

Transport costs and carbon emissions

The Committee on Climate Change says surface transport must make a significant contribution towards tackling climate change. New research¹ shows that pricing policy can support the Government in this. The cost of travelling by public transport, car or plane should give people an incentive to choose low-carbon travel.

Getting the prices right for different transport modes could help the Government to achieve its carbon reduction targets.

The relative prices of public transport, motoring and flying have an impact on demand, modal shares and carbon emissions. Substantial cuts in carbon emissions could be made by embracing a policy that recognises the different contribution of each transport mode to carbon emissions, and provides financial incentives for people to choose low-carbon modes like public transport.

Current cost trends are working against Government attempts to cut carbon emissions.

Public transport is a low-carbon way to travel, but the cost is discouraging people from using it. Fares keep rising in real terms and in the UK are about 20% above the European average. This has suppressed demand for bus and rail travel. Although demand for rail is increasing, if fares were lower, demand would be greater and rail would have a higher modal share.

Motoring and aviation are high carbon, but falling prices mean people are using these modes more. The overall cost of motoring is falling in real terms (despite fluctuating petrol prices); the price of one-way flights from UK airports has, on average, halved in the last 10 years.

Unless policies change, traffic, congestion and carbon emissions are forecast to increase. Current plans to improve vehicle efficiency won't get us to our carbon targets; modal shift is needed. The evidence is that pricing changes could help us achieve that modal shift.

¹ *Transport Costs and Carbon Emissions*, research produced by Steer Davies Gleave and commissioned by Campaign for Better Transport. The full research is available from Campaign for Better Transport.

Rail would have greater potential to contribute towards the Government's climate change goals if fares were more affordable.

The policy of increasing fares outlined in 'Delivering a Sustainable Railway' will discourage potential passengers and conflict with Government attempts to give people low-carbon travel choices. The real level of regulated fares should be kept steady by replacing the RPI+1 formula currently used with RPI+ 0.

The Government has an opportunity to develop a holistic pricing policy that gives people financial incentives to choose low-carbon transport.

Relative transport prices have led to the UK having the highest modal share for car of all the EU 15 countries (together with the Netherlands). Encouraging people to choose public transport rather than driving and flying would reduce traffic levels, congestion and carbon emissions. If public transport fares had been reduced by 20% (to around the European average) in 2000, bus and rail travel combined might now be 120 billion passenger-km, an increase of 10 billion or around 9%. Reducing fares today by 20% could increase bus travel by 13% and rail travel by 17% by 2015.

A package of pricing measures, involving cutting bus and rail fares and increasing motoring and aviation taxation, could reduce carbon emissions from transport by 13%.

A new pricing package could increase public transport use and reduce the car's modal share of travel from 87% to around 78% by 2025. Taxing aviation fuel would make rail more competitive. Overall, carbon emissions from transport could be reduced by 16 million tonnes a year by 2025, a reduction of 13% compared to the levels implied by Government traffic forecasts.

Maximum impact pricing scenario	2015	2025
% change in passenger-km relative to Government forecasts		
Car - a one-off increase in the price of motoring fuel of 15% - a reapplication of the fuel duty escalator resulting in further real increases in the price of motoring fuel of 1.5% per annum - an increase in Vehicle Excise Duty of 100%	-9.6	-18.2
Bus – a reduction in average bus fares across the country of 50%	48.4	97.0
Rail – a reduction in rail fares across all rail sectors of 25%	21.4	35.5
Domestic air – application of duty to aviation fuel having the effect of increasing the fuel price by 200% and the overall price of air travel by 50%	-43.7	-45.5
Total	-5.1	-9.2
% point change in mode share relative to Government forecasts		
Car	-4.1	-8.5
Bus	3.0	6.0
Rail	1.6	3.2
Domestic air	-0.5	-0.7
Change in CO2 emissions (m tonnes) relative to Government forecasts		
Car	-10.3	-20.4
Bus	2.2	4.3
Rail	0.7	1.4
Domestic air	-0.9	-1.3
Total	-8.4	-16.0

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