

EVOLUTION OF FUEL QUALITY

Transmitted by the Expert from CONCAWE (Conservation of Clean Air and Water in Europe – the oil companies' European organization for environment, health and safety)

1. Item 57 in the report of the 41st GRPE meeting did not correctly reflect my comments at the meeting.

A more accurate report of my comments at the 41st meeting would be :

"57. The expert from CONCAWE thanked OICA for again tabling their Fuels Charter. However, versus current fuel specifications, CONCAWE's assessment is that sulphur content is the only fuel property which is significant to enable new vehicle technologies to achieve Euro IV-V emissions standards. In this regard, CONCAWE are awaiting the outcome of the European Commission's study on the need for sulphur levels below 50 ppm. CONCAWE are willing to work with other industry partners in joint programmes to better quantify the fuel quality needs of future engine technologies."

2. Since the last GRPE meeting, the European Commission have issued their proposal on the update to the Fuels Directive (98/70/EC) covering fuel quality requirements for year 2005 and beyond. CONCAWE have the following comments on this proposal and evolution of fuel quality in general.

CONCAWE agrees with the Auto-Oil II programme conclusions that major reductions have been made in EU-15 road transport emissions of regulated pollutants as a result of past initiatives. Particulates and Regional Ozone are the remaining Europe-wide air quality issues.

Specifically, the programme has demonstrated that further changes in European conventional fuels specifications in 2005 would give a limited reduction in emissions of targeted pollutants. Any changes in fuel specifications would also lead to an increase in CO₂ emissions in the European refineries. The Commission decision to leave the majority of fuel specifications unchanged is consistent with this outcome.

CONCAWE recognises that fuel parameters which, in principle, would enable new vehicle technology to make significant contributions to emissions reduction could allow cost effective improvements to air quality. Sulphur is the only potentially enabling parameter currently identified.

CONCAWE considers that a European-wide fuel specification of below 50ppm sulphur is not needed to meet the emission standards mandated for 2005. There is evidence that some new advanced vehicle systems developed to reduce regulated emissions and CO₂ can work more effectively at lower levels of sulphur. However, as noted in the Commission's low sulphur fuels study, the quantitative effect of fuel sulphur reduction on emissions in these technologies is more difficult to assess. The study showed that there is uncertainty and a need for further work to quantify the effect of low sulphur fuels on the fuel efficiency of new engine technologies and CONCAWE believes that legislation decisions should be based on this outcome.

The Commission's proposal on fuel sulphur reflects the position that the "well to wheels" CO₂ balance associated with any Europe-wide move towards lower sulphur automotive fuels is negative until sufficient penetration of new cars compensates for the additional CO₂ emitted by oil refineries during the production of the new fuels. Early introduction of sulphur-free fuels (10 mg/kg max S) on a Europe-wide basis would increase net CO₂ emissions.

3. CONCAWE does not support the fuel specification proposals in the OICA Worldwide Fuels Charter as these would not provide significant additional improvements in air quality, would increase CO₂ emissions, would not be cost-effective and could restrict product supply.
 4. CONCAWE believes that any further changes to fuel specifications should only be considered in the wider context of the impact on the remaining air quality problems and the cost effectiveness of further controls on transport emissions versus emissions from other sources. One part of this analysis would require sound understanding and quantification of the interactions between fuel quality and new vehicle technologies. On this basis, CONCAWE is ready and willing to co-operate with the industry partners in suitable joint programmes to develop the needed understanding.
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