COORDINATED EUROPEAN PARTICULATE MATTER EMISSION INVENTORY - CEPMEIP

The Coordinated European Particulate Matter Emission Inventory (CEPMEIP) project was initiated in 2000 in response to an official request for information to European national experts by EMEP. The project pooled information from a number of sources and applied technical expert judgement to develop default emission factors for emission sectors as a function of abatement plant performance:

CEPMEIP Plant Classifications

Technology	Abatement
Modern plant (BAT)	e.g. High efficiency ESP or equivalent to control primary sources; fabric filters for fugitive emission;
Conventional plant	e.g. Installation with average age; conventional de-dusting: ESP, wet scrubber; some capturing of fugitives
Older technology	e.g. Multi-cyclones only[1]

[1]The 'Older technology' CEPMEIP classification is the equivalent to an uncontrolled plant, as selected by the technical experts to be representative across the Task Force countries.

The sources of information that have been pooled are:

1. Information requested of available national PM emission inventories and underlying information together with any source measurements of emission/concentration/particle size distribution. In total about 75% of all UNECE Member States responded.

2. PM emission information from collected by TNO for the Dutch Emission Registration and from 'grey literature' directly available from international environmental benchmarking projects; source-related stack concentration measurement surveys and PM related information available from heavy metal emission studies.

3. Information in public reports and handbooks that deal with or somehow include source related emission (factor) data. In this category are reports by:
   -IPPC Bureau (BREF/BAT documents)
   -UN-ECE Expert Groups (e.g. on HM)
   -UN-ECE MSC-East (e.g. work by S. Kakareka et al.)
   -US-EPA (e.g. AP42, AIRCHIEF and the United States National Inventory of PM10/PM2.5)
   -German Umweltbundesamt UBA (e.g. report 297 44 853 by Dreiseidler et al.)
   -Swiss BUWAL
   -Austrian JOANEUM
   -Dutch RIVM and KEMA
   -British APEG
   -The COPERT and HBEFA emission models for mobile sources
   -CONCAWE

4. A literature review was conducted of the scientific literature: articles and papers on source-related PM emission data from scientific journals and meetings from the period 1970 to 2000.

5. Nationally applying emission limit values for stationary sources of primary PM.

Throughout the exercise actual measurements of PM emissions were preferred over emission standards in order to estimate real world emission factors.