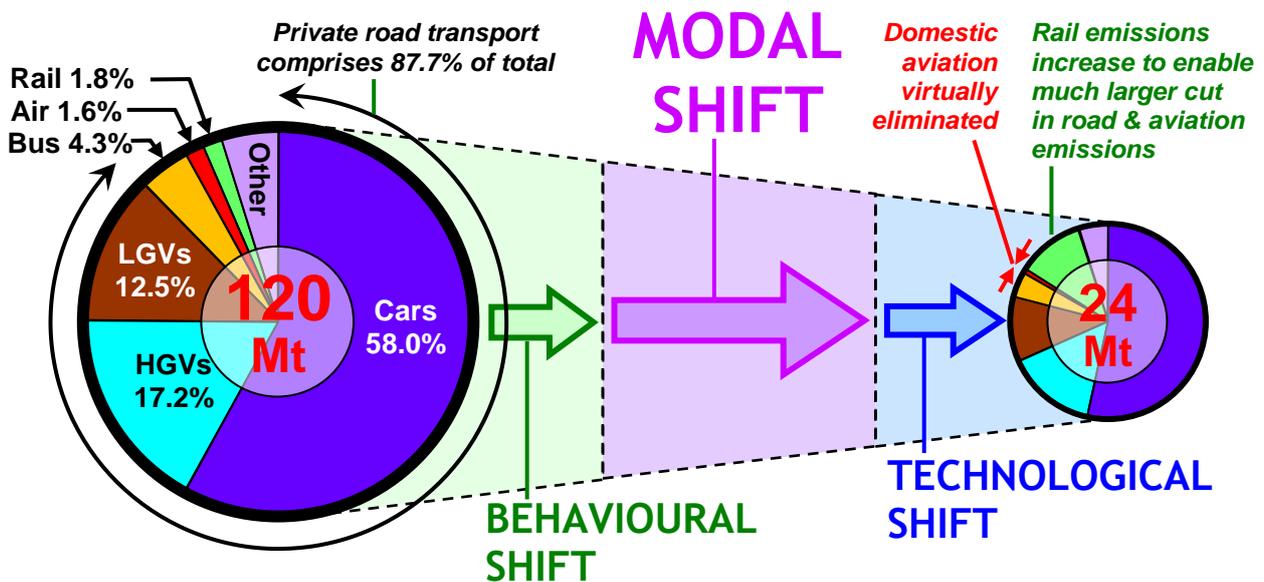
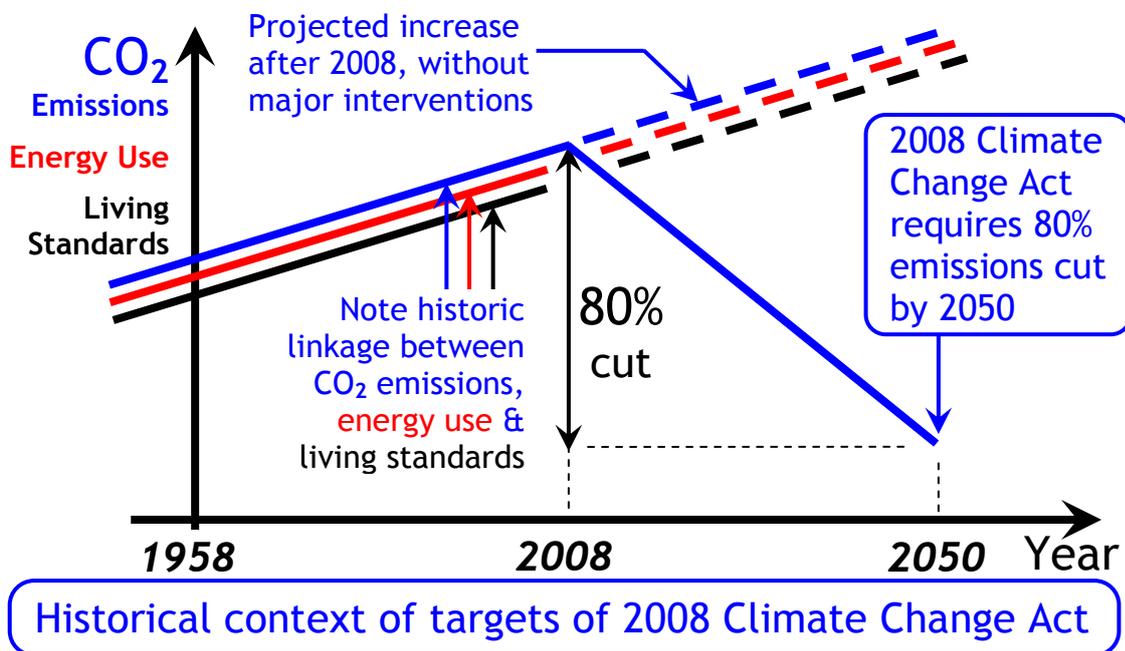


# HS2 fails the CO<sub>2</sub> Challenge

HS2 is planned to be the most significant intervention in UK surface transport during the first half of the 21<sup>st</sup> Century. This is exactly the period in which the UK Government is legally committed by the 2008 Climate Change Act to achieve an 80% reduction in national CO<sub>2</sub> emissions by 2050. It would therefore seem eminently reasonable to expect the Government to ensure that HS2 would be designed to make the maximum possible contribution to meeting this radical target. However, HS2 achieves no significant reductions in transport sector CO<sub>2</sub> emissions.



**3 'Shifts' must occur to deliver 80% emission reductions by 2050**

HSUK designed as network with full integration. Connectivity & Capacity maximised

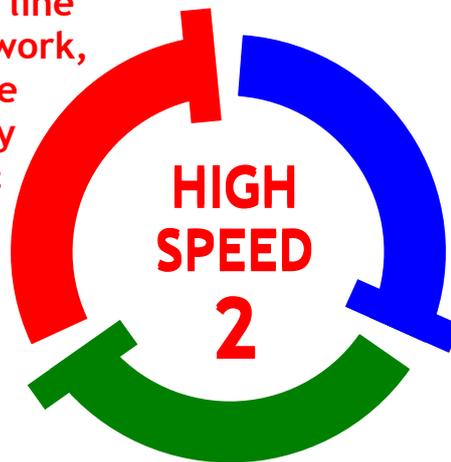


Maximised capacity & connectivity enables step-change road to rail modal shift

Step-change road to rail modal shift results in CO<sub>2</sub> emission reductions estimated at 600Mt over 40 years

### HSUK & HS2 : Relative Environmental Performance

HS2 designed as line rather than network, with no effective integration. Only small capacity & connectivity gains achieved



Connectivity & capacity gains insufficient for major road to rail modal shift

Without major road to rail modal shift HS2 cannot achieve major CO<sub>2</sub> emission reductions

By HS2 Ltd's own predictions, HS2 will only be 'carbon neutral' i.e. it will deliver no worthwhile reduction of overall transport CO<sub>2</sub> emissions. This failure is directly attributable to HS2's inability to significantly enhance either connectivity or capacity.

Together these deficiencies make it impossible for HS2 to bring about the step-change road to rail modal shift that is essential for CO<sub>2</sub> reductions in line with the requirements of the 2008 Climate Change Act.

By contrast HSUK's far superior connectivity and capacity are forecast to avoid the emission of 600Mt of CO<sub>2</sub> over 40 years.