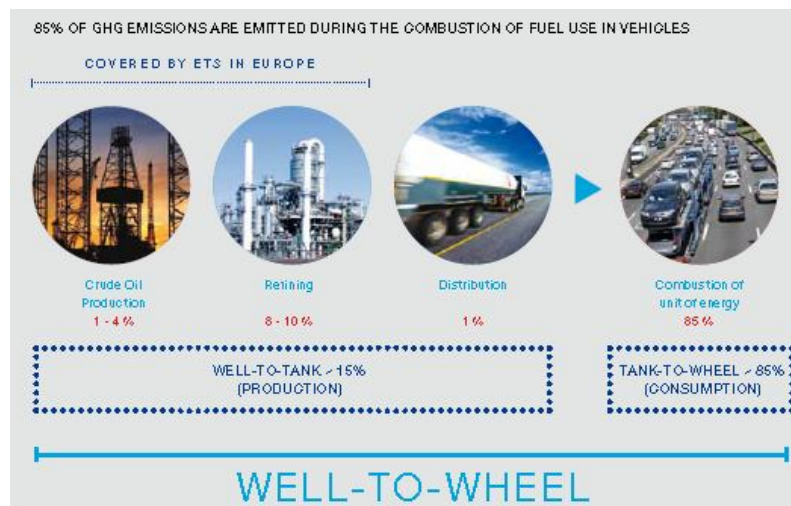


Fuelling EU Transport The Dash for Energy Efficiency

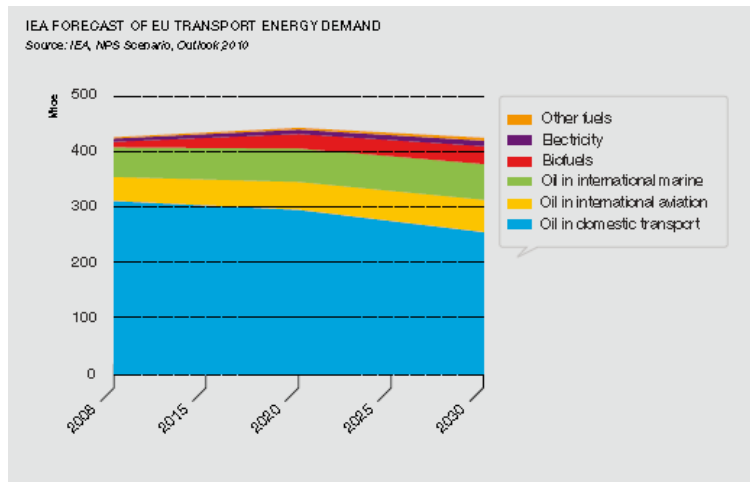


Harald Schnieder
Brussels, 27th April 2011

85% of GHG emissions are emitted during the combustion of fuel use in vehicles

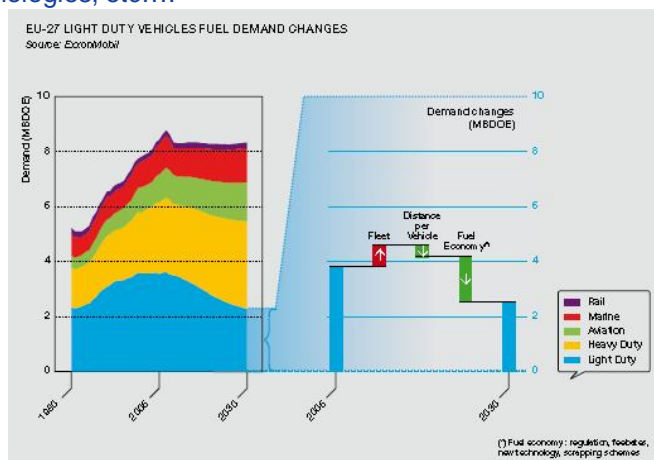


IEA forecasts: Decline in EU demand for crude oil in the transportation sector



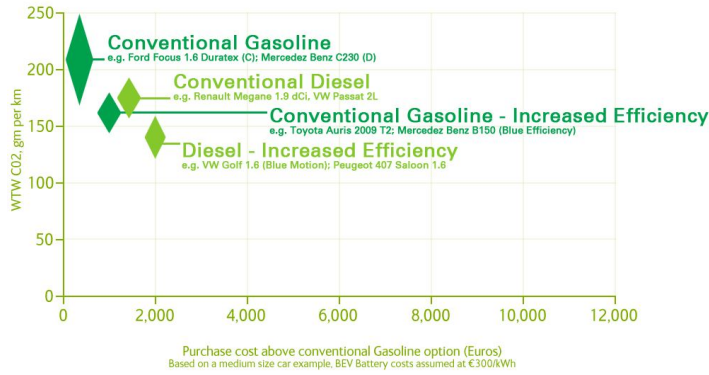
Light Duty Vehicles

LDV passenger car fleet will continue to grow until 2030 but fuel consumption will decrease sharply due to regulation, fleet bates, new technologies, etc....



We can see four technology paths impacting the cost and CO2 reductions for transport...

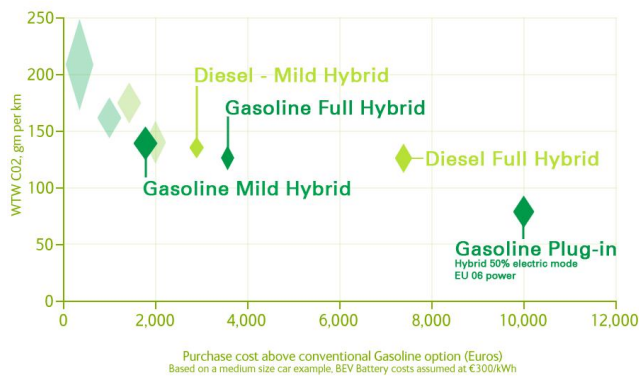
First, vehicle efficiency can be increased through more efficient engines...



Source: BP

We can see four technology paths impacting the cost and CO2 reductions for transport...

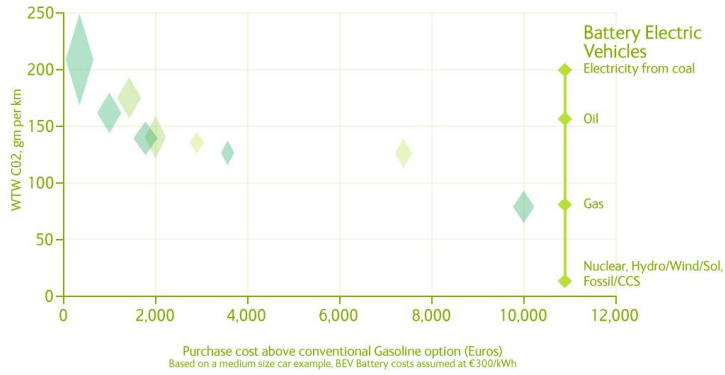
And further efficiency is available through hybridisation



Source: BP

Very low emissions can be achieved...

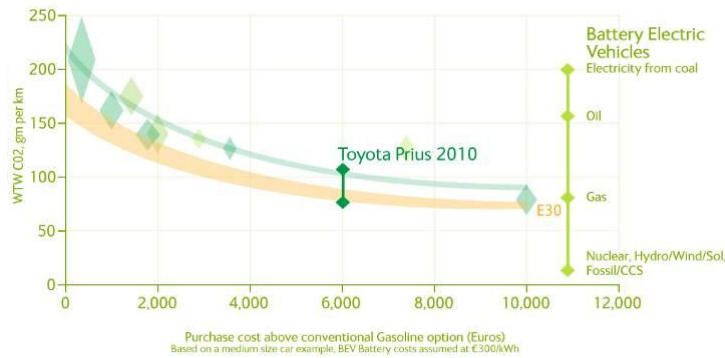
Through battery electric vehicles recharged with renewable, CCS or nuclear power



Source: BP

Very low emissions can be achieved...

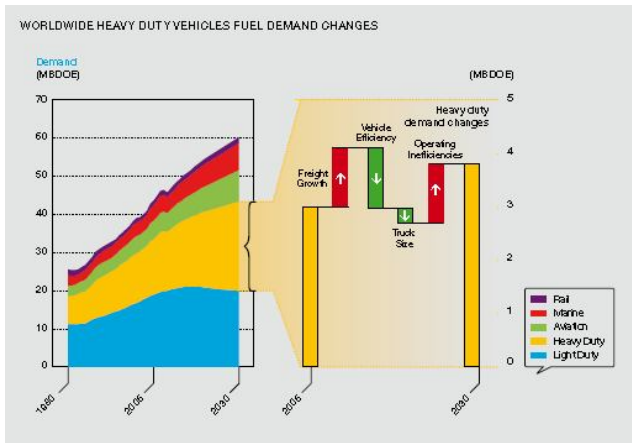
First, vehicle efficiency can be increased through more efficient engines...
And through the use of sustainable low carbon biofuels



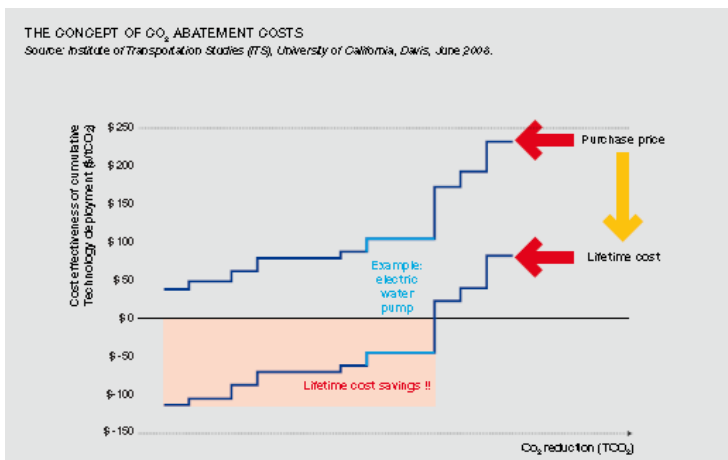
Source: BP

Heavy Duty Vehicles

The HDV segment will keep growing mainly due to freight growth and operating inefficiencies



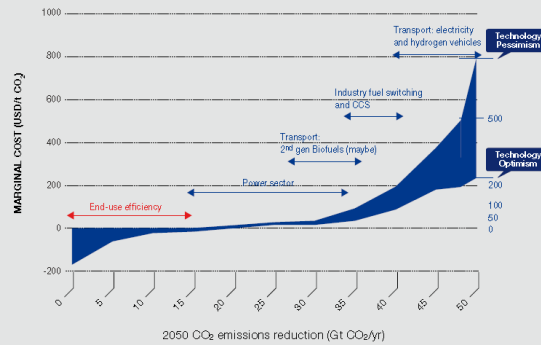
Many measures to increase fuel efficiency are cost-efficient on a vehicle "lifetime" basis



IEA lowest CO2 abatement cost are to be expected for end-use efficiency improvements

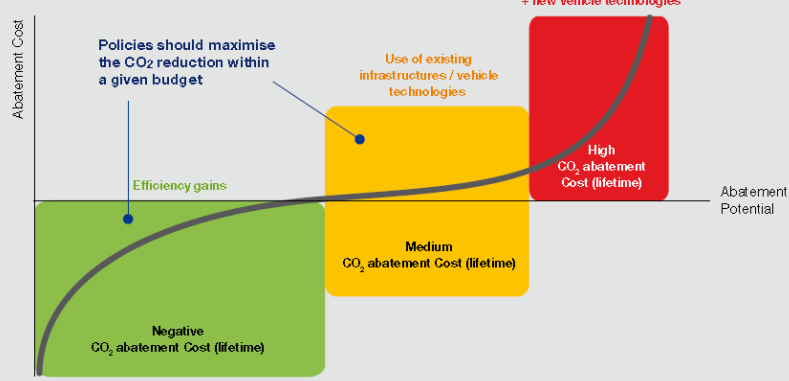
IEA CO₂ ABATEMENT COST CURVE

Source: International Energy Agency (IEA)



2. In order to maximise CO₂ reduction, policies should focus on technologies with negative or moderate cost

HIERARCHY OF CO₂ ABATEMENT COSTS



Conclusions



- EUROPIA believes that CO2 reductions should be at the lowest cost to society.
 - Promote a framework for consistent and predictable CO2 abatement cost across the entire economy
- Focus on efficiency gains as readily available and most cost-efficient opportunities
 - Internal Combustion Engines (ICE) provide a large potential for low cost efficiency gains similar to other existing technologies based on existing infrastructures
 - Optimise use of existing infrastructures (Supply, distribution & retail)
- Policy goals and measures should be built on realistic and attainable objectives
- Invest in R&D to remove barriers to commercialisation of advanced technologies (advanced combustion engines and associated fossil fuels, fuel cells, battery technologies, advanced biofuels...)



Thank you for your attention

