

Fear of Flying

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**[I thank James Oswald for valuable discussions]*

Last Wednesday was an interesting day. I was asked to give a lecture of advice, close to Buckingham Palace, about how best to handle the future. No, not to Charles. My talk was to a group of exceptionally talented people from the transport and energy industries. I tried to persuade them of four things.

First, the reason that global warming is hard to solve is because the unborn babies of the future are not yet here to vote. To save the planet, those babies-to-come need somehow to be empowered. One way to do this would be with a new kind of long-dated Global Warming Bond. These government bonds would be designed to start paying out in, say, the year 2045 (hence funded by future taxpayers). Yet the bonds would be valuable immediately and could be given -- as an incentive -- to people and firms who reduce their emissions today. In this way, a generation of unborn babies pays to solve global warming.

Second, at the moment the UK is not serious about renewable energy. Crucially, our citizens will need to understand that -- assuming we cannot go nuclear -- enormous land areas will have to be given over to the production of green energy.

Third, we ought to have road pricing throughout the country.

Fourth, we must do something dramatic about UK air transport emissions.

The last of these is pressing.

It is probably not widely appreciated that the level of emissions from the UK air transport industry shows an extraordinary rise in a small number of years. Merely between 1990 and 2002, greenhouse gas emissions from our air industry doubled, from approximately 20 million tonnes to nearly 40 million tonnes. Indeed they peaked above 40 million around the turn of the millennium, but were knocked down by the world-wide drop in passengers after the September 11 terrorist attacks on the Twin Towers.

Granted, in terms of the sheer levels of emissions, air is still a noticeably smaller source than road transport (the latter is approximately 1.7 times the former). But that is only a small comfort, because transport is now the largest single burner of energy in the United Kingdom. Manufacturing industry since 1970 has successfully halved its energy use; travel by our citizens has gone up so much that it has exactly offset that. Profligate drivers have undone the good work of parsimonious design engineers.

Here is a remarkable fact. On current rates of growth -- a mechanical criterion that may not be an exact guide to the future -- UK air emissions will exceed all UK car and lorry emissions by the end of the decade after this one.

This brings us to two features of the future. One is that punitive tax levels will be needed – either directly on flights themselves or on airplane fuel. The other is that we must eventually get fossil fuels out of planes. Therefore some clean replacement is needed.

And that ushers us towards water, or more precisely to the bit of water that is left when you take the oxygen out. This substance is light. It is intrinsically non-polluting. It has been around as an air propellant for a long time and has real potential.

What will this future look like?

It is 7.30am. The year is 2045. You have brushed your teeth. You are waiting for your lift. At last, there it is. Excellent. Swish, rumble, whirr. As you walk cheerily out of the front door, only one doubt is playing on your mind. I hope that damn hydrogen helicopter has missed my carrots.