The economics of decarbonising road transport
How the transition from oil strengthens the European economy
Low-carbon technologies change the nature of spending on mobility

- Less diesel and gasoline is used, reducing the capital leaving the European economy.
- Low carbon technologies are more efficient, so costs faced by hauliers and households are reduced.
- More is spent on vehicles, boosting domestic output.
The transition in passenger cars has a positive impact on GDP…

THE NET IMPACT FOR THE EUROPEAN ECONOMY IS POSITIVE

Compared to the alternative of not improving the CO₂ efficiency of passenger cars, a transition to low-carbon cars will lead to small increases (0.1-0.2%) in GDP by 2030.

A transition that pushes beyond 95 gCO₂ per km (and the proposed legislation to 2030) will yield greater net economic benefits.
…while the economic benefits are proportional to the volume of oil removed from the economy

DECARBONISING BOTH CARS AND FREIGHT CAN REMOVE MORE THAN 30BN BARRELS OF OIL FROM THE EUROPEAN ECONOMY BY 2050

In these scenarios, about half as much oil is removed from the European economy as in the passenger car analysis, and the economic benefits are around half the size (0.2% compared to 0.5% by 2050)
While net impacts are positive, there are winners and losers

THE JOBS IMPACT VARIES BY ECONOMIC SECTOR

The oil supply sector sees a reduction in employment.

Vehicle assembly sees very little change in employment to 2030, but thereafter the dominance of relatively simple electric vehicles leads to a reduction in employment.

Vehicle parts manufacturers see fairly significant gains.

Service sector jobs dominate the impact.
Concluding remarks

A TRANSITION TO LOW CARBON MOBILITY IS ECONOMICALLY AND ECOLOGICALLY DESIRABLE

All the technology transitions we looked at yielded net positive economic outcomes, which is made possible by the reduction in spending on imported oil.

The economic benefit from reducing CO$_2$ emissions represents a WIN-WIN for Europe.
The economics of decarbonising transport
How the transition from oil strengthens the European economy

Jon Stenning