameters like carbon, acidity, semivolatile components, ultrafine particles and so on. The research goals of these studies are not always the same in detail, but generally particle properties with respect to effects on the environment and in particular on human health are addressed. Furthermore, epidemiological studies focused on different health endpoints and high risk groups are conducted. " (http://cost633.dmu.dk)

Under COST 633 the "Workshop on Similarities and differences in airborne particulate matter, exposure and health effects over Europe" were held at Austrian Academy of Sciences, Vienna, Austria from April 3 to 5, 2006.

Final program:

http://www2.dmu.dk/atmosphericenvironment/COST633/Downloads/FinalProgrammeCOST633_V1_0602 02.pdf A documentation will be soon available from:

http://www.iuta.de/Verfahrenstechnik/Cost/COST_Start.htm



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