



European Commission

Enterprise and Industry
Directorate General

ACEA Commercial Vehicle Event
The challenge of globalisation
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The European Perspective of Harmonisation

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Agenda

- **Drivers of emissions legislation**
- **Heavy duty standard (Euro VI)**
 - **Public consultation**
 - **Impact assessment**
 - **Draft proposal**
- **Safety Issues**
- **Conclusion**

Drivers of emissions legislation

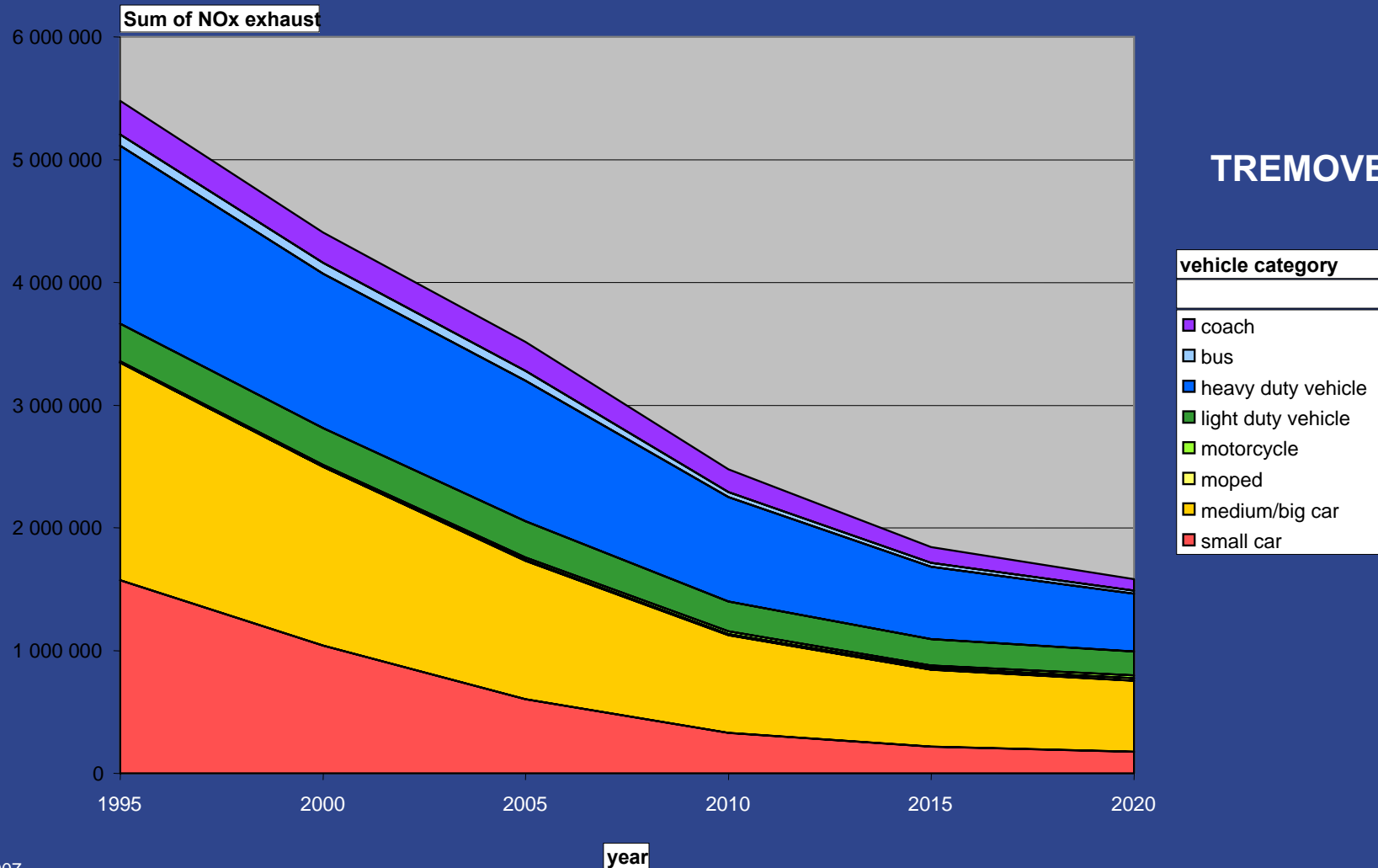
Key principles:

- Ensure a **single market** for vehicles across the EU
- Set high environmental standards in the interest of the EU's **Thematic Strategy on Air Pollution**

Transport and air pollution

- By 2020, emissions are forecast to **decrease** in Europe, even without further legislation
- This is due to the existing legislation, i.e. Euro III and IV

NOx emissions from road transport without further legislative measures



TREMOVE 2.4

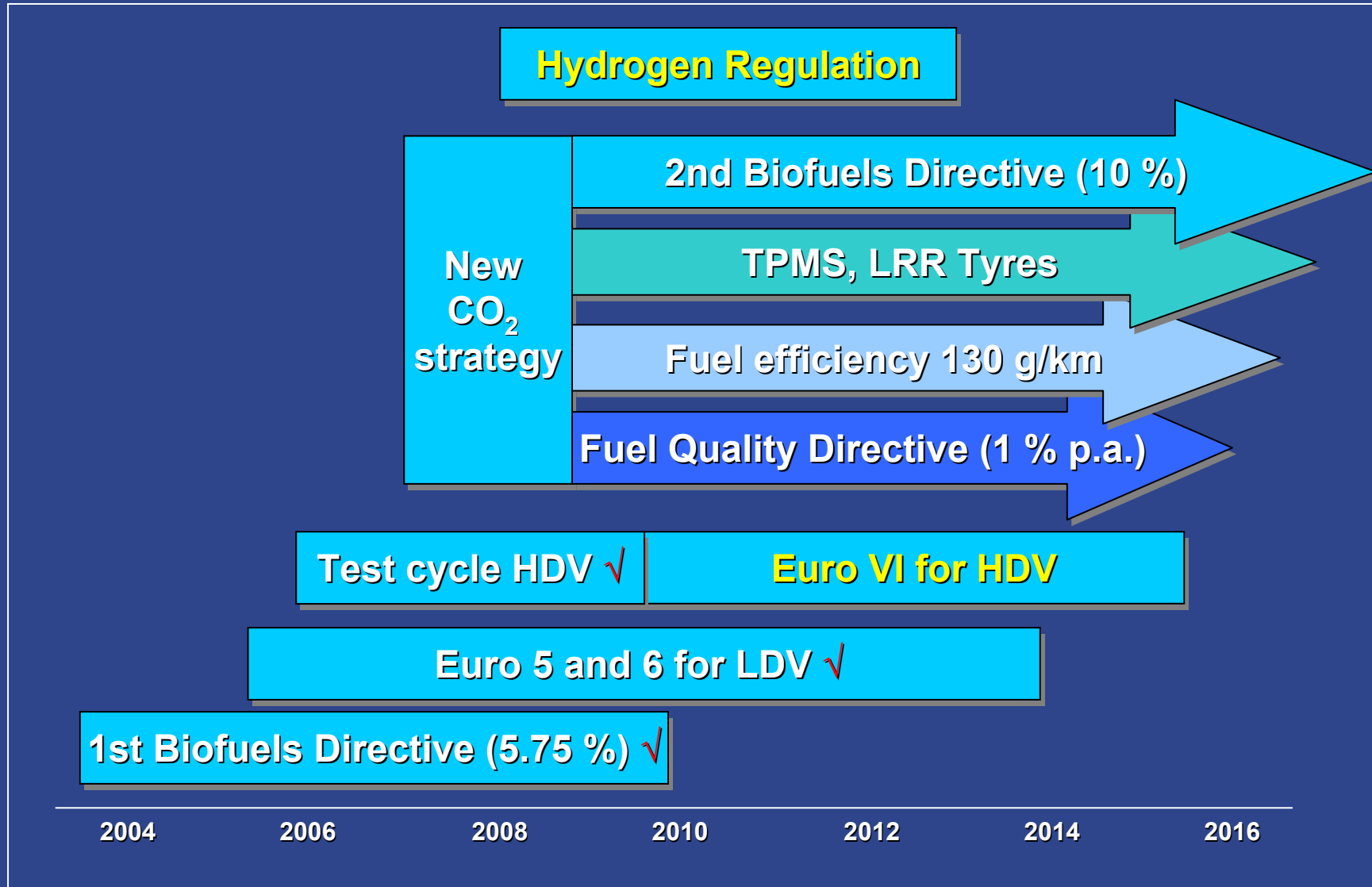
But: emissions problem not yet solved

- With **no further changes** (i.e. **without** Euro 5 and 6 and Euro VI), road transport is forecast to contribute in 2020 :
 - **31% of total NO_x emissions**
 - 12% of VOC emissions
 - 7% of primary PM

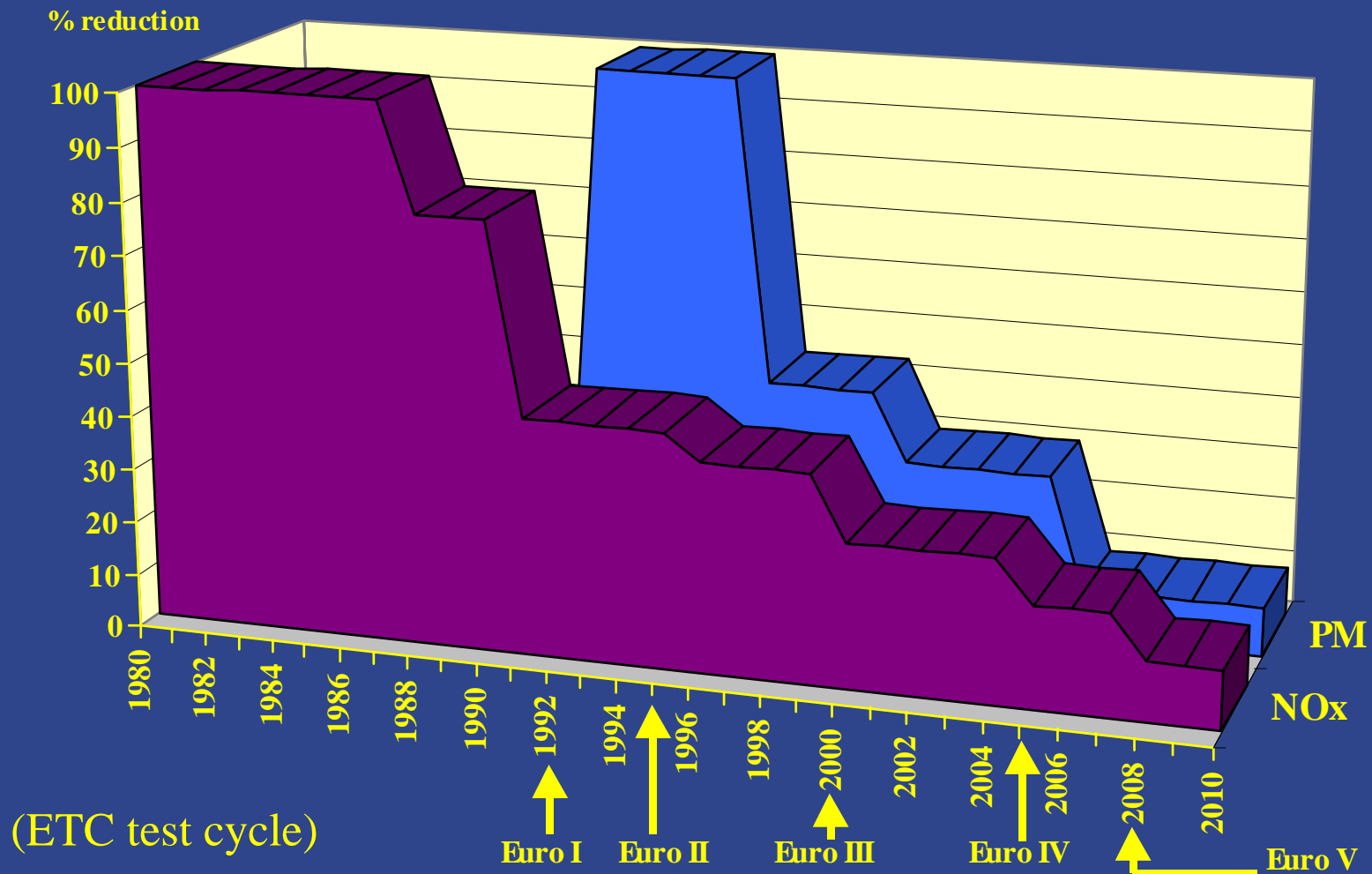
Tighter emissions standards are needed

- EU's Thematic Strategy on Air Pollution seeks **further reductions in emissions from all sectors**
- Required reductions (from 2000 to 2020)
 - 59% reduction in PM_{2.5}
 - **60% reduction in NOx**
 - 51% reduction in VOCs

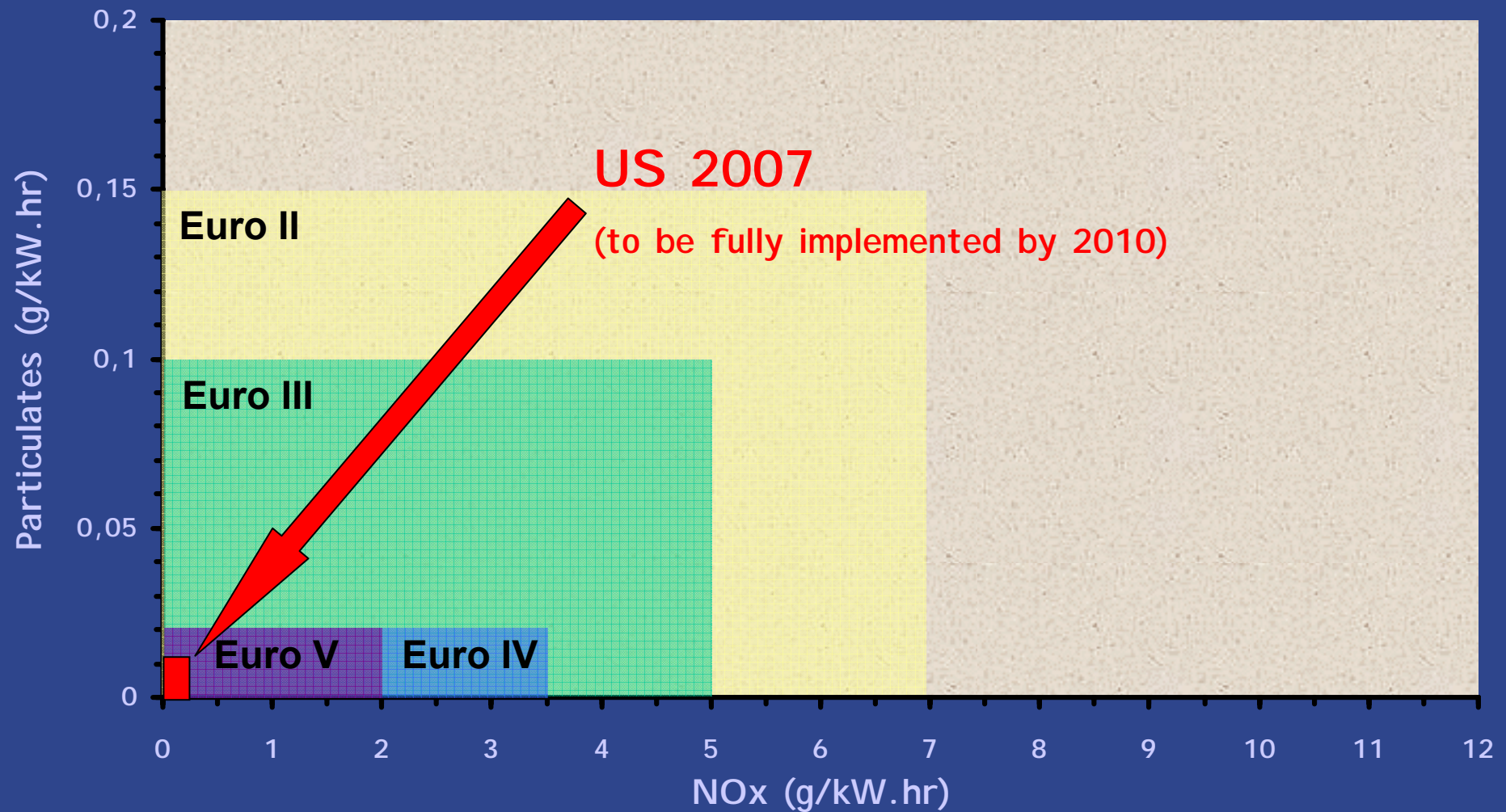
Roadmap Emissions



Heavy duty vehicles - Evolution of emission limits



How far should Euro VI for HDV go?



HD Euro VI emission scenarios

g/kWh	A		B		C		D	
Engine	CI ²⁾	PI ³⁾	CI ²⁾	PI ³⁾	CI ²⁾	PI ³⁾	CI ²⁾	PI ³⁾
PM	0.01	0.01	0.02	0.02	0.015	0.02	0.015	0.01
NOx	0.4	0.4	0.2	2.0	1.0	2.0	0.5	1.0
THC	0.16	0.66	0.55	1.05	0.55	1.05	0.55	1.05
CO	4.0	4.0	4.0	3.0	4.0	3.0	4.0	3.0
NH ₃ ⁴⁾	10 ppm	10 ppm	10 ppm	10 ppm	10 ppm	10 ppm	10 ppm	10 ppm
Increased CO ₂ ⁴⁾	2-3 %	-	5-6%	-	Neutral	-	Neutral	-

1) To be applicable to vehicles using SCR (Selective Catalytic Reduction) after-treatment technology

2) Engines fuelled with diesel and ethanol

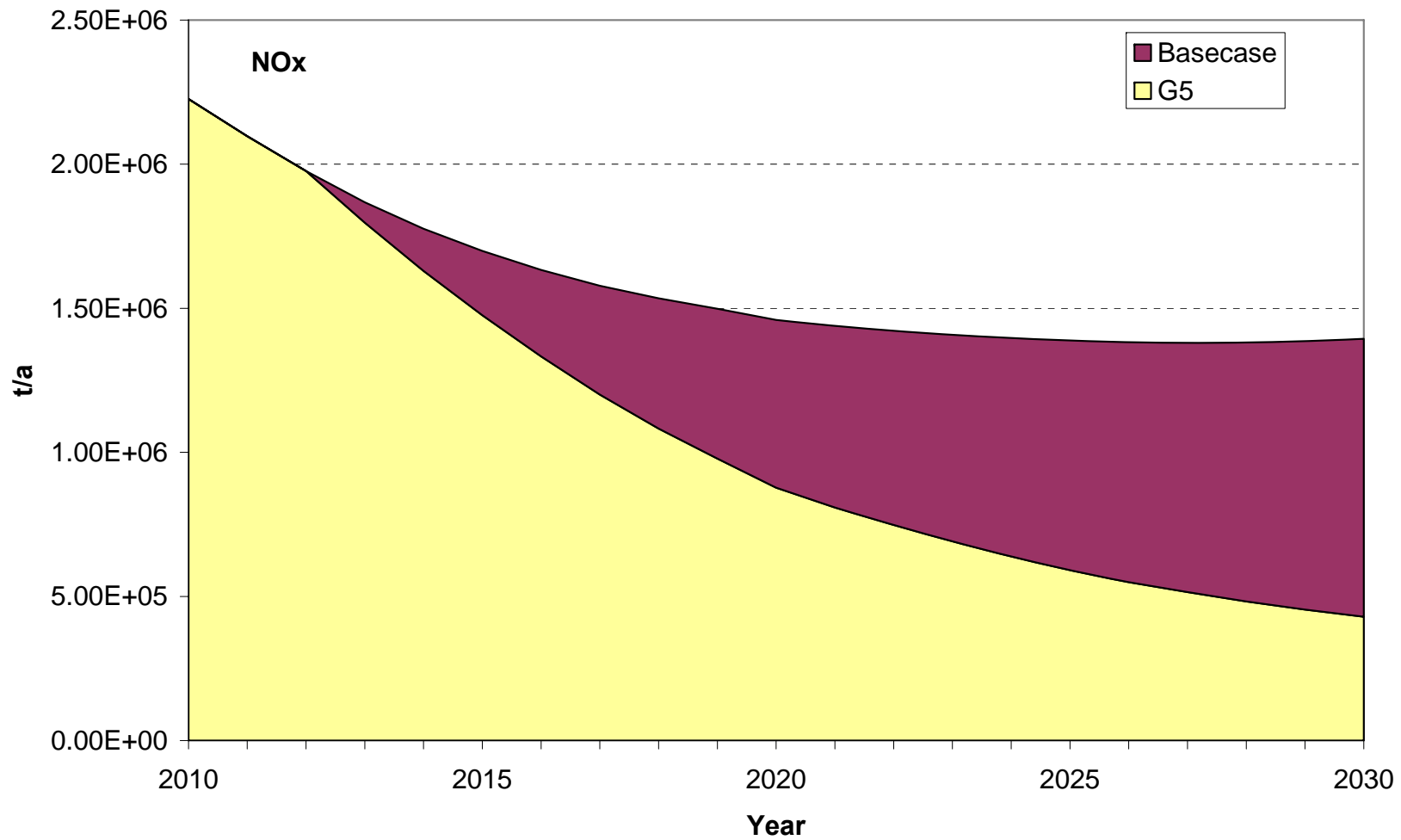
3) Engines fuelled with natural gas (NG) and liquefied petroleum gas (LPG)

4) Anticipated additional CO₂ emissions resulting from the various scenarios

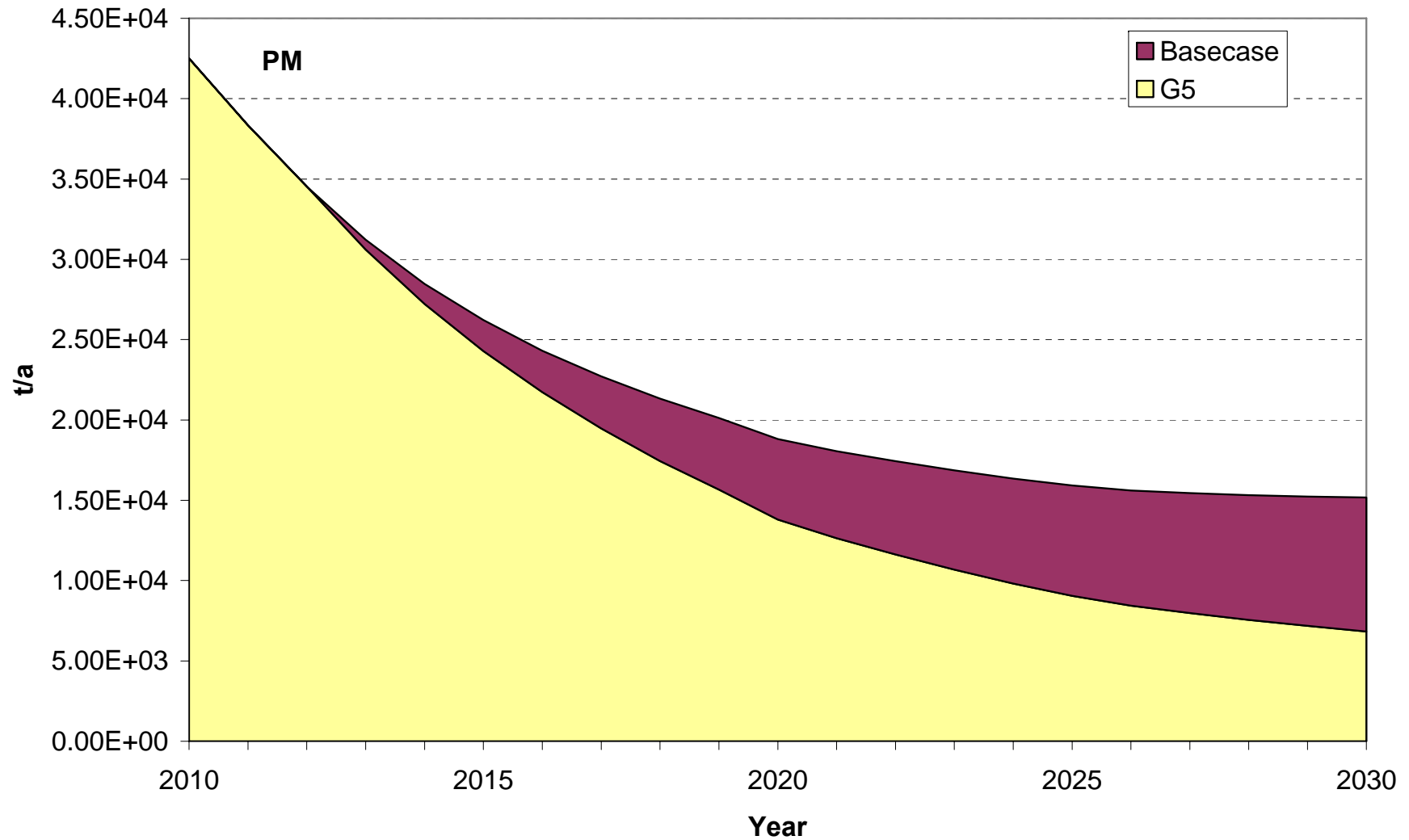
Euro VI – Results of Public Consultation

- vast majority support a **single step** with limit values close to US 2010 (A or D)
- majority supports **scenario A**
- CO₂ impacts not an issue - fuel penalty likely to be reduced by technical improvements
- global harmonisation of testing procedures supported
- additional requirements on OBD, OCE and in-service conformity desirable
- particle number limit value (PMP) requested

Euro VI – NOx savings of Scenario A



Euro VI – PM savings of Scenario A



Euro VI – Draft proposal

- **Global harmonisation**
 - limit values close to US 2010 = **scenario A**
 - introduction of WHDC (cycles, test and measurement procedure)
 - Correlation factors under development
 - Introduction of WWH-OBD requirements
 - Introduction of OCE requirements



Euro VI – Next Steps

- **Split-level approach:**
 - **Co-decision regulation – adopted by European Parliament and Council**
 - **Technical regulation – adopted by Commission with Committee**
- **Co-decision proposal to be made by the Commission by December 2007**

Safety Issues

- **ESC for heavy duty vehicles adopted in UNECE on 14 November 2007**
- **Automatic Emergency Braking Systems (AEBS) planned**
- **Internet Consultation under**
http://ec.europa.eu/enterprise/automotive/pagesbackgroud/safety/consultation/consultation_document.pdf

Conclusion

- Continued air quality issues require further action on vehicle emissions
- The EU's goal of **halving fatalities** on the road by 2010 requires improved safety features of vehicles
- Euro VI for HDVs due in 2007
- Regulation on Advanced Safety Features due in 2008
- More details:
http://ec.europa.eu/enterprise/automotive/pagesbackground/pollutant_emission/index.htm

The End