



## Climate Change and Railways

Scientists overwhelmingly agree that the threat from man-made climate change is enormous. As Sir David King, until recently the Government's chief scientific advisor, claims 'Climate Change is the biggest threat to humanity that we have ever known, bigger than terrorism'.

So what does this have to do with railways? Rather a lot actually as transport is responsible for almost a quarter (23%) of global greenhouse gas emissions.

As shown in the table below, 85% of global CO<sub>2</sub> transport emissions come from cars, planes and trucks.<sup>1</sup>

Planes produce eight to eleven times the CO<sub>2</sub> of high speed rail and lorries emit about six times more CO<sub>2</sub> than trains for every ton carried.

Cars	45%
Trucks	25%
Planes	12%
Shipping	10%
Buses	6%
Rail	1%
2-wheelers	1%

**GLOBAL EMISSIONS OF CO<sub>2</sub> FROM TRANSPORT**

Lorries carry most of the freight. A shift to buses and trains would cut transport CO<sub>2</sub> emissions by 80%.

### Why trains

In order to combat global warming it is necessary to invest in alternatives to cars, planes and trucks. Trains are especially useful for replacing air and road travel. High-speed trains can replace many domestic and European flights. Transferring freight from road to rail will play a key role in building a sustainable future. Important improvements to the railway infrastructure, including electrification sourced by renewable energies and gauge clearance, will be required.

Following the privatisation of the of the UK railways in the early 1990s we have resulted in receiving an unsatisfactory and expensive service. The interest of the railway operators is primarily commercial to maximise their profit for shareholders, not to keep ticket prices down. The government needs to take responsibility once again, and ensure that rail capacity is increased.

### Rebuilding Rail

The 'Rebuilding Railway' report<sup>2</sup>, released in summer 2012, exposes the huge costs billed to the taxpayer for propping up the most fragmented and privatised railway system in Europe. The report states:

1. The public money going into the railways has increased from around £2.4 billion per year before privatisation (in the period 1990/91 - 1994/95) to approximately £5.4 billion per year now (in the period 2006/6 - 2009/10), all at 2009/10 prices. This doesn't cover the additional extra cost going into the railway from higher real-terms passenger fares.
2. The cumulative cost of privatisation has been more than £11 billion of public funds. The report found that 'if all unnecessary costs were eliminated and the resultant saving was used entirely to reduce fares, it would equate to an across-the-board cut in fares of 18%'. Since privatisation, the cost to passengers of rail has risen by 17% in real terms.
3. In Europe, between 80% and 100% of passenger train services are provided by the public sector.
4. Chief Executives at train operating companies and at Network Rail typically receive remuneration packages of £640,000 to £1.35 million per year. The number of private companies now means that there are many more posts for which this salary range is considered appropriate. At the same time, train operators pay tax at a rate far below the headline 30% corporation tax rate. In 2005 they paid an average of just 3.8% tax.

### The need for investment?

In some ways, the model for sustainable transport is what happened in World War II. During the war all the great powers of the world took control of their economies and directed industry to make as many weapons as possible and as quickly as possible. The Second World War rearmament boom did not bankrupt governments, instead, it created jobs and lifted the entire world out of the Great Depression.

***It is as if the government decided to stop manufacturing Spitfires at the start of the Second World War!***

Increasing rail use will reduce the levels of HGVs and other vehicles on our roads, keep planes out of the sky and will help us combat climate change, and it will create jobs!

<sup>1</sup> For sources see the One Million Climate Jobs Now! pamphlet and Jonathan Neale's book Stop Global Warming- Change the World.

<sup>2</sup> by Dr Ian Taylor & Dr Lynn Sloman of Transport for Quality of Life