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Requests to Transport Emission Experts by the Inventoring Community

A subjective view



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There's more to emissions than NOx, e.g. PM

- Exhaust PM size fractions still uncertain, esp. $PM_{2.5}/PM_{10}$
 - ◆ How much of the PM_{exhaust} is $PM_{2.5}$?
- Tyre and brake wear somehow certain
 - ◆ New information is still required
- Road wear very uncertain
 - ◆ Large improvements required
- PM definitions
 - ◆ **Filterable vs condensable**
 - ◆ SVOC, primary, secondary

Other pollutants covered by the protocol

➤ Cd, Hg, Pb

- ◆ We hardly have any recent data on exhaust emissions
- ◆ We hardly have any data on non-exhaust, maybe for brakes

➤ POPs: Dioxins/Furans, HCB, PAH

- ◆ We hardly know their names, let alone measuring them

Inconsistencies

➤ Protocols require BC

- ◆ We often report EC
- ◆ Brown C?
- ◆ Difference may be / not be small

➤ Protocols require NMVOC

- ◆ We report NMHC, which may result in large differences especially for some alternative fuels (alcohols)

Data

- Activity and profile data are often missing
- Data relevance
 - ◆ e.g. what is average speed?
- Responsibility for data collection / mining / generation resides on both groups
 - ◆ Could we optimize our efforts?

Latest science vs consistency

- Latest scientific findings should be taken into account:
 - ◆ ASAP as they significantly change projections
 - ◆ In scheduled time frames so that time series do not 'randomly' change

- Latest scientific findings should not lead to much more complex methods
 - ◆ Data availability?
 - ◆ Potential for incorrect use of the method

Latest data vs time-series

- Future targets are based on current knowledge (=level)
 - ◆ If 'current' level changes in the future, the preceding target has no meaning

- Emissions of a tech X on a past year in a time-series is not the same as the emissions of tech X in the current year
 - ◆ Questionable if it makes sense to change old emission levels with latest info on old technologies

Non-road transport

➤ Marine emissions

- ◆ In-port primary and secondary engines
- ◆ Emission factors / fuels / emission control

➤ NRMM

- ◆ Number of units
- ◆ Load profiles
- ◆ Hours of use