

# Net zero

Some people writing in want me to challenge the idea behind net zero policies. They believe the climate is not warming, or they believe it is but this is not brought about by manmade CO<sub>2</sub>. They query the climate models, pointing out past times when the models have not forecast correctly. They ask why the models are based on one main variable, manmade CO<sub>2</sub>, and do not seem to encompass solar intensity, cloud cover and water vapour, earth seismic activity, natural CO<sub>2</sub>, and other possible influences. They wish to dispute with the scientific establishment who claim the science is settled and that only a major reduction of man made CO<sub>2</sub> can change things for the better.

I have no intention of doing this. Those who want to need to find other sites and other authors. I intend instead to concentrate on the areas I know best. My challenge to established governments' thinking is to the idea that the current range of policy proposals to drop world CO<sub>2</sub> will deliver their exacting targets any time soon. They very clearly will not, and in some cases the proposed remedies land the world with more CO<sub>2</sub> than without them.

The main things I will continue to question are

1. The accounting system which says if the UK cuts its CO<sub>2</sub> production by importing energy and energy intensive products instead of extracting and making its own, this is helpful. It clearly increases world CO<sub>2</sub> by at least the amount of the extra transport. If you import LNG instead of producing your own piped gas it is a big increase in CO<sub>2</sub>.
2. The fact that whatever the UK does to its small amount of world CO<sub>2</sub> the targets will be met or missed by the actions of China, India, the US and the other large CO<sub>2</sub> emitters. China and India plan to increase emissions this decade, and India well into the next decade making it very unlikely world targets will be hit by 2030. Those most worried about this need to turn their protests to China and India.
3. Electric cars are very CO<sub>2</sub> intensive for their manufacture and for the extraction of the raw materials and the production of their batteries. They need to be driven many miles before there are CO<sub>2</sub> savings compared to keeping your old ICE vehicle. If you recharge an EV drawing power from fossil fuel power generators as many do there is clearly no gain.
4. Heat pumps are very expensive. They require a lot of disruptive and CO<sub>2</sub> intensive work to remodel and insulate a home before installation. They may not give a good result. They too do not help if the country has too little renewable power available to fire them.
5. The world is embarking on a wide range of different technologies – carbon capture, hydrogen, electrical drive, battery storage, pump storage, synthetic fuels other than hydrogen. There will only be a swifter transition when a few of these are scaled up and become cheaper, leading to wider adoption. The big array puts many people off early adoption, waiting to see what will attract the most subsidy to start and what will become more economic as it is grows.
6. The green issues need to be balanced with security of supply, affordability and practicality of product. Many green products for

transport and home are a work in progress which is why they are not selling in huge numbers. More work is needed to produce great value products that people want.

In summary for this revolution to take off most people need to change the way they travel, heat their homes, their diet and the products they buy. This will only happen when there are better green products on offer that people want to buy.