

## Commission proposal on CH4 limit in Euro 5/6

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## Legislative background

- Current Euro 5/6 Regulation sets emission limits for NMHC of 68 mg/km and THC of 100 mg/km
- Limits relevant only for CNG, affecting a vehicle fleet of less than 1%
- Light-duty CNG vehicles are normally bi-fuel
- Modalities of type-approval
  - > By OEM as bi-fuel
  - ➤ As retrofits: type-approved as petrol from the origin, and later retrofitted for CNG according to Regulation 115; retrofitters maybe or not qualified vehicle modifiers



## **Technical background**

- Oxidising CH4 implies the fitting of a special catalyst, different than the usual TWC
- Solution unpractical and expensive for retrofitting, since additional costs are added due to the removal and fitting of a new catalyst replacing the old TWC
- Consequence: achieving Euro 5/6 limits with retrofitted engines becomes uneconomic and...
- may create problems of durability



## **Proposal**

- Give the choice to OEM's between
  - > THC emission limit of 100 mg/km
  - ➤ THC emission limit of 220 mg/km. In this case the GWP of CH4 would be taken into account as a CO2 equivalent
- Reg 115 would be amended with a THC limit of 220 mg/km
- Advantages for OEM's
  - No negative effect for OEM's as CO2 penalty when below 100 mg/km
  - Manufacturer could use same emission limits as retrofitters