

GHG mitigation potential of the transport sector

Jean-François Gagné
Head of Energy Technology Policy Division
International Energy Agency





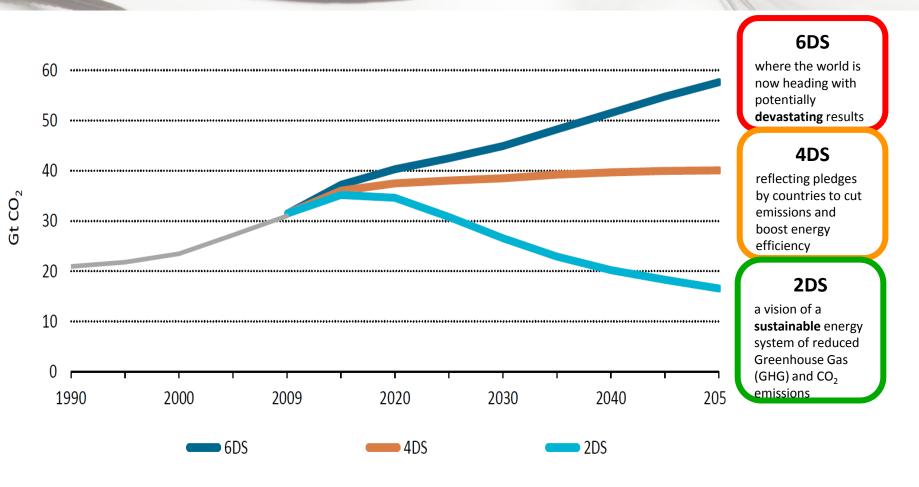
Content

- Why do we need to act
 - CO₂ mitigation potential: transport in the big picture
- What can we do
 - IEA's Avoid/Shift/Improve 2DS scenario
- How can we optimise
 - Costing out the options
- Conclusions



ETP 2012 - Choice of 3 Futures

ETP 2012



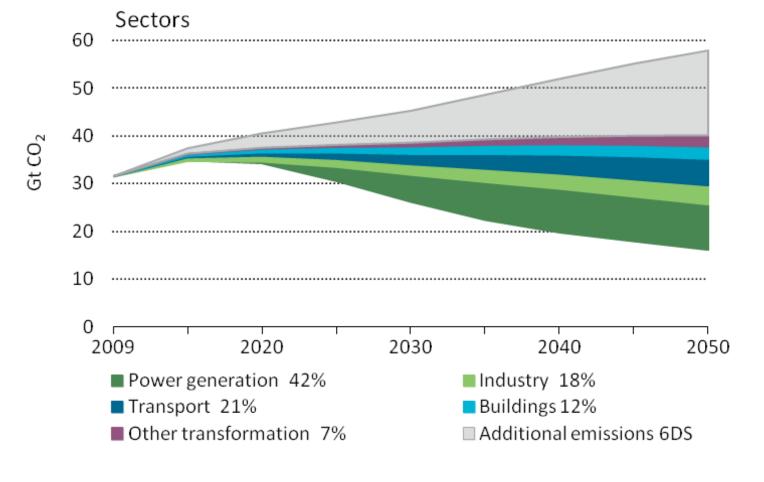
To achieve the 2DS, energy-related CO_2 emissions must be halved until 2050.



Look at role of every sectors and linkages



 After the power sector, transport is the biggest contributor to CO2 emisisons reduction globally

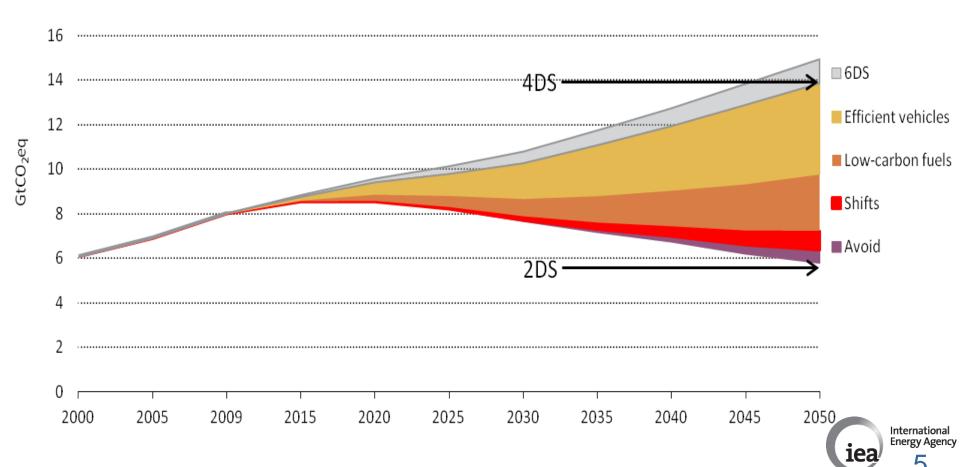




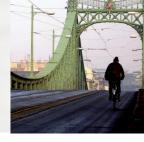
ETP 2012 2DS scenario for transport



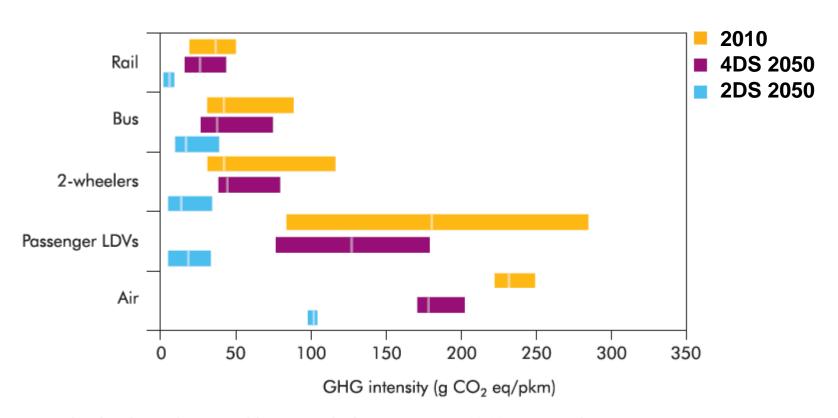
An 'avoid, shift and improve' approach is the most cost effective to reach 2DS objectives



Technology still has a big potential



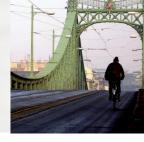
All modes can significantly decrease their carbon intensity



Note: The clear line indicates world average, the bar representing MoMo regions' discrepancy.

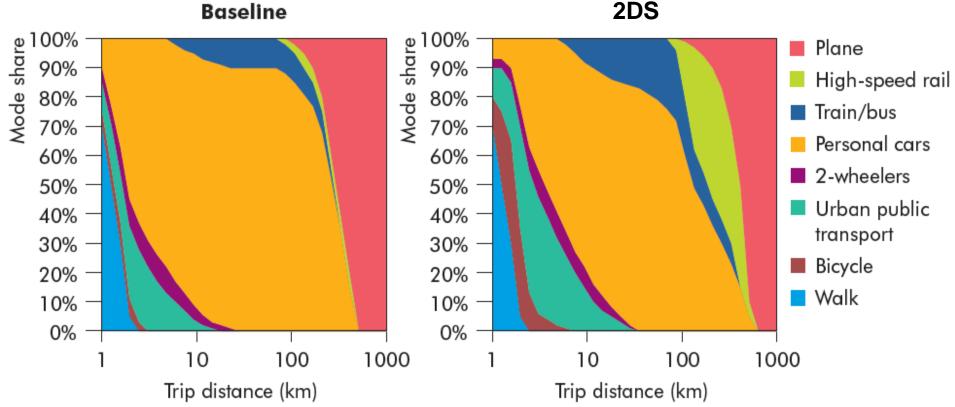


Reducing the reliance on cars



Short- and long-distance car trip can be subsituted by more efficient modes

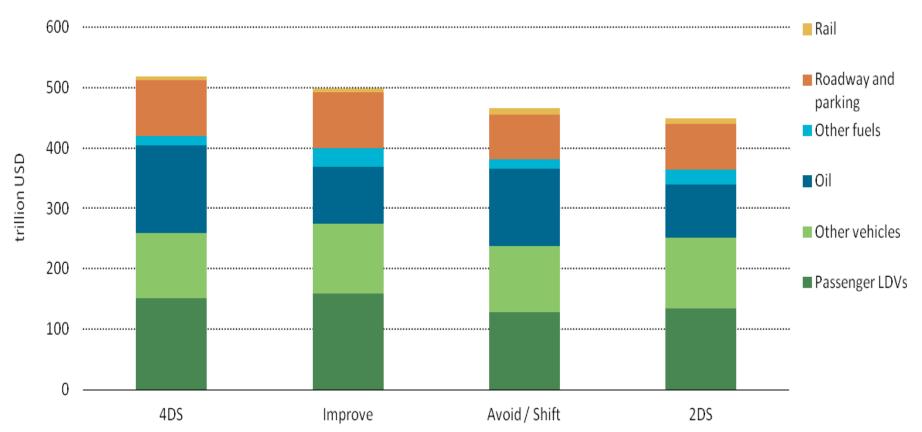
Short-haul air travel has lower carbon alternative options



Mitigation strategies cost comparison



Global transport expenditure estimates to 2050





Conclusions



- A sustainable transport system is less expensive than a conventional one
- A 3-pillar strategy is needed to reach low carbon sustainable mobility
- Extra initial investments in infrastructure / vehicle technology are needed to trigger market interest
- Role of governments key to provide a longterm vision and to show the way to sustainable mobility





THANK YOU

Jean-Francois.GAGNE@iea.org

































