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Fuel Economy & CO₂ emission reduction policies in the European Union

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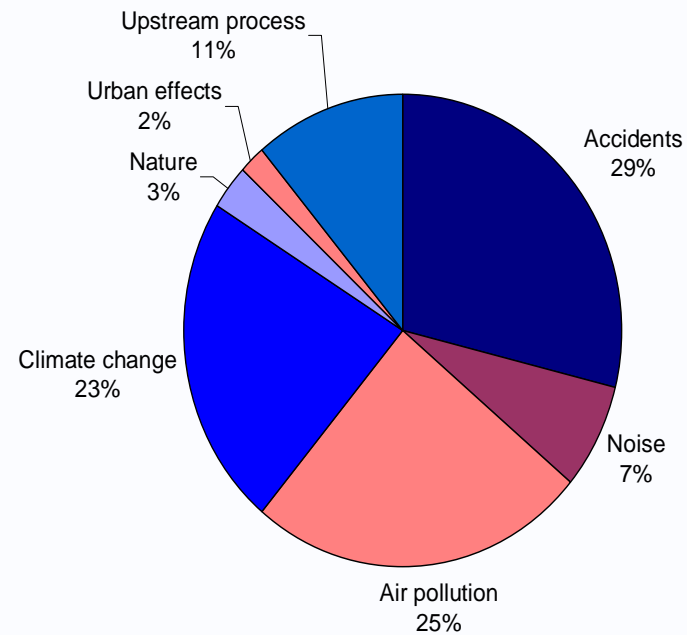
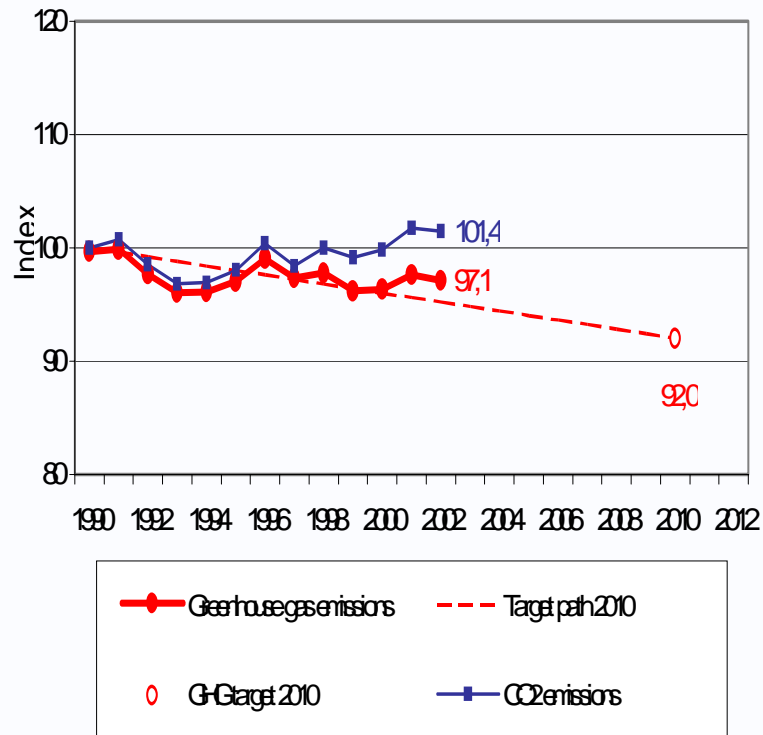
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Shanghai, 13th of October 2004



Driving forces: Climate change & external costs

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**Cars account for about 58 % of external costs
(Total about 4 – 8% of GDP)**



CO₂&cars strategy



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- ◆ **Community target for new registrations (EU 15): 120 g CO₂/km, defined in 1995**
- ◆ **Three pillar strategy:**
 - ❖ **Voluntary Commitments of the car industries**
 - ❖ **Fuel efficiency labelling Directive**
 - ❖ **Fiscal measures**
- ◆ **Two pillars erected; fiscal measures under way (proposal by the end of 2004)**



Commitment of car manufacturers' associations

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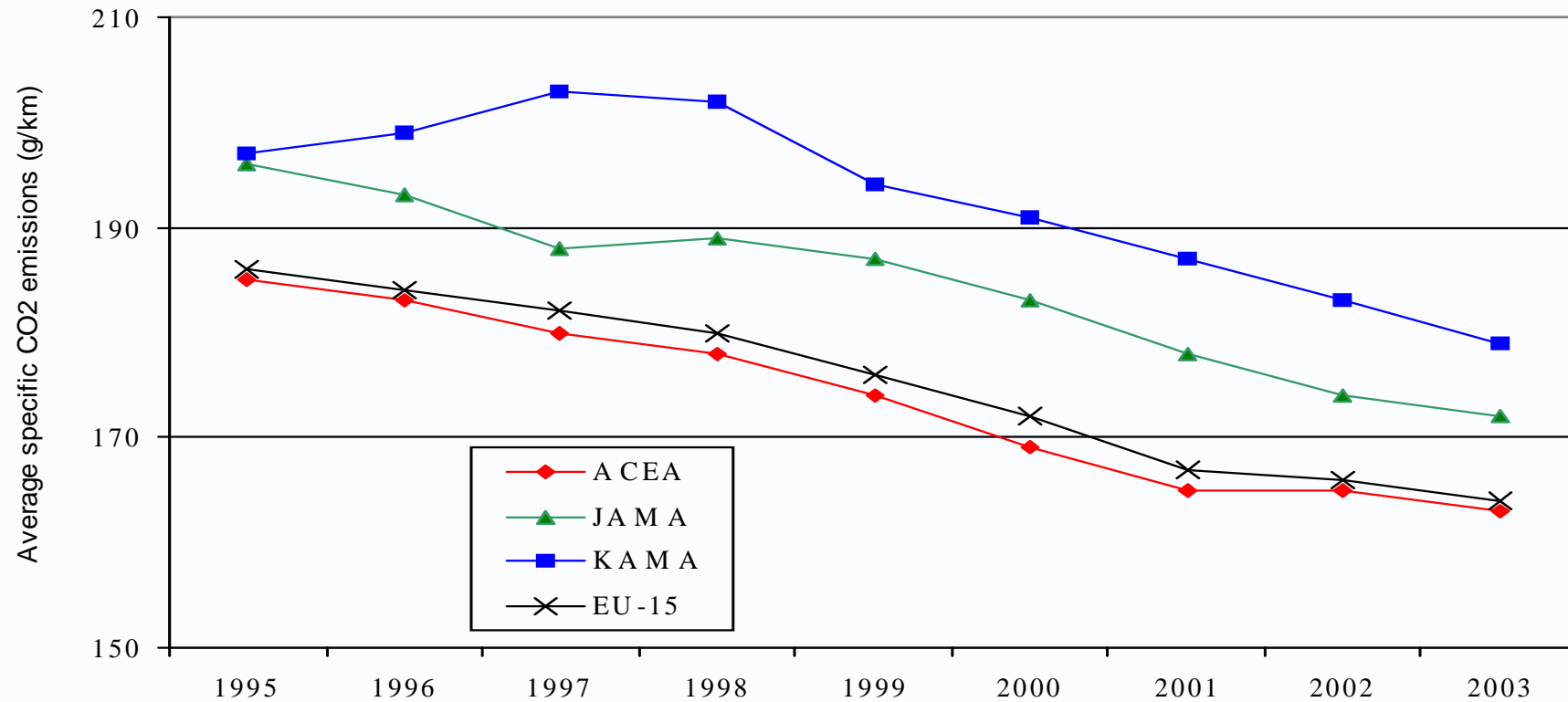
- ❖ **Legally non-binding**
- ❖ **Target 140 g/km for 2008/9**
- ❖ **120 g/km car models by the year 2000, or as soon as possible**
- ❖ **Means of achievements: “..technological developments affecting different car characteristics and market changes linked to these developments...”**
- ❖ **Intermediate objectives for 2003/4**
- ❖ **In 2003/4 evaluation of 2012 target**
- ❖ **Joint monitoring (target/assumptions)**
- ❖ **Major Review in 2003 (2004 for KAMA)**



Progress made so far



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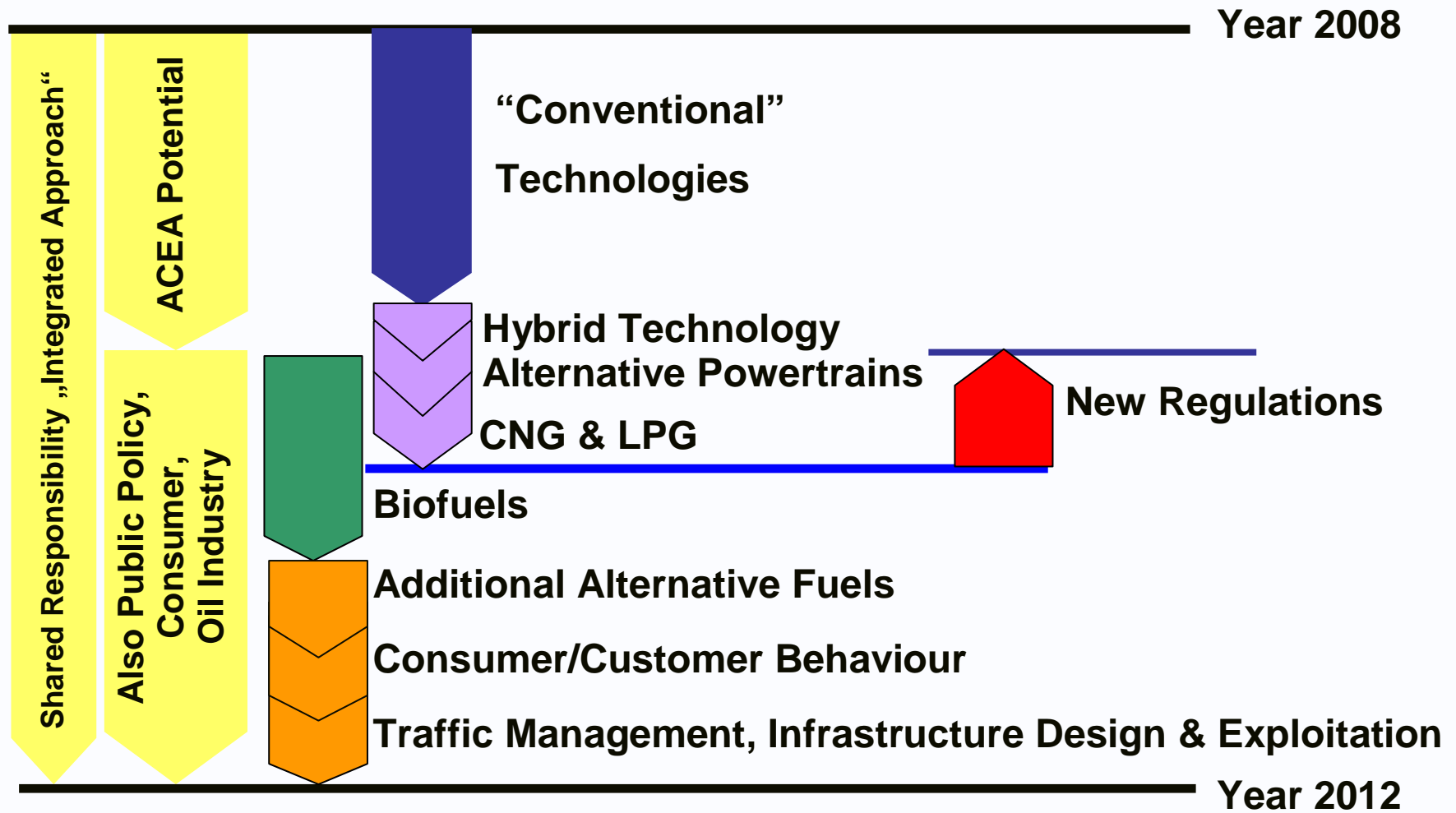
➔ Overall tendency, including all measures and market changes



ACEA's Integrated Approach



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Future fuels



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- ◆ **Natural gas could gain a broader market share (10% envisaged for 2020)**
- ◆ **Hydrogen is a potential future main energy carrier. The contribution of hydrogen to fuel consumption could reach a few percent by 2020.**
- ◆ **Biomass-to-Liquid (BTL) fuels could largely enhance the market share of biofuels, beyond the EU target of 6% for 2010. The maximum total potential of biomass-derived fuels is estimated at about 15%.**
- ◆ **Liquefied petroleum gas (LPG) is an established alternative motor vehicle fuel with scope for additional market share, possibly up to 5% by 2020.**
- ◆ **Alternative fuels have a potential of gaining significant market share within the next decades, and on the longer term exceeding targets considered so far for 2020.**



Conclusions



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- ◆ **Whatever scenario on climate change prevails, further EU wide and international action on climate change is indispensable and inevitable**
 - ◆ **The voluntary action by the car industry is a cornerstone of EU policy; it is progressing but we will have to look beyond; more attention needs to be paid to total GHG emission from PC (WTW)**
 - ◆ **Concerns over fuel supply and over climate change pull in the same direction, world-wide. Alternative fuels will play a more important role in future**
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