Interactive comment on “Evolution of NO$_x$ emissions in Europe with focus on road transport control measures” by V. Vestreng et al.

V. Vestreng et al.

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Response to referee #1

We acknowledge that this reviewer emphasis the importance of our historical inventory in addition to the discussions on the development in road transport emissions related to different regulations. The referee #1 recommendation to publish the paper in ACP as it is published now for open discussion will be followed, taken into account to the extend possible the specific comments from both referees.

Specific/technical comments:

Comment: In paragraph 5.1(page 10722,line 25 to page 10723, line 3) argued the authors that they cannot calculate IEFs separately for PCs and LDV. But in Figure 7 they can, but can not distinguish between Diesel and gasoline cars. The relationship
to the following sentence (The reason for that;) is not clear. In following from my point of view the assumption that the emission factors for gasoline cars are higher than for diesel cars is not plausible. My recommendation is to work out this paragraph more precise. This could improve the understanding of the arguments.

Response: Page 10722, line 25 to page 10723, line 3: We appreciate the comment. The correct statement is that we cannot calculate separately emissions from petrol and diesel PCs and LDVs. Further, we will reformulate the rational for drawing conclusions by comparison with the EURO standards (which are related to petrol and diesel) in the final version of the paper.

Comment: In the conclusion I am a bit surprised about the page 10727, line 28 (This is because the stationary emissions closely followed the trend in solid fuel consumption;.). I think should be clear that main fuel shares consumed in stationary sources in Europe are solid fuels. Therefore I think the argument is trivial. But on the other side there should be also observed at least a decoupling of fuel use and emissions in the period from 2000 to 2005, especially on base of the implementation of the LCP directive.

Response: We do agree to this comment. The sentence will be removed from the final version of the paper. We will further include a paragraph on the development in stationary emissions in the conclusions, based on the recent EEA report: EEA: Air pollution from electricity-generating large combustion plants, Technical report No 4/2008, ISSN 1725-2237, 2008.

Comment: Page 10701, line 13: Jonson et al., in preparation should be cited in the literature chapter


Comments: Page 10712, line 5: EU(R)ONOX Page 10718, line 27: count(r)ies Page
Response: Thank you for your careful reading. The typos will be corrected in the final version of the paper.