Decarbonisation of transport: Challenges for modal-shift, infrastructure and innovative vehicles

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Agenda

Strategy for decarbonisation of transport

CO2-standards for cars – a push for industrial transition of the automotive industry
GHG emissions of transport without improvements

Do-nothing scenario

![Chart showing GHG emissions of transport in Germany]

- 164 Without any improvement
- 146-149 Current reference
- 115 Most recent official forecast

Source: Schade, W., MKS Jahreskonferenz, Berlin 29. Mai 2017
Mitigation Wedges 1+2:

Efficiency improvements of road transport

Source: Schade, W., MKS Jahreskonferenz, Berlin 29. Mai 2017
Mitigation Wedges 3+4: 
Electrification and load factors of road transport

Source: Schade, W., MKS Jahreskonferenz, Berlin 29. Mai 2017
Mitigation Wedges 5+6:
Modal-shift to environmental friendly modes

Source: Schade, W., MKS Jahreskonferenz, Berlin 29.Mai 2017
Decarbonisation strategy of transport in Germany

Most important:

- Efficiency of cars
- Efficiency of trucks
- Electrification of road transport
- Organisation of transport i.e. load factors and modal-shift

=> this requires to take measures
Setting CO$_2$-Standards for new cars (1)

 загли Policy-measures need to save 48 to 52 Mt CO2 by 2030 to move along the transition pathway and to achieve German climate policy target.

 загли Largest single policy are CO2-standard levels for the new car fleet in 2030

 загли 15 to 20 Mt CO2 savings need to be generated by these

 загли Combination of stimulation of efficiency improvement of cars with internal combustion engines (ICE) and of electric vehicle diffusion (BEV, PHEV, FCEV)
  => In 2030 share of BEV 45-50%, share of PHEV 20-25%
  => In 2030 average CO2-emission factor of new ICE at 82-84 gCO2/km
  => Targets of 30 to 35 gCO2/km feasible and necessary

 загли By coincidence industry is on that path of electrification with 25% in 2025
Setting CO$_2$-Standards for new cars (2)

- But the European Commission first proposal to set the target:
  - 67 gCO$_2$/km in 2030
  - Means 5 to 7 Mt CO2 savings only

- Industry and policy-makers will need to convince the EC on stronger targets at levels of 30 to 35 gCO$_2$/km to both:
  - Meet the industry vision of road electrification
  - Meet the political goals of decarbonisation
Thank you for your attention!

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