



Federal Ministry for the
Environment, Nature Conservation
and Nuclear Safety

Innovative Transport Solutions

Essential in Mitigation and Part of Technology Cooperations

WELCOME!

Hubert Steinkemper

Chair



What is expecting you

Brief introduction and key note *3:30pm*

Hubert Steinkemper, Federal Ministry of Environment of Germany

Advanced Technologies in Vehicle Transport *3:45pm*

Thomas Becker, Head of Policy Liasons BMW

Climate Challenges in the Transport Sector *4:00pm*

Ilka Petersen, Press Speaker WWF Germany

Technology Cooperations – Focus: Transport *4:15pm*

Daniel Bongardt, Head Technology Cooperations GTZ

Panel Discussion *4:30pm*



Introduction outline

- I. GHG in transport, recent developments
- II. Strategies for mitigation in transport
- III. Activities supported by the German Government
- IV. Conclusions



Some prepositions

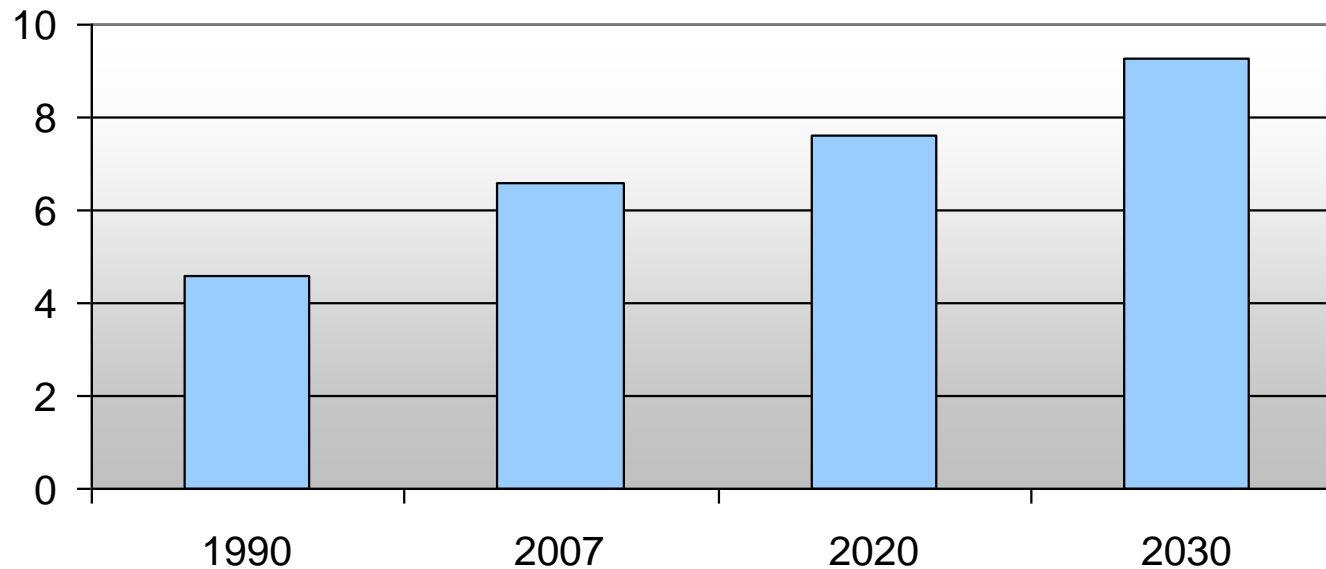
Why transport is a crucial issue

- rapidly growing sector in all countries
- no decline of emissions in developed countries
- motorisation in developing countries accelerates
- burden sharing requires at least -80% GHG in developed countries
- other sectors are on the lead, except of transport!



GHG in transport

Global emissions from transport in CO₂-equ GT



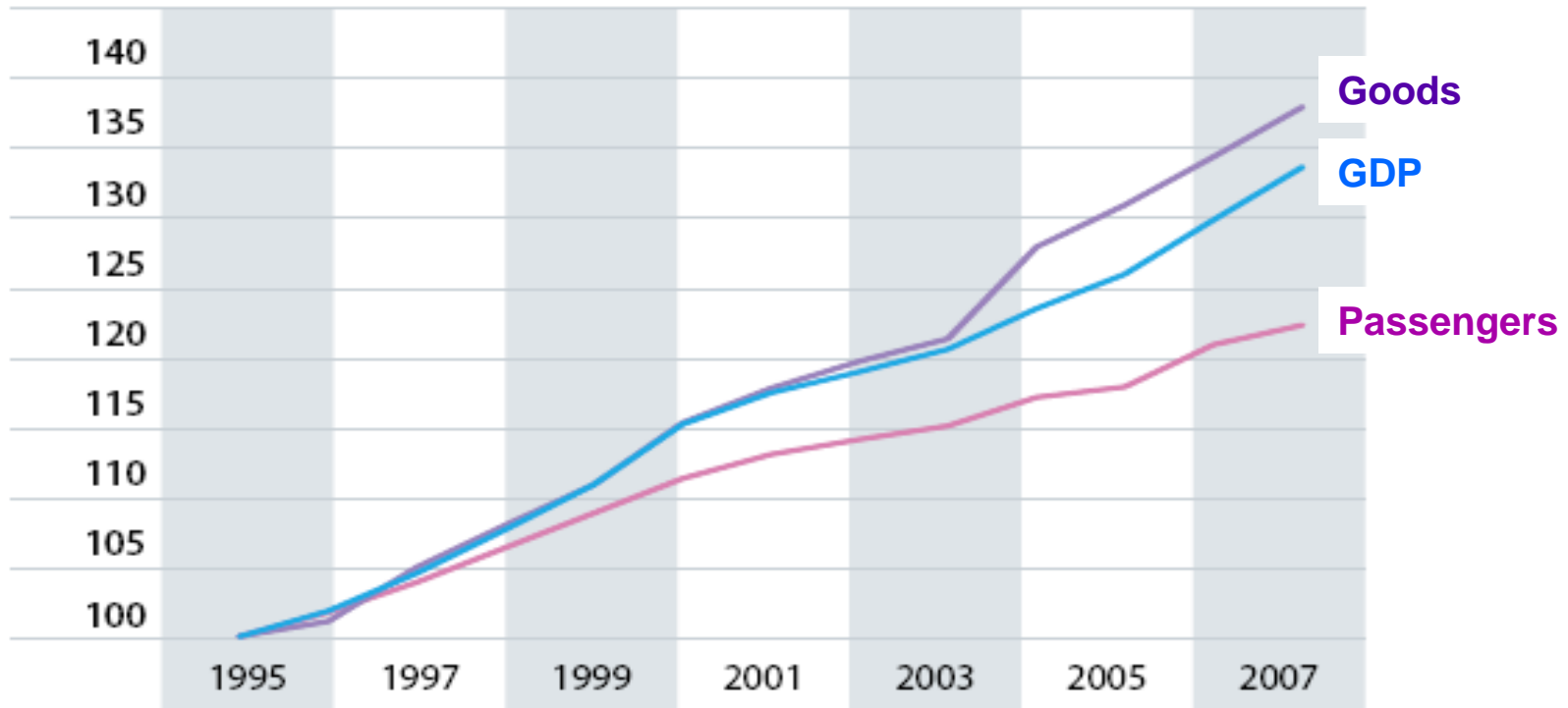
Source: World Energy Outlook 2009, Reference Scenario 2020/30



EU Transport Growth

YEAR
1995
= 100

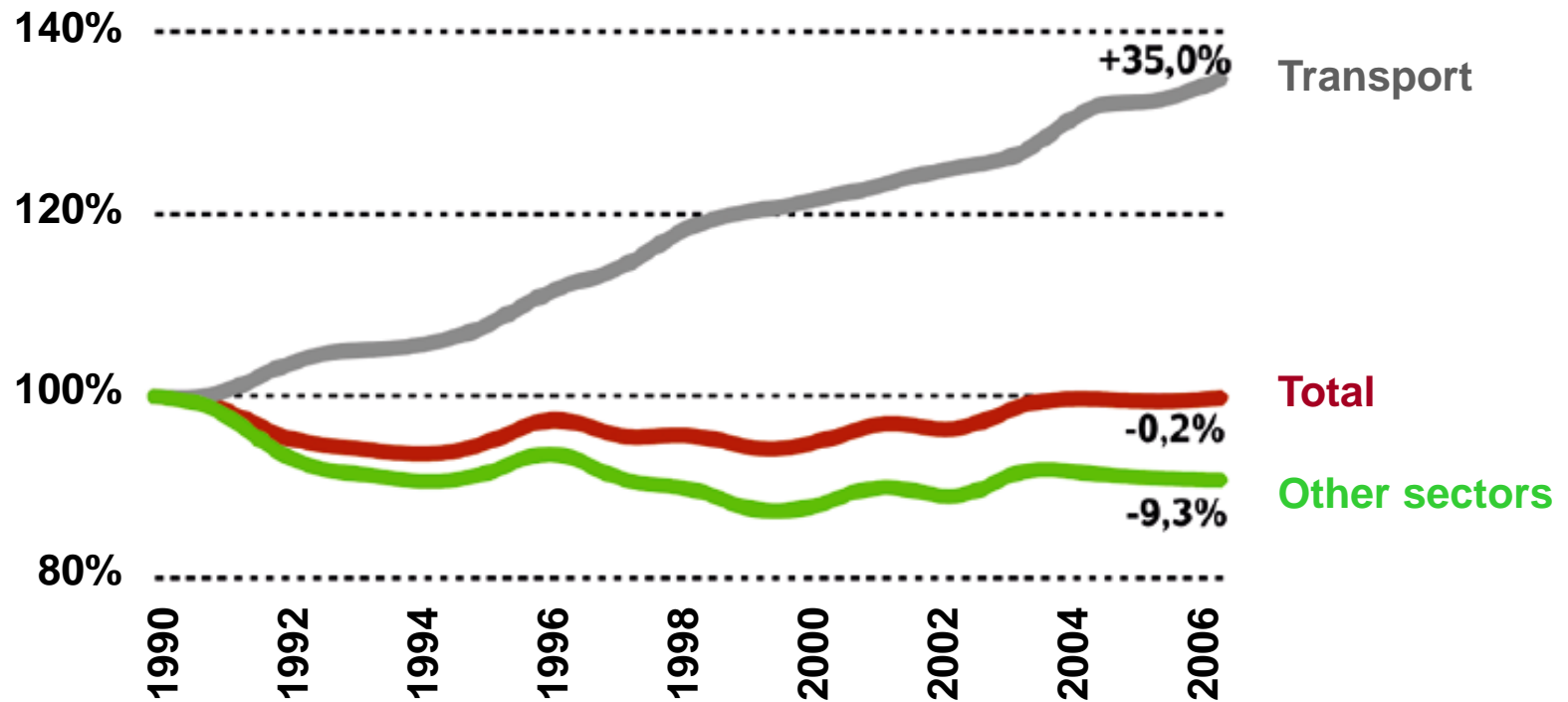
PASSENGERS, GOODS, GDP 1995-2007



Source: Transport in Figures 2009, EU



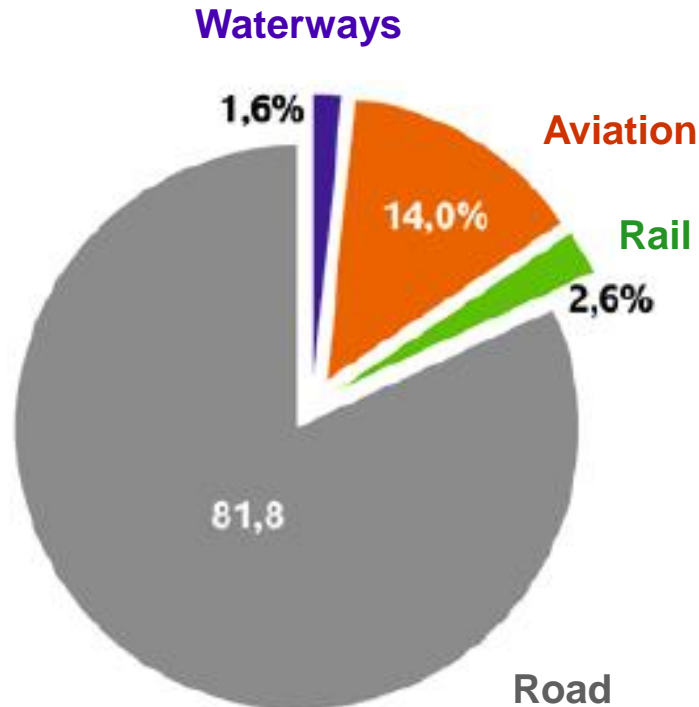
EU CO₂ emissions



Source: Eurostat/ Cramer



EU modal breakdown



Tackling road transport's emissions is a must regardless of other measures to be taken!



Mitigation strategies

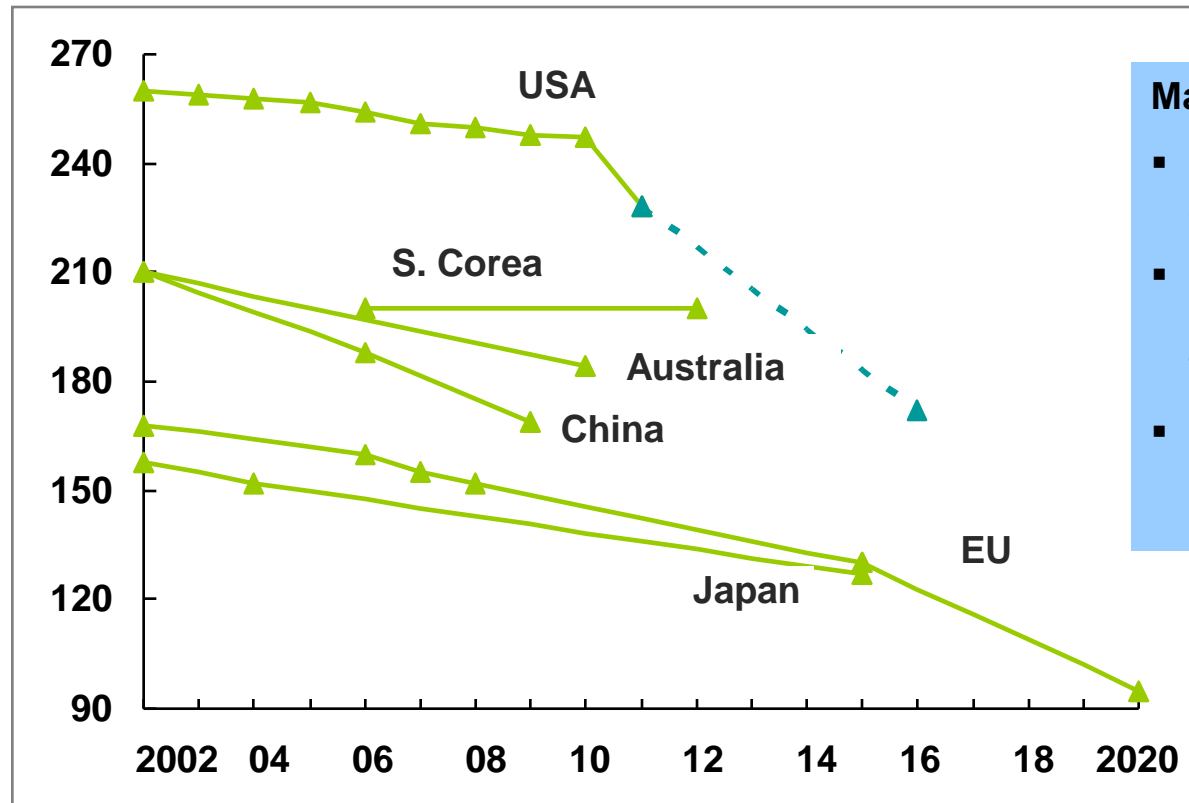
Overall strategies in transport

- shift to low carbon transport modes
- sustainable spatial planning to reduce mobility needs
- increase efficiency in all transport remaining
 - efficiency
 - advanced drives (and fuels)



Efficiency targets

CO₂-emissions g/km



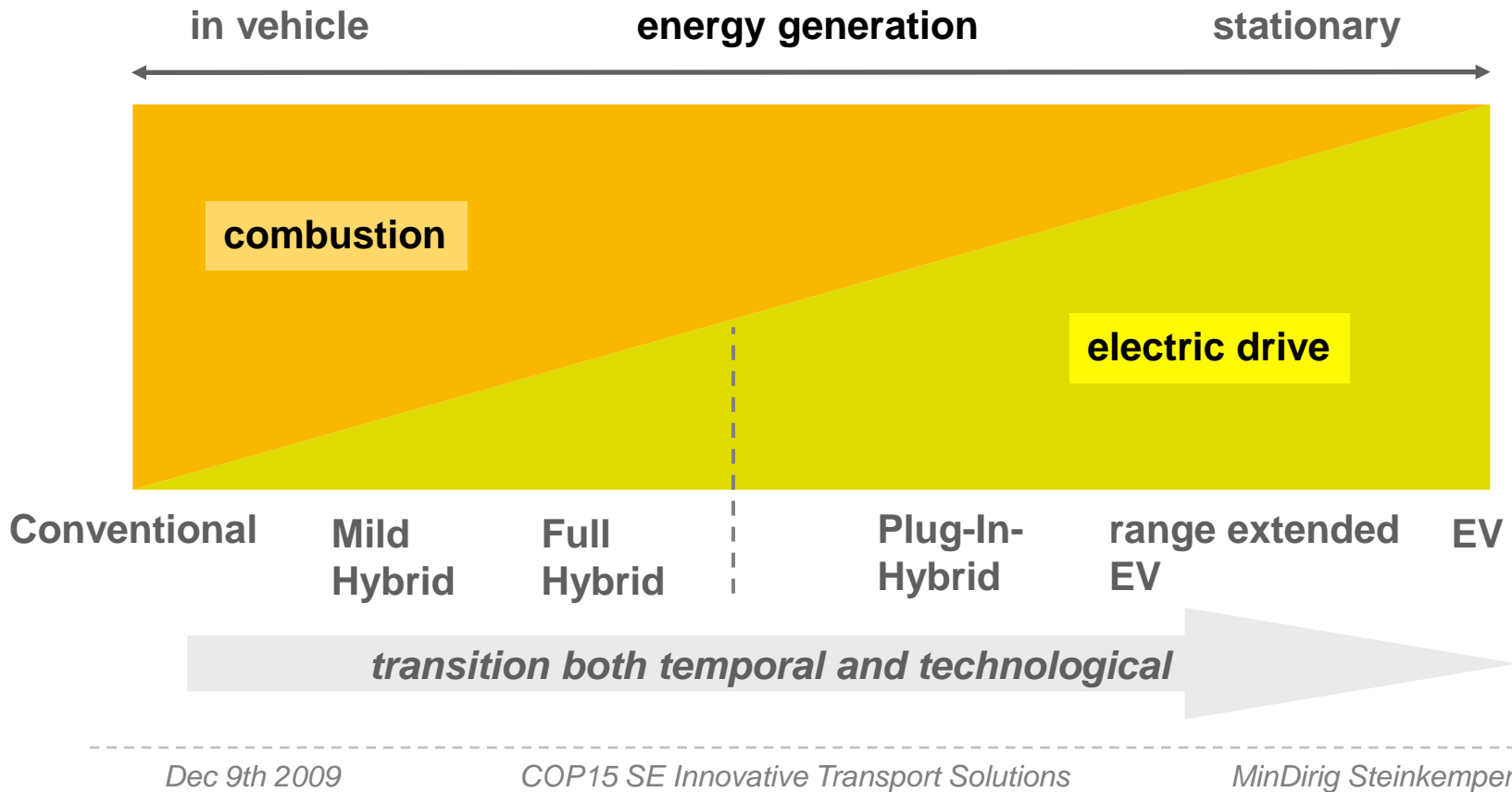
Main findings

- Strictest regulation in Japan
- EU 2020 with most restrictive fleet emission targets
- US with high relative reduction, if targets discussed are agreed

Mark: Dashed lines refer to targets in discussion. Source: ICCT, May 2009



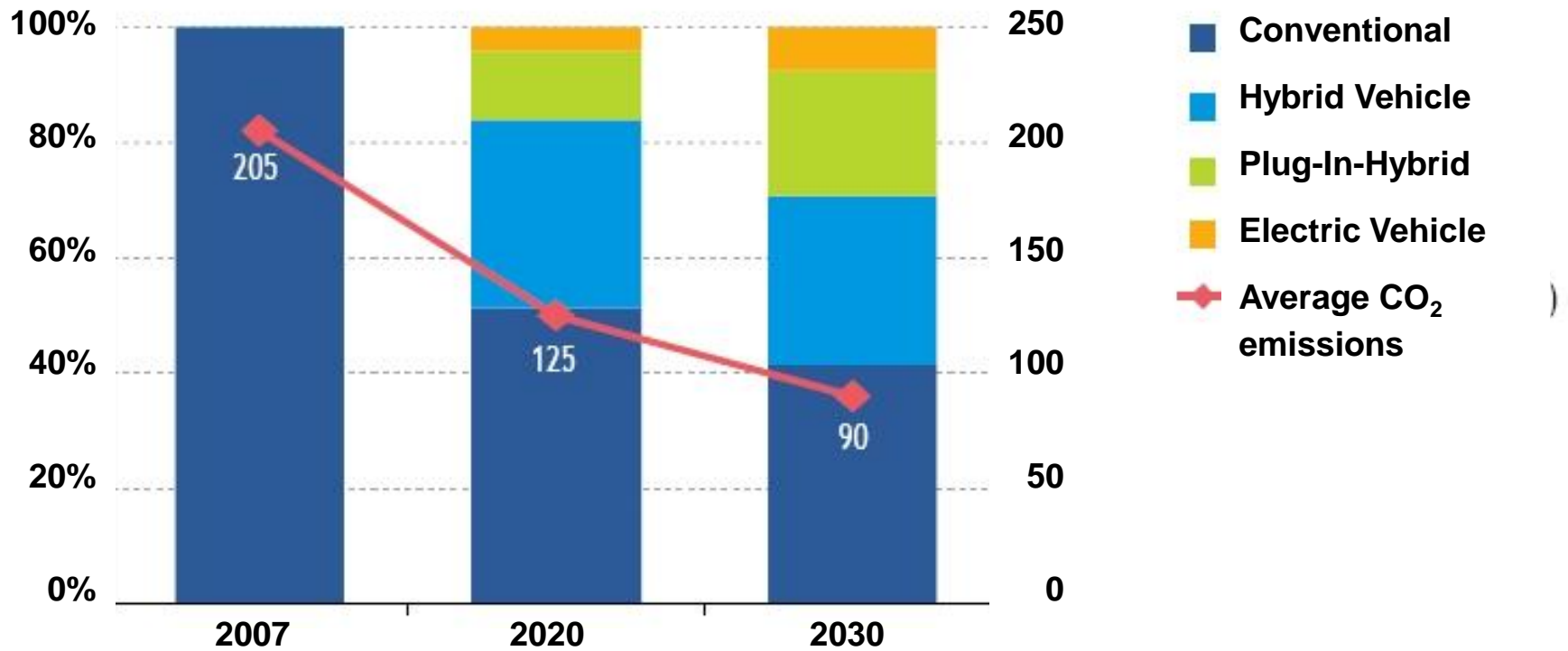
Advanced Vehicles





Transition Scenario

Share of
vehicle stock

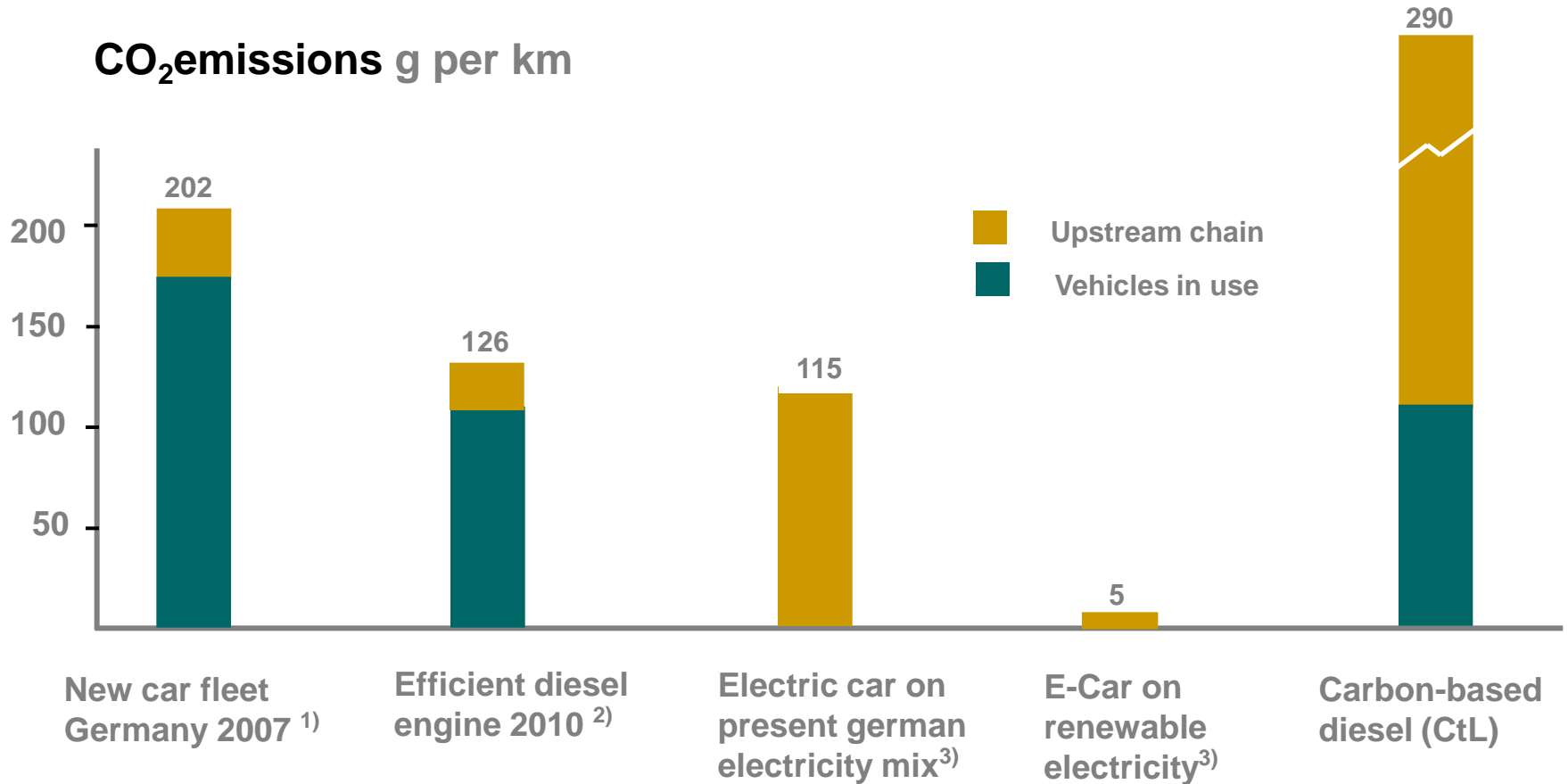


Source: World Energy Outlook 2009, Scenario 450



Low carbon drive?

CO₂ emissions g per km



1) Source: KBA, conventional fuel

2) Consumption: 4 l/100 km, conventional fuel 3) Electricity needed: 18 kWh/100 km



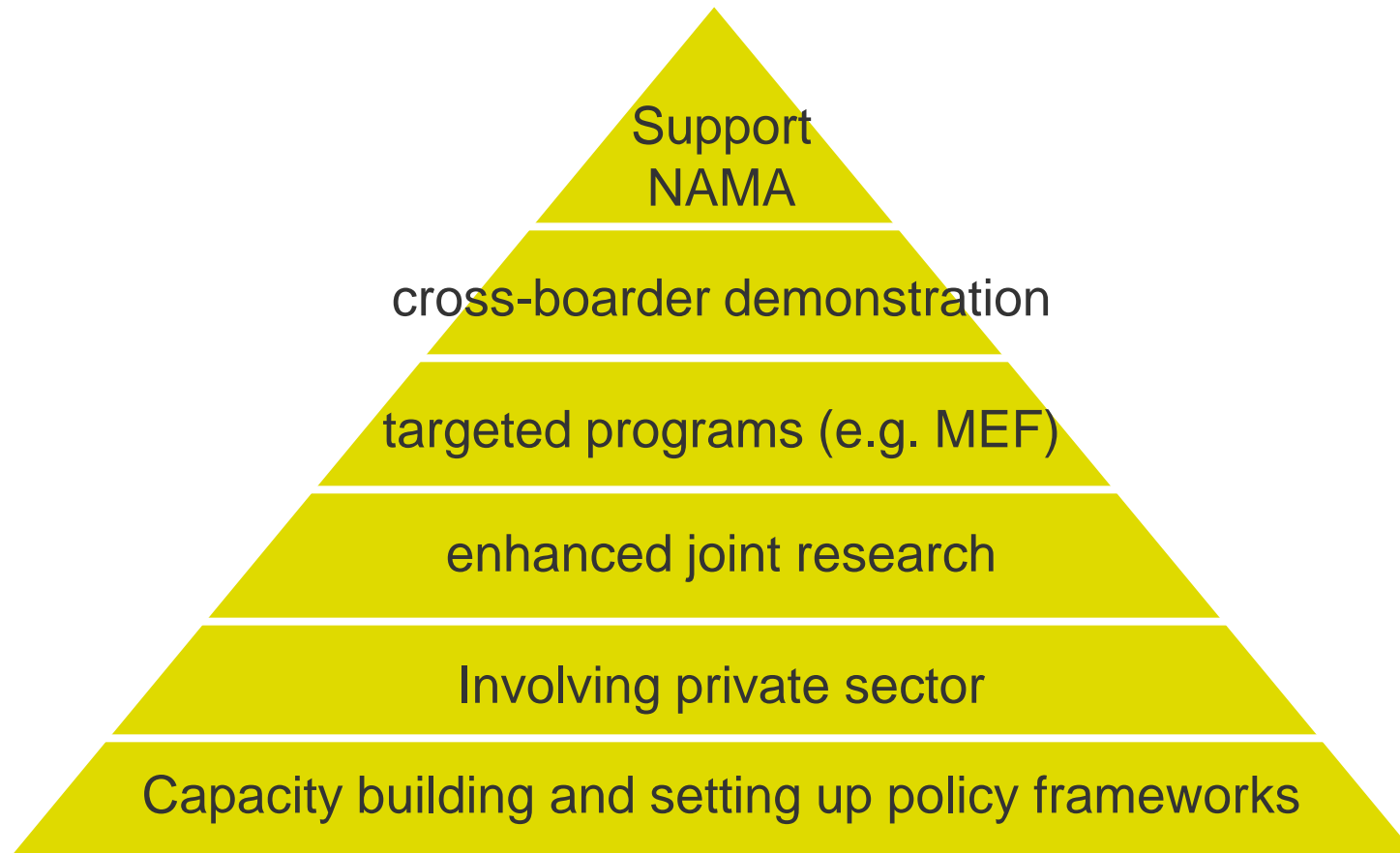
EV – an OECD issue only?

Not only, as

- burden sharing requires substantial efforts in developed countries
- EV enable a low carbon growth path in general
 - technology cooperation required
- air quality represents a major concern in mega cities
- excessive oil dependency of transport is detrimental to virtually every economy



Technology Cooperation





Related activities

- foster research on advanced and efficient vehicles
- create test beds through fleet demonstrations
- enhance progress on related technologies (i.e. battery)
- facilitate a low carbon energy supply for transport
- share knowledge with rapidly motorizing developing countries
 - **Electric mobility project in China**
 - **Efficiency technologies in cooperation with Asia**



Conclusions

- transport sector poses a major challenge in GHG mitigation
- advanced vehicles need to make an amplified contribution
- developed countries have to go ahead with regard to technology
- knowledge sharing can foster to pave a low carbon trajectory in developing countries which experience strong transport growth
- electric cars require low carbon electricity to run sustainably



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Thank you for your kind attention!